DRAFT
FOR PUBLIC COMMENT

PHASE III REMEDIAL ACTION PLAN

Former Lewis
Chemical Facility
Hyde Park, MA

MassDEP Release
Tracking Numbers
3-1616, 3-31548,
3-31697, and 3-33111

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Boston Department of Neighborhood Development
November 2015

woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS

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1. INTRODUCTION

Woodard & Curran has prepared this Phase III Remedial Action Plan (Phase III RAP) to identify and evaluate remedial alternatives for the former Lewis Chemical facility located in Hyde Park, Boston, Massachusetts. This Phase III RAP was prepared at the request of the City of Boston Department of Neighborhood Development (Boston DND) and in general accordance with the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). The Massachusetts Department of Environmental Protection (MassDEP) issued several Release Tracking Numbers (RTNs) including 3-1616, 3-31548, and 3-31697 for historical releases of hazardous materials. The original RTN 3-1616 is currently Tier Classified as a Tier II disposal site. The RTN associated with the release of lead in soils on the Department of Conservation and Recreation (DCR) property (RTN 3-31697) was retracted and linked with the primary RTN associated with the DCR property (RTN 3-31548) on October 30, 2015. A new RTN, 3-33111 was issued by MassDEP upon discovery of light non-aqueous phase liquid (LNAPL) in one monitoring well at the Property. The new RTN as well as RTN 3-31548 are being linked with the original RTN (3-1616) with the submittal of this Phase III RAP.

The Phase II Comprehensive Site Assessment (CSA) report identified that concentrations of volatile organic compounds (VOCs), metals, and PCBs (constituents of concern; COCs) are present in soils, groundwater, sediment, and surface water and pose a significant risk of harm to human health, public welfare, and the environment. Therefore, a conclusion of No Significant Risk (NSR) of harm to the environment as defined by the MCP could not be supported and a Phase III evaluation is required and presented herein. In addition, supplemental data were collected to 1) re-evaluate historical analytical data; 2) conduct bench-scale feasibility evaluations, and 3) conduct pilot tests for certain remedial action alternatives (RAAs).

The purpose of this Phase III RAP was to evaluate and select a RAA or combination of RAAs for the releases of oil and hazardous materials (OHM) at the former Lewis Chemical facility. This Report is being submitted along with the required Comprehensive Response Action Transmittal Forms BWSC107 and BWSC 108, via the MassDEP eDEP system.

2. BACKGROUND

2.1 PROPERTY LOCATION AND DESCRIPTION

The former Lewis Chemical facility is located at the end of Fairmount Court in Hyde Park, Massachusetts and has a corresponding street address of 12-24 Fairmount Court (the Property). The Property is located in a mixed commercial and residential area of the Hyde Park neighborhood of Boston, Suffolk County, Massachusetts and is accessed via 3rd New Way. According to the City of Boston's Online Assessors Database, the former Lewis Chemical property consists of three (3) separate parcels identified as parcel 18-10598-000, parcel 18-10601-000 and parcel 18-10602-000. The City of Boston is listed as the current owner for the first two parcels (18-10598 and 18-10601) consisting of approximately 0.8 acres, while the Commonwealth of Massachusetts is the current owner of the final given parcel (cityofboston.gov, 2014). The State owned parcel (18-10602) is the portion of land along the Neponset River at the southeastern extent of the Property and totals approximately 0.4 acres. The Massachusetts DCR manages the state-owned parcel as environmental preservation land. The three parcels collectively comprise approximately 1.2 acres of land.

The coordinates for the central portion of the Property where the building was formerly located are 42° 15' 11.5" North latitude and 71° 7' 13.0" West longitude. The Universal Transverse Mercator (UTM) coordinates for the central portion of the Property are 325144 East and 4679831 North.

A Site Locus Map is provided as Figure 1. Key site features, including parcel boundaries, are shown on Figure 2.

2.2 PROPERTY USE HISTORY

The Property was historically developed with a one to three (1-3) story industrial manufacturing/warehouse style structure. The concrete block, wood and brick building was noted to be constructed in several different phases. From 1940 until the early 1960s, a leather manufacturing company reportedly occupied the Property, although little specific information was ever found relative to its operation. Lewis Chemical subsequently operated at the Property from 1963 until 1983 as a collection, transportation, storage, and processing facility for hazardous waste. Numerous violations of federal, state, and local laws regarding the safe handling, transport, storage, and treatment of hazardous materials, as well as complaints from local residents, were documented during Lewis Chemical's time of operation at the Property. Lewis Chemical was forced to terminate operations under a Court Order issued by MassDEP in 1983. According to information provided in the Phase I Addendum (ES&M, 2003), several different tenants leased the space from 1983 to 2000 following Lewis Chemical's departure; however, none of the operations involved known chemical handling or storage.

In October 2000, the City of Boston foreclosed on the property due to unpaid property taxes. The property has been unoccupied since 2000. In June 2014, the former structure was razed. To limit the exposure to the underlying soil/groundwater impacts, the concrete slab and certain slope-stabilizing retaining walls along the western extent of the building were left intact. All utilities connected to the building were cut and capped prior to demolition. However, there is a sewer manhole located on Parcel 18-10598-000 that was reportedly left in place during building demolition activities.

Currently, the Property consists of vacant and mostly undeveloped parcels with only the concrete footprint of the former Lewis Chemical building remaining in the central portion of Parcel 18-10598-000. Therefore, approximately 25% of the Property is impervious surfaces and the remaining portions consist primarily of exposed soils and/or ground covering vegetation. The western corner of the Property along with areas nearest the Neponset River are more heavily wooded than the central and northern portions of the Property. Several small piles of discarded leather sheet goods are located in the southwestern corner of the Property near the Massachusetts Bay Transit Authority (MBTA) railroad bridge abutment.

Access to the Property is controlled by a 6-foot chain link fence and locked gate at the dead end of Fairmount Court/3rd New Way. The northernmost parcel of land adjacent to the Fairmount Avenue bridge abutment, which is also referred to as "0" Fairmount Court (18-10601-000), is unsecured and vacant.

2.3 SURROUNDING LAND USE

The Property is located in a mixed residential and commercial area of Hyde Park, Massachusetts. Active railroad tracks used by MBTA commuter rail and associated with the Penn Central Railroad right-of-way are located along the northern and western Property boundary. The Fairmount MBTA commuter rail train station is located approximately 125 feet northeast of the Property. The Neponset River is located along the southwest to southeast Property boundary. The Fairmount Avenue right-of-way and overpass abuts the Property to the east.

Residential or commercial properties are not located adjacent to the Property. However, commercial properties including a convenience store and pizza chain restaurant are located within 200 feet of the Property to the southeast beyond the Neponset River and residential properties are located within 200 feet north of the Property beyond the railroad right-of-way. No institutions, which are defined by the MCP as publicly or privately owned hospitals, health care facilities, orphanages, nursing homes, convalescent homes, educational facilities, or correctional facilities that in whole or part provide overnight housing, are located within 500 feet of the Property.

The Parkwell House nursing home and rehabilitation center and the Fairmount Rest Home for senior living are both located slightly beyond 500 feet as measured from the central portion of the Property. The Parkwell House is located at 745 Truman Parkway southwest of the Property and the Fairmount Rest Home is located at 172 Fairmount Avenue east of the Property. Each location has overnight housing.

2.4 ENVIRONMENTAL SETTING AND NATURAL RESOURCES

Currently, as depicted on the Massachusetts Geographic Information Systems (MassGIS; 2015) MassDEP Priority Resource Map (Appendix A), the Property is not located within 500 feet of any public drinking water supply areas (Zone II, Interim Wellhead Protection Aquifers (IWPA), Zone A, and/or Potentially Productive Aquifers). The nearest surface water feature is the Neponset River, which flows in an easterly direction and is located adjacent to the Property as shown in Figure 2. The upgradient portion of the Property is not located within the 100-year floodplain; however, portions of the Neponset River and riverbank are within the 100-year floodplain. The Property is not located within Bordering Vegetated Wetlands, Isolated Land Subject to Flooding, Areas of Critical Environmental Concern (ACEC), MassDEP Permitted Solid Waste Facilities, Natural Heritage Endangered Species Program Habitats, or Certified Vernal Pools (MassGIS, 2015).

Areas of Protected Open Space are located within 500-feet of the Property to the west and southwest along the Neponset River. A major drainage basin division is located within 0.5-miles of the Property to the northwest.

2.5 RELEASE HISTORY

Information available from the MassDEP's Waste Site/Reportable Releases Lookup database (http://db.state.ma.us/dep/cleanup/sites/search.asp) was used to identify releases at the Property. An evaluation of these documents indicated that one RTN, 3-1616, was assigned to the Boston portion of the Property in January 1987. Two additional RTNs, 3-31548 and 3-31697, were assigned to the Massachusetts DCR parcel in March 2013 and August 2013, respectively. In August 2015, a second RTN for the Boston portion of the Property was issued for the discovery of LNAPL in one monitoring well. The following is a summary of information pertaining to each RTN.

RTN 3-1616

Information provided in the documents associated with this RTN indicates that the persistent mishandling and improper storage of chemicals by Lewis Chemical during its time of operation has resulted in impacts to the soil, groundwater, sediment, and surface water. The following information was provided by Environmental Strategies & Management (ES&M) as part of the Phase I investigation for the Property:

- A spill of approximately 75 to 100 gallons of water used to flush a tank reportedly overflowed and spilled to the Neponset River was noted to have occurred in April 1981.
- A spill in March 1982 of approximately 25 to 30 gallons of "waste flammable liquids" which overflowed a tank and the containment dike, impacting nearby surface soils.
- On April 22, 1983, a fire was reported at the Property. The fire started in a basement dryer on site while the facility was unmanned.
- On May 25, 1983, a second fire and resulting explosion occurred at the facility. Consequently, a cease and desist order was issued to Lewis Chemical by the Boston Fire Commissioner.

Because of the explosion, MassDEP revoked Lewis Chemical's hazardous waste license in June 1983. Lewis Chemical was forced to terminate operations under a Court Order issued in September 1983. Although individual instances of releases or potential releases have been identified, it is believed that these actions are more indicative of prolonged mishandling and misuse of hazardous materials by Lewis Chemical.

RTN 3-31548

Investigations completed at the Property have documented soil and groundwater concentrations on the portion of the Property that is owned by the Commonwealth of Massachusetts, and controlled by DCR, that exceed the applicable soil and groundwater Reportable Concentrations (RCs). Property inspections have observed that a small pipe (approximately 3-inches in diameter) discharges onto the riverbank on the DCR parcel. The pipe was apparently the discharge point of the trench drain located in the basement of the former Lewis Chemical Company building.

Upon receipt of knowledge of the RC exceedances, DCR submitted a release notification to MassDEP on May 17, 2013 listing the constituents in soil and groundwater from sample points located on the DCR parcel that exceeded the applicable RCs. MassDEP assigned RTN 3-31548 to the release. Because the constituents that exceeded the RCs were similar to the COCs associated with the former Lewis Chemical facility (RTN 3-1616), and there was no evidence of the use of these constituents on the DCR parcel, DCR submitted a Downgradient Property Status (DPS) submittal to MassDEP on January 24, 2014. MassDEP terminated the DPS with a Notice of Audit Findings (NOAF) on June 5, 2014, stating that the DPS submittal did not meet the requirements of a DPS (310 CMR 40.0180).

On November 4, 2014, CDW Consultants, Inc., (CDW) on behalf of DCR, submitted a Phase I Initial Site Investigation Report and a Tier Classification for RTN 3-31548, classifying the site as a Tier II site. The DCR parcel site (RTN 3-31548) is included within the disposal site boundary of the former Lewis Chemical facility (RTN 3-1616).

RTN 3-31697

On August 2, 2014, a release notification was submitted to MassDEP for the release of lead to the soil on the DCR parcel. RTN 3-31697 was assigned to the lead release condition in soil. On August 8, 2014, CDW, on behalf of DCR, submitted a Summary Report and Method 1 Risk Characterization in Support of a Permanent Solution with No Conditions for the site. The Method 1 Risk Characterization documented that the calculated exposure point concentration for lead in the soil on the DCR parcel did not exceed the applicable Method 1 S-1/GW-3 standard and

therefore the documented lead release did not pose a significant risk to human health or the environment. The site (RTN 3-31697) is currently listed on the MassDEP database as "PSNC" (Permanent Solution with No Conditions).

On October 30, 2015, CDW, on behalf of DCR, submitted a Permanent Solution Retraction Statement for this RTN. The purpose of this retraction is to better facilitate a more unified cleanup approach to co-mingled releases within the overall disposal site boundary of the former Lewis Chemical facility and the adjoining DCR-owned parcel. As a result of this retraction, this RTN will be linked with RTN 3-31548. Refer to Appendix A for a copy of the retraction notice.

RTN 3-33111

On August 26, 2015, Boston DND submitted a 120-day release notification form (RNF) for the detection of LNAPL in the subsurface equal to or greater than 1/8-inch (0.01 ft) and less than ½-inch (0.04 ft). During groundwater sampling and gauging events conducted on July 20, 2015, LNAPL was detected at a thickness of 0.02 feet in monitoring well ESM-15. Further assessment of the release associated with this RTN will be conducted under comprehensive response actions associated with RTN 3-1616. Refer to Appendix A for a copy of the BWSC103 RNF.

A list of reports prepared by previous consultants that provide more details pertaining to the release history for the disposal site is provided in Appendix B.

2.6 SUMMARY OF THE APRIL 2015 METHOD 3 RISK ASSESSMENT

A characterization of risk of harm to human health, safety, public welfare, and the environment was completed for the releases at the Property and presented in the April 2015 Final Phase II CSA. For the releases at the former Lewis Chemical facility, a MCP Method 3 risk assessment approach was used to evaluate potential risks based on site-specific information. The complete risk assessment is provided in Appendix F of the Phase II CSA. This section summarizes the approach and outcome of the risk evaluation.

The results of the Method 3 Risk Characterization (RC) rely on certain assumptions regarding future site use, such as the prohibition of redevelopment of the Property for future residential use through implementation of an Activity and Use Limitation (AUL) in support of permanent closure. Therefore, potential risks posed to future hypothetical residents were not quantitatively evaluated in the April 2015 Method 3 Risk Assessment.

COCs identified in site soil and groundwater include petroleum hydrocarbon fractions, PAHs, VOCs, polychlorinated biphenyl (PCBs), and heavy metals. For this assessment, potential human receptors were identified as current/future trespassers, current/future youth recreational users, future facility workers, and future construction/utility workers. Potential risks estimated for these four receptor groups are also considered protective of other, lesser-exposed human receptors, such as adult visitors and/or landscape workers. Therefore, separate risks were not quantified for those receptor groups.

A summary of risks for human health, public welfare, safety, and the environment is presented in the following sections.

2.6.1 Human Health

Estimated cumulative noncancer hazards and cancer risks are below acceptable MCP risk limits for the current and future trespasser for site-wide exposures, as well as the current/future recreational user for site-wide exposures. Lead risks, which were evaluated separately using USEPA's Adult Lead Model (ALM) for the future facility worker and future construction/utility worker scenarios, indicate that estimated probabilities of fetal blood lead levels in a pregnant worker are below the acceptable probability of 5% for these receptors. However, estimated risks for the existing site worker (landscape maintenance), future facility worker and the future construction worker, at various exposure points, are above MCP risk limits. Therefore, a condition of No Significant Risk of harm to human health has not been achieved.

2.6.2 Safety, Public Welfare, and Environmental Risk Characterization

Based on observations made and information collected during environmental investigations and because the building has been razed, conditions at the Property do not pose a threat of physical harm or bodily injury to people. Furthermore, Woodard & Curran did not identify release-related conditions that may pose a risk to public safety. Therefore, a condition of NSR of harm to safety has been achieved.

There does not appear to be adverse impacts to the surrounding community. However, one of the public welfare criteria involves a comparison of analytical data to Upper Concentrations Limits (UCLs). Concentrations of trichloroethylene, C5-C8 aliphatic hydrocarbons, and PCB Aroclor 1248 in soil and C5-C8 aliphatic hydrocarbons in groundwater exceeded UCLs. Therefore, in accordance with the MCP, a condition of No Significant Risk to public welfare has not been achieved.

As indicated in previous reports, there are currently no complete exposure pathways for terrestrial receptors at the Property. No observations of readily apparent harm to the environment have been made and in fact, wildlife has been observed at the Property and in the Neponset River on multiple occasions during site assessment activities. Historical sediment concentrations of selenium and VOCs exceeded ecological screening benchmarks used in a Stage I Ecological Screening but these data were very limited and additional data were collected to support this Phase III RAP. In addition, UCLs in soil and groundwater were exceeded at the Property. Therefore, a condition of No Significant Risk of harm to the environment has not been achieved for current and reasonably foreseeable future conditions.

3. SUPPLEMENTAL INVESTIGATION ACTIVITIES

Supplemental investigation activities were completed after the Phase II CSA to evaluate subsurface conditions and COPCs relative to the application of RAAs. The objectives of collecting additional data were to evaluate: 1) current COPC concentrations in soil and groundwater; 2) the presence and types of bacteria present in groundwater that may support dechlorination; 3) the potential for subsurface conditions to support natural attenuation 4) whether or not PCBs are actually detected in groundwater or are a result of sediment in historical samples; 5) the abnormally high concentrations of C_5-C_8 aliphatic hydrocarbon concentrations in groundwater exceeding the UCL; 6) the presence of 1,4-dioxane in groundwater at concentrations historically reported below elevated reporting limits; 7) the leachability of lead; 8) the presence of hexavalent chromium in soil; 9) the potential for using in-situ chemical oxidation as a RAA; and 10) updating the ecological data collected along the Neponset River in the vicinity of the disposal site. The methodology and results of supplemental investigation activities are summarized in the sections below.

3.1 GROUNDWATER GAUGING

On July 16, 2015, depth to water measurements were collected from select monitoring wells using an electronic interface probe, measured to the nearest 0.01 foot. Follow-up gauging was also conducted on July 20, 2015, prior to conducting groundwater sampling. At that time, LNAPL was detected at a thickness of 0.02 feet in monitoring well ESM-15. On August 26, 2015, Boston DND submitted a 120-day RNF for the detection of LNAPL. Refer to Section 2.5 for further details.

3.2 GROUNDWATER SAMPLING

During historical sampling events, groundwater samples were collected using purge and grab techniques, resulting in anomalous results particularly for PCBs. However, during more recent sampling events, low flow sampling was conducted in accordance with the January 2010 USEPA Low Stress (Low Flow) Purging and Sampling Procedures for the Collection of Groundwater Samples from Monitoring Wells guidelines. Ground water sampling was conducted with emphasis on monitoring field chemistry parameters including temperature, specific conductance, dissolved oxygen (DO), pH, and ORP to ensure stabilization and turbidity measurements that were approximately less than or equal to 5 Nephelometric Turbidity Units (NTUs) because of the historical problems with sediment in the samples submitted for laboratory analysis.

Between July 16 and July 20, 2015, groundwater samples were collected from select monitoring wells and piezometers across the Property and submitted to Absolute Resource Associates of Portsmouth, New Hampshire for laboratory analysis of the following analytes:

- VOCs (USEPA Method 8260C);
- low level 1,4-dioxane (USEPA Method 8260 SIM);
- volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) (MassDEP Method);
- total and filtered PCB aroclors (USEPA Method 8082 with soxhlet extraction); and
- natural attenuation parameters including:
    - total and dissolved iron and manganese (USEPA Method 6020);
    - carbonate alkalinity (USEPA Method 2320B);
    - ammonia (USEPA Method SM4500 NH3-D);
    - dissolved organic carbon (USEPA Method 5310C);
    - nitrate and sulfate (USEPA Method 300.0A);
    - sulfide (USEPA Method SM4500); and
    - dissolved methane, ethane, and ethene (USEPA Method 8015 mod).

VOC Results

VOC results indicated that concentrations of chlorinated solvents were generally greater than what was measured during the March 2015 sampling event but were very similar to historical concentrations reported at similar times of the year. Of the 16 samples collected, 3 samples collected from monitoring wells CDW-3, ESM-05, and ESM-03B-D had a least one COC, which exceeded the UCLs. These areas were known to be located within source areas and were designated as Hot Spots in the Phase II CSA report.

1,4-Dioxane Results

Historically, laboratory reporting limits were too high to be able to detect concentrations of 1,4-dioxane. During the July 2015 sampling event, separate samples were collected and submitted to the laboratory for USEPA Method 8260 SIM to obtain lower reporting limits for 1,4-dioxane. Overburden groundwater concentrations ranged from less than the laboratory reporting limit (2.5 µg/L) to 55 µg/L, which are all below the Method 1 GW-2 and GW-3 standards and 1,4-dioxane was not detected above the laboratory reporting limits (0.25 µg/L to 1.2 µg/L) in bedrock groundwater.

C5-C8 Aliphatic Hydrocarbon Results

Historically, C_5-C_8 aliphatic hydrocarbons were detected at concentrations exceeding UCLs in areas where gasoline or other volatile petroleum hydrocarbons were not stored or used and where chlorinated solvents were detected at elevated concentrations (e.g., monitoring well ESM-03, ESM-05, and CDW-3). Based upon discussions with multiple laboratories and research conducted regarding the VPH Method, chlorinated solvents such as TCE and PCE can be calculated under the carbon peaks and represented under the total C_5-C_8 aliphatic hydrocarbon range. Absolute Resource Associates was not capable of evaluating the peaks in the chromatograms; therefore, a second groundwater sample was submitted for VOCs via USEPA Method 8260C to quantify the chlorinated solvents within the C_5-C_8 aliphatic hydrocarbon range. Based upon the VOC data for these three wells, the calculated/adjusted C_5-C_8 aliphatic hydrocarbon ranges are as follows:

Sample Location	C5-C8 Aliphatic	PCE	TCE	cDCE	1,1-DCE	1,1,1-TCA	1,1-DCA	Adjusted C5-C8 Aliphatic	UCL
ESM-03 (April 2006)	**150,000**	4,300	9,400	63,000	310	25,000	1,600	**46,390**	100,000
ESM-05 (July 2015)	**100,000**	18,000	130,000	95,000	1700	130,000	2,300	**Can't be determined**	100,000
CDW-3 (March 2015)	**116,000**	7,050	87,200	17,700	ND (5,000)	246,000	ND (5,000)	**Can't be determined**	100,000

Note – all results reported in ug/L.

As indicated in the above table, groundwater sample results that initially exceeded the C_5-C_8 aliphatic hydrocarbon UCL, the adjusted C5-C8 aliphatic hydrocarbon range (i.e., the concentration after removing the above-listed VOCs) does not exceed the UCL or the presence of elevated concentrations of chlorinated solvents would suggest that the C5-C8 aliphatic hydrocarbon was a false positive. Similarly, sample results that do not exceed the UCL can also be adjusted for a more representative C5-C8 aliphatic hydrocarbon concentration.

PCB Results

Due to historical sampling methods (purge and grab or low flow that did not monitor turbidity), PCBs were detected at concentrations exceeding the Method 1 GW-2/GW-3 standards, and sometimes the UCLs. However, during the July 2015 sampling event, low flow purging and monitoring techniques were used to collect the samples from monitoring wells ESM-05, ESM-06, ESM-14, and CDW-3 with a focus on collecting samples with very low turbidity measurements (less than 5 NTUs) as well as total and filtered samples to remove sediments down to the 0.45 micron size. Because of these changes in sampling techniques, the total analytical results were significantly lower than historical data and the filtered samples indicated that PCBs were not present above the laboratory reporting limits (0.25 ug/L) with the exception of one location (ESM-05; 2.1 ug/L) where PCBs are co-located with elevated chlorinated solvent concentrations.

Natural Attenuation Results

Carbonate alkalinity, which is a measurement of the pH buffering capacity of an aquifer, is used to evaluate the extent of additional buffering capacity for pH to be in a favorable range for organisms to proliferate. In general, alkalinity concentrations (measured as mg/L of calcium carbonate) ranging from 20 to 200 mg/L are typical of fresh water and concentrations below 10 mg/L indicate that the water is poorly buffered and is very susceptible to changes in pH. Results of the alkalinity sampling indicate that with the exception of ESM-9, concentrations of alkalinity range from 36 to 110 mg/L.

"The efficiency of reductive dechlorination is directly related to the availability of molecular hydrogen which drives the overall process. Biological reduction of PCE to TCE involves breaking a chlorine bond and replacing it with a hydrogen ion. The hydrogen ion released can then be used by organisms during the fermentation processes (i.e., methanogens) to sustain further biodegradation" (Weidemeir, 1998). Any available oxygen in the groundwater (at concentrations greater than 0.5 mg/L) will drive the predominant microbial processes. Once the oxygen is consumed to concentrations less than 0.5 mg/L, nitrate (if present) becomes the predominant microbial process. Following the consumption of nitrate is iron oxide (Fe(II)), sulfate, and hydrogen sulfide. Finally, if methane concentrations are greater than 0.2 mg/L, then methanogenesis is the predominant process.

Below is a summary table of the range of concentrations detected for each of the MNA parameters. As shown, the primary constituent available for microbial processes is sulfate. Ammonia and dissolved organic carbon are also constituents used to evaluate the potential for natural attenuation in groundwater.

Constituent	Range in Concentrations Overburden	Range in Concentrations Bedrock
Dissolved Oxygen	0.1 to 6 mg/L	0.1 to 1.5 mg/L
Nitrate	1.1 to 2.1 mg/L	Non-detect
Iron oxide	Not measured	Not measured
Sulfate	47 to 500 mg/L	418 – 700 mg/L
Methane	Non-detect to 47 mg/L	Non-detect

Part of the in-situ biological analysis for DHB and DHC includes an evaluation of ethane and ethene concentrations. The bacterial culture DHB has been shown to effectively degrade 1,1,1-TCA to ethane while the microbial culture DHC degrades PCE to ethene. An analysis of ethane and ethene concentrations indicates whether or not there has been a vinyl chloride (VC) or dichloroethane (DCA) "stall" where the microbial colonies are no longer able to further break down these constituents to VC and/or DCA. Analytical results indicate that concentrations of both constituents in all

wells sampled for these parameters were detected at concentrations less than the laboratory reporting limit. Non-detected concentrations indicate that a "stall" has occurred at both VC and DCA.

Total iron concentrations in overburden monitoring wells range from 1.2 to 54 mg/L and dissolved iron concentrations range from 1 to 53 mg/L indicating that most of the iron present in overburden groundwater is in the dissolved phase. Concentrations of total and dissolved iron in bedrock groundwater are less than 0.5 mg/L.

Total manganese concentrations in overburden groundwater range from 0.25 to 4 mg/L while dissolved concentrations are slightly lower, indicating that most of the manganese present in overburden groundwater is also in the dissolved phase. Concentrations of total and dissolved iron manganese in bedrock groundwater generally range from 0.5 mg/L to 7 mg/L.

Refer to Table 1 (VOCs), Table 2 (VPH & EPH), Table 3 (PCBs & Metals), and Table 4 (Natural Attenuation Parameters) for a summary of analytical data, Figure 2 for monitoring well locations, and Appendix C for copies of the laboratory analytical reports.

3.3 IN-SITU BIOLOGICAL ANALYSIS

Under anaerobic conditions, PCE and/or TCA can undergo reductive dechlorination to reduce COPCs to non-toxic ethenes and ethanes. In order for this to occur, bacteria capable of using these compounds as growth supporting electron acceptors must be present in the subsurface. In general, the bacterial culture *Dehalococcoides* (DHC) has been shown to effectively degrade PCE to ethene. As indicated in the Microbial Insights DHC Interpretation guide, studies have shown that ethene production was observed in approximately 80% of samples in which DHC results were greater than 10^4 DHC cells/mL. However, a "stall" sometimes occurs where PCE daughter products (cis-1,2-DCE and VC) accumulate under natural attenuation conditions rather than continuing to degrade. To evaluate the potential for a degradation "stall," there are functional genes which can be also be analyzed for to attempt to identify if the enzymes for continued reductive dechlorination are present. "The tceA gene encodes the enzyme responsible for reductive dechlorination of TCE to cis-1,2-DCE. The bvcA gene encodes the VC reductase enzyme responsible for reductive dechlorination of VC to ethene. The vcrA gene encodes the VC reductase enzyme responsible for reductive dechlorination of cis-1,2-DCE and VC." (Microbial Insights, 2015). Additionally, the bacterial culture *Dehalobacter* (DHBt) has been shown to effectively degrade 1,1,1-TCA to ethane.

As part of the groundwater sampling event conducted July 16 through July 20, 2015, Woodard & Curran collected six groundwater samples for analysis of DHC and/or DHBt to evaluate the potential presence of TCE and TCA degrading bacteria in the subsurface. Groundwater samples were collected from overburden and bedrock samples at the two source areas near monitoring wells ESM-3 and ESM-5. Samples were also collected from ESM-9, located between the two source areas, and ESM-13 to establish background conditions. Groundwater was purged from these select monitoring wells using low flow sampling techniques. Once field parameters stabilized and required COC samples were collected, groundwater was pumped through a Microbial Insights Bio-Flo filter. At each location, approximately 1 to 2-L of water was filtered and then returned to the point of generation. The filter was sent to Microbial Insights of Knoxville, Tennessee for analysis of DHC, associated reductase enzymes, and/or DHBt.

ESM-5 Source Area Results

Results of the analysis indicated that for the ESM-5 source area, the highest microbial colony of DHC was identified in the overburden groundwater ($1.12x10^5$ cells/mL). The tceA reductase enzyme, as well as bvcA and vcrA enzymes were present, which supports the conversion of cDCE to VC. Concentrations of VC in groundwater may not be accurately represented in analytical results due to the high laboratory reporting limits. The presence of cis-1,2-DCE in groundwater combined with the presence of DHC and associated reductase enzymes indicates that reductive dechlorination is occurring. Results of the DHBt analysis indicate that there is a weak microbial community capable of 1,1,1-TCA biodegradation.

In bedrock groundwater within this source area, there are high TCE concentrations with no cDCE detected. Additionally, all DHC and associated enzymes were non-detect (less than $5x10^{-1}$ cells/mL) indicating that reductive dechlorination is likely not occurring in bedrock groundwater. Results of the DHBt analysis indicate that there was also a very weak microbial community capable of 1,1,1-TCA biodegradation.

ESM-3 Source Area Results

Results of the analysis indicated that for the overburden groundwater in the ESM-3 source area, DHC and the associated reductase enzymes were present at concentrations ranging from $3.6x10^{2}$ cells/mL to $6.4x10^{4}$ cells/mL and aa cDCE "stall" may be occurring based upon the non-detect VC results although reporting limits for VC were elevated. Results of the DHBt analysis also indicated that there is a weak microbial community capable of 1,1,1-TCA biodegradation.

Similar to the bedrock groundwater in ESM-5, there are minimal concentrations of cDCE coupled with very low microbial populations (both DHC and DHBt), indicating that reductive dechlorination is likely not occurring in deeper zones.

ESM-9 Results

Results of the analysis indicated that for the overburden groundwater in the ESM-9 area (between source areas identified at ESM-3 and ESM-5), DHC and the associated reductase enzymes were present at low concentrations ranging from $5.0x10^{-1}$ cells/mL to $6.3x10^{1}$ cells/mL. Analytical concentrations of both cDCE and VC provide substantive evidence of the conversion process to VC. However, there appears to be a VC "stall", as evident by the lack of a microbial community capable of doing any conversion work (vcrA results are $5x10^{-1}$ cells/mL).

ESM-13 Results

At this upgradient location, chemical analytical results indicated that 1,1,1-TCA in groundwater was either historically not detected or detected at very low concentrations. Therefore, groundwater from this location was only evaluated for the presence of DHC, and not DHBt. Results of the analysis indicated that for the overburden groundwater in the ESM-13 area, DHC and the associated reductase enzymes were present at low to moderate concentrations ranging from $1.9x10^{1}$ cells/mL to $1.1x10^{3}$ cells/mL, indicating that reductive dechlorination is possible.

Refer to Table 5 for a summary of biological analytical data, Figure 2 for monitoring well locations, and Appendix C for copies of the laboratory analytical report.

3.4 SOIL SAMPLING

On July 23, 2015, Woodard & Curran documented and observed the advancement of eight soil borings by Technical Drilling Services (TDS) of Sterling, Massachusetts. The location of these soil borings were advanced where historical lead and chromium concentrations were elevated for the purpose of evaluating the leachability of these metals and to evaluate for the presence of hexavalent chromium. Soil borings were advanced using a track-mounted 6620DT GeoProbe™ and 2-inch diameter core barrels with acetate sleeves to various depths up to 20 feet below ground surface (bgs). Refusal and/or bedrock was encountered during this soil sampling program at approximately 16 to 20 feet bgs. Soil samples were classified as silty sand in accordance with the modified Burmeister Soil Classification System. Soil was field screened for total VOCs via the jar headspace method using a photoionization detector (PID) equipped with an 11.7 electron volt (eV) lamp, calibrated to an isobutylene standard with a benzene correction factor. Total PID measurements ranged from less than 0.1 to 15.3 parts per million per volume (ppmv).

Select samples were submitted to Absolute Resource Associates of Portsmouth, New Hampshire for analysis of the following analytes:

- total lead (USEPA Method 6010);
- toxicity characteristic leaching procedure (TCLP) lead and/or chromium (USEPA Method 6010);
- hexavalent chromium (USEPA Method SM 3060A);
- pH (USEPA Method SW9045C); and
- ORP (ASTM 1498-08).

Soil generated from boring advancement was returned to the point of origin and no monitoring wells were installed. Refer to the boring logs in Appendix E for a summary of soil lithology and headspace concentrations.

Analytical results indicated that total lead was detected in all five samples at concentrations ranging from 130 milligrams per kilogram (mg/kg) (WC-GP-5) to 1,300 mg/kg (WC-GP-7). Of the seven samples analyzed for TCLP lead, only one (WC-GP-7; 5.8 mg/L) exceeded the TCLP standard of 5 milligrams per liter (mg/L). These data indicate that stabilization may be needed if soil were to be transported off-site for disposal or the soil may need to be sent to a hazardous waste facility.

Additionally, one sample (WC-GP-2) located in the area where elevated total chromium was historically detected was analyzed for hexavalent and TCLP chromium, as well as pH and ORP. Results indicated that while hexavalent chromium was detected at a very low concentration (0.63 mg/kg), TCLP concentrations were below laboratory reporting limits (less than 0.5 mg/L).

Refer to Table 6 (PCBs & Metals) for a summary of analytical data, Figure 3 for soil sampling locations, and Appendix F for copies of the laboratory analytical reports.

3.5 CHEMICAL OXIDATION TREATABILITY EVALUATION

During drilling activities conducted on July 23, 2015, soil samples were also collected from soil borings advanced near ESM-3, ESM-5, and ESM-7. Soil samples were collected from select intervals based upon headspace concentrations, soil stratigraphy, and soil color and were submitted to PeroxyChem of Tonawanda, New York for an in-situ chemical oxidation (ISCO) treatability analysis. In addition, samples of groundwater were collected from ESM-5 (5 gallons) and ESM-7 (2 gallons) for a bench-scale groundwater treatability study.

One boring was advanced at an approximate 30° angle near ESM-5 and roughly parallel to the slope near the river. The objective of this boring was to collect a soil sample from the approximate water table elevation at the potential discharge point of COPCs to evaluate the non-target oxidant demand of the soils. This result would be used to evaluate the potential for transport of the unspent oxidant to the River in the event that ISCO was a selected remedial alternative.

In addition to sending soil to PeroxyChem, select samples were submitted to TestAmerica of Westfield, Massachusetts to evaluate chemical, biological, and oxidant demand of the soils. Samples were analyzed for:

- total organic carbon (TOC; USEPA Method 9060A),
- total MCP-14 metals (USEPA Method 6020);
- chemical oxygen demand (COD; USEPA Method 410.4), and
- 5-day biological oxygen demand (BOD_5; USEPA Method SM 5210B).

In the event that additional treatability analyses on the soils needed to be conducted, soil samples were also submitted to Absolute Resource Associates for analysis of VOCs via USEPA Method 8260C. VOC data collected concurrently with the treatability samples would allow for compensation of any potential VOC losses. The above analyses were used in conjunction with the results of the PeroxyChem analysis to evaluate potential treatability options and the results are summarized below.

ISCO Treatability Analysis – Part 1

As part of the first phase of analysis, both soil and groundwater samples were tested using catalyzed hydrogen peroxide (CHP) to evaluate stability of the CHP. The objective of the CHP test was to observe if the CHP could persist for more than 15 hours once the samples were treated. In general, CHP has a very short half-life (approximately 35 hours under laboratory control conditions), which indicated that it oxidizes rapidly. From a contact and distribution perspective, rapid oxidation has the potential to oxidize non-target organics, wasting the treatment process. In the event that CHP did not persist, then using CHP as part of a soil mixing treatability option would not be feasible, and other chemicals (e.g., persulfate) would need to be evaluated.

Results of the ISCO treatability analysis conducted by PeroxyChem indicated that the half-life of CHP in the soil samples analyzed was approximately 35 hours. Additionally, two types of stabilizers were added (citric acid and phytic acid) to evaluate the potential of increasing the half-life. Results indicated that the addition of 20 milli-Moles (mM) of citric acid doubled the half-life (to 63 hours) and the addition of 5mM of phytic acid more than tripled the half-life (to 124 hours). This data demonstrates that CHP would remain in the subsurface for an appreciable amount of time for oxidation of site COCs.

ISCO Treatability Analysis – Part 2

The objective of the second phase of testing was to evaluate the optimal dose and/or concentration of Klozure® needed to oxidize site COCs. Klozure® is an activated persulfate, which is capable of oxidizing chlorinated solvents, petroleum hydrocarbons, and many other COPCs. Rapid destruction of COPCs is driven by the activation of the persulfate ion, which generates a sulfate radical. There are many ways that activation can be accomplished and include heat, transition metals, addition of hydrogen peroxide and/or using high pH. The Klozure® Demand Test (KDT) evaluates the demand upon the persulfate by the organic content, mineral loading and soil type. The resulting KDT value can be used to estimate the magnitude of oxidant dosing during treatment. The results of the KDT test indicated that approximately 2.2 grams of persulfate to one kilogram (kg) of soil would be required for soil treatment. Based upon the area in need of treatment, (175 feet long by 60 feet wide, by 25 feet deep; approximately 9,700 cubic yards) and the assumed average weight of soil at 1.5 tons/cubic yard (1361 kg/cubic yard), approximately 96,046 pounds (48 tons) of persulfate would be needed to treat the impacted area. This estimate does not consider a contingency volume or supplemental addition of persulfate to treat back diffusion or rebound.

Because high pH was chosen as the most effective activation method for Part 2, a Base Buffering Capacity (BBC) test was conducted. The objective of the BBC was to evaluate varying amounts of sodium hydroxide (NaOH) needed to raise pH of the soil to a pH of 10.5 (the required pH for Klozure® activation). The results of the BBC test indicated that approximately 6.2 grams of 25% NaOH per one kilogram of soil would be required in addition to the persulfate to create the high pH necessary to cause the chemical reactions. Therefore, using the same area/volume referenced above for persulfate, approximately 270,674 pounds (135 tons) of NaOH will be needed for the catalyst.

Refer to Table 7 (VOCs), Table 8 (historic VPH & EPH), Table 9 (Oxygen Demand and TOC), Appendix G for copies of the laboratory analytical reports, and Appendix H for a copy of the ISCO treatability report.

4. SUPPLEMENTAL ECOLOGICAL ASSESSMENT

In preparation for evaluating RAAs, Woodard & Curran reviewed historical surface water and sediment data collected in the Neponset River and the Stage I Ecological Screening Assessment (ESA) presented in the Phase II CSA report. The results of Stage I ESA exceeded benchmark standards for VOCs and select metals and indicated that there may be risk to ecological receptors. Other COPCs detected at the site were not analyzed during previous sampling events. As a result, Woodard & Curran created a sampling plan consisting of surface water, pore water, and sediment samples collected from up to 12 locations along six transects to fill in data gaps and obtain current concentration data. Additional upriver locations were proposed to be collected as background, reference samples. The assessment activities are summarized below and the results are summarized in Section 5.

4.1 RECONNAISSANCE ACTIVITIES

On August 21, 2015, Woodard & Curran conducted reconnaissance activities to evaluate boat access to the river, approximate surface water depth, sediment thickness, and locations of samples relative to sediment deposits within the river channel & other site features. Results of the reconnaissance indicated that boat access to the river could be achieved by cutting a hole in the mesh portion of the fence on the eastern side of the Property in the vicinity of ESM-9 and carrying the boat down the riverbank and repairing the fence when complete. During reconnaissance activities, a few fish, frogs, and terrestrial animals were observed in the river and along the embankment.

At the time of sampling, the river was approximately 75 feet wide and 12 feet deep in the middle of the channel. Surface water was observed to be approximately 12 to 24-inches deep immediately near the shore and becoming much deeper approximately 3 to 4 feet from the bank. On the northeastern portion of the Property (downriver near the Fairmount Avenue bridge abutment), the slope of the river dropped off significantly at the edge of the shore at an approximate 1 foot-to-1 foot ratio. On the southeastern portion of the Property (upriver near the MBTA bridge abutment), the slope of the river also dropped off significantly, but not as sharply as downstream. In between the two steeper portions of the Property was a relatively flat area with significant sediment deposits greater than 6 feet in depth. In the steeper portions of the Property, the sediment appeared to consist of approximately 1 to 2-inches of "muck" (fine grained, silty and organic material) underlain by a more solid material (approximately 4-inches of sand).

In the vicinity of the bridge abutments, "armoring" (large, flat boulders approximately 2 to 3 feet in diameter and set into the riverbank) was observed above the water line on the riverbank slope and extending into the river. The armoring was observed approximately 100 feet upriver from the Fairmount Avenue bridge abutment and 60 feet down river of the MBTA bridge abutment. The armoring was also observed in a small portion of the embankment in the middle of the Property (in the vicinity of monitoring well ESM-5). There is a possibility that the armoring was present along the entire riverbank but may have been covered by the thick vegetation. Due to the organic layer of leaves, sticks, and sediment on the bottom of the River, it was not possible to evaluate the presence of armoring below the water line in the channel at the time of the site reconnaissance. However, the presence of the armoring was determined during the sediment sampling effort described below. Additionally, trash, aluminum cans, tires, miscellaneous debris, and a car were all observed either on the riverbank or in the channel.

4.2 SAMPLING METHODOLOGY

Between August 25 and August 27, 2015, Woodard & Curran collected surface water, sediment, and pore water samples to update the Stage I ESA and collect current and more representative data from the Neponset River. Surface water samples were collected first from a boat to minimize the disturbance of sediment during sample collection. Surface water samples were collected using a peristaltic pump and dedicated polyethylene tubing, with the sample collected from the midpoint of the water column. Pore water samples were collected using a micro push point sampler configured with a 4-centimeter screen interval and pumped using a peristaltic pump and dedicated polyethylene tubing.

Due to armoring encountered within the stream bank channel, some of the samples (mostly sediment) were not able to be collected. Two different types of sediment sampling equipment were attempted – a 2-inch diameter AMS sediment core sampler with plastic liner and a 6-inch-by-6-inch Petit Ponar grab dredge sampler. Sediment thicknesses near the shoreline were observed to be much less than originally thought (only approximately 6 to 9 inches thick) due to armoring which resulted in minimal volumes available for sample collection. Due to the lack of available sediment, most of the sediment that was able to be collected sloughed out the bottom of both types of sampling equipment. The most effective method for collecting samples along the shoreline was a shovel.

Nine surface water, six pore water, and seven sediment samples were collected along the Property boundary. Four surface water, three pore water, and four sediment samples were collected from the reference areas located approximately 150 feet upriver of the MBTA bridge. Samples were submitted to Test America of Westfield, Massachusetts for analysis of some or all of the following analytes:

- VOCs (USEPA Method 8260C) and associated percent solids;
- total MCP 14 metals, plus copper (USEPA Method 6020 and 7471A [mercury]);
- total and/or filtered PCBs (USEPA Method 8082 with Soxhlet extraction);
- fractional organic carbon (FOC; USEPA Method D2974); and
- total and/or dissolved hardness (USEPA Method SM 2340C).

Refer to Table 10 (surface water), Table 11 (pore water), and Table 12 (sediment) for a summary of analytical data, Figure 4 for sampling locations, and Appendix I for copies of the laboratory analytical reports. Refer to Section 5 for a summary of the results and updated Stage I Ecological Screening Assessment and background evaluation.

5. UPDATED STAGE I ESA & BACKGROUND EVALUATION SUMMARY

The results of the Stage I Ecological Screening Assessment (ESA) presented in the Method 3 Risk Characterization (W&C 2015) indicated that concentrations of VOCs and selenium in sediment exceeded ecological screening benchmarks and that certain sediment COPCs may present a potential risk of harm to the environment. The Method 3 concluded that evaluation of ecological effects and collection of supplemental sediment data, particularly for PCBs, was warranted (W&C 2015). The river sampling program described in Section 4 of this report was implemented in the summer of 2015 to address these data gaps and reduce uncertainties.

Appendix J contains an updated Stage I ES that evaluates the recent surface water, sediment, and pore water with respect to local conditions within the river, and to evaluate whether site-related constituents may pose a significant risk to ecological receptors, and whether remediation may be warranted within the river. This updated ES contains an updated local conditions evaluation based on the recent river data and historical site and reference data, as well as an expanded benchmark evaluation that takes into consideration a broader range of published ecological benchmark concentrations and the spatial distribution of the revised dataset.

VOCs, metals and PCBs have been detected in pore water, surface water and sediment within the reach of the Neponset River adjacent to the Property, as well as in upriver Reference areas. A comparison of recent 2015 pore water, surface water and sediment analytical results suggest higher concentrations of certain COPCs along the embankment at the Property, particularly for pore water and sediment. However, historical and recently collected Reference data indicate that elevated concentrations of metals and PCBs also exist in upriver locations. In the context of historical data, concentrations measured in the vicinity of the former Lewis Chemical facility in 2015 for many constituents are consistent with those of upriver areas.

As a preliminary estimate of ecological risk, constituents that have not been ruled out as disposal site-related due to the limited reference and background data described above, were compared to ecotoxicological benchmarks to evaluate the potential for risk of harm to the environment. In pore water, chlorinated VOCs and barium exceeded benchmark concentrations at a frequency and magnitude that suggested the potential for adverse effects to ecological receptors. In sediment, chromium, barium, lead, mercury, vanadium and zinc were present in a number of samples at the Property and in the river at concentrations exceeding the range of benchmark values. However, these metals were also detected in reference samples in some cases above benchmark values indicating that there are local background conditions that will need to be evaluated further. Surface water COPCs were determined to pose negligible environmental risk.

Samples collected at locations SW-12/SED-12/PW-12, SW-15/SED-15/PW-15 and SW-16/SED-16/PW-16 (see Figure 4) tended to have the highest concentrations of COPCs and hence, greatest number of benchmark exceedances. All three locations are located adjacent to soil/groundwater VOC Hot Spots identified near the bank of the river on the Property (refer to the Phase II CSA report for Hot Spot locations). Remediation of these VOC hot spots and other areas of the Property is expected to result in mitigation of VOCs, metals, and PCBs in pore water and sediment.

Other more current features such as the active MBTA railroad line, historical fill, and the erosion of embankments in upriver locations may also be contributing to the elevated metals detected in sediment and need to be evaluated further. Samples would need to be collected for the metals identified in the Updated Stage I ES including barium, lead, mercury, selenium, and zinc and submitted to a laboratory for analysis. In addition, microscopy samples would be submitted to identify the presence of coal, coal ash, and wood ash from soil and sediment locations. Based on this updated Stage I ES, it is recommended that additional delineation for the presence and magnitude of concentrations of metals at these three sample locations and further assessment of metals background conditions, be conducted after source area remediation activities are complete. Therefore, a RAA was not evaluated or selected for the Neponset River at this time and it is anticipated that the VOC RAA selection will address VOCs in porewater.

6. PILOT TESTS AND PREVIOUS RESPONSE ACTIONS

6.1 SOIL VAPOR EXTRACTION SYSTEM

Between September 24, 2010 and February 13, 2013, a soil vapor extraction (SVE) system was operated under a Release Abatement Measure (RAM) for the purpose of removing VOC mass below the former Lewis Chemical building. The SVE system was operational for approximately 650 days. Based upon estimates provided in previous reports, approximately 1,500 pounds of VOCs were removed from the subsurface.

The vapor extraction points consisted of ten 2-inch diameter vertical SVE wells screened at a depth of 0.5-feet to 3.5-feet below the concrete slab. A sand pack was installed around the screened interval and a concrete and bentonite mix extended from the top of the slab to 0.5-feet. The extraction wells were piped together in three separate inlets that combined at the control manifold located within the SVE equipment area. One 5-horsepower Rotron DR757 regenerative blower, a moisture separator, and two 1,000-pound vapor phase granular activated carbon vessels piped in series followed by a potassium permanganate filter (to extract vinyl chloride) were used for vapor treatment.

Based upon monitoring data collected during system operation, the maximum radius-of-influence from each extraction point was approximately 20-feet. In addition, PID measurements were collected at the SVE blower inlet and at the carbon outlet on at least a monthly basis. Influent concentrations fluctuated during system operation; however, in 2013, influent concentrations had been reduced to less than 5 ppmv. Limited VOC data were collected from extraction and monitoring points to evaluate concentrations remaining in the subsurface during and after the system operation. However, the mass removal estimates indicated that the system was effective at removing mass in the subsurface. The SVE system was decommissioned in April 2013 when the former building was scheduled for demolition.

Refer to Figure 5 for locations of SVE extraction wells and discharge locations.

6.2 HISTORICAL SLUG TEST DATA

As outlined in the 2007 Interim Phase II Assessment prepared by ES&M, an aquifer slug test was performed in April 2006 to calculate the hydraulic conductivity of overburden soils at the Property. The slug tests were performed at monitoring wells ESM-3, ESM-5, and ESM-15 and consisted of inserting a 1.5-inch diameter PVC slug into each well and allowing the water level to return to static conditions. Based on the average of the slug tests performed on wells ESM-3 and ESM-13, the hydraulic conductivity was reported to be approximately 0.25 feet per day (ft/day). ESM-5 had a significantly larger hydraulic conductivity than ESM-03 and ESM-13, which was estimated to be approximately 26 ft/day. This difference was noted during sample collection and during slug testing when it was observed how much more quickly water levels in ESM-5 recovered.

6.3 PUMPING TESTS

Woodard & Curran designed and implemented a hydraulic evaluation consisting of a step-drawdown test and a longer term pumping tests at the sustainable pumping rate for the purposes of evaluating the feasibility of installing a groundwater extraction and treatment system in the bedrock. The hydraulic evaluation was conducted between June 29 and July 1, 2015. A submersible Grundfos pump was used to extract groundwater and pumping rates were adjusted using the pump's controller panel. Prior to initiation of the pump tests, select monitoring wells were gauged to establish baseline depth to water measurements. Results indicated that depth to water ranged from approximately 7.6 to 14.6 ft below PVC casing. These data were used to prepare a groundwater contour map (Figure 2). A summary of the water table measurements used to develop the groundwater contour plan are presented on Table 13.

Step-Drawdown Tests

During the step-drawdown test for the bedrock wells, two of the three bedrock wells (ESM-5B screened 30 to 40 feet bgs and ESM-8B screened 45-55 feet bgs) dewatered in less than 10 minutes at flow rates between 0.75 and 1 gpm.

The third bedrock well (ESM-3B-D screened 60 to 70 feet bgs) had a drawdown of 40 feet in 45 minutes at a pumping rate of 0.75 gpm.

Based upon these data and the limited ability to perform step-drawdown tests in the bedrock wells, additional overburden wells (ESM-3, ESM-6, CDW-5, and G-D-1) were selected for the step-drawdown test. These wells are generally screened from 4 to 14 feet bgs with the exception of ESM-6 that is screened from 4.5 to 19.5 feet bgs. Similar to bedrock wells, the step-drawdown test could not be performed due to the wells dewatering at very low flow rates ranging from 0.3 to 1.25 gpm. Only overburden well ESM-6 data indicated the potential for longer term pumping at low flow rates but still dewatered at rates approaching 2 gpm.

A summary of the step-drawdown response of each bedrock well to groundwater extraction is provided on Table 14.

Pumping Tests

On July 1, 2015, Woodard & Curran performed a pump test at monitoring well ESM-3B-D (deep bedrock) because this well had the most available water column to reduce the potential for dewatering the well. The pumping well and several nearby overburden wells (ESM-3, CDW-5) were equipped with automatic data loggers (pressure transducers) to aid in rapid data acquisition. Prior to initiating groundwater extraction, the following nearby wells were gauged for initial groundwater elevations: overburden wells ESM-3, CDW-5, ESM-4, ESM-2; bedrock wells ESM-3BS and CDW-4B. Bedrock well ESM-3B-D was pumped using the peristaltic pump for approximately 70 minutes at an average flow rate of approximately 0.43 gpm. When the pump was turned off, water levels continued to be monitored to observe groundwater recovery in the selected monitoring well network. Bedrock well ESM-3B-D experienced approximately 8.41 feet of drawdown during the pumping test, for a specific capacity of 0.05 gpm/ft (Table 14). Measured drawdown at the nearby overburden and bedrock monitoring wells listed above was less than or equal to 0.05 feet. Due to the limited hydraulic influence of deep bedrock groundwater extraction on nearby shallow bedrock and overburden wells, recovery data from the extraction of groundwater from ESM-3B-D was used to determine hydraulic parameters as a single-well rising head test instead of using either a multi-well distance-drawdown or time-drawdown analysis. A plot of the recovery data is provided in Appendix K and was analyzed using the Bouwer & Rice method. The data were analyzed using AquiferWin32 Version 3.25 (ESI, 2007) which resulted in a hydraulic conductivity of approximately 3.75 ft/day in bedrock well ESM-3B-D which does not translate to other bedrock locations due to the other wells dewatering at very low flow rates.

On July 1, 2015, two pump tests were performed on monitoring well ESM-6. The first test operated at an average flow rate of approximately 1 gpm for 60 minutes. The second test increased the average flow rate to approximately 1.75 gpm for approximately 10 minutes to evaluate specific capacity of the well when subjected to a greater flow rate. ESM-6, and nearby overburden monitoring wells CDW-3, ESM-5, and G-A-2 were equipped with dataloggers; a datalogger was installed in bedrock well ESM-5B, but was removed (due to it malfunctioning) and replaced with manual gauging with an electronic oil/water interface probe.

Overburden well ESM-6 experienced roughly 1.63 feet of drawdown at an extraction rate of 1 gpm and a drawdown of 2.65 feet at a rate of 1.75 gpm. The calculated specific capacity for both tests is approximately 0.65 gpm/ft. Measured drawdown at monitoring wells surrounding ESM-6 (overburden wells CDW-2, G-A-2, CDW-3, ESM-5, and G-B-1) were less than or equal to 0.05 feet during both pump tests. Nearby bedrock well ESM-5B experienced between approximately 0.1-0.2 feet of drawdown during the course of the two pumping tests. The drawdown data suggest limited connectivity between overburden and shallow bedrock; however, the minimal cone of depression experienced by nearby overburden wells suggests that the inferred downward flow gradient likely will not be reversed via shallow groundwater extraction at the sustainable pumping rates used during the pump test. Recovery data for the pumping test at 1 gpm were not considered for analysis due to flow-back from the pump tubing as the pump was deactivated, creating an artificially rapid water level recovery. Data from the test conducted at 1.75 gpm did provide adequate input for slug test analysis via the Bouwer & Rice method. The data were analyzed using AquiferWin32 Version 3.25 (ESI,

2007) which resulted in a hydraulic conductivity of approximately 0.95 ft/day in the overburden, which falls within the range of historical data provided by ES&M.

A plot of these data is provided in Appendix K, along with copies of the transducer data.

6.4 INVESTIGATION DERIVED WASTES

During the hydraulic evaluation conducted in June and July 2015, investigation derived waste was generated and stored at the Property. On July 24, 2015, two 55-gallon containers of purge water generated during the pump test were classified as hazardous waste and transported off-site for disposal. Veolia Technical Services of West Bridgewater, Massachusetts was contracted to transport and dispose of these wastes at the Veolia facility located in Flanders, New Jersey. Once the wastes arrived in New Jersey, Veolia consolidated and transported the wastes to Port Arthur, Texas for incineration. Copies of the hazardous waste manifest for this shipment is included in Appendix L.

7. UPDATED NATURE & EXTENT OF IMPACTS

OHM at the Property consists of VOCs, PCBs, petroleum constituents (VPH, EPH, and PAHs), and metals. Releases of OHM occurred at the Property due to historic mishandling and use of hazardous materials specifically by the former Lewis Chemical Corporation. The results of subsurface investigations conducted at the Property from June 2002 July 2015 were previously described in Section 3. Additional information regarding the nature and extent of OHM in the separate media, as well as a description of the conceptual site model (CSM), is presented below.

7.1 SOIL

Soil impacts at the Property consist of concentrations of COPCs consistent with historical operations of chemical salvaging, recycling, bulk solvent storage, and leather substitutes manufacturing. Soil concentrations indicate that mainly VOCs and PCBs, and to a lesser degree, metals (e.g., arsenic, barium, cadmium, chromium, lead, mercury, and silver) and petroleum constituents (e.g., EPH, VPH, and PAHs) impact the overburden soils to approximate depths of 20 feet bgs. However, the most significant impacts are found within 10 feet of ground surface. Deeper fill and native overburden soils (approximately 10 to 20 ft. bgs) have diminishing impacts. The approximate top of bedrock is located at 20 feet bgs based upon refusal during drilling activities.

Analytical results indicated that concentrations of detected COPCs are variable across the Property and across varying depth intervals. The highest concentrations of consistently detected VOCs (mainly PCE, TCE, 1,1,1-TCA and associated daughter products) were generally found in soils collected at the southern extent of the Property, including in and around the former tank farm containment area, inside the former building footprint and between the former building and the Neponset River. Heavy metals are present across the Property, including beneath the former building foundation at depths ranging from surficial soils to approximately 5 feet bgs. Finally, PCBs were detected in soil across the Property with the highest PCB impacts identified at depths ranging from surficial soils to approximately 5 feet bgs in the area to the south-southwest of the former tank farm area.

7.2 GROUNDWATER

Overburden depth to groundwater at the Property ranges from approximately 4 feet near the Neponset River to approximately 15 feet bgs in upland portions of the Property. Groundwater flow is generally in a south-southeast direction towards the Neponset River; however, during dry spells, the presence of groundwater is intermittent across the property and the volume available for sampling is substantially reduced. The overburden horizontal hydraulic gradient in the upland portion of the Property is estimated to be 0.17 feet per foot (ft/ft). The overburden horizontal hydraulic gradient closer to the river was very shallow and estimated to be 0.017 ft/ft. The vertical gradient in the overburden was estimated to be 0.012 ft/ft downward in bedrock. The overburden vertical gradient is in a downward direction; however, based upon pore water data, groundwater is discharging to the Neponset River and the vertical gradient likely changes to an upward direction along the river.

Historical sampling data identified VOC concentrations in overburden and bedrock groundwater at concentrations greater than the solubility limits; however, DNAPL has never been detected in monitoring wells at the Property. Concentrations of EPH constituents in groundwater are very low or not detected above laboratory reporting limits or Method 1 standards. However, VPH constituent concentrations are elevated. In particular, C5-C8 aliphatic hydrocarbons exceed UCLs whereas other hydrocarbon fraction concentrations are low and below Method 1 standards. As shown in Section 3.2 the C5-C8 aliphatic hydrocarbons are biased high due to the inclusion of chlorinated solvents (PCE, TCE, TCE, and associated daughter products) within this aliphatic range. Therefore, concentrations of C5-C8 aliphatic hydrocarbons are overestimated and the remaining hydrocarbon fractions are more representative of conditions relating to a petroleum release.

Historical sampling data also indicated the presence of PCBs in groundwater at concentrations exceeding the MassDEP GW-2 and/or GW-3 in overburden monitoring wells and at concentrations exceeding the UCL in groundwater at the piezometers. However, recent sampling data indicated that PCB concentrations are generally low to non-detect

in these locations. As presented in Section 3.2, the historical PCB data in groundwater are related to high turbidity and sediment in the samples due the sampling method and collection techniques. Elevated concentrations of chlorinated solvents are present at the Property, which may have the ability to dissolve PCBs in groundwater. However, PCBs were not detected in filtered samples with the exception of ESM-5, which could be an anomalous result that would need to be evaluated further. Based upon these data, PCBs are not expected to be a COPC in groundwater.

Dissolved metals were detected in groundwater but at very low concentrations below Method 3 GW-3 standards that were developed by MassDEP to be protective of adversely impacting surface water. Most of the metals in the groundwater samples were not detected above laboratory reporting limits. These data indicate that the releases of metals to soil (particularly lead chromium, barium, mercury, vanadium and zinc) are not affecting groundwater at the disposal site with potentially one exception, barium. Barium concentrations will need to be evaluated further as it related to impacted groundwater, pore water, and sediment during the implementation of RAAs.

Refer to Section 3 for further details and Figure 2 for monitoring well and piezometer locations.

7.3 PORE WATER, SEDIMENTS, AND SURFACE WATER

As noted in separate Phase II CSAs prepared and submitted by both Woodard & Curran and ES&M, the Neponset River and Mother Brook, which flows into the Neponset River upriver of the Property, have been the subject of extensive study and remediation by others. Both have a history of having industrial operations conducted along the riverbanks, resulting in impacts to surface water and sediment in many locations. In 2004, the US Geological Survey (USGS) completed a study of the Neponset River, which identified PCBs in sediment and surface water throughout the river. The primary contributor of impacts to the Neponset River was the L.E. Mason site, which impacted Mother Brook, approximately 200 meters upriver of the former Lewis Chemical facility.

VOCs, metals and PCBs have been detected in pore water, surface water and sediment within the reach of the Neponset River adjacent to the Property, as well as in upriver Reference Areas. A comparison of recent 2015 pore water, surface water and sediment analytical results suggest higher concentrations of certain COPCs along the Property (e.g., VOCs), particularly for pore water and sediment. However, historical data indicate that elevated concentrations of metals and PCBs also exist in upriver locations, and are attributed to various sources including the LE Mason site, which had released PCBs to sediments within Mother Brook; a tributary of the Neponset River located approximately 200 meters upriver of the Property. In the context of historical data, concentrations measured in 2015 for many constituents are consistent with those of upriver areas. Constituents potentially related to releases at the Property (VOCs and metals, due to lack of additional metals background data to date) were compared to ecotoxicological benchmarks to evaluate the potential for risk of harm to the environment. Metals in sediment require further assessment to evaluate background conditions due to the heavy manufacturing property uses upriver of the disposal site, historical fill that may contribute to metals in sediment, and the MBTA railroad that is located adjacent to the Property that may contain these metals in rail lines and other equipment (exempt from MCP obligations). A supplemental assessment prior to determining the need for remedial actions will be necessary. The results of the updated Stage I ES are provided in Appendix J.

7.4 SOIL GAS

During the March 2006 Phase II assessment activities completed by ES&M, six soil gas points were installed and sampled in various locations beneath the concrete foundation of the former building at the Property. PCE was detected at concentrations ranging from 157,000 µg/m^3 to 2,360,000 µg/m^3 and TCE was detected at concentrations ranging from 50,600 µg/m^3 to 1,730,000 µg/m^3. These soil gas concentrations, in combination with sub-slab soil samples collected by Woodard & Curran in 2008, prompted the installation and start-up of an SVE system in September 2010. Concentrations of COPCs in soil gas are expected to remain after the termination of the SVE system due to elevated PID measurements in subsequent soil sampling efforts as well as concentrations in groundwater, though sampling has not been conducted to confirm their presence.

7.5 NON-AQUEOUS PHASE LIQUID

During previous investigation activities, neither LNAPL nor DNAPL have been detected in monitoring wells, despite chlorinated VOCs exceeding the solubility limits for the primary COPCs. However, on July 20, 2015 during groundwater gauging and sampling activities, Woodard & Curran personnel detected 0.02 feet of LNAPL in monitoring well ESM-15. On August 26, 2015 and as a result of this detection, Boston DND submitted to MassDEP, a 120-day RNF for the detection of LNAPL in the subsurface equal to or greater than 1/8-inch (0.01 ft) and less than ½-inch (0.04 ft). LNAPL was not identified in surrounding wells and appears to be a localized condition.

On August 27, 2015, MassDEP assigned the LNAPL condition RTN 3-33111. This new RTN is being linked to the original RTN with the submittal of this Report. Pre-Design investigation activities will be conducted under RTN 3-1616 to assess additional controls that may be needed for the selected RAA strategy.

7.6 UPDATED DISPOSAL SITE BOUNDARY

As part of the Phase III site investigation activities and the transition between Licensed Site Professionals (LSPs), new soil and groundwater data were collected and historical data collected both on the Property and in the Neponset River were reviewed. Based upon these data, the disposal site boundary was expanded to include sampling locations further to the northeast toward the Fairmount Avenue bridge abutment and into the Neponset River (parcel 18-10601-000). This parcel is not secured; however, concentrations of metals and PCBs do not exceed Imminent Hazard thresholds provided in 310 CMR 40.0321(2)(b). In fact, only very low concentrations were detected in soil and groundwater. Refer to each of the previously mentioned figures for the new disposal site boundary.

8. TIER CLASSIFICATION EVALUATION

On July 20, 2015, the presence of LNAPL in the subsurface at a thickness equal to or greater than 1/8-inch (0.01 ft) and less than ½-inch (0.04 ft) triggered a 120-day reporting condition under the MCP and did not require Immediate Response Action (IRA) activities to mitigate immediate risks to human health or the environment. MassDEP issued RTN 3-33111 for the presence of LNAPL at the disposal site. Because the LNAPL condition does not warrant IRA activities, the presence of LNAPL alone does not warrant Tier Reclassification. In addition, the MCP has changed with regard to the Tier Classification process and no longer requires a Numerical Ranking System (NRS) Scoresheet. Therefore, the Tier I Inclusionary Criteria were reviewed for all release conditions under previous RTNs and included an evaluation of whether or not:

(a) there is evidence of groundwater contamination with OHM at concentrations equal to or exceeding the applicable RCGW-1 Reportable Concentration set forth in 310 CMR 40.0360, and such groundwater is located within an Interim Wellhead Protection Area, Zone II, or within 500 feet of a Private Water Supply Well;

(b) an Imminent Hazard is present;

(c) one or more remedial actions are required as part of an Immediate Response Action pursuant to 310 CMR 40.0414(2); or

(d) one or more response actions are required as part of an Immediate Response Action to eliminate or mitigate a Critical Exposure Pathway pursuant to 310 CMR 40.0414(3).

Based upon the known releases reported under RTNs 3-33111, 3-31697 (DCR parcel), 3-31548 (DCR parcel), and 3-1616, there are no Interim Wellhead Protection Areas, Zone IIs, or Private Water Supply Wells within 500 feet of the disposal site. Additionally, release conditions associated with these RTNs do not pose an Imminent Hazard because the site has been secured with permanent fence and IRA activities are not needed at this time. Therefore, the RTNs historically issued for releases at the disposal site as well as the new RTN 3-33111 for LNAPL will not reclassify the disposal site.

Comprehensive response actions associated with the original RTN (3-1616) are currently on-going and are in the process of evaluating the remedial alternatives that would be necessary to achieve a Permanent Solution. This report includes the Phase III RAA evaluation and considers all release conditions at the Property that are reported under the four RTNs. As summarized in an email dated June 12, 2015 from Christopher Pyott of MassDEP, the two DCR RTNs (3-31697 and 3-31548) could be linked to the overall disposal site RTN (3-1616); however, Mr. Pyott indicated that the linking would not relieve DCR of potential liability. Additionally, because the City of Boston is taking the lead on conducting response actions, the municipal exemption allows the City to stop work at any time upon written notification to MassDEP. In the event that the City ceases to conduct or does not complete all necessary response actions, DCR's obligations to conduct response actions as a PRP would remain for the portion of the disposal site that is currently owned by the Commonwealth of Massachusetts. Mr. Pyott also indicated that the Permanent Solution filed by DCR for RTN 3-31697 must be retracted prior to linking this RTN to RTN 3-1616. On October 30, 2015, the DCR submitted a report and transmittal form BWSC104 retracting the Permanent Solution for RTN 3-31697.

Because the City has agreed to take the lead for comprehensive response actions and assuming that the DCR continues to provide support to the City, the City agreed to link the two DCR RTNs to the original RTN for the disposal site with the submittal of this report. In addition, the LNAPL RTN (3-33111) is being linked such that future comprehensive response actions may address this reporting condition under the original RTN. Future response actions addressing the release conditions at the disposal site will be conducted as part of response actions for RTN 3-1616. Transmittal form BWSC107 was submitted concurrently with this Report to document the linking of these RTNs.

9. DEVELOPMENT OF REMEDIAL ACTION OBJECTIVES

Under the MCP, the objective of a Phase III Remedial Action Alternative evaluation is to identify potential alternatives and assess whether each alternative is a feasible means of achieving a condition of No Significant Risk at the disposal site. The requirements for conducting a Phase III evaluation are set forth in the MCP and include:

1) the identification and evaluation of RAAs that are reasonably likely to achieve a condition of No Significant Risk considering the OHM present, media impacted, and disposal site characteristics; and
2) the recommendation of a RAA or combination of RAAs (remedial strategy) that can achieve a Permanent or Temporary Solution.

This Phase III RAA evaluation follows a 4-stage process that includes:

1) A description of the disposal site and summary of the Phase II CSA conclusions (Sections 1 through 8);
2) A discussion of remedial action objectives (RAOs) and cleanup areas (Section 9);
3) An initial screening to identify those remedial action alternatives that are reasonably likely to be technically feasible and achieve a level of No Significant Risk; and, where necessary (Section 10 and 11); and
4) A detailed evaluation of the remedial action alternatives identified by the initial screening, to determine which alternative(s) will meet the performance standards and requirements set forth by the MCP (Section 12).

Lastly, the MCP requires that the results of a Phase III evaluation be documented in a RAP. This Phase III RAP was developed to evaluate RAAs to address soil, groundwater, pore water, and sediment exceedences at the disposal site.

9.1 AREAS AND MEDIA OF CONCERN

The comprehensive response actions associated with the original RTN (3-1616) are currently on-going and the City is is evaluating the RAAs that would be necessary to achieve a Temporary or Permanent Solution. This Report includes the Phase III RAA evaluation and considers the release conditions at the Property that are reported under the four RTNs 3-33111, 3-31697 (DCR parcel), 3-31548 (DCR parcel), and 3-1616. These RTNs include the following areas: 1) upland soil southeast of the MBTA railroad tracks; 2) the area of the former Lewis Chemical building; 3) the embankment along the Neponset River owed by the DCR; and 4) portions of the Neponset River adjacent to the disposal site that is also owned by DCR.

As discussed in Section 7, the media of concern at the disposal site include overburden soil and groundwater, bedrock groundwater, and porewater/sediment in the Neponset River. These media have varying concentrations of VOCs, metals, PCBs, VPH, and EPH constituents. Due to the nature of the COPCs present at the disposal site, the RAAs that will be evaluated focus on the removal, treatment, and/or containment of impacted soil, sediment, pore water, and groundwater at the four locations identified above. There is an estimated 9,700 cubic yards (cy) of soil at the disposal site that may require remediation to achieve a Permanent or Temporary Solution. Sediment was not quantified at this time because additional assessment is needed to evaluate background conditions and contributions from historical fill and the MBTA railroad line located in close proximity to the disposal site.

9.2 SITE-SPECIFIC DESIGN CONSIDERATIONS

Remedial actions at the disposal site must take into consideration the physical conditions and surroundings as well as the socio-political conditions such as Property and surrounding property land uses. The following factors present important Site-specific conditions that must be considered when evaluating the possibility of a Temporary or Permanent Solution and in evaluating various remedial technologies and alternatives:

- The disposal site is located between the active Fairmount MBTA railroad line and the Neponset River;
- The majority of the disposal site is located in an area zoned for "Neighborhood Shopping" with a smaller portion along the embankment to the Neponset River and the river that is owned by DCR and is listed as a Protected Open Space Sub-district;
- Surface topography at the disposal site generally slopes to the south and southeast toward the Neponset River; however, there is a retaining wall where the former building was located that is approximately 8 feet tall and the embankment along the Neponset River is very steep;
- The former building foundation covers approximately 50% of the disposal site and the remainder is unpaved or thick vegetation;
- Depth to groundwater ranges from approximately 4 feet bgs (low-lying areas near the Neponset River) to 14 feet bgs (behind the retaining wall between the former building and MBTA railroad line);
- Depth to bedrock is approximately 20 feet bgs and groundwater in bedrock was impacted by chlorinated VOCs;
- Heavy metals, PCBs, and VOC impacts identified in the soil, groundwater, pore water and/or sediments are attributable to historical filling and/or waste recycling activities conducted by a leather substitutes manufacturing company and/or Lewis Chemical;
- Urban fill materials are present in the subsurface across the disposal site; these fill materials include the presence of ash, charred wood, brick, glass, and leather;
- PCBs and C5-C8 aliphatic hydrocarbons in groundwater are less of a concern after subsurface investigations completed as part of the Phase III RAA evaluation;
- Soil and groundwater chlorinated VOC concentrations located below the former building and along the embankment to the Neponset River in overburden and bedrock are indicative of separate phase product; however, DNAPL has not been observed in monitoring wells at the disposal site;
- 1,4-dioxane was detected at very low concentrations (i.e., maximum up to 55 ug/L) or not above laboratory reporting limits;
- Leachable lead in soil was identified at the disposal site during subsurface investigations;
- Hexavalent chromium is not a constituent of concern based upon analytical data;
- Extracting groundwater from overburden and bedrock will have limited effectiveness as a standalone RAA based upon pump test data and the dewatering of several wells at flow rates at or less than 1 gpm;
- ISCO RAAs will require a significant volume of oxidant and catalyst to reduce the residual mass in the subsurface;
- The additional sampling conducted for sediment reference and background data in the Neponset River indicated that concentrations of select metals (chromium, barium, lead, mercury, vanadium, and zinc) exceeded benchmark screening criteria suggesting a localized background condition and additional assessment is needed to evaluate whether or not remediation of sediment will be necessary;

- Additional data are needed to determine whether metals at the disposal site require remediation or if there is a localized background condition;
- The additional sampling conducted for surface water reference and background data in the Neponset River indicated that surface water did not exceed established background concentrations or benchmark screening criteria and therefore, surface water does not require remediation; and
- Naturally occurring organisms capable of degrading chlorinated VOCs are present and natural attenuation processes are occurring but may be stalling at the cDCE and/or vinyl chloride degradation pathway.

9.3 PERMITTING CONSIDERATIONS

Due to impacts within wetland resource areas, environmental permitting requirements will need to be considered during implementation, depending on the remedial alternative selected. Remediation activities will need to be performed in accordance with all City bylaws and regulations. The following list provides primary applicable permits from state and federal agencies. This list will need to be evaluated further upon completion of the design documents.

State

- 401 Water Quality Certificate for Dredging and Dredge Material Disposal Minor Dredge Project Certification (BRP WW 08) – applicable to projects not listed in the major project certification category, and those projects involving dredging less than 5,000 cy but more than 100 cy to waters regulated by the US Army Corp. of Engineers, Federal Energy Commission or other federal agency.
- Order of Conditions (Notice of Intent) – applicable to activity/disturbance within a resource area and/or the 100-foot Buffer Zone.
- Certificate of the Secretary of Energy & Environmental Affairs, Massachusetts Environmental Policy Act (MEPA) Submission of an Environmental Notification Form under Wetlands, Waterways and Tidelands.

Federal

- National Pollutant Discharge Elimination System Permit (NPDES) – applicable to construction activities disturbing more than 1 acre, but less than 5 acres.

9.4 REMEDIAL ACTION OBJECTIVES

Based on site-specific conditions and an evaluation of risk, it is not clear whether or not metals in sediment will require remediation to achieve No Significant Risk to ecological receptors. Therefore, RAOs will not be developed for the Neponset River until additional background and reference data summarized in this Report can be collected. The following RAOs were developed for the disposal site:

- eliminate or sufficiently reduce residual mass in the overburden soil and groundwater source areas with the intent of reducing concentrations in bedrock groundwater and pore water associated with the Neponset River; and
- identify the most feasible and economical RAA that will achieve a condition of No Substantial Hazard or if feasible, No Significant Risk to human health, public safety, public welfare, and the environment.

Remedial Action Alternatives that may achieve these objectives are identified in subsequent sections.

10. IDENTIFICATION AND INITIAL SCREENING OF RAAS

An initial screening was conducted to identify RAAs that are reasonably likely to be feasible based on the OHM present, impacted media, geologic/hydrogeologic conditions, and surface features at or adjacent to the disposal site. Based upon data collected, overburden soil (vadose zone and saturated zone), overburden and bedrock groundwater, and pore water have been impacted by releases of OHM at the disposal site. Sediment will still require further investigation to evaluate potential impacts from the site versus localized background conditions and therefore, were not included in the evaluation of potentially applicable RAAs. Overburden soil will require an in-depth review because of the nature of impacts at the ground surface (VOCs, leachable metals, and PCBs) versus at depth within the saturated zone (VOCs only) that may result in the selection of multiple RAAs to mitigate impacts to overburden soil.

The MCP states that RAAs are likely to be feasible in an initial screening of RAAs if the alternatives employed are reasonably likely to achieve a Permanent or Temporary Solution and individuals with the expertise needed to implement the solutions are available. Additionally, the initial screening was performed to evaluate the applicability, effectiveness, time, costs and risks involved to perform each of the RAAs, in accordance with criteria outlined in the MCP. The initial screening was based on a review of available literature and experience with the RAAs. Each of these alternatives was screened for the technical feasibility of use and the environmental and public health impact to the surrounding area. Each of these alternatives may be considered as stand-alone remedies and/or as part of an integrated remedial strategy. A brief description of each potential RAAs and comments emphasizing site-specific issues related to each are presented in the following sections and tables.

For this initial evaluation, the disposal site media were organized into three categories consisting of overburden, bedrock, and surface water/sediment. The RAAs were evaluated based on the criteria of effectiveness, implementability, and cost. Descriptions of these criteria and how they are used in the evaluation are described below:

- Effectiveness – each RAA is evaluated on: 1) its effectiveness in meeting the response action objectives; 2) its capability of treating or processing the estimated volume of impacted media; 3) the potential impacts to human health and the environment during the construction and implementation of the remedial strategy; and 4) how proven and reliable the RAA is with the known conditions at the disposal site.
- Implementability – under this criterion, both the technical and administrative feasibility of implementing a strategy is evaluated. Technical implementability is the initial screening tool for RAAs to eliminate those that are clearly infeasible, ineffective or impractical. The administrative implementability then evaluates the ability to actually implement the strategy.
- Cost – during this screening evaluation, capital and operation and maintenance (O&M) costs are evaluated based on their relative cost to each other (i.e. low, moderate or high).

The RAA initial screening is provided in Sections 10.1 through 10.16 below. Due to the extensive number of RAAs that would need to be combined in order to achieve a site-wide remedial approach, the initial screening was outlined and conducted in the following section. Only those RAAs, which could be combined into a site-wide approach, which would likely achieve a Temporary or Permanent Solution, were carried through to the detailed evaluation.

10.1 NO ACTION

This RAA, which is potentially applicable to bedrock groundwater, would involve no actions to address impacted bedrock groundwater. No Action would not meet RAOs for other impacted media.

This RAA was retained in the evaluation for bedrock groundwater because once the overburden source areas are remediated through other RAAs; bedrock groundwater concentrations are anticipated to be reduced.

10.2 INSTITUTIONAL CONTROLS (AUL)

This RAA, which is potentially applicable to soil as well as overburden and bedrock groundwater, would involve restricting the use of or exposure to impacted soil and/or groundwater through land use restrictions, zoning, or other legal mechanisms. Implementation of an Activity and Use Limitation (AUL) would ensure any future use is adequately protective of human health, public welfare, and the environment.

This RAA was retained as a feasible alternative for overburden soil and groundwater and bedrock groundwater for limiting future site uses and exposure to residual impacts after source area remediation.

10.3 MONITORED NATURAL ATTENUATION (MNA)

This RAA, which is potentially applicable to overburden and bedrock groundwater, would involve periodic soil and/or groundwater sampling (similar to the sampling and analyses summarized in Section 3.2) to evaluate biological processes, electron donors/acceptors, and changes in soil and/or groundwater quality over time that could be attributable to natural attenuation processes which may be enhanced by active remediation.

This RAA was eliminated from the evaluation for overburden groundwater as this is not a feasible alternative for achieving the RAOs. However, this RAA was retained in the evaluation for bedrock groundwater because once the overburden source areas are remediated through other RAAs; bedrock groundwater concentrations are anticipated to be reduced and long term monitoring can be effectively implemented..

10.4 SOIL VAPOR EXTRACTION WITH OR WITHOUT AIR SPARGING

This RAA, which is potentially applicable to overburden soil and groundwater, would involve soil vapor extraction (SVE) using one or more vapor extraction wells above the groundwater table. The system then extracts vapors from the subsurface by applying a vacuum to pull the vapors to the ground surface where they are treated and discharged. Air sparging (AS) uses one or more air injection wells installed in the saturated zone. Air is then pumped into the subsurface to volatilize VOCs from groundwater and saturated soils, thereby enhancing removal of VOCs. The process is most effective in high permeability, homogeneous soils.

An SVE system was utilized beneath the building for shallow vadose zone soils and appeared to be effective at reducing mass below the former building. However, SVE alone will not mitigate impacts in the saturated zone. Air sparge would be needed to supplement the work and address the saturated zone. Because the subsurface stratigraphy consists of low permeability soil, the influence of the air sparge system would be limited and less effective. Therefore, SVE/AS was eliminated as an RAA for overburden soil and groundwater *because other source control measures are more effective and efficient at achieving RAOs.*

10.5 PERMEABLE REACTIVE BARRIER

This RAA, which is potentially applicable to overburden groundwater, would involve the installation of a subsurface barrier of reactive materials through which the dissolved plume must move as it flows under natural gradient. The most commonly used PRB configuration is a trench in which treatment material is backfilled and situated such that groundwater flow is perpendicular to the trench. However, reactive material can also be installed via injection wells or direct push injection techniques in a pattern such that wells/locations have an overlapping radius of influence. The reactive material can consist of zero-valent iron (ZVI), edible oils, oxidants, or proprietary commercial products.

This RAA was retained for evaluation for overburden groundwater as a way to prevent off-Property migration and reduce COPCs leaving the source areas but is not known to be an effective source area treatment and would only treat the saturated overburden.

10.6 SOIL STABILIZATION

This RAA, which is potentially applicable to overburden soil, would involve a treatment technology to prevent migration of COPCs (particularly leachable metals). The process involves a chemical reaction that reduces the leachability of the impacts by chemically immobilizing them to reduce the solubility, rendering them less mobile. A binding agent is mixed into the impacted media either in-situ (by injecting the binder agent into the impacted media) or ex-situ (by excavating the materials and machine or otherwise mixing them with the agent). The treatment material often stabilizes and/or solidifies the impacted media and is generally most applicable for soils containing heavy metals, PCBs, pesticides, and/or radioactive materials. The technique is often used as pre-disposal treatment step for soils to render them non-hazardous using TCLP criteria.

This RAA was retained for overburden soils but would need to be implemented in conjunction with excavation.

10.7 IN-SITU CAPPING

This RAA, which is potentially applicable to overburden soil and sediment, would involve covering impacted soil or sediment, which remains in place, with a clean material. Caps often consist of soils only; however, more complex caps can be constructed of geotextiles or other permeable or impermeable materials and products. When capping impacted sediments, materials consisting of organoclay can be used. The organoclay is often packaged and delivered in large rolls that can then be unrolled and placed over the impacted sediments. Sand, gravel and or other soil types are then placed over the clay to provide a suitable substrate for aquatic habitats.

This RAA was eliminated for overburden soils and river sediment because it will not address impacted overburden groundwater that is discharging to the Neponset River via pore water. While this could be applicable for impacted sediment in the Neponset River, additional investigation would be necessary to evaluate the extent of impacts and whether or not the armoring of the river would impede an effective cap. At this time, this RAA was eliminated for sediment but may be reevaluated in the future depending upon the outcome of overburden remediation, pre-design investigations, and additional sediment sampling and subsequent metals background evaluation.

10.8 IN-SITU CHEMICAL OXIDATION

This RAA, which is potentially applicable to overburden soil and groundwater, would involve the introduction of a chemical oxidant into the subsurface in the attempt to oxidize target COCs to less toxic or hazardous end products. ISCO can be used for soil treatment, but is primarily used for in-situ treatment of groundwater and can be used for both source area mass reduction and to treat the more dilute portions of a groundwater plume and is often accompanied by other remedial technologies. There are many types of oxidants that can be used; however, the most common are permanganate, persulfate, Fenton's reagent (hydrogen peroxide) and ozone. The amount of oxidant required is directly related to the mass of COC to be treated and is also related to the amount of naturally occurring oxidant demand. The primary mechanism behind the success of ISCO is to maximize contact time between the oxidant and the constituent of concern. Therefore, the persistence of the oxidant in the subsurface and the method in which it is delivered to the impacted zones are important. Permanganate persists for long periods (months to years) while Fenton's reagent and ozone can be used up in minutes or hours. Finally, select oxidants do not treat certain constituents (e.g., permanganate will not treat 1,1,1-TCA).

This RAA was eliminated for overburden soil and groundwater because of the volume of oxidant and catalyst needed to treat soil and groundwater at the disposal site (48 tons of persulfate and 135 tons of catalyst) and because ISCO requires distribution and contact with COPCs in the subsurface and there is no efficient delivery system (i.e., mixing or injection) that would overcome the geologic conditions (very low hydraulic conductivity) and very low groundwater velocity.

10.9 IN-SITU BIOREMEDIATION

This RAA, which is potentially applicable to overburden soil and groundwater, would involve the use of naturally occurring organisms to degrade VOC impacts in the soil and groundwater. It generally requires a mechanism for stimulating and maintaining the growth and activity of the organisms. In-situ bioremediation (ISB) may consist primarily of biostimulation, which typically includes the supply of one or more of the following: an electron acceptor (e.g., oxygen), nutrients (e.g., nitrogen), and an energy source (e.g., carbon). Depending on site conditions, ISB may also include bioaugmentation (the addition of supplemental organisms). Bioremediation can take place under both aerobic (with oxygen) or anaerobic (without oxygen) conditions or through cometabolism. With cometabolic processes, organisms use one compound as an energy source and, in the process, produce an enzyme that chemically transforms another compound.

Similar to ISCO, this RAA was eliminated for overburden soil and groundwater because it requires distribution and contact with COPCs in the subsurface and there is no efficient delivery system (i.e., mixing or injection) that would overcome the geologic conditions (very low hydraulic conductivity) and very low groundwater velocity.

10.10 GROUNDWATER EXTRACTION AND TREATMENT

This RAA, which is potentially applicable to overburden soil (saturated zone only) and overburden and bedrock groundwater, would involve the extraction of groundwater from the subsurface via pumps installed in an array of extraction wells and either stored in holding tanks for off-site treatment or treated on site. Treatment methods can consist of a single method, such as activated carbon, or a multi-step treatment train depending on the constituents requiring treatment and the geochemical characteristics of the groundwater. Once groundwater is treated to the required regulatory standards, it is discharged for disposal or re-use. Disposal methods may include, but are not limited to, re-injection into the subsurface, discharge to surface water, or discharge to a publically owned treatment works (POTW) for further treatment. As a result of this treatment method, other wastes are often generated, including spent activated carbon, sludge, or used filters.

This RAA was eliminated for overburden soil and groundwater and bedrock groundwater due to low groundwater yields, limited available groundwater to effectively create a cone of depression, low hydraulic conductivities, limited connectivity of bedrock fractures based upon the pumping pilot test described in this Report and for bedrock so that impacts in the overburden are not drawn into bedrock.

10.11 MULTI-PHASE EXTRACTION

This RAA, which is potentially applicable to overburden soil and groundwater, would involve simultaneous extraction of air, groundwater, and/or LNAPLs or DNAPLs. Using a vacuum and/or downhole pump, various combinations of impacted groundwater, separate phase product, and vapors are removed from the subsurface. Groundwater pumps lower the water table, exposing more of the surrounding formation and allowing the vapor extraction process to remove VOC mass that would not normally be available because of the static groundwater level. Once the vapors and other liquids are above ground, they are separated, treated, and discharged. Multi-phase extraction (MPE) is most applicable to fine-grained formations in the fine sand to silty range similar to what is at this disposal site. The vacuum enhancement of MPE overcomes capillary forces, which tend to trap fluid in the pore spaces of the capillary zone, making it an effective RAA for removal of vapors and LNAPL/DNAPL.

This RAA was retained for overburden media to address LNAPL as well as overburden soil and groundwater concentrations. This RAA will eliminate source areas and is anticipated to have an added benefit of reducing bedrock groundwater concentrations over time.

10.12 EXCAVATION AND OFF-SITE DISPOSAL

This RAA, which is potentially applicable to overburden vadose zone soil, would involve the removal of soil from the ground surface to depths approaching the groundwater table for re-use, disposal, and/or treatment. Soils can be removed with various types of equipment (e.g., excavators, backhoes, etc.) and either stockpiled for later disposal or "live-loaded" where soils are immediately placed in dump trucks or shipping containers. Depth restrictions during excavation may include slope or sidewall stability, shallow groundwater resulting in the need for dewatering, or the presence of obstructions and/or underground utilities.

This RAA was retained for consideration as an approach to eliminate potential exposure to PCBs and metals in surface soils and at depths approaching groundwater. Excavated soil would generate TSCA as well as F- and D-listed wastes likely requiring stabilization prior to off-Property disposal and disposal at a hazardous waste facility.

10.13 IN-SITU THERMAL REMEDIATION

This RAA, which is potentially applicable to overburden soil and groundwater, would involve the addition of heat to the subsurface combined with the use of liquid pumping or soil vapor extraction techniques to remove organic COCs from impacted overburden soil and groundwater. In addition, some of the thermal technologies may have an added benefit of reducing concentrations of VOCs in the shallow bedrock groundwater depending upon the nature of the design. This RAA could be applicable for PCBs but the additional costs to heat the ground to temperatures that would destroy PCBs is very high compared to other RAAs applicable to the soil and PCBs (e.g., excavation and institutional controls) The addition of heat reduces viscosity, increases solubility, oxidation and volatilization, all of which allow for the efficient removal of COCs from the subsurface. Once subsurface temperatures achieve the appropriate target temperatures, the target constituents become more mobile and are easier to be captured, extracted, and treated aboveground. There are multiple types of thermal remediation for overburden and bedrock, which are described below:

Steam Enhanced Extraction (SEE) – SEE involves the addition of steam to the subsurface to heat up the soil and groundwater, reducing the viscosity of the impacts and accelerating volatilization. As steam is injected into the source zone, it flows outward radially, which drives the impacts to nearby groundwater extraction wells (in the saturated zone) and SVE wells in the vadose zone. *This RAA was eliminated for overburden soil and groundwater because it is not technically feasible due to limiting geologic conditions (tight silty soils).*

Electrical Resistance Heating (ERH) – ERH involves the installation of an array of electrodes around a central, neutral electrode. Resistance to flow in the soils generates heat, which then produces steam that more easily mobilizes impacts towards SVE wells. The SVE wells collect the vapors and transfer them aboveground where they are treated and discharged to the atmosphere. *This RAA was retained for overburden media. However, additional pre-design investigations will be needed to determine whether ERH or Thermal Conductance Heating would be more suitable for disposal site conditions.*

Thermal Conductance Heating (TCH) – TCH involves adding heat to the soil via steel wells (for deep impacts) or with a blanket which covers the ground surface (for shallow impacts). As the impacted area is warmed, COPCs are destroyed or evaporated. Additionally, a carrier gas or SVE system is used to transport the impacted vapors to the ground surface for treatment. *This RAA was retained for overburden media. However, additional pre-design investigations will be needed to determine whether ERH or TCH would be more suitable for disposal site conditions.*

10.14 RESULTS OF INITIAL REMEDIAL ALTERNATIVE EVALUATION

The results of the initial screening of RAAs indicated eight RAAs as being reasonably likely to be feasible based on the OHM present, media contaminated, and disposal site characteristics. Per the MCP, RAAs are reasonably likely to be feasible if the technologies to be employed by the alternative are reasonably likely to achieve a Permanent or

Temporary Solution and individuals with the expertise needed to effectively implement available solutions would be available, regardless of arrangements for securing their services. The table below summarizes the RAAs retained for each media after the initial screening.

Summary of RAAs Retained During Initial Screening

Remedial Alternative	Media		
	Overburden Soil	Overburden Groundwater	Bedrock Groundwater
No Action			X
Institutional Controls (AUL)	X	X	X
Monitored Natural Attenuation (MNA)			X
Soil Vapor Extraction with/without Air Sparging			
Permeable Reactive Barrier (PRB)		X	
Soil Stabilization	X		
In-Situ Capping			
In-Situ Chemical Oxidation (ISCO)			
In-Situ Bioremediation (ISB)			
Groundwater Pump & Treat (P&T)			
Multi-Phase Extraction (MPE)	X	X	
Excavation & Off-Site Disposal	X		
In-Situ Thermal Remediation	X	X	

Notes:
1. X = selected for detailed evaluation.

The initial screening identified that not one single RAA will achieve a Temporary or Permanent Solution for the complex nature of the disposal site. Therefore, combinations of RAAs will be needed to achieve RAOs for the disposal site. Based upon the number of RAAs that were retained, there are approximately 18 potential remedial strategies that could be evaluated in the detailed evaluation. However, there are RAAs that are consistent among remedial strategies that would likely achieve a Temporary or Permanent Solution including excavation, stabilization, institutional controls, and MNA. These RAAs would address metals, PCBs, and VOCs in overburden soil. However, VOCs in the saturated overburden would require one of three RAAs to achieve RAOs including MPE, PRB, or in-situ thermal remediation.

Therefore, a detailed evaluation was completed using MPE, PRB, and in-situ thermal remediation to address VOCs in overburden groundwater and ultimately pore water in the Neponset River. The other strategies would not achieve RAOs and therefore, were not included in the detailed evaluation provided in the next section.

11. DETAILED EVALUATION OF REMEDIAL STRATEGIES

Based upon the initial evaluation and a review of the possible combination of RAAs to achieve RAOs, only three remedial strategies consisting of a combination of different RAAs were ultimately retained and reviewed in detail for the disposal site. The purpose of this detailed evaluation was to assess the practicability of implementing each remedial strategy at the disposal site, the effect of such strategy on projected time frames for remedial action, the effectiveness of such strategy in meeting the RAOs, and the impact of such strategy on remedial costs for the disposal site.

Under the provisions of the MCP, the detailed evaluation and selection of a strategy for a disposal site must consider:

(a) alternatives which reuse, recycle, destroy, detoxify or treat OHM, where feasible, to minimize the need for long-term management of contamination at or from a disposal site;

(b) containment measures as feasible Permanent Solutions only where reuse, recycling, destruction, detoxification and treatment are not feasible; and

(c) remedial actions to reduce the overall mass and volume of OHM at a disposal site to the extent feasible, regardless of whether it is feasible to achieve one or more Temporary Solutions and/or Permanent Solutions or whether it is feasible to achieve background for the entire disposal site.

11.1 DETAILED EVALUATION CRITERIA

Based on the results of the initial screening presented in Section 10 and a review of the multiple potential remedial strategies, only three potential strategies remain, for further review in a detailed evaluation using the criteria listed below.

- **Comparative Effectiveness** (310 CMR 40.0858(1)) – Each of the remedial strategies is evaluated on its effectiveness in achieving a permanent or temporary solution as defined by the MCP 310 CMR 40.1000, at reusing, recycling, destroying, detoxifying or treating OHM at the disposal site; and at reducing levels of untreated OHM at the disposal site to concentrations that achieve or approach background.
- **Short- and Long-Term Reliability** (310 CMR 40.0858(2)) – The comparative short-term and long-term reliability of the strategies includes the degree of certainty that the alternative will be successful and the effectiveness of any measures required to manage residues or remaining wastes or control emissions or discharges to the environment.
- **Implementability** (310 CMR 40.0858(3)) – The comparative difficulty in implementing each strategy in terms of technical complexity of the alternative; the integration of the strategy with nearby facility operations and other current or potential remedial actions; any necessary monitoring, operations, maintenance or disposal site access requirements or limitations; the availability of necessary services, materials, equipment, or specialists; the availability, capacity and location of necessary off-site treatment, storage and disposal facilities; and whether the strategy meets regulatory requirements for any likely approvals permits or licenses required by state, federal, or local agencies will be examined.
- **Relative Cost** (310 CMR 40.0858(4)) – Costs of implementing the strategy (including design, construction, labor, permits, disposal, and OM&M costs); costs of environmental restoration and/or potential damages to natural resources, and the relative consumption of energy resources in the operation of the strategy and the externalities associated with the use of the resources will be evaluated.
- **Risk** (310 CMR 40.0858(5)) – Evaluation of the risks associated with the implementation of the remedial strategy with regard to the short-term on-site and off-site risks posed during implementation of the strategy; on-site and off-site risks posed over the period of time required for the strategy to attain applicable remedial standards; and the potential risk of harm to health, safety, public welfare or the environment after the completion of the remedial strategy will be assessed.

- **Benefit** (310 CMR 40.0858(6)) – Analysis of the benefits of restoring natural resources; providing for the productive reuse of the disposal site; the avoided costs of relocating people, businesses, or providing alternative water supplies, and the avoided lost value of the disposal site will be conducted.
- **Relative Timeliness** (310 CMR 40.0858(7)) – All remedial strategies will be examined to determine if eliminating any uncontrolled sources of OHM and achieving a level of No Significant Risk is achievable in an efficient time frame.
- **Non-Pecuniary Interests** (310 CMR 40.0858(8)) – All remedial strategies will be evaluated to determine the relative effect upon non-pecuniary interests, such as aesthetic values, community concerns, etc. Additionally, each strategy was evaluated in terms of sustainable practices that emphasize the need to evaluate core elements of clean-up projects and to weigh the environmental trade-offs of potential strategies.

11.2 DETAILED EVALUATION OF REMEDIAL STRATEGIES

As previously indicated, three strategies have been retained for detailed evaluation on the basis that each strategy contains a combination of RAAs which may lead to the achievement of a Temporary or Permeant Solution over time. Each alternative was evaluated on its ability to eliminate or sufficiently reduce residual mass in the overburden soil and groundwater source areas with the intent of reducing concentrations in bedrock groundwater and pore water associated with the Neponset River (i.e., achieve the RAO). Table 15 presents each strategy, the RAAs that make up each strategy, and the criteria used during the evaluation process.

11.3 COMPARATIVE ANALYSIS SUMMARY

The comparative analysis performed for each of the remedial strategies evaluated in the detailed analysis relative to the MCP evaluation criteria is provided in a side-by-side comparison in Table 15. The purpose of this analysis was to identify the advantages and disadvantages of each strategy relative to one another and to aid in the selection of a remedial strategy.

12. FEASIBILITY EVALUATION

Three remedial strategies have been identified as being "reasonably likely to be feasible" for the treatment of the overburden, bedrock, and surface water/sediment at the disposal site. The three strategies, all of which underwent an initial screening (see Section 10) and a detailed technical review (see Section 11), are remedial strategies that are comprised of combinations of RAAs that have the potential to achieve the established RAOs for the disposal site. The combination of RAAs are summarized in Table 15.

Under MCP regulations, reasonably likely alternatives or strategies must undergo a feasibility evaluation. The feasibility evaluation is a comprehensive five-part analysis used to determine if a potential remedial alternative is "feasible" and to aid in the selection of a final remedy. In accordance with the MCP, reasonably likely technologies are evaluated to determine the feasibility of the particular alternative in:

(a) Implementing a Permanent Solution at the disposal site;

(b) Reducing the concentrations of OHM in the environment to levels that achieve or approach background;

(c) Reducing the concentrations of OHM in soil to levels at or below applicable soil UCLs;

(d) Eliminating, preventing or mitigating Critical Exposure Pathway(s); and

(e) Eliminating or controlling each source of OHM and controlling migration of OHM in support of a Permanent or Temporary Solution.

The feasibility evaluation for the disposal site is presented in the following sections and addresses the feasibility of the each of the three strategies in terms of its technological feasibility, risk reduction, benefit cost effectiveness, timeliness, and other considerations. The feasibility evaluation and strategy selection discussion that follows builds on the initial screening and detailed analysis presented in Sections 10 and 11 of this Report and is consistent with relevant definitions, standards, and interpretation set forth in MCP regulations and supporting guidance documents. Conclusions regarding the feasibility of achieving a Temporary or Permanent Solution are presented in Section 12.6.

12.1 FEASIBILITY OF ACHIEVING A PERMANENT OR TEMPORARY SOLUTION

In general accordance with the MCP, the objective of the Phase III process is to select an RAA or combination of RAAs (strategy) that would result in a "Permanent Solution" for the disposal site, provided that the selected alternative represents a "feasible" means of achieving pre-established disposal site RAOs. If a Permanent Solution is not achievable or feasible, then a "Temporary Solution" that eliminates all substantial hazards may be appropriate. However, even if a Permanent Solution is considered to be achievable or feasible, it may not necessarily be selected for implementation if it is found to be less timely and less cost-effective than a Temporary Solution.

Potential remedial strategies that would result in a Permanent Solution are, by definition, considered to be "feasible" unless it is shown that:

(a) The remedial strategy is not technologically feasible;

(b) The costs of conducting, or the risks resulting from the remedial strategy would not be justified by the benefits, considering such factors as potential damage to human health or the environment, cost of environmental restoration, long term operation and maintenance costs, and non-pecuniary values as determined by the benefit-cost analysis;

(c) Individuals with the expertise needed to effectively implement the remedial strategy would not be available, regardless of arrangements for securing their services;

(d) The remedial strategy would necessitate land disposal other than at the site itself and no off-site facility is available in the Commonwealth or in other states that is in full compliance with all applicable federal and state regulatory requirements; or

(e) A remedial strategy is selected for a portion of a disposal site for which the source of the OHM is not located thereon, and the elimination or control of such source cannot currently be achieved by the party conducting the response actions at that portion of the disposal site. In such instances, a Temporary Solution shall be implemented for that portion of the disposal site to which the selected strategy applies.

Each of these five elements is evaluated individually below.

12.1.1 Technological Feasibility

Under the MCP, a remedial action alternative or remedial strategy is considered to be "technologically feasible" unless:

(a) existing technology or reasonable modifications of existing technology cannot remediate the OHM present at the disposal site to the extent necessary to attain a level of No Significant Risk, or, when required to be considered, to levels that approach or achieve background;

(b) the reliability of the identified alternative has not been sufficiently proven at other sites or through pilot tests and a substantial uncertainty exists as to whether it will effectively reduce risk; or

(c) the identified alternative cannot comply with or be modified to comply with applicable regulatory requirements.

Each of the RAAs and three strategies evaluated has the potential for mass reduction in soil, bedrock, groundwater, sediment and surface water. Based upon available data, mitigating overburden source areas will likely have a significant impact on sediment, pore water, surface water, and bedrock groundwater concentrations, particularly for chlorinated VOCs. These source reduction measures will address a majority of the risks at the disposal site. However, institutional controls will likely be needed to prevent unnecessary COC exposure to human receptors.

It is anticipated that each of the alternatives evaluated has the potential to be designed and implemented to comply with applicable regulatory requirements and permits. However, as discussed throughout the remedial evaluation, the intrusive alternatives (excavation/dredging alternatives) will result in significant disruption, if not destruction, of the natural resources, which may present challenges throughout the process. Therefore, due to the magnitude of potential resource destruction, permitting of any of the intrusive alternatives would be challenging.

Based on information provided in this Report, there are enough available and effective RAAs for source reduction that a Permanent Solution is technologically feasible for the disposal site. Though there is some uncertainty regarding the ability to achieve a condition of NSR in bedrock groundwater concentrations and will depend upon the effectiveness of the overburden RAAs and data collected during the Phase II and Phase III process that indicated that bedrock concentrations may be a result of improperly installed wells in source areas or other factors.

12.1.2 Benefit - Cost Analysis

The benefit of implementing a strategy to achieve RAOs is considered to justify the related costs unless:

(a) the incremental cost of conducting the remedial action alternative is substantial and disproportionate to the incremental benefit of risk reduction, environmental restoration, and monetary and non-pecuniary values;

(b) the risk of harm to health, safety, public welfare, or the environment posed by the implementation of the alternative cannot be adequately controlled; or

(c) the alternative would destroy more than 5,000 square feet of wetlands or wildlife habitat, or would otherwise result in substantial deleterious impacts to the environment, and

1. other feasible Temporary or Permanent Solutions exist;
2. the OHM, if any, that have come to be located in such resources do not bio-accumulate and are not likely to migrate; and

3. the damage to such resources resulting from the implementation of the alternative would be permanent and irreparable.

The estimated timeframe for each RAA, the applicable media, and the estimated cost range for the RAAs that were included in the three strategies are provided below. These costs were developed without completing pre-design investigations or designs that would be provided in a Phase IV Remedy Implementation Plan (RIP).

Remedial Alternative	Relative Timeframe	Media	Cost Range	
			Low	High
Institutional Controls (AUL)	< 1 year	OB, BR	$15,000	$30,000
Monitored Natural Attenuation (MNA)	~ 10 years	BR	$100,000	$200,000
Permeable Reactive Barrier (PRB)	~30 years	OB	$2,000,000	$4,000,000
Soil Stabilization	< 1 year	OB	$50,000	$150,000
Multi-Phase Extraction (MPE)	~25 years	OB	$3,000,000	$5,000,000
Excavation & Off-Site Disposal	< 2 years	OB	$1,000,000	$4,000,000
In-Situ Thermal Remediation	< 2 years	OB	$2,000,000	$4,000,000

Notes:
1. BR = bedrock.
2. OB = overburden
3. SED = sediment

Strategy & Anticipated Sequence	Relative Timeframe	Cost Range	
		Low	High
Strategy #1			
1a. Excavation & Off-Site Disposal 1b. Soil Stabilization (metals only)	< 2 years	$1,050,000	$4,150,000
2. In-Situ Thermal (VOCs and LNAPL)	< 2 years	$2,000,000	$4,000,000
3. MNA in Bedrock	~ 10 years	$100,000	$200,000
4. AUL	< 1 year	$15,000	$30,000
	TOTAL =	**$3,165,000**	**$8,380,000**
Strategy #2			
1a. Excavation & Off-Site Disposal 1b. Soil Stabilization (metals only)	< 2 years	$1,050,000	$4,150,000
2. MPE	~25 years	$3,000,000	$5,000,000
3. MNA in Bedrock	~ 10 years	$100,000	$200,000
4. AUL	< 1 year	$15,000	$30,000
	TOTAL =	**$4,165,000**	**$9,380,000**

Strategy & Anticipated Sequence	Relative Timeframe	Cost Range	
		Low	High
Strategy #3			
1a. Excavation & Off-Site Disposal	< 2 years	$1,050,000	$4,150,000
1b. Soil Stabilization (metals only)			
2. PRB	~25-30 years	$2,000,000	$4,000,000
3. MNA in Bedrock	~ 10 years	$100,000	$200,000
4. AUL	< 1 year	$15,000	$30,000
	TOTAL =	**$3,165,000**	**$8,380,000**

Based upon site conditions, there is more uncertainty with the effectiveness of Strategies #2 and #3 with regard to achieving RAOs. In general, MPE and PRBs typically take longer due to back diffusion, distribution problems, long term equipment operation and many more factors. Therefore, it is possible that the ranges in costs for Strategies #2 and #3 may be higher than the range provided. In addition, PRBs are not as effective at remediating source areas and are typically used to control off-site migration and combined with other RAAs to address source areas.

Intrusive alternatives, such as excavation with soil stabilization or thermal treatment, in the source areas are less likely to result in harm. Access to the disposal site is controlled through a perimeter fence and more than half of the disposal site is covered by the former building foundation. Because most of the disposal site is occupied by the former building foundation, the implementation of potential source area alternatives will result in minimal destruction or alteration of the upland habitat areas. However, some portions of the upland area and embankment would require clearing and grubbing to provide access to areas for remediation activities.

Cost-benefit analyses demonstrate that while the economic costs of intrusive, engineered solutions such as dredging, excavation, and/or thermal are high, they are not disproportionate to the actual reduction in risk that would be achieved. As a result, a Permanent Solution is justified through the benefit-cost analysis.

12.1.3 Availability of Individuals with Requisite Expertise

Individuals with the expertise needed to effectively implement the alternatives are available.

12.1.4 Off-Site Land Disposal Considerations

Several alternatives necessitate land disposal of soil, sediments, or remediation waste generated during treatment processes at locations other than at the disposal site. Off-site facilities are available that are in full compliance with all applicable federal and state regulatory requirements.

12.1.5 Sources Not Within Control of the Disposal Site

The sources of OHM have been controlled at the disposal site in that the operations at the Property ceased in 1983, sources of OHM were removed prior to building demolition, and the building was razed in 2013.

12.2 FEASIBILITY OF ACHIEVING OR APPROACHING BACKGROUND

The selected remedial strategies for the source areas account for the extraction, treatment, and/or stabilization of COCs. Every effort will be made to remove all COCs present at the disposal site to background conditions. However, the potential exists for residual concentrations of COCs (e.g., PCBs, VOCs, metals) to persist. To achieve background concentrations of COCs would require the removal of all trees, vegetation, and the top 20 feet of soil across the entire disposal site, which is not feasible. Strategy #3 has some uncertainty with regard to being able to achieve or approach background because it is not necessarily a source area treatment and is unlikely to mitigate residual ganglia and

elevated soil concentrations in the vadose zone. The remaining strategies (#1 and #2) will likely meet RAOs but not approach or achieve background conditions without an institutional control.

12.3 FEASIBILITY OF REDUCING CONCENTRATIONS BELOW UCLS

Source reduction on the disposal site will reduce concentrations of OHM in soil and groundwater to below the applicable UCLs through extraction, treatment, and/or stabilization. UCLs are only applicable to soil and groundwater; therefore, an evaluation of the UCLs in sediment and surface water was not conducted.

12.4 FEASIBILITY OF ELIMINATING, PREVENTING, OR MITIGATING CEPS

There are no Critical Exposure Pathways at the disposal site.

12.5 FEASIBILITY OF CONTROLLING SOURCES AND MIGRATION OF OHM AND REMOVING NAPL

The three strategies will control or eliminate sources thereby controlling migration of OHM. The source of the limited aerial extent of LNAPL has also been removed and the extent is not expected to change. Two of the three strategies (#1 and #2) will remove LNAPL whereas strategy #1 will not remove LNAPL. DNAPL has not been measured in wells but is expected to be present in the form of ganglia based upon soil and groundwater concentrations. Strategies #1 and #2 will address the presence of ganglia at the disposal site whereas Strategy #3 will not remove the ganglia.

12.6 RESULTS OF FEASIBILITY EVALUATION

Based on an evaluation of the MCP feasibility criteria above, the disposal site is eligible for the submittal of a Permanent Solution Statement, signifying that a Permanent Solution will be achieved through implementation of remedial strategies # 1 and # 2. However, remedial strategy # 3 would likely result in a Temporary Solution based upon information provided in this Report.

13. SELECTED REMEDIAL ACTION ALTERNATIVE SUMMARY

The selected remedial strategy for the overburden soil and groundwater, LNAPL, bedrock groundwater, and pore water is a combination of RAAs that will lead to a condition of No Significant Risk and a Permanent Solution for the disposal site. Please note that surface water was ruled out as a media of concern and sediment will require further investigation for metals relative to background concentrations. Therefore, the strategy does not contemplate RAAs for sediment at this time. Implementation of an AUL with these alternatives will be required should COPC concentrations not achieve or approach background. It is believed that the selected remedial strategy (#1) will achieve the site-specific remedial goals. The RAAs included in strategy #1 are as follows:

- **Overburden Soil, LNAPL, Groundwater, and Pore Water** – In-Situ Thermal Remediation, soil excavation with stabilization, and AUL.
- **Bedrock** – MNA and AUL.

These RAAs were selected based on their implementability, effectiveness and reliability in reaching a Permanent Solution, as well as the costs, risks, benefits and timing involved with implementing each alternative. A Permanent Solution will be achieved upon completion of the RAAs, when the disposal site RAOs are attained, COPC concentrations are below risk-based cleanup levels and a condition of No Significant Risk of harm to human health, public welfare, and the environment is achieved.

14. COMPLETION STATEMENT

This Phase III RAP was prepared in general accordance with the MCP and meets the Phase III RAP performance standards summarized in the MCP. RAAs, which are reasonably likely to achieve a Permanent Solution, were evaluated in this Report. Pre-design investigations will be completed to refine the scope and design of the RAAs prior to preparing the Phase IV RIP. Woodard & Curran anticipates that the selected remedial strategy will eventually achieve a condition of No Significant Risk to human health, safety, public welfare, and the environment via the excavation and stabilization of soil, in-situ thermal remediation of VOCs and LNAPL in the overburden, MNA in bedrock groundwater, and implementation of an AUL.

15. PUBLIC INVOLVEMENT

A draft of this Phase III RAP was provided for public comment on December 19, 2015 in accordance with the May 2005 Public Involvement Plan (PIP). This Report was transmitted to interested parties and the Brownfields Support Team (BST) using the online repository located at http://dnd.cityofboston.gov/#page/LewisChemical and the Hyde Park Branch of the Boston Public Library. The public was provided with 20 calendar days to review and comment of the contents of this Report. Comments were reviewed and this Report was updated accordingly where warranted. A summary of comments received as well as responses to those comments was prepared and a copy of the response summary was sent to the PIP group, placed at the above-referenced webpage, and included in Appendix M of this Report.

Notices of the availability of this Report was provided to the Chief Municipal Officer (Mayor Martin J. Walsh) and the Boston Public Health Commission for the City of Boston concurrently with the submittal of the final Phase III RAP to MassDEP. A copy of these letters were also provided to the MassDEP with this Report.

Notice of Environmental Sampling letters for data collected on the DCR property were provided to DCR and their consultant, CDW, on September 24 and October 21, 2015.

Copies of the City notification letters, PIP letters, response to comments, and the Notice of Environmental Sampling letters, are included in Appendix M.

16. SCHEDULE FOR PHASE IV IMPLEMENTATION

Prior to the Phase IV RIP, bench scale test(s) and/or pilot stud(y/ies) will be performed to evaluate full-scale design parameters. Implementation of the selected remedial approach will proceed under the Phase IV RIP in stages as follows:

Stage 1 - Excavation, stabilization, and off-site disposal of PCB, metal, and VOC-impacted soil (hot spots) above the water table.

Stage 2 - In-Situ Thermal Remediation for VOCs and LNAPL.

Stage 3 - Additional sediment sampling to evaluate potential background conditions and extent of metal impacts near the disposal site and determine course of action for river sediment.

Stage 4 - Implement MNA for bedrock.

Stage 5 - prepare and submit an AUL.

17. LIMITATIONS

The activities described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or limited is implied. These services were performed consistent with the agreement with our client. The conclusions presented in this Report were based upon the services described and not on scientific tasks or procedures beyond the scope of described services or time or budgetary constraints. Any statement or opinion contained in this report prepared by Woodard & Curran shall not be construed to create any warranty or representation that the property is free of pollution or complies with any or all applicable regulatory or statutory requirements; or that the property is fit for any particular purpose. Unless otherwise indicated in this Report, no attempt was made to check on the compliance of present or past owners of the disposal site with federal, state, or local laws and regulations. Woodard & Curran Inc. shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld or not fully disclosed at the time the evaluation was performed.

Results of the activities contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others or the use of segregated portions of this report.

This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

18. REFERENCES

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ES&M, 2006, Phase I/Phase II CSA, March

ES&M, 2007, Interim Phase II Site Assessment

Massachusetts Geographic Information Systems (MassGIS), 2015 MassDEP Priority Resource (21E) Map

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Microbial Insights DHC Interpretation Guide, 2015

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ISCO:

http://www.epa.gov/ada/gw/isco.html

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PRB:

https://clu-in.org/techfocus/default.focus/sec/Permeable_Reactive_Barriers%2C_Permeable_Treatment_Zones%2C_and_Application_of_Zero-Valent_Iron/cat/Overview/

Soil stabilization:

https://clu-in.org/techfocus/default.focus/sec/Solidification/cat/Overview/

Bioremediation:

http://www.epa.gov/oust/cat/insitbio.htm

https://clu-in.org/download/remed/introductiontoinsitubioremediationofgroundwater_dec2013.pdf

Groundwater Extraction and Treatment:

https://clu-in.org/download/Citizens/a_citizens_guide_to_pump_and_treat.pdf

MPE:

https://clu-in.org/techfocus/default.focus/sec/Multi-Phase_Extraction/cat/Overview/

https://clu-in.org/download/remed/mpe2.pdf

Excavation:

https://clu-in.org/contaminantfocus/default.focus/sec/Dense_Nonaqueous_Phase_Liquids_(DNAPLs)/cat/Treatment_Technologies/p/10

Thermal:

https://clu-in.org/techfocus/default.focus/sec/Thermal_Treatment%3A_In_Situ/cat/Overview/

SVE/AS:

https://clu-in.org/download/contaminantfocus/dnapl/treatment_technologies/air_sparg_tr-2193.pdf

Watershed info:

https://www.neponset.org/your-watershed/

Zoning maps:

http://www.bostonredevelopmentauthority.org/getattachment/cf124711-692a-443b-95f4-046ad15cb9d3/

MassDEP's Waste Site/Reportable Releases Lookup database:

http://db.state.ma.us/dep/cleanup/sites/search.asp,

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TABLE 1
SUMMARY OF GROUNDWATER VOC ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Well ID					B1/OW1		ESM-01				ESM-02				ESM-03						ESM-03B-S					ESM-03B-D					ESM-04			ESM-05					
Screen Interval (ft)		GW-2	GW-3	UCLs	UNKNOWN		7-22				5-20				4-14						30-40					60-70					4-14			3-18					
Date Sampled					6/25/02	6/22/12	6/25/02	4/7/06	6/22/12	7/20/15	6/25/02	4/6/06	6/21/12	9/25/14	6/25/02	4/7/06	6/22/12	9/29/14	3/20/15	7/16/15	4/7/06	6/22/12	9/26/14	3/20/15	7/16/15	4/7/06	6/21/12	9/26/14	3/20/15	7/17/15	6/25/02	4/10/06	6/21/12	6/25/02	4/10/06	6/22/12	9/25/14	3/20/15	7/16/15
Analytes	Units																													*								
Volatile Organic Compounds (VOCs)																																						
1,1,1,2-Tetrachloroethane	ug/L	10	50,000	100,000	**25**	<2	<400	<2	<2	<10	<10	<2	<2	<2	<2500	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	**12**	<1000	<250	<400	<100	<20	<2	<10000	<20	<2000	<1000	<1000	<800
1,1,1-Trichloroethane	ug/L	4,000	20,000	100,000	**150**	<2	**5900**	**18**	**10**	**660**	**100**	**4**	**58**	**60**	**34000**	**25000**	**15000**	**12000**	**5920**	**26000**	**7800**	**2400**	**1660**	**1580**	**1700**	**23000**	**26000**	**22600**	**8140**	**18000**	**740**	**900**	**77**	**210000**	**280000**	**130000**	**56100**	**76800**	**130000**
1,1,2-Trichloroethane	ug/L	900	50,000	100,000	NA	<2	NA	<2	<2	<10	NA	<2	<2	<2	NA	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	**110**	<1000	<250	<400	NA	<20	<2	NA	<400	<2000	<1000	<1000	<800
1,1,2-Trichlorotrifluoroethane	ug/L	--	--	--	NA	NA	NA	NA	NA	**34**	NA	NA	NA	NA	NA	NA	NA	**3320**	**550**	**3400**	NA	NA	**1110**	**1220**	**1200**	NA	NA	**6940**	**1130**	**5900**	NA	NA	NA	NA	NA	NA	**4190**	**5700**	**6300**
1,1-Dichloroethane	ug/L	2,000	20,000	100,000	**290**	**19**	**2500**	**110**	**270**	**360**	**140**	**69**	**140**	**140**	**2900**	**1600**	**1500**	**1460**	<500	**2200**	**230**	**60**	<100	<100	**41**	**430**	**1600**	<1000	**388**	**660**	**550**	**500**	**150**	**5500**	**4900**	**3000**	**1320**	**1740**	**2300**
1,1-Dichloroethene	ug/L	80	30,000	100,000	**5**	<2	**230**	<1	**1**	<5	**15**	<1	**4**	<1	**2700**	**310**	**300**	<500	<500	**380**	**1200**	**570**	**323**	**377**	**400**	**3000**	**5000**	**5230**	**1700**	**5200**	**75**	<10	<2	**15000**	**2800**	**1200**	<1000	<1000	**1700**
1,2,3-Trichloropropane	ug/L	--	--	--	NA	<2	NA	<2	<2	<10	NA	**5**	<2	<2	NA	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	<10	<1000	<250	<400	NA	<20	<2	NA	<400	<2000	<1000	<1000	<800
1,2,4-Trichlorobenzene	ug/L	200	50,000	100,000	<15	<2	<400	<2	<2	<10	**21**	**14**	**9**	**4**	<2500	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	<10	<1000	<250	<400	<100	<20	<2	<10000	<400	<2000	<1000	<1000	<800
1,2,4-Trimethylbenzene	ug/L	--	--	--	<15	<2	<400	<2	<2	<10	**34**	**34**	<2	<2	<2500	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	**49**	<1000	<250	<400	<100	<20	<2	<10000	<400	<2000	<1000	<1000	<800
1,2-Dichlorobenzene	ug/L	8,000	2,000	80,000	<15	<2	**98**	**83**	<2	<10	**150**	**98**	**23**	**14**	**1300**	**850**	**590**	<500	<500	**450**	**140**	**41**	<100	<100	**42**	<400	**580**	<1000	<250	<400	<100	<20	<2	<10000	<400	<2000	<1000	<1000	<800
1,2-Dichloroethane	ug/L	5	20,000	100,000	**6**	<2	**340**	**3**	**7**	<10	**7**	<2	<2	<2	<2500	<400	<400	<500	<500	<400	**470**	**130**	<100	<100	**68**	**1600**	**2600**	**2480**	**1240**	**1800**	**28**	<20	**5**	**5500**	**1300**	<2000	<1000	<1000	<800
1,3,5-Trimethylbenzene	ug/L	--	--	--	<15	<2	<400	<2	<2	<10	**11**	<2	<2	<2	<2500	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	**20**	<1000	<250	<400	<100	<20	<2	<10000	<400	<2000	<1000	<1000	<800
1,3-Dichlorobenzene	ug/L	6,000	50,000	100,000	NA	<2	NA	<2	<2	<10	NA	**11**	<2	<2	NA	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	<10	<1000	<250	<400	NA	<20	<2	NA	<400	<2000	<1000	<1000	<800
1,4-Dichlorobenzene	ug/L	60	8,000	80,000	<15	**17**	<400	<2	<2	<10	**3**	**6**	**19**	**9**	<2500	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	<10	<1000	<250	<400	<100	<20	<2	<10000	<400	<2000	<1000	<1000	<800
1,4-Dioxane**	ug/L	6,000	50,000	100,000	NA	<50	NA	<50	<50	<250	NA	<50	<50	<50	NA	NA	<10000	<10000	<10000	<2.5	NA	<1000	<2000	<2000	<0.25	NA	<250	<20000	<5000	<1.2	NA	<500	<50	NA	<10000	<50000	<20000	<20000	**55**
4-Isopropyltoluene	ug/L	--	--	--	<15	<2	**81**	**11**	<2	<10	**33**	<2	<2	<2	<2500	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	<10	<1000	<250	<400	<100	<20	<2	<10000	<400	<2000	<1000	<1000	<800
4-Methyl-2-pentanone	ug/L	50,000	50,000	100,000	<15	<2	<400	<10	<2	<50	<10	<10	<2	<2	<2500	<2000	<400	<5000	<5000	<2000	<200	<40	<1000	<1000	<200	<2000	**110**	<10000	<2500	<2000	<100	<100	<2	<10000	<2000	<2000	<10000	<10000	<4000
Acetone	ug/L	50,000	50,000	100,000	<15	<10	<400	<10	<10	<50	<10	<10	<10	<10	<2500	<2000	<21000	<5000	<5000	<2000	<200	<200	<1000	<1000	<200	<2000	<50	<10000	<2500	<2000	<100	<100	<10	<10000	<100	<10000	<10000	<10000	<4000
Benzene**	ug/L	1,000	10,000	100,000	<15	<2	<400	<2	<2	<10	<10	<2	<2	<2	<2500	<100	<400	<500	<50	<400	<40	<40	<100	<50	<40	<400	**62**	<1000	<50	<400	<100	<20	<2	<10000	<400	<2000	<1000	<200	<500
Bromoform	ug/L	700	50,000	100,000	NA	<2	NA	<2	<2	<10	NA	**2**	<2	<2	NA	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	<10	<1000	<250	<400	NA	<20	<2	NA	<400	<2000	<1000	<1000	<800
Chlorobenzene	ug/L	200	1,000	10,000	<15	<2	<400	<2	<2	<10	<10	**17**	**16**	**10**	<2500	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	**78**	<1000	<250	<400	<100	<20	<2	<10000	**2300**	**2100**	<1000	**2820**	**2900**
Chloroethane	ug/L	--	--	--	**190**	**5**	<400	**54**	**17**	<10	<10	<2	<2	<2	<2500	<400	<400	<1000	<1000	<400	<40	<40	<200	<200	<40	<400	<10	<1000	<500	<400	<100	<20	<2	<10000	<400	<2000	<2000	<2000	<800
Chloroform	ug/L	50	20,000	100,000	<15	<2	<400	<2	<2	<10	<10	<2	<2	<2	<2500	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	**36**	<1000	<250	<400	<100	<20	<2	<10000	<20	<2000	<1000	<1000	<800
cis-1,2-Dichloroethene	ug/L	20	50,000	100,000	**360**	**49**	**11000**	**13**	**670**	**1600**	**96**	<2	**180**	**68**	**60000**	**63000**	**46000**	**29700**	**24200**	**90000**	**92**	**190**	**192**	**298**	**210**	<400	**640**	<1000	<250	<400	**3000**	**2700**	**280**	**52000**	**110000**	**100000**	**62900**	**47700**	**95000**
Ethylbenzene**	ug/L	20,000	5,000	100,000	**3**	<2	<400	**9**	<2	<10	**46**	**18**	**4**	<2	**1800**	**1600**	**830**	<500	<50	**530**	**55**	<40	<100	<50	<40	<400	**210**	<1000	<50	<400	<100	<20	<2	<10000	<400	<2000	<1000	**286**	**2900**
Isopropylbenzene	ug/L	--	--	--	<15	<2	<400	<2	<2	<10	**2**	<2	<2	<2	<2500	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	<10	<1000	<250	<400	<100	<20	<2	<10000	<400	<2000	<1000	<1000	<800
Methylene Chloride	ug/L	2,000	50,000	100,000	<15	<2	**2300**	<5	<2	<10	<10	<5	<2	<2	<2500	<1000	<400	<1000	<1000	<400	**2900**	**62**	<200	<200	<40	**12000**	**18000**	**16000**	**5560**	**12000**	<100	<50	<2	<10000	**1300**	<2000	<2000	<2000	<800
Methyl tert butyl ether**	ug/L	50,000	50,000	100,000	<15	<2	<400	<2	<2	<10	<10	<2	<2	<2	<2500	<200	<400	<500	<50	<400	<40	<40	<100	<50	<40	<400	<10	<1000	<50	<400	<100	<20	<2	<10000	<400	<2000	<1000	<200	<800
Naphthalene**	ug/L	700	20,000	100,000	<15	<2	<400	<5	<2	<10	**13**	<5	<2	<2	<2500	<500	<400	<500	<50	**9.3 J-**	<100	<40	<100	<50	**0.8**	<1000	**24**	<1000	<50	**4.2**	<100	<50	<2	<10000	<1000	<2000	<1000	<200	**5.8 J-**
n-Propylbenzene	ug/L	--	--	--	<15	<2	<400	<2	<2	<10	**4**	<2	<2	<2	<2500	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	<10	<1000	<250	<400	<100	<20	<2	<10000	<400	<2000	<1000	<1000	<800
Sec-Butylbenzene	ug/L	--	--	--	<15	<2	<400	<2	<2	<10	**12**	**12**	**4**	<2	<2500	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	<10	<1000	<250	<400	<100	<20	<2	<10000	<400	<2000	<1000	<1000	<800
Tetrachloroethene	ug/L	50	30,000	100,000	**25**	**2**	**770**	**21**	**8**	**34**	**4**	<2	**8**	**2**	**9100**	**4300**	**650**	**825**	<500	**430**	**6900**	**2700**	**2700**	**2610**	**2900**	**14000**	**14000**	**14000**	**3320**	**12000**	<100	<20	**9**	**17000**	**21000**	**12000**	**5420**	**19100**	**18000**
Toluene**	ug/L	50,000	40,000	100,000	**300**	<2	**560**	**8**	<2	<10	**110**	**19**	**3**	<2	**55000**	**40000**	**18000**	**10200**	**161**	**16000**	**420**	<40	<100	<50	<40	**2500**	**3700**	**2250**	**252**	**1600**	**100**	<20	<2	**77000**	**38000**	**24000**	**6930**	**27200**	**31000**
Trans-1,2-Dichloroethene	ug/L	80	50,000	100,000	**12**	**2**	<400	**3**	**4**	**12**	**3**	**2**	**4**	**3**	<2500	<400	<400	<500	<500	**680**	<40	<40	<100	<100	<40	<400	**17**	<1000	<250	<400	**73**	**53**	**18**	<10000	**460**	<2000	<1000	<1000	<800
Trichloroethene	ug/L	5	5,000	50,000	**150**	**5**	**3400**	**16**	**18**	**96**	**13**	<2	**83**	**3**	**33000**	**9400**	**470**	<500	<500	<400	**19000**	**8400**	**4490**	**3380**	**6000**	**57000**	**67000**	**67500**	**16300**	**68000**	**54**	<20	**7**	**250000**	**360000**	**170000**	**34000**	**83000**	**130000**
Trichlorofluoromethane	ug/L	--	--	--	<15	<2	<400	<2	<2	<10	<10	<2	<2	<2	<2500	<400	<400	<500	<500	<400	<40	<40	<100	<100	<40	<400	**180**	<1000	<250	<400	<100	<20	<2	<10000	<400	<2000	<1000	<1000	<800
Vinyl Chloride	ug/L	2	50,000	100,000	**260**	**3**	**130**	**22**	**140**	**12**	**270**	<2	**58**	**21**	<2500	<400	**740**	**1380**	<500	<400	<40	<40	<100	<100	<40	<400	**28**	<1000	<250	<400	**340**	**25**	**200**	<10000	**490**	<2000	<1000	<1000	<800
Xylenes, Total**	ug/L	3,000	5,000	100,000	**7**	<2	**110**	**7**	<2	<20	**76**	**16**	**5**	<4	**7100**	**6700**	**3460**	**1500**	<150	**1790**	**61**	<40	<300	<300	<80	<400	**840**	<3000	<150	<800	<100	<20	<2	<10000	**610**	<2000	<3000	<3000	**990**

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
** = compounds analyzed by multiple methods - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
NA = Not analyzed.
-- = Not available.
ug/L = micrograms per liter.
J = Detected result is qualified as estimated. A plus or minus sign indicates the direction of potential bias, if known.
UJ = Non-detect result is qualified as estimated.

TABLE 1
SUMMARY OF GROUNDWATER VOC ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Well ID		GW-2	GW-3	UCLs	ESM-05B					ESM-06					ESM-07					ESM-08			ESM-08B		ESM-09				ESM-10		ESM-11	ESM-12		ESM-13			ESM-14			ESM-15		ESM-16	
Screen Interval (ft)					30-40					4.5-19.5					8-23					5-15			45-55		3-16				7-17		8-18	9-17		6-17			6-17			3-18		2-12	
Date Sampled					4/10/06	6/22/12	9/25/14	3/20/15	7/17/15	6/25/02	4/10/06	6/22/12	9/26/14	7/16/15	6/25/02	4/10/06	6/22/12	9/29/14	7/16/15	6/25/02	4/6/06	6/20/12	4/6/06	6/20/12	6/25/02	4/10/06	6/22/12	7/17/15	6/25/02	4/10/06	4/6/06	4/6/06	6/21/12	4/6/06	6/20/12	7/17/15	4/6/06	6/20/12	7/20/15	4/10/06	6/20/12	4/7/06	6/21/12
Analytes	**Units**																	*																*								
Volatile Organic Compounds (VOCs)																																										
1,1,1,2-Tetrachloroethane	ug/L	10	50,000	100,000	<400	<40	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	<2	<2
1,1,1-Trichloroethane	ug/L	4,000	20,000	100,000	**6300**	**35000**	**11900**	**12000**	**27000**	**160000**	**11000**	**1500**	**1530**	**1600**	**140**	**63**	**34**	**20.7**	**25**	**23**	**17**	**18**	**2**	<2	**11000**	**35000**	**1200**	**3500**	**14**	<40	<2	<2	<2	**14**	<10	**5**	<2	<2	**4**	**66000**	**36000**	**3**	**2**
1,1,2-Trichloroethane	ug/L	900	50,000	100,000	<20	<40	<250	<200	<400	NA	<40	<10	<200	<10	NA	<2	<2	<1	<2	NA	<2	<2	<2	<2	NA	<100	<10	<10	NA	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	**130**	<200	<2	<2
1,1,2-Trichlorotrifluoroethane	ug/L	--	--	--	NA	NA	**4370**	**6580**	**14000**	NA	NA	NA	**632**	**340**	NA	NA	NA	**2.3**	<2	NA	NA	NA	NA	NA	NA	NA	NA	**480**	NA	NA	NA	NA	NA	NA	NA	**18**	NA	NA	**5**	NA	NA	NA	NA
1,1-Dichloroethane	ug/L	2,000	20,000	100,000	**180**	**150**	<250	<200	<400	**3600**	**280**	**42**	**600**	**80**	**54**	**58**	**34**	**16.7**	**14**	**69**	**16**	**19**	<2	<2	**2000**	**3500**	**520**	**640**	**10**	**91**	**2**	<2	<2	**25**	**17**	**4**	**42**	**15**	**4**	**2600**	**2900**	**14**	**9**
1,1-Dichloroethene	ug/L	80	30,000	100,000	**320**	**4000**	**1640**	**2020**	**3300**	**14000**	**140**	**15**	<200	**17**	**5**	<1	<2	<1	<1	<80	<1	<2	<1	<2	**290**	**480**	**16**	**39**	<15	<20	<1	<1	<2	<5	<10	<1	<1	<2	<1	**920**	**660**	<1	<2
1,2,3-Trichloropropane	ug/L	--	--	--	<20	<40	<250	<200	<400	NA	<40	<10	<200	<10	NA	<2	<2	<1	<2	NA	<2	<2	<2	<2	NA	<100	<10	<10	NA	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	<2	<2
1,2,4-Trichlorobenzene	ug/L	200	50,000	100,000	<20	<40	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	<2	<2
1,2,4-Trimethylbenzene	ug/L	--	--	--	<20	<40	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	**14**	<10	<2	<2	<2	<2	<100	<200	**15**	<2
1,2-Dichlorobenzene	ug/L	8,000	2,000	80,000	**93**	**1000**	**385**	**340**	**1100**	**1600**	<40	**34**	<200	**16**	<10	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	**3**	<2
1,2-Dichloroethane	ug/L	5	20,000	100,000	**120**	**280**	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	**130**	**11**	**30**	<2	<2	**200**	**290**	**13**	**42**	<15	<40	<2	<2	<2	**20**	<10	<2	<2	<2	<2	**2900**	**480**	<2	<2
1,3,5-Trimethylbenzene	ug/L	--	--	--	<20	<40	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	**7**	<2
1,3-Dichlorobenzene	ug/L	6,000	50,000	100,000	<20	<40	<250	<200	<400	NA	<40	<10	<200	<10	NA	<2	<2	<1	<2	NA	<2	<2	<2	<2	NA	<100	<10	<10	NA	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	<2	<2
1,4-Dichlorobenzene	ug/L	60	8,000	80,000	<20	<40	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	<2	<2
1,4-Dioxane**	ug/L	6,000	50,000	100,000	<500	<1000	<5000	<4000	<1.2	NA	<1000	<250	<4000	<250	NA	<50	<50	<20	<50	NA	<50	<50	<50	<50	NA	<3000	<250	<250	NA	<1000	<50	<50	<50	<300	<50	<50	<50	<50	<50	<3000	<5000	<50	<50
4-Isopropyltoluene	ug/L	--	--	--	<20	<40	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	**37**	<2	<2	<2	<2	<400	<100	<10	<10	**25**	**620**	<2	<2	<2	**130**	**48**	<2	<2	<2	<2	<100	<200	**110**	<2
4-Methyl-2-pentanone	ug/L	50,000	50,000	100,000	<100	<40	<2500	<2000	<2000	<7500	<200	<10	<2000	<50	<10	<10	<2	<10	<10	<80	<10	<2	<10	<2	<400	<500	<10	<50	<15	<200	<10	<10	<2	<50	<10	<10	<10	<2	<2	<500	<200	<10	<2
Acetone	ug/L	50,000	50,000	100,000	<2000	**310**	<2500	<2000	<2000	<7500	<200	<50	<2000	<50	<10	<10	<10	<10	<10	<80	<10	<10	<10	<10	<400	<500	<50	<50	<15	<200	<10	<10	<10	<50	<50	<10	<10	<10	<10	<500	<1000	<10	<10
Benzene**	ug/L	1,000	10,000	100,000	<20	<40	<250	<20	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	<80	<1	<2	<1	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<5	<10	<2	<1	<2	<2	<100	<200	<2	<2
Bromoform	ug/L	700	50,000	100,000	<20	<40	<250	<200	<400	NA	<40	<10	<200	<10	NA	<2	<2	<1	<2	NA	<2	<2	<2	<2	NA	<100	<10	<10	NA	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	<2	<2
Chlorobenzene	ug/L	200	1,000	10,000	<20	**51**	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<10	<10	<2	**2**	<2	<2	<100	<200	<2	<2
Chloroethane	ug/L	--	--	--	<20	<40	<250	<400	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<2	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	<2	<2
Chloroform	ug/L	50	20,000	100,000	<400	<40	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	<2	<2
cis-1,2-Dichloroethene	ug/L	20	50,000	100,000	**62**	**62**	<250	<200	<400	**47000**	**8800**	**1200**	**11500**	**2800**	**260**	**110**	**110**	**49.7**	**43**	**190**	**42**	**88**	<2	<2	**6400**	**26000**	**1500**	**4100**	**63**	**610**	<2	<2	<2	**2200**	**740**	**29**	**15**	**3**	**8**	**27000**	**29000**	**3**	**5**
Ethylbenzene**	ug/L	20,000	5,000	100,000	**32**	**160**	<250	<20	**140**	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	**2300**	<2	**29**	<2	<2	<400	**140**	<10	<10	**430**	**11000**	<2	<2	<2	**1700**	**990**	<2	**270**	**43**	<2	**460**	**260**	**41**	**3**
Isopropylbenzene	ug/L	--	--	--	<20	<40	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	**3**	**3**
Methylene Chloride	ug/L	2,000	50,000	100,000	**1200**	**3200**	**658**	<400	**950**	<7500	<100	<10	<400	<10	<10	<5	<2	<2	<2	**330**	<5	<2	<5	<2	**89**	<300	<10	<10	**14**	**410**	<5	<5	<2	**38**	<10	<2	<5	<2	<2	**2100**	**380**	<5	<2
Methyl tert butyl ether**	ug/L	50,000	50,000	100,000	<20	<40	<250	<20	<400	<7500	<40	<10	<200	<10	**9**	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	<2	<2
Naphthalene**	ug/L	700	20,000	100,000	<50	<40	**5.8**	<20	**2.7**	<7500	<100	<10	<200	<10	<10	<5	<2	<1	<2	<80	<0.8	<2	<0.5	<2	<400	<300	<10	<10	<15	**3.1**	<5	<5	<2	**3.3**	<10	<0.5	<0.5	<2	<2	<300	<200	<5	<2
n-Propylbenzene	ug/L	--	--	--	<20	<40	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	**2**	**2**
Sec-Butylbenzene	ug/L	--	--	--	<20	<40	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	**15**	**10**	<2	<2	<2	<2	<100	<200	<2	<2
Tetrachloroethene	ug/L	50	30,000	100,000	**2700**	**18000**	**4690**	**5720**	**14000**	**18000**	**1600**	**300**	**418**	**770**	**73**	**37**	**37**	**26.6**	**20**	**90**	**44**	**40**	**6**	<2	<400	<100	<10	**420**	**82**	**180**	<2	<2	<2	**150**	**50**	**45**	**8**	**2**	**22**	**11000**	**6800**	**2**	**6**
Toluene**	ug/L	50,000	40,000	100,000	**430**	**610**	<250	<20	**520**	**2600**	**110**	<10	<200	<10	<10	<2	<2	<1	<2	**580**	<2	**2**	<2	<2	**1800**	**5900**	**42**	**36**	**70**	**2100**	<2	<2	<2	**370**	**240**	<2	**12**	**5**	<2	**9900**	**6200**	**110**	<2
Trans-1,2-Dichloroethene	ug/L	80	50,000	100,000	<20	<40	<250	<200	<400	<7500	**43**	<10	<200	**31**	**3**	**3**	**3**	**1.5**	<2	<80	<2	<2	<2	<2	**130**	**240**	**29**	**87**	<15	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	**210**	**260**	<2	<2
Trichloroethene	ug/L	5	5,000	50,000	**7100**	**41000**	**14400**	**12400**	**34000**	**200000**	**11000**	**1000**	**662**	**1200**	**200**	**90**	**60**	**44.5**	**39**	**82**	**39**	**54**	**7**	**2**	**250**	<100	**13**	**510**	**61**	**120**	**5**	<2	<2	**57**	**33**	**38**	**8**	**6**	**32**	**93000**	**28000**	<2	**5**
Trichlorofluoromethane	ug/L	--	--	--	<20	<40	<250	<200	<400	<7500	<40	<10	<200	<10	<10	<2	<2	<1	<2	<80	<2	<2	<2	<2	<400	<100	<10	<10	<15	<40	<2	<2	<2	<10	<10	<2	<2	<2	<2	<100	<200	<2	<2
Vinyl Chloride	ug/L	2	50,000	100,000	<20	<40	<250	<200	<400	<7500	<40	<10	**1750**	**31**	<10	**16**	<2	**6.2**	<2	<80	**12**	**7**	<2	<2	**280**	**1700**	**340**	**340**	<15	**120**	<2	<2	<2	**61**	**59**	<2	**20**	<2	<2	**920**	**1900**	<2	<2
Xylenes, Total**	ug/L	3,000	5,000	100,000	**30**	**480**	<750	<600	**170**	<7500	<40	<10	<600	<4	<10	<2	<2	<3	<4	**4200**	<2	**27**	<2	<2	**110**	<100	**17**	<20	**740**	**19300**	<2	<2	<2	**2770**	**880**	<4	**57**	<2	<4	**1750**	**1070**	**116**	**8**

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
** = compounds analyzed by multiple methods - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
NA = Not analyzed.
-- = Not available.
ug/L = micrograms per liter.
J = Detected result is qualified as estimated. A plus or minus sign indicates the direction of potential bias, if known.
UJ = Non-detect result is qualified as estimated.

TABLE 1
SUMMARY OF GROUNDWATER VOC ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Well ID		GW-2	GW-3	UCLs	G-E-2	G-D-3	G-D-1	G-C-1		G-B-3	G-B-1	G-A-2	CDW-2	CDW-3		CDW-4	CDW-5	PZ-01D	PZ-02D	PZ-08S	PZ-08D		PZ-09S	PZ-09D
Screen Interval (ft)					7.5-17.5	8-18	7-14	8-18		8-18	6-16	10.5-20.5												
Date Sampled					9/25/14	9/25/14	9/25/14	9/25/14	7/20/15	9/26/14	9/26/14	9/26/14	3/19/15	3/19/15	7/20/15	3/19/15	3/20/15	7/20/15	7/17/15	4/29/15	4/29/15	7/20/15	4/29/15	4/29/15
Analytes	**Units**				*																			
Volatile Organic Compounds (VOCs)																								
1,1,1,2-Tetrachloroethane	ug/L	10	50,000	100,000	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	<1	<2	<200	<1	<1	<2	<1	<1
1,1,1-Trichloroethane	ug/L	4,000	20,000	100,000	<2	**3**	**14**	**120**	**260**	<40	**23000**	<40	**32.3**	**246000**	**100000**	**686**	**73.5**	**9**	**9200**	**35.5**	**23.9**	**29**	**41.2**	**51.4**
1,1,2-Trichloroethane	ug/L	900	50,000	100,000	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	<1	<2	<200	<1	<1	<2	<1	<1
1,1,2-Trichlorotrifluoroethane	ug/L	--	--	--	NA	NA	NA	NA	**71**	NA	NA	NA	**95.3**	**10200**	**2100**	**366**	**208**	**6**	**760**	<1	<1	**7**	**8.2**	**10.3**
1,1-Dichloroethane	ug/L	2,000	20,000	100,000	<2	**32**	**63**	**180**	**260**	**150**	**600**	**190**	**52.9**	<5000	**1100**	<50	**39.2**	**24**	**1700**	**99.7**	**19.9**	**41**	**27.9**	**45.1**
1,1-Dichloroethene	ug/L	80	30,000	100,000	<2	<2	**3**	**15**	**15**	<40	**360**	<40	<1	<5000	**1000**	**194**	<1	<1	**250**	<1	<1	<1	**1**	**2.8**
1,2,3-Trichloropropane	ug/L	--	--	--	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	<1	<2	<200	<1	<1	<2	<1	<1
1,2,4-Trichlorobenzene	ug/L	200	50,000	100,000	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	<1	<2	<200	<1	<1	<2	<1	<1
1,2,4-Trimethylbenzene	ug/L	--	--	--	<2	**2**	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	**16.2**	<2	<200	<1	**2.6**	<2	<1	<1
1,2-Dichlorobenzene	ug/L	8,000	2,000	80,000	<2	<2	**16**	<10	<10	<40	<200	<40	**1.1**	<5000	<20	<50	**34.2**	<2	<200	<1	<1	<2	<1	<1
1,2-Dichloroethane	ug/L	5	20,000	100,000	<2	<2	<2	<10	<10	<40	**340**	<40	<1	<5000	<20	<50	<1	**3**	**1800**	<1	<1	**4**	<1	**3.2**
1,3,5-Trimethylbenzene	ug/L	--	--	--	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	**5.6**	<2	<200	<1	<1	<2	<1	<1
1,3-Dichlorobenzene	ug/L	6,000	50,000	100,000	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	<1	<2	<200	<1	<1	<2	<1	<1
1,4-Dichlorobenzene	ug/L	60	8,000	80,000	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	**1.8**	<2	<200	<1	<1	<2	<1	<1
1,4-Dioxane**	ug/L	6,000	50,000	100,000	<50	<50	<50	<250	<250	<1000	<5000	<1000	<20	<100000	<0.25	<1000	<20	<50 UJ	<0.25	<5	<5	<50 UJ	<5	<5
4-Isopropyltoluene	ug/L	--	--	--	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	**2.4**	<2	<200	<1	<1	<2	<1	<1
4-Methyl-2-pentanone	ug/L	50,000	50,000	100,000	<2	<2	<2	<10	<50	<40	<200	<40	<10	<50000	<100	<500	<10	<10	<1000	<10	<10	<10	<10	<10
Acetone	ug/L	50,000	50,000	100,000	<10	<10	<10	<50	<50	<200	<1000	<200	<10	<50000	<100	<500	<10	**25**	<1000	<10	<10	<10	<10	<10
Benzene**	ug/L	1,000	10,000	100,000	<2	<2	<2	<10	<10	<40	<200	<40	<1	<500	<20	<25	<1	<2	**56**	<1	<1	<2	<1	<1
Bromoform	ug/L	700	50,000	100,000	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	<1	<2	<200	<1	<1	<2	<1	<1
Chlorobenzene	ug/L	200	1,000	10,000	<2	<2	<2	<10	<10	<40	<200	<40	**1.7**	<5000	<20	<50	<1	<2	<200	<1	<1	<2	<1	<1
Chloroethane	ug/L	--	--	--	<2	**2**	<2	<10	<10	<40	<200	**110**	**3.2**	<10000	**28**	<100	<2	<2	<200	**9.7**	**55.6**	**12**	**3.5**	**13**
Chloroform	ug/L	50	20,000	100,000	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	<1	<2	<200	<1	<1	<2	<1	<1
cis-1,2-Dichloroethene	ug/L	20	50,000	100,000	<2	**440**	**87**	**580**	**870**	**3700**	**8600**	**3700**	**15**	**17700**	**28000**	<50	**68.8**	**44**	**19000**	**54.8**	**21.1**	**83**	**35.7**	**133**
Ethylbenzene**	ug/L	20,000	5,000	100,000	<2	<2	**10**	<10	<10	<40	**380**	<40	**9**	<500	**64**	<25	**72.2**	<2	**100**	<1	**41.7**	<2	<1	<1
Isopropylbenzene	ug/L	--	--	--	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	**1.3**	<2	<200	<1	<1	<2	<1	<1
Methylene Chloride	ug/L	2,000	50,000	100,000	<2	<2	<2	<10	<10	<40	<200	<40	<2	<10000	**33**	<100	<2	<2	**460**	<2	<2	<2	<2	<2
Methyl tert butyl ether**	ug/L	50,000	50,000	100,000	<2	<2	<2	<10	<10	<40	<200	<40	<1	<500	<20	<25	<1	<2	<200	<1	<1	<2	<1	<1
Naphthalene**	ug/L	700	20,000	100,000	<2	<2	<2	<10	<10	<40	<200	<40	<1	<500	**1.4**	<25	**9.7**	<2	<200	<1	**1**	<2	<1	<1
n-Propylbenzene	ug/L	--	--	--	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	**2.1**	<2	<200	<1	<1	<2	<1	<1
Sec-Butylbenzene	ug/L	--	--	--	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	<1	<2	<200	<1	<1	<2	<1	<1
Tetrachloroethene	ug/L	50	30,000	100,000	**8**	<2	**14**	**37**	**36**	<40	**5600**	<40	**1.3**	**7050**	**1200**	**648**	**60.8**	<2	<200	<1	<1	<2	**1.2**	<1
Toluene**	ug/L	50,000	40,000	100,000	<2	**99**	**47**	**15**	**19**	<40	**5900**	**390**	**6.1**	**7510**	**1600**	<25	**271**	<2	**11000**	<1	**15.2**	<2	<1	**2**
Trans-1,2-Dichloroethene	ug/L	80	50,000	100,000	<2	**6**	**2**	**28**	**39**	<40	<200	<40	**1**	<5000	**620**	<50	**1.8**	<2	<200	<1	**1.1**	**10**	**1.1**	**1.2**
Trichloroethene	ug/L	5	5,000	50,000	**2**	<2	**38**	**240**	**200**	<40	**30000**	<40	**1.8**	**87200**	**23000**	**2220**	**43.3**	<2	**710**	<1	<1	**2**	**3.1**	<1
Trichlorofluoromethane	ug/L	--	--	--	<2	<2	<2	<10	<10	<40	<200	<40	<1	<5000	<20	<50	<1	<2	<200	<1	<1	<2	<1	<1
Vinyl Chloride	ug/L	2	50,000	100,000	<2	**38**	<2	**480**	**430**	**930**	**230**	**890**	**19.3**	<5000	**400**	<50	**24.6**	**37**	**320**	**17.1**	**9**	**18**	**11.4**	**63.9**
Xylenes, Total**	ug/L	3,000	5,000	100,000	<2	<2	**20**	<10	<20	<40	**1930**	<40	**5.6**	<1500	**163**	<75	**178.3**	<4	**170**	<3	**37.5**	<4	<3	<3

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
** = compounds analyzed by multiple methods - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
NA = Not analyzed.
-- = Not available.
ug/L = micrograms per liter.
J = Detected result is qualified as estimated. A plus or minus sign indicates the direction of potential bias, if known.
UJ = Non-detect result is qualified as estimated.

TABLE 2
SUMMARY OF GROUNDWATER VPH & EPH ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Well ID		GW-2	GW-3	UCLs	ESM-03			ESM-03B-S		ESM-03B-D		ESM-05		ESM-05B		ESM-08	ESM-08B	ESM-10	ESM-13		ESM-14	CDW-2	CDW-3		CDW-4	CDW-5	PZ-02D
Screen Interval (ft)					4-14			30-40		60-70		3-18		30-40		5-15	45-55	7-17	6-17		6-17						
Date Sampled					4/7/06	3/20/15	7/16/15	3/20/15	7/16/15	3/20/15	7/17/15	3/20/15	7/16/15	3/20/15	7/17/15	4/6/06	4/6/06	4/10/06	4/6/06	7/17/15	4/6/06	3/19/15	3/19/15	7/20/15	3/19/15	3/20/15	7/17/15
Analytes	**Units**																										
Volatile Petroleum Hydrocarbons (VPH)																											
C5-C8 Aliphatics *	ug/L	3,000	50,000	100,000	**150,000**	**11,500**	**47,000**	**3,280**	<2000	**11,400**	**22,000**	**65,000**	**100,000**	**9,330**	**19,000**	**340**	<100	**10000**	**3,600**	<100	**320**	**88.4**	**116,000**	**33,000**	**1,790**	**276**	**17,000**
C9-C12 Aliphatics	ug/L	5,000	50,000	100,000	<10000	<250	<20000	**306**	<2000	<250	<10000	**1,630**	<50000	<100	<5000	<100	<100	<2000	<500	<100	<100	**33.8**	**2720**	<10000	< 125	**41.5**	<5000
C9-C10 Aromatics	ug/L	4,000	50,000	100,000	<10000	**327**	<20000	**421**	<2000	**331**	<10000	**1,390**	<50000	**439**	<5000	<100	<100	<2000	**2,100**	<100	<100	**40.3**	**2750**	<10000	< 125	**129**	<5000
Extractable Petroleum Hydrocarbons (EPH)																											
C9-C18 Aliphatics	ug/L	5,000	50,000	100,000	NA	NA	**110 J-**	NA	<100	NA	<100	NA	<100	NA	<100	<300	<200	<200	<200	<100	<200	NA	NA	<100	NA	NA	NA
2-Methylnaphthalene	ug/L	2,000	20,000	100,000	NA	NA	<0.5 UJ	NA	<0.5	NA	<0.5	NA	**0.5**	NA	<0.5	<0.8	<0.5	<0.5	<0.6	<0.5	<0.5	NA	NA	<0.5	NA	NA	NA
Benzo(a)anthracene	ug/L	--	1,000	10,000	NA	NA	<0.5 UJ	NA	<0.5	NA	<0.5	NA	<0.5	NA	<0.5	<0.8	<0.5	<0.5	<0.6	<0.5	**0.7**	NA	NA	<0.5	NA	NA	NA
Benzo(a)pyrene	ug/L	--	500	5,000	NA	NA	<0.2 UJ	NA	<0.2	NA	<0.2	NA	<0.2	NA	<0.2	**0.5**	<0.2	<0.2	<0.2	<0.2	**0.9**	NA	NA	<0.2	NA	NA	NA
Benzo(b)fluoranthene	ug/L	--	400	4,000	NA	NA	<0.5 UJ	NA	<0.5	NA	<0.5	NA	<0.5	NA	<0.5	**1.0**	<0.5	<0.5	<0.6	<0.5	**1.2**	NA	NA	<0.5	NA	NA	NA
Benzo(g,h,i)perylene	ug/L	--	20	500	NA	NA	<0.5 UJ	NA	<0.5	NA	<0.5	NA	<0.5	NA	<0.5	<0.8	<0.5	<0.5	<0.6	<0.5	**0.8**	NA	NA	<0.5	NA	NA	NA
Benzo(k)fluoranthene	ug/L	--	100	1,000	NA	NA	<0.5 UJ	NA	<0.5	NA	<0.5	NA	<0.5	NA	<0.5	<0.8	<0.5	<0.5	<0.6	<0.5	**0.6**	NA	NA	<0.5	NA	NA	NA
Chrysene	ug/L	--	70	700	NA	NA	<0.5 UJ	NA	<0.5	NA	<0.5	NA	<0.5	NA	<0.5	<0.8	<0.5	<0.5	<0.6	<0.5	**0.7**	NA	NA	<0.5	NA	NA	NA
Fluoranthene	ug/L	--	200	2,000	NA	NA	<0.5 UJ	NA	<0.5	NA	<0.5	NA	<0.5	NA	<0.5	**1.0**	<0.5	<0.5	<0.6	<0.5	**1.2**	NA	NA	<0.5	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ug/L	--	100	1,000	NA	NA	<0.5 UJ	NA	<0.5	NA	<0.5	NA	<0.5	NA	<0.5	<0.8	<0.5	<0.5	<0.6	<0.5	**0.7**	NA	NA	<0.5	NA	NA	NA
Pyrene	ug/L	--	20	600	NA	NA	<0.5 UJ	NA	<0.5	NA	<0.5	NA	<0.5	NA	<0.5	**1.1**	<0.5	<0.5	<0.6	<0.5	**1.1**	NA	NA	<0.5	NA	NA	NA

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
* = C5-C8 aliphatic hydrocarbons include chlorinated solvent concentrations including PCE, TCE, TCA, and associated daughter products and are not representative of petroleum concentrations.
-- = Not available.
ug/L = micrograms per liter.
J = Detected result is qualified as estimated. A plus or minus sign indicates the direction of potential bias, if known.
UJ = Non-detect result is qualified as estimated.

TABLE 3
SUMMARY OF GROUNDWATER PCB & DISSOLVED METALS ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Well ID		GW-2	GW-3	UCLs	B1/OW1	ESM-01		ESM-02		ESM-03				ESM-03B-S			ESM-03B-D			ESM-04		ESM-05						
Screen Interval (ft)					UNKNOWN	7-22		5-20		4-14				30-40			60-70			4-14		3-18						
Date Sampled					6/25/02	6/25/02	4/7/06	6/25/02	4/6/06	6/25/02	4/7/06	9/29/14	3/20/15	4/7/06	9/26/14	3/20/15	4/7/06	9/26/14	3/20/15	6/25/02	4/10/06	6/25/02	4/10/06	6/22/12	9/25/14	3/20/15	7/16/15	
Analytes	**Units**				Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Filtered
Polychlorinated Biphenyls (PCBs)																												
Aroclor-1016	ug/L	5	10	100	NA	NA	<0.3	NA	<0.3	NA	<0.3	<0.204	<0.206	<0.3	**1.52**	**0.404**	<0.3	**0.368**	<0.204	NA	<0.3	NA	<6	<1.7	**31.1**	<0.204	<5	<0.25
Aroclor-1232	ug/L	5	10	100	NA	NA	<0.3	NA	<0.3	NA	<0.3	<0.204	<0.206	<0.3	<0.202	<0.204	<0.3	<0.211	<0.204	NA	<0.3	NA	<6	<1.7	<0.204	<0.204	<5	<0.25
Aroclor-1242	ug/L	5	10	100	NA	NA	<0.3	NA	<0.3	NA	<0.3	<0.204	<0.206	<0.3	<0.202	<0.204	<0.3	<0.211	<0.204	NA	<0.3	NA	**26**	**35**	<0.204	<0.204	**28**	**1.3**
Aroclor-1248	ug/L	5	10	100	NA	NA	<0.3	NA	<0.3	NA	<0.3	<0.204	<0.206	<0.3	<0.202	<0.204	<0.3	<0.211	<0.204	NA	<0.3	NA	<6	<1.7	<0.204	**23.9**	<5	<0.25
Aroclor-1254	ug/L	5	10	100	NA	NA	<0.3	NA	<0.3	NA	<0.3	<0.204	<0.206	<0.3	<0.202	<0.204	<0.3	<0.211	<0.204	NA	<0.3	NA	<6	<1.7	<0.204	<0.204	<5	**0.8**
Total PCBs							<RL		<RL		<RL	<RL	<RL	<RL	**1.52**	**0.404**	<RL	**0.368**	<RL		<RL		**26**	**35**	**31.1**	**23.9**	**28**	**2.1**
Dissolved Metals																												
Arsenic	ug/L	--	900	9,000	<3.0	**3.9**	NA	<3.0	NA	**4.4**	<0.01	NA	NA	NA	NA	NA	NA	NA	NA	**4.6**	NA	**9.7**	<10	NA	NA	NA	NA	NA
Barium	ug/L	--	50,000	100,000	**121**	**97.7**	NA	**85.9**	NA	**189**	**0.07**	NA	NA	NA	NA	NA	NA	NA	NA	**260**	NA	**187**	**180**	NA	NA	NA	NA	NA
Lead	ug/L	--	10	150	**4.4**	<1.0	NA	<1.0	NA	<1.0	<0.01	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	<1.0	<10	NA	NA	NA	NA	NA
Selenium	ug/L	--	100	1,000	<8.0	<8.0	NA	<8.0	NA	<8.0	<0.05	NA	NA	NA	NA	NA	NA	NA	NA	<8.0	NA	<8.0	<50	NA	NA	NA	NA	NA
Silver	ug/L	--	7	1,000	<2.0	<2.0	NA	<2.0	NA	<2.0	<0.007	NA	NA	NA	NA	NA	NA	NA	NA	**2.6**	NA	**2.9**	<7	NA	NA	NA	NA	NA

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
-- = Not available.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
ug/L = micrograms per liter.

TABLE 3
SUMMARY OF GROUNDWATER PCB & DISSOLVED METALS ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Well ID		GW-2	GW-3	UCLs	ESM-05B			ESM-06						ESM-07					ESM-08			ESM-08B	ESM-09		ESM-10		ESM-11	ESM-12	ESM-13
Screen Interval (ft)					30-40			4.5-19.5						8-23					5-15			45-55	3-16		7-17		8-18	9-17	6-17
Date Sampled					4/10/06	9/25/14	3/20/15	6/25/02	4/10/06	6/22/12	9/26/14	7/16/15		6/25/02	4/10/06	6/22/12	9/29/15 *	7/16/15	6/25/02	4/6/06	6/20/12	4/6/06	6/25/02	4/10/06	6/25/02	4/10/06	4/6/06	4/6/06	4/6/06
Analytes	**Units**				Total	Total	Total	Total	Total	Total	Total	Total	Filtered	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Tota
Polychlorinated Biphenyls (PCBs)																													
Aroclor-1016	ug/L	5	10	100	<0.3	**0.847**	<0.206	NA	<0.3	<1.7	**1.37**	<0.25	<0.25	NA	<0.3	NA	<0.206	NA	NA	<0.5	<0.3	<0.3	NA	<0.3	NA	<0.3	<0.3	<0.3	<0.3
Aroclor-1232	ug/L	5	10	100	<0.3	<0.204	<0.206	NA	<0.3	<1.7	<0.204	<0.25	<0.25	NA	<0.3	NA	<0.206	NA	NA	<0.5	<0.3	<0.3	NA	<0.3	NA	<0.3	<0.3	<0.3	<0.3
Aroclor-1242	ug/L	5	10	100	<0.3	<0.204	<0.206	NA	**3.5**	**5.0**	<0.204	**1.2**	<0.25	NA	<0.3	NA	<0.206	NA	NA	**0.8**	<0.3	<0.3	NA	<0.3	NA	<0.3	<0.3	<0.3	<0.3
Aroclor-1248	ug/L	5	10	100	<0.3	<0.204	<0.206	NA	<0.3	<1.7	<0.204	<0.25	<0.25	NA	<0.3	NA	<0.206	NA	NA	<0.5	<0.3	<0.3	NA	<0.3	NA	<0.3	<0.3	<0.3	<0.3
Aroclor-1254	ug/L	5	10	100	<0.3	<0.204	<0.206	NA	<0.3	<1.7	<0.204	<0.25	<0.25	NA	<0.3	NA	<0.206	NA	NA	<0.5	<0.3	<0.3	NA	<0.3	NA	<0.3	<0.3	<0.3	<0.3
Total PCBs					<RL	**0.847**	,RL		**3.5**	**5**	**1.37**	**1.2**	<RL		<RL		<RL			**0.8**	<RL	<RL		<RL		<RL	<RL	<RL	<RL
Dissolved Metals																													
Arsenic	ug/L	--	900	9,000	<10	NA	NA	**7.8**	NA	NA	NA	NA	NA	<3.0	NA	NA	NA	NA	**3.2**	NA	NA	NA	**4.2**	NA	<3.0	NA	<0.01	NA	NA
Barium	ug/L	--	50,000	100,000	**220**	NA	NA	**109**	NA	NA	NA	NA	NA	**42.1**	NA	NA	NA	NA	**114**	NA	NA	NA	**244**	NA	**79.4**	NA	**0.2**	NA	NA
Lead	ug/L	--	10	150	<10	NA	NA	<1.0	NA	NA	NA	NA	NA	**1.5**	NA	NA	NA	NA	**3**	NA	NA	NA	<1.0	NA	<1.0	NA	<0.01	NA	NA
Selenium	ug/L	--	100	1,000	<50	NA	NA	<8.0	NA	NA	NA	NA	NA	<8.0	NA	NA	NA	NA	<8.0	NA	NA	NA	<8.0	NA	**9**	NA	<0.05	NA	NA
Silver	ug/L	--	7	1,000	<7	NA	NA	<2.0	NA	NA	NA	NA	NA	<2.0	NA	NA	NA	NA	<2.0	NA	NA	NA	**2.5**	NA	<2.0	NA	<0.007	NA	NA

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
-- = Not available.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
ug/L = micrograms per liter.

TABLE 3
SUMMARY OF GROUNDWATER PCB & DISSOLVED METALS ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Well ID		GW-2	GW-3	UCLs	ESM-14				ESM-15	ESM-16	G-E-2	G-D-3	G-D-1	G-C-1	G-B-3	G-B-1	G-A-2	CDW-2	CDW-3			CDW-4	CDW-5	PZ-08D	PZ-09S	PZ-09D
Screen Interval (ft)					6-17				3-18	2-12	7.5-17.5	8-18	7-14	8-18	8-18	6-16	10.5-20.5	--	--			--	--	--	--	--
Date Sampled					4/6/06	6/20/12	7/20/15		4/10/06	4/7/06	9/25/14 *	9/25/14	9/25/14	9/25/14	9/26/14	9/26/14	9/26/14	3/19/15	3/19/15	7/20/15		3/19/15	3/20/15	4/29/15	4/29/15	4/29/15
Analytes	**Units**				Total	Total	Total	Filtered	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Filtered	Total	Total	Total	Total	Total
Polychlorinated Biphenyls (PCBs)																										
Aroclor-1016	ug/L	5	10	100	<2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.4	<0.3	<0.3	<0.3	< 0.202	< 0.206	<0.3 UJ	<0.3	< 0.206	< 0.204	<2.86	<0.2	**4.59**
Aroclor-1232	ug/L	5	10	100	<2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.4	<0.3	<0.3	<0.3	< 0.202	< 0.206	<0.3 UJ	<0.3	< 0.206	< 0.204	**136**	<0.2	<0.2
Aroclor-1242	ug/L	5	10	100	**8**	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.4	<0.3	<0.3	<0.3	**3.41**	**6.42**	**1.7 J-**	<0.3	< 0.206	< 0.204	<2.86	<0.2	<0.2
Aroclor-1248	ug/L	5	10	100	<2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.4	<0.3	<0.3	<0.3	< 0.202	< 0.206	<0.3 UJ	<0.3	< 0.206	< 0.204	<2.86	<0.2	<0.2
Aroclor-1254	ug/L	5	10	100	<2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.4	<0.3	<0.3	<0.3	< 0.202	< 0.206	<0.3 UJ	<0.3	< 0.206	< 0.204	<2.86	<0.2	<0.2
Total PCBs					**8**	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	**3.41**	**6.42**	1.7 J-	<RL	<RL	<RL	**136**	<RL	**4.59**
Dissolved Metals																										
Arsenic	ug/L	--	900	9,000	<0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	ug/L	--	50,000	100,000	**0.06**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	ug/L	--	10	150	<0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	ug/L	--	100	1,000	<0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	ug/L	--	7	1,000	<0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
-- = Not available.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
ug/L = micrograms per liter.

TABLE 4
SUMMARY OF GROUNDWATER NATURAL ATTENUATION PARAMETERS
Former Lewis Chemical Facility, Boston, Massachusetts

Well ID		ESM-03		ESM-03B-S	ESM-03B-D	ESM-05		ESM-05B		ESM-07	ESM-09	ESM-13	G-C-1
Screen Interval (ft)		4-14		30-40	60-70	3-18		30-40		8-23	3-16	6-17	8-18
Date Sampled		3/20/15	7/16/15	7/16/15	7/17/15	3/20/15	7/16/15	3/20/15	7/17/15	7/16/15	7/17/15	7/17/15	7/20/15
Analytes	**Units**												
Natural Attenuation Parameters													
Ethane	ug/L	<5	<20	NA	<20	<5	NA	<5	<20	<20	<20	<20	NA
Ethene	ug/L	<5	<20	NA	<20	<5	NA	<5	<20	<20	<20	<20	NA
Methane	ug/L	<2.2	<10	NA	<10	<2.2	NA	<2.2	<10	**49**	<10	<10	NA
Iron, Total	mg/L	**0.44**	**38**	**0.14**	**0.1**	**11.8**	**54**	<0.015	**0.07**	**1.2**	**52**	**6**	**14**
Iron, Dissolved	mg/L	NA	**47**	<0.05	<0.05	NA	**53**	NA	<0.05	**0.97**	**40**	**7.9**	**15**
Manganese, Total	mg/L	**0.331**	**2**	**1.6**	**7.1**	**1.68**	**3.4**	**0.838**	**0.56**	**2.3**	**3.3**	**0.23**	**2.8**
Manganese, Dissolved	mg/L	NA	**2.2**	**1.7**	**6.4**	NA	**3.9**	NA	**0.52**	**2.5**	**3.4**	**0.32**	**3.2**
Alkalinity, total (as CaCO3)	mg/L	**73.1**	**76**	**110**	**65**	**46.4**	**36**	**128**	**66**	**43**	<5	**17**	**58**
Ammonia as N	mg/L	**0.63**	**5.6**	<0.5	<0.5	**0.35**	**3.7**	**0.84**	<0.5	<0.5	**2.4**	<0.5	**2.2**
Dissolved Organic Carbon	mg/L	**6.78**	**17**	NA	<1	**7.95**	NA	**2.8**	<1	**1.8**	**4.8**	**1.9**	NA
Nitrate-N	mg/L	<0.1	<0.1	NA	<5	<0.1	<0.1	<1	NA	**1.1**	<0.1	**2.1**	NA
Sulfate	mg/L	**81.2**	**190**	NA	**700**	**62.6**	**180**	**418**	NA	**47**	**560**	**120**	NA
Sulfide	mg/L	<0.1	<0.04	NA	<0.04	<0.1	<0.04	<0.1	<0.04	<0.04	<0.04	<0.04	NA

Notes
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
ug/L = micrograms per liter.
mg/L = milligrams per liter.

TABLE 5
SUMMARY OF GROUNDWATER BIOLOGICAL ANALYSES

Former Lewis Chemical Facility, Boston, Massachusetts

Analyte	ESM-3	ESM-3B-D	ESM-5	ESM-5B	ESM-9	ESM-13
Dehalococcoides	63,500	3.4	112,000	<0.5	63	1,110
tceA Reductase	364	0.3	207	<0.5	<0.5	19
BAV1 Vinyl Chloride Reductase	46,700	5.8	45,200	<0.5	29	70
Vinyl Chloride Reductase	3,840	0.1	9,980	<0.5	0.5	73
Dehalobacter spp	776	0.3	162	8.6	131	NA

Notes:

1. All samples were collected on July 16-17, 2015.
2. Results are reported in cells per milliliter (cells/mL).

DHC - Dehalococcoides

TCE - tceA Reductase

BVC - BAV1 Vinyl Chloride Reductase

VCR - Vinyl Chloride Reductase

DHBt - Dehalobacter spp

NA = Not analyzed.

TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	4	5	6	7	9	14	18	19	23	25	A-2	14	15	17	18	18	13	18	18	18	28	2
Soil Boring									ESM-06	ESM-05	ESM-09	ESM-04	ESM-03	ESM-07	ESM-08	ESM-10	ESM-02	ESM-01	TKFMDR	TP-03	TP-04	TP-02	TP-01B	TP-06	ESM-11	ESM-13	ESM-13	ESM-14	ESM-12	III-E-02
Sample ID		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	ESM-06	ESM-05	ESM-09	ESM-04	ESM-03	ESM-07	ESM-08	ESM-10	ESM-02	ESM-01*	TKFMDR	TP-03	TP-04	TP-02	TP-01B	TP-06	ESM-11	ESM-13	ESM-13	ESM-14	ESM-12	III-E-02-S
Sample Depth (feet)									11-13	13-15	14-15	10-12	10-12	10-12	12-14	12-13.5	14-16	16-18	Unknown	5.5	4	6	9	2.5	10-12	1-3	12-14	7-9	12-14	0-0.5
Date Sampled									6/12/02	6/12/02	6/14/02	6/13/02	6/13/02	6/12/02	6/12/02	6/14/02	6/13/02	6/13/02	6/14/02	6/1/05	6/1/05	6/1/05	6/1/05	6/1/05	7/13/05	7/13/05	7/13/05	7/13/05	7/13/05	8/31/05
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.19	<2	<0.038	<0.037	<0.04	<0.039	<0.05	<0.042	<0.049	<0.038	<3.6	<0.084	<0.093	<0.093	<0.090	<0.095	<0.085	**0.47**	**0.32**	**9.9**	**0.18**	<0.83
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.19	<2	<0.038	<0.037	<0.04	<0.039	<0.05	<0.043	<0.049	<0.038	<3.6	<0.084	<0.093	<0.093	<0.090	<0.095	<0.085	<0.093	<0.11	<1.6	<0.09	<0.84
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	**2.3**	**25**	<0.038	<0.037	**0.44**	**0.078**	**0.46**	<0.042	<0.049	**0.12**	**68**	<0.084	**5.4**	<0.093	**1.5**	**0.99**	<0.085	<0.093	<0.11	<1.6	<0.09	**5.6**
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.19	<2	<0.038	<0.037	<0.04	<0.039	<0.05	<0.042	<0.049	**0.16**	<3.6	<0.084	<0.093	<0.093	<0.090	<0.095	<0.085	<0.093	<0.11	<1.6	<0.09	<0.83
Total PCBs	mg/kg								**2.3**	**25**	<RL	<RL	**0.44**	**0.078**	**0.46**	<RL	<RL	**0.28**	**68**	<RL	**5.4**	<RL	**1.5**	**0.99**	<RL	**0.47**	**0.32**	**9.9**	**0.18**	**5.6**
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	**2.7**	**2.1**	**1.7**	**1.7**	**3.4**	**1.2**	**3.9**	**5.3**	**2.5**	**1.2**	**3.5**	NA	NA	NA	NA	NA	**2.1**	**2.2**	**2.3**	**6.6**	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**18.9**	**15**	**18.7**	**19.8**	**30.9**	**12.6**	**60.9**	**67.9**	**26.1**	**14.1**	**53.7**	NA	NA	NA	NA	NA	**69**	**64**	**62**	**58**	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	<0.11	<0.11	<0.11	<0.11	**0.26**	<0.11	**0.23**	**0.15**	**0.19**	<0.10	**0.64**	NA	NA	NA	NA	NA	<0.54	<0.57	<0.71	<0.53	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	**10**	**8.5**	**7.8**	**15**	**13.6**	**6.5**	**27.3**	**27.6**	**13.3**	**7.8**	**17.9**	NA	NA	NA	NA	NA	**13**	**16**	**37**	**16**	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	**3.2**	**22.3**	**6**	**22.6**	**48.9**	**4**	**82.1**	**223**	**5**	**2.2**	**79.7**	**4800**	**280**	**76**	**38**	**540**	**150**	**35**	**37**	**420**	NA	**120**
Mercury	mg/kg	20	20	30	30	30	30	300	<0.017	**0.029**	<0.017	<0.016	**0.15**	**0.043**	**0.35**	**1.1**	**0.072**	<0.016	**0.28**	NA	NA	NA	NA	NA	**0.35**	**3**	<0.045	**0.16**	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	<0.42	<0.46	<0.44	<0.43	<0.44	<0.45	<0.53	<0.51	<0.55	<0.42	<0.41	NA	NA	NA	NA	NA	<11	<11	<14	<11	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	**0.86**	**0.61**	**0.46**	**0.72**	**0.51**	**0.3**	**0.98**	**0.8**	**0.49**	**0.28**	**0.98**	NA	NA	NA	NA	NA	<5.4	<5.7	<7.1	<5.3	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
-- = Not available.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	2	2	3	3	3	4	4	4	5	5	5	5	6	6	6	8	8	9	9	9	10	10
Soil Boring									III-E-02	III-E-02	III-F-03	III-F-03	III-F-03	II-A-01	II-A-01	II-A-01	II-A-03	II-A-03	II-A-03	II-A-03	II-A-05	II-A-05	II-A-05	II-A-07	II-A-07	II-A-09	II-A-09	II-A-09	II-A-11	II-A-11
Sample ID									III-E-02-M	III-E-02-D	III-F-03-S	III-F-03-M	III-F-03-D	II-A-01-S	II-A-01-M	II-A-01-D	II-A-03-S	II-A-03-S	II-A-03-M*	II-A-03-D	II-A-05-S	II-A-05-M	II-A-05-D	II-A-07-S	II-A-07-M	II-A-09-S	II-A-09-D	II-A-09-M	II-A-11-S	II-A-11-M
Sample Depth (feet)									5-7	17-19	0-0.5	5-7	17-19	0-0.5	5-7	14-15	0-0.5	0-0.5	5-7	14-15	0-0.5	4-6	8-10.5	0-0.5	5-7	0-0.5	13-14	6-8	0-0.5	9-10
Date Sampled									8/31/05	8/31/05	9/1/05	9/1/05	9/1/05	8/31/05	8/31/05	8/31/05	8/31/05	7/23/15	8/31/05	8/31/05	8/31/05	8/31/05	8/31/05	8/31/05	8/31/05	8/30/05	8/30/05	8/30/05	8/30/05	8/30/05
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.1	<0.088	<0.44	<0.1	<0.091	<2.2	<0.11	NA	<0.83	NA	<0.5	NA	NA	<0.099	<0.12	<0.46	<0.095	<0.086	<0.097	<0.1	<0.088	<0.1
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.2	<0.088	<0.44	<0.1	<0.091	<2.2	<0.11	NA	<0.83	NA		NA	NA	<0.099	<0.12	<0.46	<0.095	<0.086	<0.097	<0.1	<0.088	<0.1
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	**0.12**	<0.088	**2.7**	<0.1	<0.091	**18**	**0.35**	NA	**4.7**	NA	**1.7**	NA	NA	**0.83**	<0.12	**2.6**	<0.095	**0.98**	<0.097	<0.1	**0.28**	<0.1
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.1	<0.088	<0.44	<0.1	<0.091	<2.2	<0.11	NA	<0.83	NA	<0.5	NA	NA	<0.099	<0.12	<0.46	<0.095	<0.086	<0.097	<0.1	<0.088	<0.1
Total PCBs	mg/kg								**0.12**	<RL	**2.7**	<RL	<RL	**18**	**0.35**	NA	**4.7**	NA	**1.7**			**0.83**	<RL	**2.6**	<RL	**0.98**	<RL	<RL	**0.28**	<RL
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	<14	<12	**120**	<14	<12	**150**	<14	<11	**30**	NA	<13	<11	**420**	<12	<14	**710**	<12	**150**	**110**	<12	**110**	<13
Mercury	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.34**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
-- = Not available.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	10	10	14	14	16	16	16	17	17	17	18	18	18	21	21	21	24	24	24	25	25	25
Soil Boring									II-A-11	II-A-11	III-C-02	III-C-02	III-E-05	III-E-05	III-E-05	I-A-03	I-A-03	I-A-03	I-B-05	I-B-05	I-B-05	I-D-10	I-D-10	I-D-10	I-B-08	I-B-08	I-B-08	I-B-10	I-B-10	I-B-10
Sample ID									II-A-11-M2	II-A-11-D	III-C-02-M	III-C-02-D	III-E-05-S	III-E-05-M	III-E-05-D	I-A-03-S	I-A-03-M	I-A-03-D	I-B-05-S	I-B-05-M	I-B-05-D*	I-D-10-S	I-D-10-M	I-D-10-D	I-B-08-S	I-B-08-M*	I-B-08-D	I-B-10-S	I-B-10-M	I-B-10-D
Sample Depth (feet)									14-15	18-20	8.5-10	13-14	0-0.5	5-10	10-15	0-0.5	8-10	10-12	0-0.5	14-16	19-20	0-0.5	5-7	12-14	0-0.5	12-14	19-20	0-0.5	13-15	18-20
Date Sampled									8/30/05	8/30/05	8/31/05	8/31/05	9/1/05	9/1/05	9/1/05	8/30/05	8/30/05	8/30/05	8/30/05	8/30/05	8/30/05	8/31/05	8/31/05	8/31/05	8/30/05	8/30/05	8/30/05	8/30/05	8/30/05	8/30/05
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.15	NA	<0.094	<0.099	NA	NA	NA	<0.19	<0.19	<0.15	<17	<0.43	<0.086	NA	NA	NA	<0.43	<0.097	<0.091	NA	NA	NA
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.15	NA	<0.094	<0.099	NA	NA	NA	<0.19	<0.19	<0.15	<17	<0.43	<0.087	NA	NA	NA	<0.43	<0.097	<0.091	NA	NA	NA
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	<0.15	NA	<0.094	<0.099	NA	NA	NA	**1.8**	**1.2**	<0.15	**70**	**2.3**	<0.086	NA	NA	NA	**3.9**	<0.097	<0.091	NA	NA	NA
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.15	NA	<0.094	<0.099	NA	NA	NA	<0.19	<0.19	<0.15	<17	<0.43	<0.086	NA	NA	NA	<0.43	<0.097	<0.091	NA	NA	NA
Total PCBs	mg/kg								<RL		<RL	<RL				**1.8**	**1.2**	<RL	**70**	**2.3**	<RL				**3.9**	<RL	<RL			
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	NA	NA	**190**	<12	**420**	**260**	<11	**950**	**590**	**34**	**350**	**75**	<11	**440**	<13	<13	**340**	<12	<11	**210**	<12	<11
Mercury	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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TABLE 6
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Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	25	25	25	29	29	B-1	B-1	B-1	B-1	B-3	B-3	E-1	3	3	3	3	13	13	20	21	21	22
Soil Boring									I-C-09	I-C-09	I-C-09	I-A-08	I-A-08	ESM-15	ESM-15	ESM-15	ESM-15	ESMB-02	ESMB-02	ESM-16	GP-1	GP-1	GP-2	GP-2	GP-12	GP-12	GP-3	GP-4	GP-4	GP-5
Sample ID									I-C-09-S	I-C-09-M	I-C-09-D	I-A-08-S	I-A-08-M	ESM-15	ESM-15	ESM-15	ESM-15	ESMB-02	ESMB-02	ESM-16	GP-1/0-3'	GP-1/3-5'	GP-2/0-3'	GP-2/3-5'	GP-12/0-3'	GP-12/10-12'	GP-3/0-3'	GP-4/0-3'	GP-4/3-5'	GP-5/0-3'
Sample Depth (feet)									0-0.5	13-15	15-17	0-0.5	12-14	0-2	3-5	6-8	13-15	0-5	0-5	4-8	0-3	3-5	0-3	3-5	0-3	10-12	0-3	0-3	3-5	0-3
Date Sampled									8/31/05	8/31/05	8/31/05	8/30/05	8/30/05	8/31/05	8/31/05	8/31/05	8/31/05	8/31/05	7/23/15	8/31/05	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.086	<0.087	<0.086	NA	NA	NA	NA	NA	<0.088	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.086	<0.087	<0.086	NA	NA	NA	NA	NA	<0.088	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	**0.38**	<0.087	<0.086	NA	NA	NA	NA	NA	**0.44**	NA	NA	**0.38**	**170**	NA	**300**	**17**	NA	NA	NA	**6.4**	NA	NA
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.086	<0.087	<0.086	NA	NA	NA	NA	NA	<0.088	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	mg/kg								**0.38**	<RL	<RL						**0.44**			**0.38**	**170**		**300**	**17**				**6.4**		
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	NA	NA	NA	NA	NA	**5.1**	NA	NA	NA	NA	NA	NA	**2.7**	**4.2**	**3.3**	**3.4**	**2.6**	**2**	**3.5**	**3.5**	**2.5**	**3.1**
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	**80**	NA	NA	NA	NA	NA	NA	**71**	**43**	**90**	**59**	**24**	**52**	**95**	**80**	**34**	**33**
Beryllium	mg/kg	90	90	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	NA	NA	NA	NA	NA	**1.6**	NA	NA	NA	NA	NA	NA	**1**	**2.4**	**1.4**	**0.8**	<0.3	**13**	**0.6**	**0.6**	**0.4**	**0.3**
Chromium	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	**20**	NA	NA	NA	NA	NA	NA	**30**	**8**	**110**	**35**	**9**	**9**	**13**	**15**	**23**	**14**
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	**510**	<11	<11	**310**	**150**	**670**	NA	NA	NA	**1600**	NA	NA	**99**	**100**	**170**	**84**	**35**	**500**	**470**	**560**	**130**	**94**
Mercury	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	**3.3**	NA	NA	NA	NA	NA	NA	**0.69**	**0.22**	**0.51**	**0.32**	**0.05**	**0.08**	**0.2**	**0.46**	**0.59**	**0.05**
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	<11	NA	NA	NA	NA	NA	NA	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Silver	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	<5.6	NA	NA	NA	NA	NA	NA	**0.6**	<0.4	**0.9**	**0.5**	<0.5	<0.4	<0.4	<0.4	**2.1**	<0.4
Vanadium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	22	22	22	23	23	27	27	28	28	28	28	28	28	B-1	B-1	B-1	B-1	B-3	B-3	B-3	B-3	B-3
Soil Boring									GP-5	GP-6	GP-6	GP-8	GP-8	GP-7	GP-7	GP-9	GP-9	GP-10	GP-10	GP-11	GP-11	SS-3	SS-3	SS-7	SS-7	SS-1	SS-1	SS-2	SS-2	SS-4
Sample ID									GP-5/6-8'	GP-6/0-3'	GP-6/6-8'	GP-8/0-3'	GP-8/10-12'	GP-7/0-3'	GP-7/7-10'	GP-9/0-3'	GP-9/10-12'	GP-10/0-3'	GP-10/10-12'	GP-11/0-3'	GP-11/10-12'	SS-3/0-3'	SS-3/3-5'	SS-7/0-3'	SS-7/3-4'	SS-1/0-3'	SS-1/3-4'	SS-2/0-3'	SS-2/3-5'	SS-4/0-3'
Sample Depth (feet)									6-8	0-3	6-8	0-3	10-12	0-3	7-10	0-3	10-12	0-3	10-12	0-3	10-12	0-3	3-5	0-3	3-4	0-3	3-4	0-3	3-5	0-3
Date Sampled									11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	mg/kg																													
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	**6.1**	**2.5**	**2**	**1.6**	**1.6**	**1.2**	**4.1**	**5.5**	**1**	**3.1**	**1**	**2.6**	**2.4**	**7.4**	**2.2**	**3.5**	**1.7**	**1.9**	**1.4**	**2.6**	**1.6**	**2.7**
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**210**	**20**	**26**	**18**	**23**	**17**	**160**	**64**	**19**	**21**	**16**	**30**	**73**	**110**	**31**	**65**	**34**	**41**	**27**	**52**	**21**	**54**
Beryllium	mg/kg	90	90	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	**0.9**	<0.3	<0.3	<0.2	<0.3	<0.2	**0.5**	**0.6**	<0.2	<0.3	<0.3	<0.3	**0.4**	**1.8**	<0.3	**0.7**	<0.3	**16**	**1.2**	**1.3**	<0.3	**3.4**
Chromium	mg/kg	100	100	200	200	200	200	2,000	**18**	**10**	**11**	**21**	**12**	**11**	**13**	**8**	**75**	**9**	**7**	**13**	**10**	**23**	**12**	**180**	**18**	**8**	**9**	**13**	**9**	**91**
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	**1500**	**27**	**55**	**24**	**30**	**36**	**860**	**460**	**23**	**48**	**44**	**20**	**110**	**420**	**41**	**150**	**8.6**	**410**	**11**	**120**	**25**	**29**
Mercury	mg/kg	20	20	30	30	30	30	300	**0.34**	**0.03**	**0.09**	**0.03**	**0.03**	**0.32**	**0.13**	**0.37**	**0.08**	**0.14**	<0.02	**0.6**	**0.06**	**4.6**	**0.34**	**0.52**	**0.06**	**2.3**	**0.03**	**0.51**	**0.19**	**0.22**
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	<3	<3	<3	<2	<3	<2	<3	<3	<2	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Silver	mg/kg	100	100	200	200	200	200	2,000	**0.7**	<0.4	<0.4	<0.3	<0.4	<0.3	<0.4	<0.4	<0.3	<0.4	<0.4	<0.5	<0.4	**2.4**	**0.4**	< 0.5	< 0.4	< 0.5	< 0.4	< 0.5	< 0.5	**0.5**
Vanadium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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NA = Not analyzed.
-- = Not available.
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Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	B-3	C-1	C-1	C-3	C-3	D-1	D-1	3	3	3	3	3	3	4	4	4	4	4	4	4	5	5
Soil Boring									SS-4	SS-6	SS-6	SS-5	SS-5	SS-8	SS-8	G-3	G-3	G-3	G-3	G-3	G-3	G-4	G-4	G-4	G-4	G-4	G-4	G-4	G-5	G-5
Sample ID									SS-4/3-4'	SS-6/0-3'	SS-6/3-5'	SS-5/0-3'	SS-5/3-5'	SS-8/0-3'	SS-8/3-5'	G-3 0.5	G-3 2.5	G-3 5	G-3 10	G-3 15	G-3 20	G-4 0.5	G-4 2.5	G-4 5	G-4 10	G-4 15	G-4 20	G-4 20+	G-5 0.5	G-5 2.5
Sample Depth (feet)									3-4	0-3	3-5	0-3	3-5	0-3	3-5	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-20	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-20	20-21	0-0.5	0.5-2.5
Date Sampled									11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	9/30/13	9/30/13	9/30/13	9/30/13	9/30/13	9/30/13	9/30/13	9/30/13	9/30/13	9/30/13	9/30/13	9/30/13	9/30/13	9/30/13	9/30/13
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	NA	NA	NA	NA	NA	NA	NA	<8.8	<91	<23	<0.49	<0.43	<0.42	<42	<47	<4.8	<5	<0.44	<0.42	<0.44	<2600	<2300
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	NA	NA	NA	NA	NA	NA	NA	<8.8	<91	<23	<0.49	<0.43	<0.42	<42	<47	<4.8	<5	<0.44	<0.42	<0.44	<2600	<2300
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	NA	NA	NA	NA	NA	NA	NA	**43**	**670**	**88**	**1.3**	<0.43	<0.42	**340**	**120**	**31**	**19**	**2.8**	**0.62**	**2.7**	**9500**	**13000**
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	NA	NA	NA	NA	NA	NA	NA	<8.8	<91	<23	<0.49	<0.43	<0.42	<42	<47	<4.8	<5	<0.44	<0.42	<0.44	<2600	<2300
Total PCBs	mg/kg															**43**	**670**	**88**	**1.3**	<RL	<RL	**340**	**120**	**31**	**19**	**2.8**	**0.62**	**2.7**	**9500**	**13000**
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	**4.2**	**1.7**	**2.8**	**2**	**1.7**	**2.4**	**2.1**	NA	NA	<2.7	<3	<2.7	<2.7	NA	NA	<3	<3	<2.7	<2.6	<2.7	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**39**	**24**	**37**	**33**	**22**	**51**	**38**	NA	NA	**74**	**20**	**16**	**20**	NA	NA	**49**	**21**	**18**	**33**	**23**	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.27	<0.3	<0.27	<0.27	NA	NA	<0.3	<0.3	<0.27	<0.26	<0.27	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	**1.4**	**0.7**	**0.4**	**1.8**	**0.4**	<0.3	<0.3	NA	NA	**1.4**	<0.3	<0.27	<0.27	NA	NA	**5.5**	<0.3	<0.27	<0.26	<0.27	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	**22**	**13**	**11**	**17**	**11**	**16**	**22**	NA	NA	**30**	**13**	**12**	**10**	NA	NA	**22**	**11**	**9.7**	**12**	**9.5**	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	**75**	**3.8**	**8.7**	**12**	NA	NA	**36**	**4**	**8.3**	**19**	**11**	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	**69**	**21**	**110**	**11**	**6.7**	**380**	**43**	NA	NA	**97**	**4**	**3**	**2.9**	NA	NA	**41**	**4.5**	**2.6**	**6.1**	**4.8**	NA	NA
Mercury	mg/kg	20	20	30	30	30	30	300	**0.07**	**0.041**	**0.571**	**0.081**	**0.041**	**0.31**	**0.07**	NA	NA	**0.8**	**0.088**	<0.028	<0.026	NA	NA	**0.79**	**0.033**	<0.028	<0.027	<0.028	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	**13**	**3.2**	**8.3**	**7.8**	NA	NA	**12**	**3.2**	**5.8**	**8.2**	**4.3**	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	<3	<3	<3	<3	<3	<3	<3	NA	NA	<5.5	<5.9	<5.4	<5.3	NA	NA	<6.1	<6	<5.5	<5.2	<5.4	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	**1.1**	**0.04**	**0.57**	**0.08**	**0.04**	< 0.4	< 0.4	NA	NA	**1**	<0.59	<0.54	<0.53	NA	NA	<0.61	<0.6	<0.55	<0.52	<0.54	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	**25**	**16**	**22**	**17**	NA	NA	**25**	**18**	**18**	**16**	**11**	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	**720**	**25**	**39**	**19**	NA	NA	**1000**	**14**	**22**	**28**	**17**	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
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NA = Not analyzed.
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TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9
Soil Boring									G-5	G-5	G-5	G-5	G-6	G-6	G-6	G-6	G-6	G-6	G-7	G-7	G-7	G-7	G-7	G-8	G-8	G-8	G-8	G-8	G-9	G-9
Sample ID									G-5 5	G-5 10	G-5 15	G-5 20	G-6 0.5	G-6 2.5	G-6 5	G-6 10	G-6 15	G-6 20	G-7 0.5	G-7 2.5	G-7 5	G-7 10	G-7 15	G-8 0.5	G-8 2.5	G-8 5	G-8 10	G-8 15	G-9 0.5	G-9 2.5*
Sample Depth (feet)									2.5-5	5-10	10-15	15-16	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-16	0-0.5	0.5-2.5	2.5-5	5-10	10-15	0-0.5	0.5-2.5	2.5-5	5-10	10-13	0-0.5	0.5-2.5
Date Sampled									9/30/13	9/30/13	9/30/13	9/30/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13	9/27/13
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<190	<10	<0.42	<0.4	<22	<0.85	<0.45	<0.67	<0.46	<0.43	<0.42	<0.42	<0.51	<0.51	<0.45	<0.41	<0.41	<0.5	<0.59	<0.44	<0.88	<0.41
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<190	<10	<0.42	<0.4	<22	<0.85	<0.45	<0.67	<0.46	<0.43	<0.42	<0.42	<0.51	<0.51	<0.45	<0.41	<0.41	<0.5	<0.59	<0.44	<0.88	<0.41
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	**1700**	**44**	**3.7**	**2**	**130**	**7.1**	<0.45	<0.67	<0.46	<0.43	**3.2**	**0.6**	<0.51	<0.51	<0.45	**2.2**	**0.77**	<0.5	<0.59	<0.44	**7.4**	**0.81**
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<190	<10	<0.42	<0.4	<22	<0.85	<0.45	<0.67	<0.46	<0.43	<0.42	<0.42	<0.51	<0.51	<0.45	<0.41	<0.41	<0.5	<0.59	<0.44	<0.88	<0.41
Total PCBs	mg/kg								**1700**	**44**	**3.7**	**2**	**130**	**7.1**	<RL	<RL	<RL	<RL	**3.2**	**0.6**	<RL	<RL	<RL	**2.2**	**0.77**	<RL	<RL	<RL	**7.4**	**0.81**
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	<2.4	<3.2	<2.7	<2.6	NA	NA	<2.7	<4	<2.9	<2.7	NA	NA	<3.3	<3.2	<2.8	NA	NA	<3.2	<3.8	<2.8	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**43**	**26**	**21**	**19**	NA	NA	**90**	**37**	**22**	**28**	NA	NA	**64**	**19**	**19**	NA	NA	**38**	**26**	**21**	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	<0.24	<0.32	<0.27	<0.26	NA	NA	<0.27	<0.4	<0.29	<0.27	NA	NA	<0.33	<0.32	<0.28	NA	NA	<1.6	<0.38	<0.28	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	**4.1**	**0.41**	<0.27	<0.26	NA	NA	<0.27	<0.4	<0.29	<0.27	NA	NA	<0.33	<0.32	<0.28	NA	NA	**0.34**	<0.38	<0.28	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	**51**	**16**	**13**	**12**	NA	NA	**24**	**40**	**15**	**17**	NA	NA	**43**	**11**	**12**	NA	NA	**27**	**13**	**9.6**	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	**340**	**6.8**	**16**	**12**	NA	NA	**25**	**19**	**6.5**	**13**	NA	NA	**49**	**3.1**	**5.8**	NA	NA	**22**	**3.3**	**4.8**	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	**79**	**5.8**	**5.2**	**2.1**	NA	NA	**21**	**20**	**3.7**	**4.8**	NA	NA	**46**	**4.2**	**3.9**	NA	NA	**49**	**4.3**	**3.7**	NA	NA
Mercury	mg/kg	20	20	30	30	30	30	300	**0.79**	<0.034	<0.027	<0.027	NA	NA	**0.12**	**0.17**	<0.031	<0.028	NA	NA	**0.25**	<0.033	<0.03	NA	NA	**0.27**	<0.038	<0.029	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	**12**	**6.6**	**9.2**	**8.1**	NA	NA	**17**	**9.7**	**7.2**	**13**	NA	NA	**13**	**3.4**	**6.1**	NA	NA	**9.6**	**4**	**5.3**	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	<4.8	<6.5	<5.4	<5.3	NA	NA	<5.4	<7.9	<5.8	<5.4	NA	NA	<6.6	<6.4	<5.6	NA	NA	<6.4	<7.6	<5.6	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	<0.48	<0.65	<0.54	<0.53	NA	NA	<0.54	<0.79	<0.58	<0.54	NA	NA	<0.66	<0.64	<0.56	NA	NA	<0.64	<0.76	<0.56	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	**22**	**31**	**21**	**18**	NA	NA	**42**	**18**	**24**	**21**	NA	NA	**29**	**14**	**24**	NA	NA	**25**	**18**	**18**	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**580**	**190**	**37**	**42**	NA	NA	**55**	**120**	**32**	**40**	NA	NA	**150**	**16**	**33**	NA	NA	**97**	**20**	**26**	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
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-- = Not available.
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TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid									9	9	9	16	16	16	16	17	17	17	17	18	18	18	18	19	19	19	19	20	20	20
Soil Boring									G-9	G-9	G-9	G-16	G-16	G-16	G-16	G-17	G-17	G-17	G-17	G-18	G-18	G-18	G-18	G-19	G-19	G-19	G-19	G-20	G-20	G-20
Sample ID		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	G-9 5*	G-9 10	G-9 15	G-16 0.5	G-16 2.5	G-16 5	G-16 10	G-17 0.5	G-17 2.5	G-17 5	G-17 10	G-18 0.5	G-18 2.5	G-18 5	G-18 10	G-19 0.5	G-19 2.5	G-19 5	G-19 10	G-20 0.5	G-20 2.5	G-20 5
Sample Depth (feet)									2.5-5	5-10	10-14	0-0.5	0.5-2.5	2.5-5	5-10	0-0.5	0.5-2.5	2.5-5	5-10	0-0.5	0.5-2.5	2.5-5	5-10	0-0.5	0.5-2.5	2.5-5	5-10	0-0.5	0.5-2.5	2.5-5
Date Sampled									9/27/13	9/27/13	9/27/13	9/30/13	9/30/13	9/30/13	9/30/13	9/26/13	9/26/13	9/26/13	9/26/13	9/26/13	9/26/13	9/26/13	9/26/13	9/26/13	9/26/13	9/26/13	9/26/13	9/26/13	9/26/13	9/26/13
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.42	<0.5	<0.72	<0.4	<0.41	<8.5	<4.4	<0.43	<0.44	<0.46	<0.49	<42	<44	<44	<22	<2	<0.43	<0.44	<0.42	<0.43	<0.41	<0.44
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.42	<0.5	<0.72	<0.4	<0.41	<8.5	<4.4	<0.43	<0.44	<0.46	<0.49	<42	<44	<44	<22	<2	<0.43	<0.44	<0.42	<0.43	<0.41	<0.44
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	<0.42	<0.5	<0.72	<0.4	**2.1**	**56**	**25**	**1.7**	**1.5**	**1.2**	**0.77**	**190**	**400**	**360**	**63**	**6.3**	<0.43	<0.44	<0.42	<0.43	<0.41	<0.44
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.42	<0.5	<0.72	<0.4	<0.41	<8.5	<4.4	<0.43	<0.44	<0.46	<0.49	<42	<44	<44	<22	<2	<0.43	<0.44	<0.42	<0.43	<0.41	<0.44
Total PCBs	mg/kg								<RL	<RL	<RL	<RL	**2.1**	**56**	**25**	**1.7**	**1.5**	**1.2**	**0.77**	**190**	**400**	**360**	**63**	**6.3**	<RL	<RL	<RL	<RL	<RL	<RL
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	<2.7	<3.3	<4.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**24**	**18**	**27**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	<1.3	<0.33	<0.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	<0.27	<0.33	<0.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	**16**	**8.5**	**18**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	**16**	**4.2**	**11**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	**12**	**3.8**	**3.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	mg/kg	20	20	30	30	30	30	300	**0.12**	<0.034	<0.045	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	**7.3**	**2.7**	**8.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	<5.4	<6.5	<8.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	<0.54	<0.65	<0.86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	**22**	**13**	**26**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**35**	**11**	**36**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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< = Analyte is not detected above the LRL presented.
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Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	20	24	24	24	24	A-1	A-1	A-1	A-1	A-1	A-1	A-2	A-2	A-2	A-2	A-2	A-2	A-3	A-3	A-3	A-3	A-3
Soil Boring									G-20	G-24	G-24	G-24	G-24	G-A-1	G-A-1	G-A-1	G-A-1	G-A-1	G-A-1	G-A-2	G-A-2	G-A-2	G-A-2	G-A-2	G-A-2	G-A-3	G-A-3	G-A-3	G-A-3	G-A-3
Sample ID									G-20 10	G-24 0.5	G-24 2.5	G-24 5	G-24 10	G-A-1 2.5	G-A-1 5	G-A-1 10	G-A-1 15	G-A-1 20	G-A-1 20+	G-A-2 0.5	G-A-2 2.5	G-A-2 5	G-A-2 10	G-A-2 20	G-A-2 20+	G-A-3 0.5	G-A-3 2.5	G-A-3 5	G-A-3 10	G-A-3 15
Sample Depth (feet)									5-10	0-0.5	0.5-2.5	2.5-5	5-10	0.5-2.5	2.5-5	5-10	10-15	15-20	20-21.5	0-0.5	0.5-2.5	2.5-5	5-10	15-20	20-20.5	0-0.5	0.5-2.5	2.5-5	5-10	10-15
Date Sampled									9/26/13	9/26/13	9/26/13	9/26/13	9/26/13	10/1/13	10/1/13	10/1/13	10/1/13	10/1/13	10/1/13	11/18/13	11/18/13	11/18/13	11/18/13	11/18/13	11/18/13	10/1/13	10/1/13	10/1/13	10/1/13	10/1/13
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.58	<2	<0.4	<0.42	<0.42	<8.4	<0.86	<0.53	<0.44	<0.42	<0.43	<470	<5.5	<0.23	<0.17	<0.11	<0.11	<0.43	<8.9	<0.44	<0.62	NA
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.58	<2	<0.4	<0.42	<0.42	<8.4	<0.86	<0.53	<0.44	<0.42	<0.43	**2600**	**14**	**1.1**	<0.17	<0.11	<0.11	<0.43	<8.9	<0.44	<0.62	NA
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	<0.58	**8.7**	**2.1**	<0.42	<0.42	**60**	**5.7**	**3.9**	**2.8**	**1.6**	<0.43	<470	<5.5	<0.23	<0.17	<0.11	<0.11	**1.5**	**54**	<0.44	<0.62	NA
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.58	<2	<0.4	<0.42	<0.42	<8.4	<0.86	<0.53	<0.44	<0.42	<0.43	<470	<5.5	<0.23	<0.17	<0.11	<0.11	<0.43	<8.9	<0.44	<0.62	NA
Total PCBs	mg/kg								<RL	**8.7**	**2.1**	<RL	<RL	**60**	**5.7**	**3.9**	**2.8**	**1.6**	<RL	**2600**	**14**	**1.1**	<RL	<RL	<RL	**1.5**	**54**	<RL	<RL	
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	NA	NA	NA	NA	NA	NA	<2.5	<3.3	<2.7	<2.5	<2.6	NA	NA	<2.8	<4.3	<2.7	<2.7	NA	NA	<2.6	<3.9	<2.7
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	**35**	**22**	**22**	**23**	**48**	NA	NA	**34**	**48**	**43**	**30**	NA	NA	**30**	**48**	**16**
Beryllium	mg/kg	90	90	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	<0.25	<0.33	<0.27	<1.2	<1.3	NA	NA	**0.5**	**0.94**	**0.39**	**0.35**	NA	NA	<1.3	<0.39	<1.4
Cadmium	mg/kg	70	70	100	100	100	100	1,000	NA	NA	NA	NA	NA	NA	**0.93**	<0.33	<0.27	<0.25	<0.26	NA	NA	<0.28	**0.72**	<0.27	<0.27	NA	NA	<0.26	<0.39	<0.27
Chromium	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	**13**	**18**	**12**	**11**	**8.3**	NA	NA	**15**	**23**	**7.9**	**8.6**	NA	NA	**9.4**	**32**	**13**
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	**20**	**6.5**	**13**	**16**	**15**	NA	NA	**13**	**7.1**	**19**	**13**	NA	NA	**15**	**20**	**14**
Lead	mg/kg	200	200	600	600	600	600	6,000	NA	NA	NA	NA	NA	NA	**17**	**5.3**	**3.2**	**6**	**5.5**	NA	NA	**23**	**3.8**	**13**	**7.4**	NA	NA	**35**	**17**	**3.8**
Mercury	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	**0.31**	**0.042**	<0.028	<0.027	<0.028	NA	NA	**0.067**	<0.04	<0.027	<0.027	NA	NA	**0.078**	**0.083**	<0.027
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	NA	NA	NA	NA	NA	NA	**12**	**4.3**	**8.1**	**8.7**	**5.7**	NA	NA	**11**	**5.4**	**5.8**	**5.1**	NA	NA	**11**	**3.8**	**6.4**
Selenium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	<5	<6.7	<5.3	<5	<5.1	NA	NA	<5.5	<8.7	<5.5	<5.4	NA	NA	<5.2	<7.8	<5.4
Silver	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	<0.5	<0.67	<0.53	<0.5	<0.51	NA	NA	<0.55	<0.87	<0.55	<0.54	NA	NA	<0.52	<0.78	<0.54
Vanadium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	**26**	**20**	**25**	**19**	**17**	NA	NA	**24**	**20**	**18**	**17**	NA	NA	**21**	**16**	**19**
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	**310**	**29**	**29**	**38**	**20**	NA	NA	**33**	**16**	**30**	**21**	NA	NA	**82**	**18**	**27**
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
-- = Not available.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid									A-3	B-1	B-1	B-1	B-1	B-1	B-1	B-2	B-2	B-2	B-2	B-2	B-2	B-3	B-3	B-3	B-3	B-3	B-3	C-1	C-1	C-1
Soil Boring									G-A-3	G-B-1	G-B-1	G-B-1	G-B-1	G-B-1	G-B-1	G-B-2	G-B-2	G-B-2	G-B-2	G-B-2	G-B-2	G-B-3	G-B-3	G-B-3	G-B-3	G-B-3	G-B-3	G-C-1	G-C-1	G-C-1
Sample ID		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	G-A-3 15+	G-B-1 0.5	G-B-1 2.5	G-B-1 5	G-B-1 10	G-B-1 15	G-B-1 15+	G-B-2 0.5	G-B-2 2.5	G-B-2 5	G-B-2 10	G-B-2 15	G-B-2 15+	G-B-3 0.5	G-B-3 2.5	G-B-3 5	G-B-3 10*	G-B-3 15	G-B-3 15+	G-C-1 0.5	G-C-1 2.5	G-C-1 5
Sample Depth (feet)									15-18.5	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-16	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-18.5	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-18	0-0.5	0.5-2.5	2.5-5
Date Sampled									10/1/13	11/15/13	11/15/13	11/15/13	11/15/13	11/15/13	11/15/13	11/12/13	11/12/13	11/12/13	11/12/13	11/12/13	11/12/13	11/15/13	11/15/13	11/15/13	11/15/13	11/15/13	11/15/13	11/15/13	11/15/13	11/15/13
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	NA	<0.11	<0.11	<0.11	<0.14	<0.1	<0.1	<0.6	<0.11	<0.12	<0.16	<0.12	<0.11	<0.1	<0.12	<0.11	<0.16	NA	NA	<0.53	<0.54	<0.54
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	NA	**0.33**	**1.1**	**0.34**	**1.2**	**0.31**	<0.1	<0.6	<0.11	<0.12	<0.16	<0.12	<0.11	<0.1	<0.12	<0.11	<0.16	NA	NA	**3.8**	**4**	**4.9**
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	NA	<0.11	<0.11	<0.11	<0.14	<0.1	<0.1	**1.8**	**0.39**	**0.22**	<0.16	<0.12	<0.11	<0.1	<0.12	<0.11	<0.16	NA	NA	<0.53	<0.54	<0.54
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	NA	<0.11	<0.11	<0.11	<0.14	<0.1	<0.1	<0.6	<0.11	<0.12	<0.16	<0.12	<0.11	<0.1	<0.12	<0.11	<0.16	NA	NA	<0.53	<0.54	<0.54
Total PCBs	mg/kg									**0.33**	**1.1**	**0.34**	**1.2**	**0.31**	<RL	**1.8**	**0.39**	**0.22**	<RL	<RL	<RL	<RL	<RL	<RL	<RL			**3.8**	**4**	**4.9**
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	<2.5	NA	NA	<2.6	<3.4	<2.6	<2.5	NA	NA	<2.7	<3.8	<3	<2.6	NA	NA	<2.6	<4	<3.4	<2.5	NA	NA	<2.6
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**19**	NA	NA	**130**	**28**	**12**	**14**	NA	NA	**34**	**37**	**22**	**65**	NA	NA	**38**	**54**	**33**	**49**	NA	NA	**83**
Beryllium	mg/kg	90	90	200	200	200	200	2,000	<1.3	NA	NA	**0.67**	**0.36**	**0.27**	<0.25	NA	NA	**0.28**	<0.38	**0.32**	**0.39**	NA	NA	**0.46**	**0.63**	**0.5**	**0.48**	NA	NA	**0.57**
Cadmium	mg/kg	70	70	100	100	100	100	1,000	<0.25	NA	NA	**0.52**	<0.34	<0.26	<0.25	NA	NA	**0.76**	**2.3**	**1**	**0.29**	NA	NA	**1.9**	**2.2**	<0.34	**0.34**	NA	NA	**0.39**
Chromium	mg/kg	100	100	200	200	200	200	2,000	**14**	NA	NA	**56**	**56**	**14**	**9.9**	NA	NA	**14**	**26**	**12**	**25**	NA	NA	**12**	**80**	**18**	**12**	NA	NA	**63**
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	**32**	NA	NA	**240**	**33**	**5.3**	**12**	NA	NA	**38**	**91**	**24**	**18**	NA	NA	**17**	**960**	**11**	**23**	NA	NA	**66**
Lead	mg/kg	200	200	600	600	600	600	6,000	**3.9**	NA	NA	**230**	**23**	**3.2**	**3.1**	NA	NA	**12**	**6.9**	**3.7**	**4.1**	NA	NA	**12**	**51**	**8.8**	**6.5**	NA	NA	**240**
Mercury	mg/kg	20	20	30	30	30	30	300	<0.027	NA	NA	**10**	**0.41**	<0.026	<0.026	NA	NA	**0.99**	<0.039	<0.031	<0.027	NA	NA	**0.26**	**0.81**	<0.034	<0.026	NA	NA	**0.55**
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	**8.2**	NA	NA	**21**	**9.9**	**7.2**	**9.2**	NA	NA	**9.6**	**13**	**8**	**70**	NA	NA	**9.2**	**44**	**9.1**	**8.4**	NA	NA	**15**
Selenium	mg/kg	400	400	700	700	700	700	7,000	<5.1	NA	NA	<5.2	<6.9	<5.1	<5	NA	NA	<5.4	<7.5	<6.1	<5.1	NA	NA	<5.3	<8	<6.8	<5.1	NA	NA	<5.2
Silver	mg/kg	100	100	200	200	200	200	2,000	<0.51	NA	NA	**3.3**	<0.69	<0.51	<0.5	NA	NA	<0.54	<0.75	<0.61	<0.51	NA	NA	<0.53	<0.8	<0.68	<0.51	NA	NA	<0.52
Vanadium	mg/kg	400	400	700	700	700	700	7,000	**19**	NA	NA	**54**	**14**	**17**	**14**	NA	NA	**26**	**33**	**18**	**29**	NA	NA	**23**	**27**	**27**	**28**	NA	NA	**33**
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**25**	NA	NA	**570**	**370**	**25**	**64**	NA	NA	**130**	**140**	**70**	**44**	NA	NA	**930**	**620**	**48**	**35**	NA	NA	**190**
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
-- = Not available.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	C-1	C-1	C-1	C-2	C-2	C-2	C-2	C-2	C-2	C-3	C-3	C-3	C-3	C-3	D-1	D-1	D-1	D-1	D-1	D-2	D-2
Soil Boring									G-C-1	G-C-1	G-C-1	G-C-2	G-C-2	G-C-2	G-C-2	G-C-2	G-C-2	G-C-3	G-C-3	G-C-3	G-C-3	G-C-3	G-C-3	G-D-1	G-D-1	G-D-1	G-D-1	G-D-1	G-D-2	G-D-2
Sample ID									G-C-1 10	G-C-1 15	G-C-1 15+	G-C-2 0.5	G-C-2 2.5	G-C-2 5	G-C-2 10	G-C-2 15	G-C-2 15+	G-C-3 0.5	G-C-3 2.5	G-C-3 5	G-C-3 10	G-C-3 15	G-C-3 15+	G-D-1 0.5	G-D-1 2.5	G-D-1 5	G-D-1 10*	G-D-1 15	G-D-2 0.5	G-D-2 2.5
Sample Depth (feet)									5-10	10-15	15-18	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-17	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-20	0-0.5	0.5-2.5	2.5-5	5-10	10-15	0-0.5	0.5-2.5
Date Sampled									11/15/13	11/15/13	11/15/13	11/12/13	11/12/13	11/12/13	11/12/13	11/12/13	11/12/13	11/12/13	11/12/13	11/12/13	11/12/13	11/12/13	11/12/13	11/14/13	11/14/13	11/14/13	11/14/13	11/14/13	11/13/13	11/13/13
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.14	<0.11	<0.1	<1.1	<0.11	<0.11	<0.15	<0.11	<0.11	<0.12	<0.11	<0.11	<0.15	NA	NA	<1.1	<0.11	<0.12	<0.17	<0.13	<0.11	<0.12
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.14	<0.11	<0.1	**1.2**	<0.11	<0.11	<0.15	<0.11	<0.11	<0.12	<0.11	<0.11	<0.15	NA	NA	**8.4**	**0.75**	<0.12	<0.17	<0.13	<0.11	<0.12
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	<0.14	<0.11	<0.1	<1.1	<0.11	<0.11	<0.15	<0.11	<0.11	**0.31**	<0.11	<0.11	<0.15	NA	NA	<1.1	<0.11	<0.12	<0.17	<0.13	<0.11	<0.12
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.14	<0.11	<0.1	<1.1	<0.11	<0.11	<0.15	<0.11	<0.11	<0.12	<0.11	<0.11	<0.15	NA	NA	<1.1	<0.11	<0.12	<0.17	<0.13	<0.11	<0.12
Total PCBs	mg/kg								<RL	<RL	<RL	**1.2**	<RL	<RL	<RL	<RL	<RL	**0.31**	<RL	<RL	<RL			**8.4**	**0.75**	<RL	<RL	<RL	<RL	<RL
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	<3.5	<2.8	<2.5	NA	NA	<2.8	<3.7	<2.8	<2.6	NA	NA	<2.8	<3.5	<2.7	<2.7	NA	NA	<3	<4	<3.2	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**28**	**25**	**12**	NA	NA	**92**	**43**	**10**	**58**	NA	NA	**31**	**39**	**18**	**34**	NA	NA	**57**	**66**	**19**	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	**0.61**	<0.28	<0.25	NA	NA	**0.52**	**0.7**	<0.28	<0.26	NA	NA	**0.34**	<0.35	<0.27	<0.27	NA	NA	**0.48**	<0.4	<0.32	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	<0.35	<0.28	<0.25	NA	NA	**0.39**	<0.37	<0.28	**0.29**	NA	NA	**0.42**	<0.35	<0.27	<0.27	NA	NA	<0.3	<0.4	<0.32	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	**29**	**10**	**5.7**	NA	NA	**12**	**20**	**7.5**	**15**	NA	NA	**9**	**17**	**13**	**11**	NA	NA	**14**	**71**	**11**	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	**7.2**	**5.5**	**5.7**	NA	NA	**33**	**3.6**	**6.3**	**28**	NA	NA	**130**	**77**	**15**	**7.3**	NA	NA	**14**	**37**	**3.1**	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	**14**	**3.9**	**2.3**	NA	NA	**220**	**5.7**	**2.7**	**5.3**	NA	NA	**16**	**8.6**	**5.3**	**5.4**	NA	NA	**77**	**55**	**2.6**	NA	NA
Mercury	mg/kg	20	20	30	30	30	30	300	**0.15**	<0.028	<0.025	NA	NA	**0.45**	**0.042**	<0.028	<0.027	NA	NA	**0.18**	**0.061**	<0.028	<0.028	NA	NA	**0.17**	**0.11**	<0.034	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	**3.2**	**6**	**4**	NA	NA	**11**	**4.5**	**4.4**	**13**	NA	NA	**9.9**	**16**	**8.2**	**5.3**	NA	NA	**10**	**7.2**	**6.6**	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	<7.1	<5.7	<5	NA	NA	<5.6	<7.4	<5.5	<5.2	NA	NA	<5.6	<6.9	<5.4	<5.4	NA	NA	<5.9	<7.9	<6.5	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	<0.71	<0.57	<0.5	NA	NA	<0.56	<0.74	<0.55	<0.52	NA	NA	<0.56	<0.69	<0.54	<0.54	NA	NA	<0.59	<0.79	<0.65	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	**37**	**21**	**8.5**	NA	NA	**28**	**16**	**13**	**33**	NA	NA	**19**	**21**	**22**	**19**	NA	NA	**33**	**25**	**29**	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**22**	**23**	**15**	NA	NA	**66**	**7.6**	**17**	**27**	NA	NA	**140**	**200**	**34**	**19**	NA	NA	**78**	**66**	**46**	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
-- = Not available.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid									D-2	D-2	D-2	D-2	D-3	D-3	D-3	D-3	D-3	D-3	E-1	E-1	E-1	E-1	E-1	E-2	E-2	E-2	E-2	E-2	E-2	E-3
Soil Boring									G-D-2	G-D-2	G-D-2	G-D-2	G-D-3	G-D-3	G-D-3	G-D-3	G-D-3	G-D-3	G-E-1	G-E-1	G-E-1	G-E-1	G-E-1	G-E-2	G-E-2	G-E-2	G-E-2	G-E-2	G-E-2	G-E-3
Sample ID		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	G-D-2 5	G-D-2 10*	G-D-2 15	G-D-2 20	G-D-3 0.5	G-D-3 2.5	G-D-3 5	G-D-3 10	G-D-3 15	G-D-3 15+	G-E-1 0.5	G-E-1 2.5	G-E-1 5	G-E-1 10	G-E-1 15	G-E-2 0.5	G-E-2 2.5	G-E-2 5	G-E-2 10	G-E-2 15	G-E-2 15+	G-E-3 2.5
Sample Depth (feet)									2.5-5	5-10	10-15	15-20	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-18	0.5	2.5	5	10	14	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-17.5	0.5-2.5
Date Sampled									11/13/13	11/13/13	11/13/13	11/13/13	11/18/13	11/14/13	11/14/13	11/14/13	11/14/13	11/14/13	11/13/13	11/13/13	11/13/13	11/13/13	11/13/13	11/13/13	11/13/13	11/13/13	11/13/13	11/13/13	11/13/13	9/26/13
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.11	<0.17	<0.11	<0.11	<0.11	<0.1	<0.1	<0.18	NA	NA	<0.12	<0.11	<0.11	<0.21	<0.11	<1.1	<0.11	<0.11	<0.19	<0.11	<0.11	<0.48
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.11	<0.17	<0.11	<0.11	<0.11	<0.1	<0.1	<0.18	NA	NA	<0.12	<0.11	<0.11	<0.21	<0.11	<1.1	<0.11	<0.11	<0.19	<0.11	<0.11	<0.48
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	<0.11	<0.17	<0.11	<0.11	<0.11	**0.35**	<0.1	<0.18	NA	NA	**1.1**	<0.11	<0.11	<0.21	<0.11	**9.5**	**0.22**	<0.11	<0.19	<0.11	<0.11	**0.5**
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.11	<0.17	<0.11	<0.11	<0.11	<0.1	<0.1	<0.18	NA	NA	<0.12	<0.11	<0.11	<0.21	<0.11	<1.1	<0.11	<0.11	<0.19	<0.11	<0.11	<0.48
Total PCBs	mg/kg								<RL	<RL	<RL	<RL	<RL	**0.35**	<RL	<RL			**1.1**	<RL	<RL	<RL	<RL	**9.5**	**0.22**	<RL	<RL	<RL	<RL	**0.5**
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	<2.8	<4.2	<2.8	<2.7	NA	NA	<2.6	<4.5	<2.6	<2.5	NA	NA	<2.6	**6.3**	<2.6	NA	NA	<2.8	<4.7	<2.6	<2.8	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**41**	**56**	**27**	**79**	NA	NA	**33**	**46**	**13**	**58**	NA	NA	**18**	**34**	**20**	NA	NA	**24**	**62**	**22**	**87**	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	**0.39**	<0.42	<0.28	**0.42**	NA	NA	<0.26	**0.59**	<0.26	**0.5**	NA	NA	<0.26	<0.5	**0.3**	NA	NA	<0.28	<0.47	**0.3**	**0.54**	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	**0.55**	**1**	<0.28	<0.27	NA	NA	<0.26	<0.45	<0.26	<0.25	NA	NA	<0.26	**0.96**	**0.31**	NA	NA	<0.28	**0.89**	<0.26	<0.28	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	**13**	**21**	**11**	**14**	NA	NA	**17**	**23**	**7.7**	**19**	NA	NA	**7.7**	**21**	**12**	NA	NA	**8.2**	**25**	**12**	**12**	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	**14**	**6.5**	**6.8**	**11**	NA	NA	**26**	**13**	**5.3**	**32**	NA	NA	**7.8**	**5.8**	**3.5**	NA	NA	**6**	**10**	**4.6**	**24**	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	**77**	**12**	**3.8**	**6**	NA	NA	**10**	**11**	**2.9**	**9.6**	NA	NA	**3.7**	**3.2**	**2.8**	NA	NA	**4.6**	**4.2**	**9**	**16**	NA
Mercury	mg/kg	20	20	30	30	30	30	300	**0.35**	**0.055**	<0.028	<0.027	NA	NA	**0.035**	**0.091**	<0.026	<0.027	NA	NA	<0.028	<0.052	<0.027	NA	NA	<0.028	<0.047	<0.028	<0.028	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	**16**	**9.1**	**7.8**	**7.8**	NA	NA	**13**	**7.4**	**4.1**	**9**	NA	NA	**6.7**	**10**	**5.1**	NA	NA	**6**	**5.3**	**8.2**	**6.8**	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	<5.6	<8.3	<5.6	<5.4	NA	NA	<5.2	<9	<5.1	<5.1	NA	NA	<5.2	<10	<5.3	NA	NA	<5.6	<9.5	<5.1	<5.5	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	<0.56	<0.83	<0.56	<0.54	NA	NA	<0.52	<0.9	<0.51	<0.51	NA	NA	<0.52	<1	<0.53	NA	NA	<0.56	<0.95	<0.51	<0.55	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	**26**	**40**	**19**	**19**	NA	NA	**33**	**23**	**13**	**32**	NA	NA	**17**	**40**	**19**	NA	NA	**22**	**26**	**18**	**30**	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**89**	**39**	**25**	**25**	NA	NA	**53**	**38**	**18**	**30**	NA	NA	**17**	**63**	**27**	NA	NA	**19**	**13**	**26**	**24**	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
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< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
-- = Not available.
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TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid									E-3	E-3	E-3	E-3	2	2	2	2	2	10	10	10	10	10	10	11	11	11	11	11	11	12
Soil Boring									G-E-3	G-E-3	G-E-3	G-E-3	G-2	G-2	G-2	G-2	G-2	G-10	G-10	G-10	G-10	G-10	G-10	G-11	G-11	G-11	G-11	G-11	G-11	G-12
Sample ID		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	G-E-3 5	G-E-3 10	G-E-3 15	G-E-3 20	G-2 (0.5)	G-2 (2.5)	G-2 (5)	G-2 (10)	G-2 (20)	G-10 (0.5)	G-10 (2.5)	G-10 (5)	G-10 (10)	G-10 (15)	G-10 (20)	G-11 (0.5)	G-11 (2.5)	G-11 (5)	G-11 (10)	G-11 (15)	G-11 (20)	G-12 (0.5)
Sample Depth (feet)									2.5-5	5-10	10-15	15-20	0.5	2.5	5	10	20	0.5	2.5	5	10	15	20	0.5	2.5	5	10	15	20	0.5
Date Sampled									9/26/13	9/26/13	9/26/13	9/26/13	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.44	<1	NA	NA	<6.9	<24	<55	<0.14	<0.22	<2.5	<0.10	<0.55	<0.14	<0.11	<0.11	<0.12	<0.10	<0.10	<0.12	<0.11	<0.11	<0.13
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.44	<1	NA	NA	<6.9	<24	<55	<0.14	<0.22	<2.5	<0.10	<0.55	<0.14	<0.11	<0.11	<0.12	<0.10	<0.10	<0.12	<0.11	<0.11	<0.13
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	<0.44	<1	NA	NA	**54**	**160**	**320**	**0.22**	**2.1**	**18**	**0.34**	**5.7**	**0.25**	<0.11	<0.11	**1.1**	<0.10	<0.10	<0.12	**0.11**	**0.12**	**0.51**
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.44	<1	NA	NA	<6.9	<24	<55	<0.14	<0.22	<2.5	<0.10	<0.55	<0.14	<0.11	<0.11	**0.41**	<0.10	<0.10	<0.12	<0.11	<0.11	<0.13
Total PCBs	mg/kg								<RL	<RL			**54**	**160**	**320**	**0.22**	**2.1**	**18**	**0.34**	**5.7**	**0.25**	<RL	<RL	**1.51**	<RL	<RL	<RL	**0.11**	**0.12**	**0.51**
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	<2.8	<6.2	<2.7	<2.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**36**	**49**	**18**	**60**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	<1.4	<0.62	<1.3	<1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	**0.37**	<0.62	<0.27	<0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	**11**	**15**	**12**	**11**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	**19**	**18**	**7.3**	**14**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	**23**	**10**	**2.8**	**6.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	mg/kg	20	20	30	30	30	30	300	**0.065**	<0.063	<0.028	<0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	**8.4**	**4.8**	**5.5**	**6.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	<5.6	<12	<5.4	<5.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	<0.56	<1.2	<0.54	<0.54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	**20**	**23**	**17**	**16**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**68**	**27**	**32**	**49**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
-- = Not available.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	12	12	12	12	12	13	13	13	13	13	13	14	14	14	14	14	14	15	15	15	15	15
Soil Boring									G-12	G-12	G-12	G-12	G-12	G-13	G-13	G-13	G-13	G-13	G-13	G-14	G-14	G-14	G-14	G-14	G-14	G-15	G-15	G-15-1	G-15-1	G-15
Sample ID									G-12 (2.5)*	G-12 (5)	G-12 (10)	G-12 (15)	G-12 (20)	G-13 (0.5)	G-13 (2.5)	G-13 (5)	G-13 (10)	G-13 (15)	G-13 (20)	G-14 (0.5)	G-14 (2.5)	G-14 (5)*	G-14 (10)	G-14 (15)	G-14 (20)	G-15 (0.5)	G-15 (2.5)	G-15-1 (0.5)*	G-15-1 (2.5)	G-15 (5)
Sample Depth (feet)									2.5	5	10	15	20	0.5	2.5	5	10	15	20	0.5	2.5	5	10	15	20	0.5	2.5	0.5	2.5	5
Date Sampled									1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.10	<0.10	<0.11	<0.13	<0.13	<0.12	<0.099	<0.099	<0.10	<0.42	<0.10	<2.4	<11	<0.11	<0.13	<0.14	<0.11	<1.2	<5.2	<0.83	<1.1	<0.12
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.10	<0.10	<0.11	<0.13	<0.13	<0.12	<0.099	<0.099	<0.10	<0.42	<0.10	<2.4	<11	<0.11	<0.13	<0.14	<0.11	<1.2	<5.2	<0.83	<1.1	<0.12
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	<0.10	<0.10	<0.11	<0.13	<0.13	**0.27**	<0.099	<0.099	<0.10	<0.42	<0.10	**9.4**	**85**	<0.11	<0.13	<0.14	**0.11**	**11**	**40**	**6.1**	**14**	**0.46**
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.10	<0.10	<0.11	<0.13	<0.13	<0.12	<0.099	<0.099	<0.10	<0.42	<0.10	<2.4	<11	<0.11	<0.13	<0.14	<0.11	<1.2	<5.2	<0.83	<1.1	<0.12
Total PCBs	mg/kg								<RL	<RL	<RL	<RL	<RL	**0.27**	<RL	<RL	<RL	<RL	<RL	**9.4**	**85**	<RL	<RL	<RL	**0.11**	**11**	**40**	**6.1**	**14**	**0.46**
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	15	15	15	15	15	15	15	16	16	16	16	16	16	18	18	18	18	18	18	18	21
Soil Boring									G-15	G-15	G-15-1	G-15-1	G-15-1	G-15	G-15-1	G-16	G-16	G-16	G-16	G-16	G-16	G-18	G-18	G-18	G-18	G-18	G-18	G-18	G-21
Sample ID									G-15 (10)	G-15 (15)*	G-15-1 (5)	G-15-1 (10)	G-15-1 (15)	G-15 (20)	G-15-1 (20)	G-16 (0.5)	G-16 (2.5)	G-16 (5)	G-16 (10)	G-16 (15)	G-16 (20)	G-18 (0.5)	G-18 (2.5)	G-18 (5)	G-18 (10)	G-18 (15)	G-18 (20)	G-18 (25)	G-18 (30)	G-21 (0.5)
Sample Depth (feet)									10	15	5	10	15	20	20	0.5	2.5	5	10	15	20	0.5	2.5	5	10	15	20	25	30	0.5
Date Sampled									1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.12	<0.11	<0.12	<0.11	<0.44	<0.11	<0.11	<0.12	<55	<0.57	<0.20	<0.11	<0.11	<23	<110	<5.2	<0.11	<0.12	<0.11	<0.11	<0.10	<2.6
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.12	<0.11	<0.12	<0.11	<0.44	<0.11	<0.11	<0.12	<55	<0.57	<0.20	<0.11	<0.11	<23	<110	<5.2	<0.11	<0.12	<0.11	<0.11	<0.10	<2.6
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	<0.12	<0.11	<0.12	<0.11	<0.44	<0.11	<0.11	**1.1**	**170**	**4**	<0.20	<0.11	<0.11	**150**	**350**	**37**	**0.52**	**0.37**	<0.11	<0.11	<0.10	**15**
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.12	<0.11	<0.12	<0.11	<0.44	<0.11	<0.11	<0.12	<55	<0.57	<0.20	<0.11	<0.11	<23	<110	<5.2	<0.11	<0.12	<0.11	<0.11	<0.10	<2.6
Total PCBs	mg/kg								<RL	<RL	<RL	<RL	<RL	<RL	<RL	**1.1**	**170**	**4**	<RL	<RL	<RL	**150**	**350**	**37**	**0.52**	**0.37**	<RL	<RL	<RL	**15**
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid									21	21	21	21	22	22	22	22	22	22	23	23	23	23	23	23	25	25	25	25	25	25
Soil Boring									G-21	G-21	G-21	G-21	G-22	G-22	G-22	G-22	G-22	G-22	G-23	G-23	G-23	G-23	G-23	G-23	G-25	G-25	G-25	G-25	G-25	G-25
Sample ID		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	G-21 (2.5)	G-21 (5)	G-21 (10)*	G-21 (15)	G-22 (0.5)	G-22 (2.5)	G-22 (5)	G-22 (10)	G-22 (15)	G-22 (20)	G-23 (0.5)	G-23 (2.5)	G-23 (5)	G-23 (10)	G-23 (15)	G-23 (20)	G-25 (0.5)	G-25 (2.5)	G-25 (5)	G-25 (10)	G-25 (15)	G-25 (20)
Sample Depth (feet)									2.5	5	10	15	0.5	2.5	5	10	15	20	0.5	2.5	5	10	15	20	0.5	2.5	5	10	15	20
Date Sampled									1/15/15	1/15/15	1/15/15	1/15/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15	1/15/15
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.13	<0.11	<0.11	<0.12	<0.13	<0.11	<0.10	<0.10	<0.13	<0.11	<0.11	<0.10	<0.10	<0.11	<0.13	<0.11	<0.15	<0.11	<0.14	<0.12	<0.11	<0.11
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.13	<0.11	<0.11	<0.12	<0.13	<0.11	<0.10	<0.10	<0.13	<0.11	<0.11	<0.10	<0.10	<0.11	<0.13	<0.11	<0.15	<0.11	<0.14	<0.12	<0.11	<0.11
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	**1.1**	**0.24**	<0.11	<0.12	**0.21**	<0.11	<0.10	<0.10	<0.13	<0.11	**0.35**	<0.10	<0.10	<0.11	<0.13	<0.11	**1.4**	<0.11	<0.14	<0.12	<0.11	<0.11
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.13	<0.11	<0.11	<0.12	<0.13	<0.11	<0.10	<0.10	<0.13	<0.11	**0.26**	<0.10	<0.10	<0.11	<0.13	<0.11	<0.15	<0.11	<0.14	<0.12	<0.11	<0.11
Total PCBs	mg/kg								**1.1**	**0.24**	<RL	<RL	**0.21**	<RL	<RL	<RL	<RL	<RL	**0.61**	<RL	<RL	<RL	<RL	<RL	**1.4**	<RL	<RL	<RL	<RL	<RL
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	26	26	26	26	26	26	27	27	27	27	27	27	28	28	28	28	28	28	29	29	29	29
Soil Boring									G-26	G-26	G-26	G-26	G-26	G-26	G-27	G-27	G-27	G-27	G-27	G-27	G-28	G-28	G-28	G-28	G-28	G-28	G-29	G-29	G-29	G-29
Sample ID									G-26 (0.5)	G-26 (2.5)	G-26 (5)	G-26 (10)	G-26 (15)	G-26 (20)	G-27 (0.5)	G-27 (2.5)	G-27 (5)	G-27 (10)	G-27 (15)	G-27 (20)	G-28 (0.5)	G-28 (2.5)	G-28 (5)	G-28 (10)	G-28 (15)	G-28 (20)	G-29 (0.5)*	G-29 (2.5)	G-29 (5)	G-29 (10)
Sample Depth (feet)									0.5	2.5	5	10	15	20	0.5	2.5	5	10	15	20	0.5	2.5	5	10	15	20	0.5	2.5	5	10
Date Sampled									1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/15/15	1/15/15	1/15/15	1/15/15
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<1.2	<0.10	<0.11	<0.11	<0.16	<0.11	<0.13	<0.11	<0.10	<0.12	<0.15	<0.11	<0.11	<0.10	<0.099	<0.11	<0.14	<0.11	<0.13	<0.11	<0.11	<0.11
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<1.2	<0.10	<0.11	<0.11	<0.16	<0.11	<0.13	<0.11	<0.10	<0.12	<0.15	<0.11	<0.11	<0.10	<0.099	<0.11	<0.14	<0.11	<0.13	<0.11	<0.11	<0.11
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	**6.2**	**0.54**	**0.57**	<0.11	<0.16	<0.11	**0.3**	<0.11	<0.10	<0.12	<0.15	<0.11	<0.11	<0.10	<0.099	**0.99**	<0.14	<0.11	**0.92**	<0.11	**0.26**	<0.11
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<1.2	<0.10	<0.11	<0.11	<0.16	<0.11	<0.13	<0.11	<0.10	**0.15**	<0.15	<0.11	<0.11	<0.10	<0.099	**0.31**	<0.14	<0.11	**0.29**	<0.11	<0.11	<0.11
Total PCBs	mg/kg								**6.2**	**0.54**	**0.57**	<RL	<RL	<RL	**0.3**	<RL	<RL	**0.15**	<RL	<RL	<RL	<RL	<RL	**1.3**	<RL	<RL	**1.21**	<RL	**0.26**	<RL
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
NA = Not analyzed.
-- = Not available.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid									29	29	30	30	30	30	30	30	31	31	31	31	31	31					3	4	5	8
Soil Boring									G-29	G-29	G-30	G-30	G-30	G-30	G-30	G-30	G-31	G-31	G-31	G-31	G-31	G-31	CDW-1	CDW-2	CDW-2	CDW-5	GP-2	II-A-01	ESM-05	II-A-07
Sample ID		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	G-29 (15)	G-29 (20)	G-30 (0.5)	G-30 (2.5)	G-30 (5)	G-30 (10)	G-30 (15)	G-30 (20)	G-31 (0.5)	G-31 (2.5)	G-31 (5)	G-31 (10)	G-31 (15)	G-31 (20)*	CDW-1/S-3/B	CDW-2/S-1	CDW-2/S-2	CDW-5/S-1	WC-GP-2 (0-3)	WC-II-A01 (0-0.5)	WC-ESM-5 (5-10)	WC-II-A07 (0-0.5)
Sample Depth (feet)									15	20	0.5	2.5	5	10	15	20	0.5	2.5	5	10	15	20					0-3	0-0.5	5-10	0-0.5
Date Sampled									1/15/15	1/15/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/16/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	1/6/15	3/11/15	3/11/15	3/11/15	3/12/15	7/23/15	7/23/15	7/23/15	7/23/15
Analytes	**units**																													
Polychlorinated Biphenyls																														
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	<0.11	<0.12	<0.52	<0.10	<0.10	<0.11	<0.25	<0.11	<0.11	<0.097	<0.099	<0.11	<0.11	<0.11	<0.0207	<0.0228	<0.021	<0.0208	NA	NA	NA	NA
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	<0.11	<0.12	<0.52	<0.10	<0.10	<0.11	<0.25	<0.11	<0.11	<0.097	<0.099	<0.11	<0.11	<0.11	<0.0207	<0.0228	<0.021	<0.0208	NA	NA	NA	NA
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	<0.11	<0.12	**2.3**	<0.10	**0.31**	<0.11	<0.25	<0.11	<0.11	<0.097	<0.099	<0.11	<0.11	<0.11	**3.41**	**3.93**	**0.224**	**0.0348**	NA	NA	NA	NA
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	<0.11	<0.12	<0.52	<0.10	<0.10	<0.11	<0.25	<0.11	<0.11	<0.097	<0.099	<0.11	<0.11	<0.11	<0.0207	<0.0228	<0.021	<0.0208	NA	NA	NA	NA
Total PCBs	mg/kg								<RL	<RL	**2.3**	<RL	**0.31**	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	**3.41**	**3.93**	**0.224**	**0.0348**				
Metals																														
Antimony	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.529	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.942 J**	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**24**	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.238 J**	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**16.5**	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.1**	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**4.21**	**400**
Mercury	mg/kg	20	20	30	30	30	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.032 J**	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.47**	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.529	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.265	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**11.6**	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**278**	NA
TCLP Metals																														
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.08	NA	**0.28**

Notes:
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TABLE 6
SUMMARY OF SOIL PCB & METAL ANAYYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	14	14	22	27
Soil Boring									ESM-07	TP-03	GP-5	GP-7
Sample ID									WC-ESM-7 (12.5-15)	WC-TP-3 (5.5)	WC-GP-5 (6-8)	WC-GP-7 (7-10)
Sample Depth (feet)									12.5-15	5.5	6-8	7-10
Date Sampled									7/23/15	7/23/15	7/23/15	7/23/15
Analytes	**units**											
Polychlorinated Biphenyls												
Aroclor-1232	mg/kg	1	1	4	4	4	4	100	NA	NA	NA	NA
Aroclor-1242	mg/kg	1	1	4	4	4	4	100	NA	NA	NA	NA
Aroclor-1248	mg/kg	1	1	4	4	4	4	100	NA	NA	NA	NA
Aroclor-1254	mg/kg	1	1	4	4	4	4	100	NA	NA	NA	NA
Total PCBs	mg/kg											
Metals												
Antimony	mg/kg	20	20	30	30	30	30	300	**0.744 B**	NA	NA	NA
Arsenic	mg/kg	20	20	20	20	50	50	500	**1.82**	NA	NA	NA
Barium	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**18.2**	NA	NA	NA
Beryllium	mg/kg	90	90	200	200	200	200	2,000	**0.321**	NA	NA	NA
Cadmium	mg/kg	70	70	100	100	100	100	1,000	<0.039	NA	NA	NA
Chromium	mg/kg	100	100	200	200	200	200	2,000	**13.6**	NA	NA	NA
Chromium, Hexavalent	mg/kg	100	100	200	200	200	200	2,000	NA	NA	NA	NA
Copper	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA
Lead	mg/kg	200	200	600	600	600	600	6,000	**3.84**	**310**	**130**	**1300**
Mercury	mg/kg	20	20	30	30	30	30	300	**0.0146 J**	NA	NA	NA
Nickel	mg/kg	600	600	1,000	1,000	1,000	1,000	10,000	**4.03**	NA	NA	NA
Selenium	mg/kg	400	400	700	700	700	700	7,000	**0.732**	NA	NA	NA
Silver	mg/kg	100	100	200	200	200	200	2,000	<0.26	NA	NA	NA
Vanadium	mg/kg	400	400	700	700	700	700	7,000	**26.3**	NA	NA	NA
Zinc	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**17.5**	NA	NA	NA
TCLP Metals												
Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	<0.08	<0.08	**5.8**

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
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NA = Not analyzed.
-- = Not available.
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TABLE 7
SUMMARY OF SOIL VOC ANALYSES
Former Lewis Chemical, Boston, Massachusetts

Grid																																										
Soil Boring			S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	4	5	6	7	9	14	18	19	23	25	A-2	14	15	17	18	18	13	18	18	18	18	28	2	2	2	3	3	3	4	4	4	5	5	5
										ESM-06	ESM-05	ESM-09	ESM-04	ESM-03	ESM-07	ESM-08	ESM-10	ESM-02	ESM-01	TKFMDR	TP-03	TP-04	TP-02	TP-01B	TP-06	ESM-11	ESM-13	ESM-13	ESM-14	ESM-14	ESM-12	III-E-02	III-E-02	III-E-02	III-F-03	III-F-03	III-F-03	II-A-01	II-A-01	II-A-01	II-A-03	II-A-03	II-A-03
Sample ID										ESM-06	ESM-05	ESM-09	ESM-04	ESM-03	ESM-07	ESM-08	ESM-10	ESM-02	ESM-01*	TKFMDR	TP-03	TP-04	TP-02	TP-01B	TP-06	ESM-11	ESM-13	ESM-13	ESM-14	ESM-14*	ESM-12	III-E-02-S	III-E-02-M	III-E-02-D	III-F-03-S	III-F-03-M	III-F-03-D	II-A-01-S	II-A-01-M	II-A-01-D	II-A-03-S	II-A-03-M*	II-A-03-D
Sample Depth (feet)										11-13	13-15	14-15	10-12	10-12	10-12	12-14	12-13.5	14-16	16-18	Unknown	5.5	4	6	9	2.5	10-12	1-3	12-14	7-9	15-17	12-14	0-0.5	5-7	17-19	0-0.5	5-7	17-19	0-0.5	5-7	14-15	0-0.5	5-7	14-15
Date Sampled										6/12/2002	6/12/2002	6/14/2002	6/13/2002	6/13/2002	6/12/2002	6/12/2002	6/14/2002	6/13/2002	6/13/2002	6/14/2002	6/1/2005	6/1/2005	6/1/2005	6/1/2005	6/1/2005	7/13/2005	7/13/2005	7/13/2005	7/13/2005	7/13/2005	7/13/2005	8/31/2005	8/31/2005	8/31/2005	9/1/2005	9/1/2005	9/1/2005	8/31/2005	8/31/2005	8/31/2005	8/31/2005	8/31/2005	8/31/2005
Analytes	CAS No.	units																																								
Volatile Organic Compounds																																										
1,1,1-Trichloroethane	71-55-6	mg/kg	500	500	600	1,000	600	3,000	10,000	**1.1**	<0.005	**0.21**	**0.01**	<0.005	**0.14**	**0.065**	<1.600	<0.140	**13**	**0.96**	<0.29	**15**	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		**0.79**	**2.4**	<0.006	**0.8**	**85**	**0.073**	**0.79**	**3000**	**1.1**
1,1,2-Trichloroethane	79-00-5	mg/kg	2	40	2	200	2	500	5,000	<0.004	**0.041**	<0.005	<0.005	<0.005	<0.005	<0.006	<1.600	<0.140	<0.550	<0.095	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
1,1,2-Trichlorotrifluoroethane	76-13-1	mg/kg	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	75-34-3	mg/kg	9	500	9	1,000	9	1,000	10,000	**0.055**	**0.18**	**0.041**	**0.045**	<0.005	**0.022**	**0.3**	<1.600	<0.140	**0.47**	**1.5**	<0.095	<0.29	**40**	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	**3.3**	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
1,1-Dichloroethene	75-35-4	mg/kg	40	500	40	1,000	40	3,000	10,000	<0.004	**1.1**	**0.019**	<0.005	**14**	<0.005	<0.006	<1.600	<0.140	**1.5**	<0.095	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
1,2,4-Trichlorobenzene	120-82-1	mg/kg	6	700	6	3,000	6	5,000	10,000	**0.006**	<0.005	<0.005	<0.005	**0.24**	<0.005	<0.006	<1.600	<0.140	<0.550	<0.095	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
1,2,4-Trimethylbenzene	95-63-6	mg/kg	–	–	–	–	–	–	–	**0.064**	**0.16**	**0.003**	**0.004**	**6.9**	**0.006**	**0.26**	<1.600	**0.14**	**0.5**	**0.25**	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	**0.65**	<0.006	<0.34	<12	<0.005	<0.26	<140	**1.2**
1,2-Dichlorobenzene	95-50-1	mg/kg	100	300	100	300	100	300	10,000	**0.15**	<0.005	<0.005	**0.014**	**16**	<0.005	**0.1**	<1.600	**0.23**	**2.6**	**1.2**	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	**2.1**	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
1,2-Dichloroethane	107-06-2	mg/kg	0	20	0	100	0	300	9,000	**0.009**	**0.51**	**0.018**	**0.006**	<0.005	**0.001**	**0.36**	<1.600	<0.140	<0.550	<0.095	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
1,3,5-Trimethylbenzene	108-67-8	mg/kg	–	–	–	–	–	–	–	**0.028**	**0.053**	<0.005	<0.005	**2.6**	<0.005	**0.074**	<1.600	**0.041**	<0.550	**0.15**	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	**0.37**	<0.006	<0.34	<12	<0.005	<0.26	<140	**0.65**
1,3-Dichlorobenzene	541-73-1	mg/kg	100	100	200	500	200	500	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	106-46-7	mg/kg	1	80	1	400	1	2,000	10,000	**0.013**	<0.005	<0.005	<0.005	**1.2**	<0.005	<0.006	<1.600	<0.140	<0.550	<0.095	<2.9	<18	<0.05	<68	<380	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<3	<3.3	<0.055	<0.34	<12	<0.005	<0.26	<140	<0.47
1,4-Dioxane	123-91-1	mg/kg	6	20	6	90	6	500	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	78-93-3	mg/kg	50	400	50	400	50	400	10,000	<0.004	<0.005	**0.012**	**0.005**	<0.005	**0.021**	<0.006	<1.600	<0.140	<0.550	<0.095	<2.9	<18	<0.05	<68	<380	<2.9	<25	<6.4	<5.8	<3.4	<2.6		<3.4		<3	<3.3	<0.055	<3.4	<120	<0.052	<2.6	<1400	<4.7
4-Isopropyltoluene	99-87-6	mg/kg	–	–	–	–	–	–	–	**0.032**	**0.019**	<0.005	<0.005	**2.7**	<0.005	**3.3**	**2.8**	<0.140	**0.54**	<0.095	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	**9.4**	<0.58	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
4-Methyl-2-pentanone	108-10-1	mg/kg	50	400	50	400	50	400	10,000	<0.004	**0.14**	<0.005	<0.005	<0.005	<0.005	<0.006	<1.600	<0.140	<0.550	<0.095	<2.9	<18	<0.05	<68	<380	<2.9	<25	<6.4	<5.8	<3.4	<2.6		<3.4		<3	<3.3	<0.055	<3.4	<120	<0.052	<2.6	<1400	<4.7
Acetone	67-64-1	mg/kg	50	400	50	400	50	400	10,000	**0.056**	**0.091**	**0.034**	<0.005	<0.005	**0.061**	<0.006	<1.600	<0.140	<0.550	<0.095	<2.9	<18	<0.2	<68	<380	<2.9	<25	<6.4	<5.8	<3.4	<2.6		<3.4		<3	<3.3	<0.22	<3.4	<120	<0.21	<2.6	<1400	<4.7
Benzene**	71-43-2	mg/kg	40	40	200	200	400	1,000	10,000	<0.004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.006	<1.600	<0.140	<0.550	<0.095	<0.13	<0.34	<0.005	<0.14	<0.13	<0.10	<0.41	<0.64	<0.10	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
Bromoform	75-25-2	mg/kg	1	300	1	800	1	800	10,000	<0.004	<0.005	**0.005**	**0.006**	<0.005	**0.004**	<0.006	<1.600	<0.140	<0.550	<0.095	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
Carbon Disulfide	75-15-0	mg/kg	–	–	–	–	–	–	–	<0.004	<0.005	**0.003**	<0.005	<0.005	**0.004**	**0.08**	<1.600	<0.140	<0.550	<0.095	<2.9	<18	<0.5	<68	<380	<2.9	<25	<6.4	<5.8	<3.4	<2.6		<3.4		<3	<3.3	<0.055	<3.4	<120	<0.052	<2.6	<1400	<4.7
Chlorobenzene	108-90-7	mg/kg	3	100	3	100	3	100	10,000	**0.005**	**0.26**	<0.005	<0.005	**0.23**	<0.005	**0.096**	<1.600	<0.140	<0.550	<0.095	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
Chloroethane	75-00-3	mg/kg	–	–	–	–	–	–	–	**0.004**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.006	<1.600	<0.140	<0.550	<0.095	<0.58	<3.5	<0.01	<14	<76	<0.58	<5.1	<1.3	<1.2	<0.68	<0.53		<0.67		<0.61	<0.66	<0.011	<0.68	<24	<0.01	<0.53	<280	<0.93
cis-1,2-Dichloroethene	156-59-2	mg/kg	0	100	0	500	0	500	5,000	**0.4**	**0.8**	**0.11**	**0.058**	<0.005	**0.062**	**0.96**	**0.55**	<0.140	**1.5**	**7.2**	**0.59**	**63**	<0.005	<6.8	<38	<0.29	<2.5	**3.4**	**0.68**	<0.34	<0.26		**0.89**		<0.3	**3.6**	<0.006	<0.34	**20**	<0.005	**0.32**	<140	<0.47
Dichlorodifluoromethane	75-71-8	mg/kg	–	–	–	–	–	–	–	<0.004	<0.005	<0.005	<0.005	**0.016**	<0.005	<0.006	<1.600	<0.140	<0.550	<0.095	<0.58	<3.5	<0.01	<14	<76	<0.58	<5.1	<1.3	<1.2	<0.68	<0.53		<0.67		<0.61	<0.66	<0.011	<0.68	<24	<0.01	<0.53	<280	<0.93
Ethylbenzene**	100-41-4	mg/kg	500	500	1,000	1,000	1,000	3,000	10,000	**0.073**	**0.15**	**0.003**	**0.053**	**10**	**0.012**	**46**	**46**	**1**	**0.31**	**0.11**	<0.13	<0.34	<0.005	**0.55**	**0.18**	<0.10	<0.41	**82**	**7.1**	**0.88**	<0.26		**0.4**		<0.3	**2.7**	<0.006	<0.34	<12	<0.005	<0.26	<140	**0.61**
Hexachlorobutadiene	87-68-3	mg/kg	30	30	100	100	100	100	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	98-82-8	mg/kg	–	–	–	–	–	–	–	**0.004**	**0.012**	<0.005	<0.005	<0.005	**0.64**	**0.004**	**0.017**	<1.600	<0.140	<0.550	<0.095	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
Methyl tert-butyl ether**	1634-04-4	mg/kg	100	100	100	500	100	500	5,000	**0.002**	**0.003**	**0.002**	**0.002**	<0.005	**0.002**	<0.006	<1.600	<0.140	<0.550	<0.095	<0.13	<0.34	<0.005	<0.14	<0.13	<0.10	<0.41	<0.64	<0.10	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
Methylene Chloride	75-09-2	mg/kg	4	400	4	700	4	700	7,000	**0.019**	**0.4**	**0.03**	**0.019**	<0.005	**0.009**	**0.14**	<1.600	<0.140	**1.2**	**3.7**	<1.2	<7.1	<0.5	<27	<150	<1.2	<10	<2.6	<2.3	<1.4	<1.1		<1.3		<1.2	<1.3	<0.055	<1.4	<48	<0.052	<1.1	<550	<1.9
Naphthalene**	91-20-3	mg/kg	20	500	20	1,000	20	3,000	10,000	**0.011**	**0.064**	**0.002**	**0.003**	**1.9**	**0.004**	**0.15**	<1.600	<0.140	<0.550	**0.16**	<0.29	<0.57	<0.005	<0.55	<0.56	<0.29	<2.5	**0.89**	<0.58	<0.34	**2.8**		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
n-Butylbenzene	104-51-8	mg/kg	–	–	–	–	–	–	–	<0.004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.006	<1.600	<0.140	<0.550	<0.095	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	**0.35**	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
n-Propylbenzene	103-65-1	mg/kg	–	–	–	–	–	–	–	**0.013**	**0.026**	<0.005	<0.005	**2.7**	<0.005	**0.026**	<1.600	<0.140	**0.2**	**0.026**	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
sec-Butylbenzene	135-98-8	mg/kg	–	–	–	–	–	–	–	**0.039**	**0.032**	<0.005	<0.005	**0.63**	<0.005	**0.01**	<1.600	<0.140	<0.550	<0.095	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	**0.83**	<0.58	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	**2.4**
Styrene	100-42-5	mg/kg	4	70	4	300	4	2,000	10,000	<0.004	<0.005	<0.005	<0.005	**0.12**	<0.005	<0.006	<1.600	<0.140	<0.550	<0.095	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
tert-Butylbenzene	98-06-6	mg/kg	–	–	–	–	–	–	–	<0.004	<0.005	<0.005	<0.005	**0.16**	<0.005	<0.006	<1.600	<0.140	<0.550	<0.095	<0.29	<1.8	<0.05	<68	<380	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<3	<3.3	<0.055	<0.34	<12	<0.005	<0.26	<140	<0.47
Tetrachloroethene	127-18-4	mg/kg	10	30	10	200	10	1,000	10,000	**0.77**	**7.5**	**0.004**	**0.006**	<0.005	**0.097**	**0.69**	**0.96**	<0.140	**22**	**0.64**	**0.46**	**11**	**0.011**	**73**	**360**	<0.29	**53**	<0.64	<0.58	<0.34	<0.26		<0.34		**0.91**	<0.33	<0.006	**1.2**	<12	**0.016**	**1.7**	**1600**	**1.1**
Toluene**	108-88-3	mg/kg	500	500	1,000	1,000	2,000	3,000	10,000	**0.08**	**3**	**0.069**	**0.031**	**300**	**0.11**	<0.006	**19**	**1.1**	**1.5**	**1.2**	<0.13	**0.39**	<0.005	<0.14	<0.13	<0.10	<0.41	**15**	**3.6**	**2.4**	<0.26		<0.34		<0.3	**5**	<0.006	<0.34	<12	<0.005	**0.29**	**680**	<0.47
trans-1,2-Dichloroethene	156-60-5	mg/kg	1	500	1	1,000	1	3,000	10,000	**0.002**	<0.005	**0.004**	**0.002**	<0.005	**0.003**	**0.03**	<1.600	<0.140	<0.550	<0.095	<0.29	<1.8	<0.005	<6.8	<38	<0.29	<2.5	<0.64	<0.58	<0.34	<0.26		<0.34		<0.3	<0.33	<0.006	<0.34	<12	<0.005	<0.26	<140	<0.47
Trichloroethene	79-01-6	mg/kg	0	30	0	60	0	60	600	**2.1**	**14**	**0.014**	**0.009**	**190**	**0.061**	**0.12**	<1.600	<0.140	**9.3**	**2.2**	**1.5**	**39**	**0.021**	**23**	<38	**0.48**	**3.9**	<0.64	<0.58	<0.34	<0.26		<0.34		**1**	<0.33	<0.006	**1.9**	**140**	**0.067**	**1.8**	**1900**	<0.47
Trichlorofluoromethane	75-69-4	mg/kg	–	–	–	–	–	–	–	<0.004	<0.005	<0.005	<0.005	**1.6**	<0.005	<0.006	<1.600	<0.140	<0.550	<0.095	<0.58	<3.5	<0.01	<14	<76	<0.58	<5.1	<1.3	<1.2	<0.68	<0.53		<0.67		<0.61	<0.66	<0.011	<0.68	<24	<0.01	<0.53	<280	<0.93
Vinyl Chloride	75-01-4	mg/kg	1	1	1	7	1	60	600	**0.006**	**0.006**	<0.005	**0.012**	**1.2**	<0.005	**0.006**	<1.600	<0.140	<0.550	<0.095	<0.58	<3.5	<0.01	<14	<76	<0.58	<5.1	<1.3	<1.2	<0.68	<0.53		<0.67		<0.61	<0.66	<0.011	<0.68	<24	<0.01	<0.53	<280	<0.93
Xylenes, Total**	1330-20-7	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**0.22**	**0.31**	**0.01**	**0.09**	**43**	**0.008**	**83**	**82**	**3.8**	**1.4**	**0.32**	<0.13	**0.48**	<0.005	**2.89**	**0.54**	<0.10	<0.41	**147**	**12.8**	**1.1**	<0.26		**1.34**		<0.3	**8.5**	<0.006	<0.34	<12	<0.005	<0.26	**160**	**0.63**

Grid																																									
Soil Boring										8	8	8	8	9	9																												
										II-A-05	II-A-05	II-A-07	II-A-07	II-A-07	II-A-09																															
Sample ID										II-A-05-D	II-A-05-S	II-A-07-S	II-A-07-M	II-A-07-D	II-A-09-S																															
Sample Depth (feet)										8-10.5	0-0.5	5-7	12-13	0-0.5	5-7																													
Date Sampled										8/31/2005	8/31/2005	8/31/2005	8/30/2005	8/31/2005	8/30/2005																													
Analytes	CAS No.	units																																								
Volatile Organic Compounds																																									
1,1,1-Trichloroethane	71-55-6	mg/kg								<0.005		**0.073**	**0.79**																														
1,1,2-Trichloroethane	79-00-5	mg/kg								<0.005		<0.005	<0.26		**44**																												
1,1,2-Trichlorotrifluoroethane	76-13-1	mg/kg								NA		NA	NA		NA																												
1,1-Dichloroethane	75-34-3	mg/kg								**0.014**		<0.005	<0.26		**<6.1**																												
1,1-Dichloroethene	75-35-4	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
1,2,4-Trichlorobenzene	120-82-1	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
1,2,4-Trimethylbenzene	95-63-6	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
1,2-Dichlorobenzene	95-50-1	mg/kg								**0.008**		**19**																														
1,2-Dichloroethane	107-06-2	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
1,3,5-Trimethylbenzene	108-67-8	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
1,3-Dichlorobenzene	541-73-1	mg/kg								NA		NA	NA		NA																												
1,4-Dichlorobenzene	106-46-7	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
1,4-Dioxane	123-91-1	mg/kg								NA		NA	NA		NA																												
2-Butanone	78-93-3	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
4-Isopropyltoluene	99-87-6	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
4-Methyl-2-pentanone	108-10-1	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
Acetone	67-64-1	mg/kg								<0.2		<0.005	<0.26		**<6.1**																												
Benzene**	71-43-2	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
Bromoform	75-25-2	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
Carbon Disulfide	75-15-0	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
Chlorobenzene	108-90-7	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
Chloroethane	75-00-3	mg/kg								<0.01		<0.01	<0.53		**<12**																												
cis-1,2-Dichloroethene	156-59-2	mg/kg								**0.61**		**0.32**	**0.93**		**47**																												
Dichlorodifluoromethane	75-71-8	mg/kg								<0.01		<0.01	<0.53		**<12**																												
Ethylbenzene**	100-41-4	mg/kg								**0.007**		**8**																														
Hexachlorobutadiene	87-68-3	mg/kg								NA		NA	NA		NA																												
Isopropylbenzene	98-82-8	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
Methyl tert-butyl ether**	1634-04-4	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
Methylene Chloride	75-09-2	mg/kg								<2.6		<0.05	<2.6		**<24**																												
Naphthalene**	91-20-3	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
n-Butylbenzene	104-51-8	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
n-Propylbenzene	103-65-1	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
sec-Butylbenzene	135-98-8	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
Styrene	100-42-5	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
tert-Butylbenzene	98-06-6	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
Tetrachloroethene	127-18-4	mg/kg								**1600**		**1.1**			**26**																												
Toluene**	108-88-3	mg/kg								**880**		<0.47			**110**																												
trans-1,2-Dichloroethene	156-60-5	mg/kg								<0.005		<0.005	<0.26		**<6.1**																												
Trichloroethene	79-01-6	mg/kg								**0.005**		**14**																														
Trichlorofluoromethane	75-69-4	mg/kg								<0.01		<0.01	<0.53		**<12**																												
Vinyl Chloride	75-01-4	mg/kg								<0.01		<0.01	<0.53		**<12**																												
Xylenes, Total**	1330-20-7	mg/kg								**0.009**		**31.3**																														

Notes
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
** = compounds analyzed by multiple methods - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
NA = Not analyzed.
-- = Not available.
mg/kg = milligrams per kilogram
UJ = non-detect estimated
J = Detected result is qualified as estimated. A plus or minus sign indicates the direction of potential bias, if known.

Notes
All concentrations presented in units of milligrams per kilogram (mg/kg).
< = Analyte is not detected above the LRL presented.
Field duplicates (indicated by *) and compounds analyzed by multiple methods (indicated by **) are resolved by retaining the highest detected concentration or, if all results are non-detect, the lowest LRL.
BDL = Below detection limits.

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TABLE 7
SUMMARY OF SOIL VOC ANALYSES
Former Lewis Chemical, Boston, Massachusetts

Grid			S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	9	10	10	10	10	14	14	16	16	16	17	17	17	18	18	18	21	21	21	24	24	24	25	25	25	25	25	25	29	29	B-1	B-1	B-1	B-1	B-3	E-1	3	3	3	3	13	13
Soil Boring										II-A-09	II-A-11	II-A-11	II-A-11	II-A-11	III-C-02	III-C-02	III-E-05	III-E-05	III-E-05	I-A-03	I-A-03	I-A-03	I-B-05	I-B-05	I-B-05	I-D-10	I-D-10	I-D-10	I-B-08	I-B-08	I-B-08	I-B-10	I-B-10	I-B-10	I-C-09	I-C-09	I-C-09	I-A-08	I-A-08	ESM-15	ESM-15	ESM-15	ESM-15	ESMB-02	ESM-16	GP-1	GP-1	GP-2	GP-2	GP-12	GP-12
Sample ID										II-A-09-M	II-A-11-S	II-A-11-M	II-A-11-M2	II-A-11-D	III-C-02-M	III-C-02-D	III-E-05-S	III-E-05-M	III-E-05-D	I-A-03-S	I-A-03-M	I-A-03-D	I-B-05-S	I-B-05-M	I-B-05-D*	I-D-10-S	I-D-10-M	I-D-10-D	I-B-08-S	I-B-08-M*	I-B-08-D	I-B-10-S	I-B-10-M	I-B-10-D	I-C-09-S	I-C-09-M	I-C-09-D	I-A-08-S	I-A-08-M	ESM-15	ESM-15	ESM-15	ESM-15	ESMB-02	ESM-16	GP-1/0-3'	GP-1/3-5'	GP-2/0-3'	GP-2/3-5'	GP-12/0-3'	GP-12/10-12'
Sample Depth (feet)										6-8	0-0.5	9-10	14-15	18-20	8.5-10	13-14	0-0.5	5-10	10-15	0-0.5	8-10	10-12	0-0.5	14-16	19-20	0-0.5	5-7	12-14	0-0.5	12-14	19-20	0-0.5	13-15	18-20	0-0.5	13-15	15-17	0-0.5	12-14	0-2	3-5	6-8	13-15	0-5	4-8	0-3	3-5	0-3	3-5	0-3	10-12
Date Sampled										8/30/2005	8/30/2005	8/30/2005	8/30/2005	8/30/2005	8/31/2005	8/31/2005	9/1/2005	9/1/2005	9/1/2005	8/30/2005	8/30/2005	8/30/2005	8/30/2005	8/30/2005	8/30/2005	8/31/2005	8/31/2005	8/31/2005	8/30/2005	8/30/2005	8/30/2005	8/30/2005	8/30/2005	8/30/2005	8/31/2005	8/31/2005	8/31/2005	8/30/2005	8/30/2005	8/31/2005	8/31/2005	8/31/2005	8/31/2005	8/31/2005	8/31/2005	11/29/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008
Analytes	**CAS No.**	**units**																																															
Volatile Organic Compounds																																																	
1,1,1-Trichloroethane	71-55-6	mg/kg	500	500	600	1,000	600	3,000	10,000	<0.55		**0.96**	<2.6	**0.27**	**4.8**					**4.7**			<0.31		<0.005					<0.005											**5.5**	NA		**12**	<2.1	**0.7**	**0.7**	**0.6**	**0.9**	<0.1	
1,1,2-Trichloroethane	79-00-5	mg/kg	2	40	2	200	2	500	5,000	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	<2.1	NA	NA	NA	NA	NA	NA
1,1,2-Trichlorotrifluoroethane	76-13-1	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	75-34-3	mg/kg	9	500	9	1,000	9	1,000	10,000	<0.55		<0.59	**6.1**	**0.64**	**8.5**					<4.5			<0.31		**0.022**					<0.005											**0.38**	NA		<5	<2.1	**0.8**	**3**	**0.4**	**1.6**	<0.2	
1,1-Dichloroethene	75-35-4	mg/kg	40	500	40	1,000	40	3,000	10,000	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	<2.1	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	120-82-1	mg/kg	6	700	6	3,000	6	5,000	10,000	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	<2.1	<0.2	<0.2	<0.2	<0.2	<0.1	
1,2,4-Trimethylbenzene	95-63-6	mg/kg	--	--	--	--	--	--	--	**1.3**		**3.4**	<2.6	<0.26	<1.9					<4.5			**0.41**		<0.005					<0.005											**0.4**	NA		<5	**3.7**	**1.1**	<0.2	<0.2	**1.7**	<0.1	
1,2-Dichlorobenzene	95-50-1	mg/kg	100	300	100	300	100	300	10,000	**1.9**		**1.7**	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	**5.5**	**2.9**	<0.2	**0.3**	**0.9**	<0.1	
1,2-Dichloroethane	107-06-2	mg/kg	0	20	0	100	0	300	9,000	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			**0.68**		<0.005					<0.005											**0.31**	NA		<5	<2.1	<0.2	**0.3**	<0.2	<0.2	<0.1	
1,3,5-Trimethylbenzene	108-67-8	mg/kg	--	--	--	--	--	--	--	**0.68**		**2**	<2.6	<0.26	<1.9					<4.5			**0.42**		<0.005					<0.005											<0.25	NA		<5	<2.1	**0.6**	<0.2	<0.2	**0.7**	<0.1	
1,3-Dichlorobenzene	541-73-1	mg/kg	100	100	200	500	200	500	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	106-46-7	mg/kg	1	80	1	400	1	2,000	10,000	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	<2.1	**0.3**	<0.2	<0.2	<0.2	<0.1	
1,4-Dioxane	123-91-1	mg/kg	6	20	6	90	6	500	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	78-93-3	mg/kg	50	400	50	400	50	400	10,000	<5.5		<5.9	<26	<2.6	<19					<45			<3.1		<0.05					<0.051											<2.5	NA		<50	<21	<0.6	**2**	<0.5	**0.6**	<0.4	
4-Isopropyltoluene	99-87-6	mg/kg	--	--	--	--	--	--	--	**5**		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	**16**	<0.2	<0.2	<0.2	**0.3**	<0.1	
4-Methyl-2-pentanone	108-10-1	mg/kg	50	400	50	400	50	400	10,000	<5.5		<5.9	<26	<2.6	<19					<45			<3.1		<0.05					<0.051											<2.5	NA		<50	<21	NA	NA	NA	NA	NA	NA
Acetone	67-64-1	mg/kg	50	400	50	400	50	400	10,000	<5.5		<5.9	<26	<2.6	<19					<45			<3.1		<0.2					<0.2											<2.5	NA		<50	<21	NA	NA	NA	NA	NA	NA
Benzene**	71-43-2	mg/kg	40	40	200	200	400	1,000	10,000	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	<0.40		<5	<2.1	**30**	<0.2	<0.2	<0.2	<0.1	
Bromoform	75-25-2	mg/kg	1	300	1	800	1	800	10,000	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	<2.1	NA	NA	NA	NA	NA	NA
Carbon Disulfide	75-15-0	mg/kg	--	--	--	--	--	--	--	<5.5		<5.9	<26	<2.6	<19					<45			<3.1		<0.05					<0.051											<2.5	NA		<50	<21	NA	NA	NA	NA	NA	NA
Chlorobenzene	108-90-7	mg/kg	3	100	3	100	3	100	10,000	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	<2.1	NA	NA	NA	NA	NA	NA
Chloroethane	75-00-3	mg/kg	--	--	--	--	--	--	--	<1.1		<1.2	<5.2	<0.52	<3.9					<8.9			<0.62		**0.037**					<0.01											<0.5	NA		<9.9	<4.3	<0.2	**3.8**	<0.2	<0.2	<0.1	
cis-1,2-Dichloroethene	156-59-2	mg/kg	0	100	0	500	0	500	5,000	**0.58**		**1.3**	**33**	**4.4**	**23**					<4.5			<0.31		<0.005					<0.005											**3.1**	NA		**5.4**	<2.1	**7.7**	**2.6**	**2.8**	**9.6**	<0.1	
Dichlorodifluoromethane	75-71-8	mg/kg	--	--	--	--	--	--	--	<1.1		<1.2	<5.2	<0.52	<3.9					<8.9			<0.62		<0.01					<0.01											<0.5	NA		<9.9	<4.3	NA	NA	NA	NA	NA	NA
Ethylbenzene**	100-41-4	mg/kg	500	500	1,000	1,000	1,000	3,000	10,000	**4**		<0.59	<2.6	<0.26	<1.9					**0.27**			<0.31		**0.1**					<0.005											<0.25	**4.5**		<5	**9.5**	**1.5**	**1.1**	<0.2	**3.5**	<0.1	
Hexachlorobutadiene	87-68-3	mg/kg	30	30	100	100	100	100	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	98-82-8	mg/kg	--	--	--	--	--	--	--	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	<2.1	NA	NA	NA	NA	NA	NA
Methyl tert-butyl ether**	1634-04-4	mg/kg	100	100	100	500	100	500	5,000	<0.55		<0.59	<2.6	<0.26	<1.9					<0.14			<0.31		<0.005					<0.005											<0.25	<0.40		<5	<2.1	NA	NA	NA	NA	NA	NA
Methylene Chloride	75-09-2	mg/kg	4	400	4	700	4	700	7,000	<2.2		<2.3	<10	<1	<7.7					<18			<1.2		<0.05					<0.051											<1	NA		<20	<8.6	**0.5**	**1.1**	<0.4	**1.6**	<0.3	
Naphthalene**	91-20-3	mg/kg	20	500	20	1,000	20	3,000	10,000	**1.1**		**2.2**	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	<2.1	**0.2**	**0.1**	<0.1	**0.5**	<0.3	
n-Butylbenzene	104-51-8	mg/kg	--	--	--	--	--	--	--	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											**1.9**	NA		<5	<2.1	NA	NA	NA	NA	NA	NA
n-Propylbenzene	103-65-1	mg/kg	--	--	--	--	--	--	--	<0.55		**0.73**	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	<2.1	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	135-98-8	mg/kg	--	--	--	--	--	--	--	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											**0.3**	NA		<5	<2.1	NA	NA	NA	NA	NA	NA
Styrene	100-42-5	mg/kg	4	70	4	300	4	2,000	10,000	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	<2.1	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	98-06-6	mg/kg	--	--	--	--	--	--	--	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	<2.1	NA	NA	NA	NA	NA	NA
Tetrachloroethene	127-18-4	mg/kg	10	30	10	200	10	1,000	10,000	<0.55		<0.59	<2.6	<0.26	**8**					**31**			**0.59**		<0.005					<0.005											**2.1**	NA		**56**	<2.1	**2.6**	**1.5**	**4.7**	**1.7**	**0.1**	
Toluene**	108-88-3	mg/kg	500	500	1,000	1,000	2,000	3,000	10,000	**1.6**		<0.59	**12**	**1.5**	<1.9					**0.67**			**0.33**		**0.085**					<0.005											**1.2**	**38**		<5	**36**	**15**	**26**	**0.5**	**20**	< 0.2	
trans-1,2-Dichloroethene	156-60-5	mg/kg	1	500	1	1,000	1	3,000	10,000	<0.55		<0.59	<2.6	<0.26	<1.9					<4.5			<0.31		<0.005					<0.005											<0.25	NA		<5	<2.1	<0.2	<0.2	**0.3**	**0.2**	<0.1	
Trichloroethene	79-01-6	mg/kg	0	30	0	60	0	60	600	<0.55		<0.59	<2.6	<0.26	**19**					**10**			**2.2**		<0.005					**0.006**											**3**	NA		**67**	<2.1	**2.2**	**0.4**	**18**	**1.2**	**0.3**	
Trichlorofluoromethane	75-69-4	mg/kg	--	--	--	--	--	--	--	<1.1		<1.2	<5.2	<0.52	<3.9					<8.9			<0.62		<0.01					<0.01											<0.5	NA		<9.9	<4.3	NA	NA	NA	NA	NA	NA
Vinyl Chloride	75-01-4	mg/kg	1	1	1	7	1	60	600	<1.1		<1.2	<5.2	**0.94**	<3.9					<8.9			<0.62		**0.012**					<0.01											<0.5	NA		<9.9	<4.3	NA	NA	NA	NA	NA	NA
Xylenes, Total**	1330-20-7	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**14.3**		**0.78**	**5.4**	**0.3**	<1.9					<0.14			<0.31		**0.103**					<0.005											**0.49**	**15**		<5	**35.9**	**3.2**	**2.1**	<0.2	**7.3**	<0.1	

Notes

Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.

< = Analyte is not detected above the LRL presented.

* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

** = compounds analyzed by multiple methods - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

NA = Not analyzed.

-- = Not available.

mg/kg = milligrams per kilogram

UJ = non-detect estimated

J = Detected result is qualified as estimated. A plus or minus sign indicates the direction of potential bias, if known.

TABLE 7
SUMMARY OF SOIL VOC ANALYSES
Former Lewis Chemical, Boston, Massachusetts

Grid										20	21	21	22	22	22	22	23	23	27	27	28	28	28	28	28	28	B-1	B-1	B-1	B-1	B-3	B-3	B-3	B-3	B-3	B-3	C-1	C-1	C-3	C-3	D-1	D-1	3	3	3	3	3	4	4	4
Soil Boring										GP-3	GP-4	GP-4	GP-5	GP-5	GP-6	GP-6	GP-8	GP-8	GP-7	GP-7	GP-9	GP-9	GP-10	GP-10	GP-11	GP-11	SS-3	SS-3	SS-7	SS-7	SS-1	SS-1	SS-2	SS-2	SS-4	SS-4	SS-6	SS-6	SS-5	SS-5	SS-8	SS-8	G-3	G-3	G-3	G-3	G-3	G-4	G-4	G-4
Sample ID		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL		GP-3/0-3'	GP-4/0-3'	GP-4/3-5'	GP-5/0-3'	GP-5/6-8'	GP-6/0-3'	GP-6/6-8'	GP-8/0-3'	GP-8/10-12'	GP-7/0-3'	GP-7/7-10'	GP-9/0-3'	GP-9/10-12'	GP-10/0-3'	GP-10/10-12'	GP-11/0-3'	GP-11/10-12'	SS-3/0-3'	SS-3/3-5'	SS-7/0-3'	SS-7/3-4'	SS-1/0-3'	SS-1/3-4'	SS-2/0-3'	SS-2/3-5'	SS-4/0-3'	SS-4/3-4'	SS-6/0-3'	SS-6/3-5'	SS-5/0-3'	SS-5/3-5'	SS-8/0-3'	SS-8/3-5'	G-3 0.5	G-3 2.5	G-3 5	G-3 10	G-3 15	G-3 20	G-4 0.5	G-4 2.5	G-4 5
Sample Depth (feet)										0-3	0-3	3-5	0-3	6-8	0-3	6-8	0-3	10-12	0-3	7-10	0-3	10-12	0-3	10-12	0-3	10-12	0-3	3-5	0-3	3-4	0-3	3-5	0-3	3-4	0-3	3-5	0-3	3-5	0-3	3-5	0-3	3-5	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-20	0-0.5	0.5-2.5	2.5-5
Date Sampled										11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/25/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	11/26/2008	9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/30/2013
Analytes	**CAS No.**	**units**																																															
Volatile Organic Compounds																																																	
1,1,1-Trichloroethane	71-55-6	mg/kg	500	500	600	1,000	600	3,000	10,000	<0.2	**0.5**	**0.4**	<0.2	**0.3**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	NA	NA	NA	<0.1	NA	**370**	**160**	**8.2**	**8.4**	**4.1**	**0.2**	**59**	**76**	**100**	**1300**	**0.9**	**2.4**	**3.6**	**0.4**	**2.5**	**1**			**43**	**13**	**4.4**	<0.0014	<10		**6**
1,1,2-Trichloroethane	79-00-5	mg/kg	2	40	2	200	2	500	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<5.7	<0.23	<0.0014	<0.0014	<10		<0.59
1,1,2-Trichlorotrifluoroethane	76-13-1	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	75-34-3	mg/kg	9	500	9	1,000	9	1,000	10,000	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			**9.1**	**0.65**	**0.036**	<0.0014	<10		<0.59
1,1-Dichloroethene	75-35-4	mg/kg	40	500	40	1,000	40	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<5.7	<0.23	**0.0043**	<0.0029	<10		<0.59
1,2,4-Trichlorobenzene	120-82-1	mg/kg	6	700	6	3,000	6	5,000	10,000	<0.2	<0.2	**1.6**	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<11	<0.47	<0.007	<0.0072	<21		<1.2
1,2,4-Trimethylbenzene	95-63-6	mg/kg	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	NA	NA	NA	<0.1	NA	**52**	**21**	<0.8	<0.3	<0.3	<0.1	<1.5	<1.8	<15	**110**	**5.5**	**10**	<0.3	<0.1	**0.3**	**3.1**			<5.7	**3.7**	**0.071**	<0.0014	<10		<0.59
1,2-Dichlorobenzene	95-50-1	mg/kg	100	300	100	300	100	300	10,000	<0.2	**0.6**	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	NA	NA	NA	<0.1	NA	<13	<11	<0.8	**0.5**	<0.1	<0.3	<0.1	<1.5	**70**	**340**	<0.1	**1**	<0.3	<0.1	**0.3**	**0.5**			<5.7	**0.77**	**0.016**	<0.0014	**29**		**4.6**
1,2-Dichloroethane	107-06-2	mg/kg	0	20	0	100	0	300	9,000	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	NA	NA	NA	<0.1	NA	<13	<11	**1.6**	<0.3	<0.3	<0.1	<1.5	<1.8	<15	<72	**0.8**	<0.8	<0.3	<0.1	**0.4**	<0.2			<5.7	<0.23	<0.0014	<0.0014	<10		<0.59
1,3,5-Trimethylbenzene	108-67-8	mg/kg	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	NA	NA	NA	<0.1	NA	**27**	**12**	<0.8	<0.3	<0.3	<0.1	<1.5	<1.8	**24**	**110**	**3.2**	**4.4**	<0.3	<0.1	<0.3	**1.2**			<5.7	**1**	**0.019**	<0.0014	<10		<0.59
1,3-Dichlorobenzene	541-73-1	mg/kg	100	100	200	500	200	500	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	106-46-7	mg/kg	1	80	1	400	1	2,000	10,000	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<5.7	<0.23	<0.0014	<0.0014	<10		<0.59
1,4-Dioxane	123-91-1	mg/kg	6	20	6	90	6	500	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 330	< 270	**21**	**14**	<7	< 4	< 37	< 45	< 370	< 1800	< 4	< 19	< 7	< 3	<7	<4			<280	<12	<0.14	<0.14	<520		<29
2-Butanone	78-93-3	mg/kg	50	400	50	400	50	400	10,000	<0.5	<0.5	<0.6	<0.5	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.7	<0.6	NA	NA	NA	NA	<0.4	NA	<39	<32.6	<2.4	<0.9	<0.8	<0.4	<4.4	<5.4	<43.9	<220	**0.5**	<2.3	<0.8	<0.4	**1.6**	<0.5			<110	<4.7	<0.028	<0.029	<210		<12
4-Isopropyltoluene	99-87-6	mg/kg	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.1	<0.1	NA	NA	NA	NA	<0.1	NA	<13	<11	<0.8	<0.3	<0.3	<0.1	<1.5	<1.8	<15	<72	**0.4**	**1.2**	<0.3	<0.1	<0.3	<0.2			<5.7	**0.5**	**0.0091**	<0.0014	<10		<0.59
4-Methyl-2-pentanone	108-10-1	mg/kg	50	400	50	400	50	400	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<57	<2.3	<0.014	<0.014	<100		<5.9
Acetone	67-64-1	mg/kg	50	400	50	400	50	400	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<280	<12	<0.07	<0.072	<520		<29
Benzene**	71-43-2	mg/kg	40	40	200	200	400	1,000	10,000	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA	NA	NA	NA	**0.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<5.7	<0.23	<0.0014	<0.0014	<10		<0.59
Bromoform	75-25-2	mg/kg	1	300	1	800	1	800	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<28	<1.2	<0.007	<0.0072	<52		<2.9
Carbon Disulfide	75-15-0	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<57	<2.3	<0.0042	<0.0043	<100		<5.9
Chlorobenzene	108-90-7	mg/kg	3	100	3	100	3	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<5.7	<0.23	**0.0025**	<0.0014	<10		<0.59
Chloroethane	75-00-3	mg/kg	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<11	<0.47	<0.007	<0.0072	<21		<1.2
cis-1,2-Dichloroethene	156-59-2	mg/kg	0	100	0	500	0	500	5,000	<0.2	<0.2	<0.2	<0.2	**2.5**	<0.1	<0.1	<0.1	<0.1	<0.1	**0.9**	**0.3**	NA	NA	NA	<0.1	NA	**130**	**51**	**1.5**	**2.4**	**2**	**0.4**	**3.8**	**4.1**	<15	<72	**1.8**	**3.3**	**1.3**	**0.2**	**8.9**	**6.2**			**36**	**1.3**	**0.051**	<0.0014	<10		**5.4**
Dichlorodifluoromethane	75-71-8	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<11	<0.47	<0.007	<0.0072	<21		<1.2
Ethylbenzene**	100-41-4	mg/kg	500	500	1,000	1,000	1,000	3,000	10,000	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	NA	NA	NA	<0.1	NA	**47**	**21**	<0.3	**0.8**	<0.1	<0.1	**1.5**	**2.7**	<2.9	<14	**0.2**	**1.6**	<0.1	<0.1	<0.1	**0.2**			**27**	**7.7**	**1.5**	<0.0014	<10		<0.59
Hexachlorobutadiene	87-68-3	mg/kg	30	30	100	100	100	100	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<13	<11	<0.8	<0.3	< 0.3	<0.1	<1.5	<1.8	<15	<72	**0.2**	<0.8	<0.3	<0.1	<0.3	<0.2			<5.7	<0.23	<0.0028	<0.0029	<10		<0.59
Isopropylbenzene	98-82-8	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<5.7	<0.23	**0.0025**	<0.0014	<10		<0.59
Methyl tert-butyl ether**	1634-04-4	mg/kg	100	100	100	500	100	500	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<5.7	<0.23	<0.0028	<0.0029	<10		<0.59
Methylene Chloride	75-09-2	mg/kg	4	400	4	700	4	700	7,000	<0.5	<0.4	**0.7**	<0.4	<0.3	<0.3	<0.4	<0.3	<0.4	<0.4	<0.6	<0.5	NA	NA	NA	<0.4	NA	<33	<27	<2	<0.7	**3.2**	<0.4	**5.7**	**11**	<37	<180	**5.9**	**2.2**	**0.8**	<0.3	**0.8**	<0.4			<28	<1.2	<0.007	<0.0072	<52		<2.9
Naphthalene**	91-20-3	mg/kg	20	500	20	1,000	20	3,000	10,000	**1.2**	<0.1	**0.1**	<0.4	**2.1**	<0.3	<0.4	<0.3	<0.4	<0.4	<0.4	**0.3**	**0.7**	<2.1	<0.5	<0.5	<0.4	<0.5	**1.2**	**4.1**	<0.1	**0.5**	<0.1	< 0.4	**0.2**	**0.7**	**0.4**	**3.7**	**3.6**	**4.1**	<0.3	< 0.3	<0.1	**0.6**			<28	<1.2	**0.0071**	<0.0072	<52		<2.9
n-Butylbenzene	104-51-8	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<5.7	**0.24**	<0.007	<0.0029	**15**		**2.4**
n-Propylbenzene	103-65-1	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**15**	< 11	< 0.8	< 0.3	< 0.3	< 0.1	< 1.5	< 1.8	< 15	< 72	**0.5**	**1**	< 0.3	< 0.1	< 0.3	**0.4**			<5.7	**0.32**	**0.0065**	<0.0014	<10		<0.59
sec-Butylbenzene	135-98-8	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 13	< 11	< 0.8	**0.5**	< 0.3	< 0.1	< 1.5	< 1.8	< 15	< 72	**2.9**	**1.8**	< 0.3	< 0.1	< 0.3	< 0.2			<5.7	<0.23	**0.0015**	<0.0014	<10		<0.59
Styrene	100-42-5	mg/kg	4	70	4	300	4	2,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<5.7	<0.23	<0.0014	<0.0014	<10		<0.59
tert-Butylbenzene	98-06-6	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<5.7	<0.23	<0.0014	<0.0014	<10		<0.59
Tetrachloroethene	127-18-4	mg/kg	10	30	10	200	10	1,000	10,000	**0.4**	**6.4**	**3.4**	**0.2**	**2.5**	**0.3**	**0.9**	<0.1	<0.1	<0.1	<0.2	**0.2**	NA	NA	NA	<0.1	NA	**1400**	**710**	**160**	**50**	**52**	**1.8**	**170**	**210**	**1600**	**8000**	**21**	**43**	**77**	**9.1**	**43**	**16**			**16**	**0.69**	**0.04**	<0.0014	**420**		**42**
Toluene**	108-88-3	mg/kg	500	500	1,000	1,000	2,000	3,000	10,000	<0.2	**0.5**	**0.9**	<0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	<0.2	< 0.2	NA	NA	NA	< 0.1	NA	**13**	<11	**1.9**	**0.7**	**0.7**	<0.1	**4.1**	**11**	<2.9	<14	**0.3**	**0.6**	**1**	<0.1	**2.5**	**2**			**110**	**7.1**	**2.7**	<0.0014	<10		<0.59
trans-1,2-Dichloroethene	156-60-5	mg/kg	1	500	1	1,000	1	3,000	10,000	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	NA	NA	NA	<0.1	NA	< 13	< 11	< 0.8	< 0.3	< 0.3	< 0.1	< 1.5	< 1.8	< 15	< 72	< 0.1	< 0.8	< 0.3	< 0.1	< 0.3	**0.2**			<5.7	<0.23	<0.0014	<0.0014	<10		<0.59
Trichloroethene	79-01-6	mg/kg	0	30	0	60	0	60	600	**0.2**	**2**	**1.1**	<0.2	**2.1**	<0.1	**0.5**	<0.1	<0.1	<0.1	**6.6**	**1.6**	NA	NA	NA	<0.1	NA	**1600**	**780**	**23**	**8.6**	**40**	**1.2**	**180**	**220**	**200**	**1900**	**4.9**	**2.3**	**21**	**1.2**	**1.5**	**0.5**			<5.7	<0.23	<0.0014	<0.0014	**39**		**8.2**
Trichlorofluoromethane	75-69-4	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<11	<0.47	<0.007	<0.0072	<21		<1.2
Vinyl Chloride	75-01-4	mg/kg	1	1	1	7	1	60	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<11	<0.47	<0.007	<0.0072	<21		<1.2
Xylenes, Total**	1330-20-7	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	<0.2	<0.2	<0.2	**0.2**	<0.1	<0.1	<0.1	**0.2**	**0.2**	**0.2**	<0.2	<0.2	NA	NA	NA	<0.1		**149**	**66**	**0.4**	**1.7**	**0.5**	<0.1	**314.3**	**13.3**	**25**	**130**	**1.7**	**6.5**	**0.2**	<0.1	**1**	**1.8**			**53.9**	**17.3**	**2.581**	<0.0043	<31		<1.79

Notes
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
** = compounds analyzed by multiple methods - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
NA = Not analyzed.
-- = Not available.
mg/kg = milligrams per kilogram
UJ = non-detect estimated
J = Detected result is qualified as estimated. A plus or minus sign indicates the direction of potential bias, if known.

TABLE 7
SUMMARY OF SOIL VOC ANALYSES
Former Lewis Chemical, Boston, Massachusetts

Grid									4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	16	16	16	16	17	17	17	17	18	18	18
Soil Boring									G-4	G-4	G-4	G-4	G-5	G-5	G-5	G-5	G-5	G-5	G-6	G-6	G-6	G-6	G-6	G-6	G-7	G-7	G-7	G-7	G-7	G-8	G-8	G-8	G-8	G-8	G-9	G-9	G-9	G-9	G-9	G-16	G-16	G-16	G-16	G-17	G-17	G-17	G-17	G-18	G-18	G-18
Sample ID		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	G-4 10	G-4 15	G-4 20	G-4 20+	G-5 0.5	G-5 2.5	G-5 5	G-5 10	G-5 15	G-5 20	G-6 0.5	G-6 2.5	G-6 5	G-6 10	G-6 15	G-6 20	G-7 0.5	G-7 2.5	G-7 5	G-7 10	G-7 15	G-8 0.5	G-8 2.5	G-8 5	G-8 10	G-8 15	G-9 0.5	G-9 2.5*	G-9 5*	G-9 10	G-9 15	G-16 0.5	G-16 2.5	G-16 5	G-16 10	G-17 0.5	G-17 2.5	G-17 5	G-17 10	G-18 0.5	G-18 2.5	G-18 5
Sample Depth (feet)									5-10	10-15	15-20	20-21	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-16	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-16	0-0.5	0.5-2.5	2.5-5	5-10	10-15	0-0.5	0.5-2.5	2.5-5	5-10	10-13	0-0.5	0.5-2.5	2.5-5	5-10	10-14	0-0.5	0.5-2.5	2.5-5	5-10	0-0.5	0.5-2.5	2.5-5	5-10	0-0.5	0.5-2.5	2.5-5
Date Sampled									9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/27/2013	9/30/2013	9/30/2013	9/30/2013	9/30/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013
Analytes	**CAS No.**	**units**																																														
Volatile Organic Compounds																																																
1,1,1-Trichloroethane	71-55-6	mg/kg	500	500	600	1,000	600	3,000	10,000	**180**	**4**	<0.0012	<0.0014	**0.073**		**200**	**310**	**7.5**	**0.1**			**0.02**	**8.5**	**170**	**0.018**			**0.0039**	**0.0028**	<0.0014			**0.0049**	**0.011**	<0.0015			**0.002**	<0.0019	<0.0027										
1,1,2-Trichloroethane	79-00-5	mg/kg	2	40	2	200	2	500	5,000	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	<0.16	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	<0.0025	<0.0015			<0.0014	<0.0019	<0.0027										
1,1,2-Trichlorotrifluoroethane	76-13-1	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	75-34-3	mg/kg	9	500	9	1,000	9	1,000	10,000	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	<0.16	<0.039			**0.0023**	<0.17	<7.4	<0.0012			**0.0039**	**0.01**	**0.014**			**0.0033**	**0.0071**	**0.0048**			<0.0014	<0.0019	**0.0028**										
1,1-Dichloroethene	75-35-4	mg/kg	40	500	40	1,000	40	3,000	10,000	<6.1	<0.17	<0.0024	<0.0028	<0.0041		<8.4	<6.9	<0.16	<0.039			<0.0035	<0.17	<7.4	<0.0024			<0.0044	<0.0034	<0.0029			<0.0039	<0.0049	<0.0029			<0.0027	<0.0038	<0.0054										
1,2,4-Trichlorobenzene	120-82-1	mg/kg	6	700	6	3,000	6	5,000	10,000	<12	<0.34	<0.0059	<0.0069	<0.01		<17	<14	<0.32	<0.078			<0.0086	<0.34	<7.4	<0.0059			<0.011	<0.0086	<0.0071			<0.0097	<0.012	<0.0073			<0.0068	<0.0095	<0.013										
1,2,4-Trimethylbenzene	95-63-6	mg/kg	--	--	--	--	--	--	--	<6.1	<0.17	<0.0012	<0.0014	<0.0021		**9.3**	<6.9	**0.6**	**0.063**			<0.0017	**0.26**	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	**0.024**	**0.014**			<0.0014	<0.0019	<0.0027										
1,2-Dichlorobenzene	95-50-1	mg/kg	100	300	100	300	100	300	10,000	**26**	**0.81**	<0.0012	<0.0014	<0.0021		<8.4	<6.9	<0.16	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	**0.0053**			**0.0077**	**60**	**2.9**			**0.0037**	**0.19**	**0.021**										
1,2-Dichloroethane	107-06-2	mg/kg	0	20	0	100	0	300	9,000	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	<0.16	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	<0.0025	<0.0015			<0.0014	<0.0019	<0.0027										
1,3,5-Trimethylbenzene	108-67-8	mg/kg	--	--	--	--	--	--	--	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	**0.2**	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	**0.0036**	**0.0025**			<0.0014	<0.0019	<0.0027										
1,3-Dichlorobenzene	541-73-1	mg/kg	100	100	200	500	200	500	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	106-46-7	mg/kg	1	80	1	400	1	2,000	10,000	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	<0.16	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	**0.011**	**0.0054**			<0.0014	<0.0019	<0.0027										
1,4-Dioxane	123-91-1	mg/kg	6	20	6	90	6	500	5,000	<300	<8.5	<0.12	<0.14	<0.21		<420	<350	<8	<1.9			<0.17	<8.4	<370	<0.12			<0.22	<0.17	<0.14			<0.19	<0.25	<0.15			<0.14	<0.19	<0.27										
2-Butanone	78-93-3	mg/kg	50	400	50	400	50	400	10,000	<120	<3.4	<0.024	<0.028	<0.041		<170	<140	<3.2	<0.78			<0.035	<3.4	<150	<0.024			<0.044	<0.034	<0.029			<0.039	<0.049	<0.029			<0.027	<0.038	<0.054										
4-Isopropyltoluene	99-87-6	mg/kg	--	--	--	--	--	--	--	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	**0.46**	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	<0.0025	<0.0015			<0.0014	<0.0019	<0.0027										
4-Methyl-2-pentanone	108-10-1	mg/kg	50	400	50	400	50	400	10,000	<61	<1.7	<0.012	<0.014	<0.021		<84	<69	<1.6	<0.39			<0.017	<1.7	<74	<0.012			<0.022	<0.017	<0.014			<0.019	<0.025	<0.015			<0.014	<0.019	<0.027										
Acetone	67-64-1	mg/kg	50	400	50	400	50	400	10,000	<300	<8.5	<0.059	<0.069	<0.1		<420	<350	<8	<1.9			<0.086	<8.4	<370	<0.059			<0.11	<0.086	<0.071			<0.097	<0.12	<0.073			<0.068	<0.095	<0.13										
Benzene**	71-43-2	mg/kg	40	40	200	200	400	1,000	10,000	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	<0.16	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	<0.0025	<0.0015			<0.0014	<0.0019	<0.0027										
Bromoform	75-25-2	mg/kg	1	300	1	800	1	800	10,000	<30	<0.85	<0.0059	<0.0069	<0.01		<42	<35	<0.8	<0.19			<0.0086	<0.84	<74	<0.0059			<0.011	<0.0086	<0.0071			<0.0097	<0.012	<0.0073			<0.0068	<0.0095	<0.013										
Carbon Disulfide	75-15-0	mg/kg	--	--	--	--	--	--	--	<61	<1.7	<0.0035	<0.0041	<0.0062		<84	<69	<1.6	<0.39			<0.0052	<1.7	<74	<0.0036			<0.0066	<0.0051	<0.0043			<0.0058	<0.0074	<0.0044			<0.0041	<0.0057	<0.008										
Chlorobenzene	108-90-7	mg/kg	3	100	3	100	3	100	10,000	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	<0.16	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	**0.0038**	**0.0063**			<0.0014	<0.0019	**0.0028**										
Chloroethane	75-00-3	mg/kg	--	--	--	--	--	--	--	<12	<0.34	<0.0059	<0.0069	<0.01		<17	<14	<0.32	<0.078			<0.0086	<0.34	<15	<0.0059			<0.011	<0.0086	<0.0071			<0.0097	<0.012	<0.0073			<0.0068	<0.0095	<0.013										
cis-1,2-Dichloroethene	156-59-2	mg/kg	0	100	0	500	0	500	5,000	**14**	**0.37**	<0.0012	<0.0014	**0.053**		**10**	**12**	**0.23**	<0.039			**0.038**	**1.9**	**61**	**0.0049**			**0.0076**	<0.0017	**0.004**			**0.0066**	<0.0025	<0.0015			**0.0059**	<0.0019	<0.0027										
Dichlorodifluoromethane	75-71-8	mg/kg	--	--	--	--	--	--	--	<12	<0.34	<0.0059	<0.0069	<0.01		<17	<14	<0.32	<0.078			<0.0086	<0.34	<15	<0.0059			<0.011	<0.0086	<0.0071			<0.0097	<0.012	<0.0073			<0.0068	<0.0095	<0.013										
Ethylbenzene**	100-41-4	mg/kg	500	500	1,000	1,000	1,000	3,000	10,000	**8.7**	**0.18**	<0.0012	<0.0014	<0.0021		**13**	<6.9	**0.32**	<0.039			<0.0017	**0.28**	<7.4	<0.0012			<0.0022	**0.0066**	**0.0018**			<0.0019	**0.025**	**0.064**			<0.0014	<0.0019	<0.0027										
Hexachlorobutadiene	87-68-3	mg/kg	30	30	100	100	100	100	1,000	<6.1	<0.17	<0.0024	<0.0028	<0.0041		<8.4	<6.9	<0.16	<0.039			<0.0035	<0.17	<7.4	<0.0024			<0.0044	<0.0034	<0.0029			<0.0039	<0.0049	<0.0029			<0.0027	<0.0038	<0.0054										
Isopropylbenzene	98-82-8	mg/kg	--	--	--	--	--	--	--	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	<0.16	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	<0.0025	<0.0015			<0.0014	<0.0019	<0.0027										
Methyl tert-butyl ether**	1634-04-4	mg/kg	100	100	100	500	100	500	5,000	<6.1	<0.17	<0.0024	<0.0028	<0.0041		<8.4	<6.9	<0.16	<0.039			<0.0035	<0.17	<7.4	<0.0024			<0.0044	<0.0034	<0.0029			<0.0039	<0.0049	<0.0029			<0.0027	<0.0038	<0.0054										
Methylene Chloride	75-09-2	mg/kg	4	400	4	700	4	700	7,000	<30	<0.85	<0.0059	<0.0069	**0.026**		<42	<35	<0.8	<0.19			<0.0086	<0.84	<37	<0.0059			<0.011	<0.0086	<0.0071			<0.0097	<0.012	<0.0073			<0.0068	<0.0095	<0.013										
Naphthalene**	91-20-3	mg/kg	20	500	20	1,000	20	3,000	10,000	<30	<0.85	<0.0059	<0.0069	<0.01		<42	<35	<0.8	<0.19			<0.0086	<0.84	<15	<0.0059			<0.011	<0.0086	<0.0071			<0.0097	**0.013**	<0.0073			<0.0068	<0.0095	<0.013										
n-Butylbenzene	104-51-8	mg/kg	--	--	--	--	--	--	--	<6.1	<0.17	<0.0059	<0.0069	<0.0041		<8.4	<6.9	**13**	**0.65**			<0.0086	**1.6**	<7.4	<0.0059			<0.011	<0.0034	<0.0029			<0.0039	<0.0049	<0.0029			<0.0027	<0.0038	<0.0054										
n-Propylbenzene	103-65-1	mg/kg	--	--	--	--	--	--	--	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	**0.19**	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	**0.0036**	<0.0015			<0.0014	<0.0019	<0.0027										
sec-Butylbenzene	135-98-8	mg/kg	--	--	--	--	--	--	--	<6.1	<0.17	<0.0012	**0.0019**	<0.0021		<8.4	<6.9	**1.4**	**0.084**			<0.0017	**0.18**	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	<0.0025	<0.0015			<0.0014	<0.0019	<0.0027										
Styrene	100-42-5	mg/kg	4	70	4	300	4	2,000	10,000	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	<0.16	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	<0.0025	<0.0015			<0.0014	<0.0019	<0.0027										
tert-Butylbenzene	98-06-6	mg/kg	--	--	--	--	--	--	--	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	<0.16	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	<0.0025	<0.0015			<0.0014	<0.0019	<0.0027										
Tetrachloroethene	127-18-4	mg/kg	10	30	10	200	10	1,000	10,000	**150**	**4.4**	**0.0012**	**0.0056**	**0.044**		**150**	**120**	**6.4**	**0.14**			**0.019**	**21**	**270**	**0.025**			<0.0022	<0.0017	<0.0014			**0.039**	**0.0027**	**0.0032**			**0.0024**	<0.0019	<0.0027										
Toluene**	108-88-3	mg/kg	500	500	1,000	1,000	2,000	3,000	10,000	**11**	**0.31**	<0.0012	<0.0014	**0.013**		**450**	**170**	**2.6**	**0.05**			**0.011**	**6**	**81**	**0.0067**			**0.0031**	**0.0023**	**0.0023**			**0.0031**	<0.0025	<0.0015			**0.0055**	<0.0019	<0.0027										
trans-1,2-Dichloroethene	156-60-5	mg/kg	1	500	1	1,000	1	3,000	10,000	<6.1	<0.17	<0.0012	<0.0014	<0.0021		<8.4	<6.9	<0.16	<0.039			<0.0017	<0.17	<7.4	<0.0012			<0.0022	<0.0017	<0.0014			<0.0019	<0.0025	<0.0015			<0.0014	<0.0019	<0.0027										
Trichloroethene	79-01-6	mg/kg	0	30	0	60	0	60	600	**160**	**3.6**	<0.0012	<0.0014	**0.12**		**500**	**510**	**7.4**	**0.11**			**0.011**	**2.9**	**88**	**0.0089**			<0.0022	<0.0017	<0.0014			**0.0088**	<0.0025	<0.0015			**0.0015**	<0.0019	<0.0027										
Trichlorofluoromethane	75-69-4	mg/kg	--	--	--	--	--	--	--	<12	<0.34	<0.0059	<0.0069	<0.01		<17	<14	<0.32	<0.078			<0.0086	<0.34	<15	<0.0059			<0.011	<0.0086	<0.0071			<0.0097	<0.012	<0.0073			<0.0068	<0.0095	<0.013										
Vinyl Chloride	75-01-4	mg/kg	1	1	1	7	1	60	600	<12	<0.34	<0.0059	<0.0069	<0.01		<17	<14	<0.32	<0.078			<0.0086	<0.34	<15	<0.0059			<0.011	<0.0086	<0.0071			<0.0097	<0.012	<0.0073			<0.0068	<0.0095	<0.013										
Xylenes, Total**	1330-20-7	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**18**	**0.43**	<0.0036	<0.0042	<0.0062		**67**	**32.3**	**1.3**	<0.117			<0.0052	**1.21**	<22.4	<0.0036			<0.0066	**0.0094**	<0.0043			<0.0058	**0.0341**	**0.0414**			<0.0041	<0.0057	<0.0081										

Notes
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
** = compounds analyzed by multiple methods - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
NA = Not analyzed.
-- = Not available
mg/kg = milligrams per kilogram
UJ = non-detect estimated
J = Detected result is qualified as estimated. A plus or minus sign indicates the direction of potential bias, if known.

TABLE 7
SUMMARY OF SOIL VOC ANALYSES
Former Lewis Chemical, Boston, Massachusetts

Grid			S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	18	19	19	19	19	20	20	20	20	24	24	24	24	A-1	A-1	A-1	A-1	A-1	A-1	A-2	A-2	A-2	A-2	A-2	A-2	A-2	A-2	A-3	A-3	A-3	A-3	A-3	A-3	B-1	B-1	B-1	B-1	B-1	B-1	B-2	B-2	B-2	B-2	B-2
Soil Boring										G-18	G-19	G-19	G-19	G-19	G-20	G-20	G-20	G-20	G-24	G-24	G-24	G-24	G-A-1	G-A-1	G-A-1	G-A-1	G-A-1	G-A-1	G-A-2	G-A-2	G-A-2	G-A-2	G-A-2	G-A-2	G-A-2	G-A-2	G-A-3	G-A-3	G-A-3	G-A-3	G-A-3	G-A-3	G-B-1	G-B-1	G-B-1	G-B-1	G-B-1	G-B-1	G-B-2	G-B-2	G-B-2	G-B-2	G-B-2
Sample ID										G-18 10	G-19 0.5	G-19 2.5	G-19 5	G-19 10	G-20 0.5	G-20 2.5	G-20 5	G-20 10	G-24 0.5	G-24 2.5	G-24 5	G-24 10	G-A-1 2.5	G-A-1 5	G-A-1 10	G-A-1 15	G-A-1 20	G-A-1 20+	G-A-2 0.5	G-A-2 2.5	G-A-2 10	G-A-2 20	G-A-2 20+	G-A-3 0.5	G-A-3 2.5	G-A-3 5	G-A-3 10	G-A-3 15	G-A-3 15+	G-B-1 0.5	G-B-1 2.5	G-B-1 5	G-B-1 10	G-B-1 15	G-B-1 15+	G-B-2 0.5	G-B-2 2.5	G-B-2 5	G-B-2 10	G-B-2 15
Sample Depth (feet)										5-10	0-0.5	0.5-2.5	2.5-5	5-10	0-0.5	0.5-2.5	2.5-5	5-10	0-0.5	0.5-2.5	2.5-5	5-10	0.5-2.5	2.5-5	5-10	10-15	15-20	20-21.5	0-0.5	0.5-2.5	2.5-5	5-10	15-20	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-18.5	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-18	0-0.5	0.5-2.5	2.5-5	5-10	10-15
Date Sampled										9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	10/1/2013	10/1/2013	10/1/2013	10/1/2013	10/1/2013	10/1/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	10/1/2013	10/1/2013	10/1/2013	10/1/2013	10/1/2013	10/1/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013
Analytes	**CAS No.**	**units**																																																			
Volatile Organic Compounds																																																				
1,1,1-Trichloroethane	71-55-6	mg/kg	500	500	600	1,000	600	3,000	10,000								<0.083	<0.0013						<0.46	**0.31**	**10**	**0.0079**	**0.0045**	<0.0015						**0.051**	**0.72**	<0.0016	<0.0014		**0.0087**	**0.016**	<0.46	<0.0014	<0.0014				**12**	**1100**	**230**	**0.62**				**7.3**	**2.8**	**1**
1,1,2-Trichloroethane	79-00-5	mg/kg	2	40	2	200	2	500	5,000								<0.083	<0.0013						<0.46	<0.17	<0.7	<0.0013	<0.0014	<0.0015						<0.036	<0.57	<0.0016	<0.0014		<0.0017	<0.0015	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
1,1,2-Trichlorotrifluoroethane	76-13-1	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	75-34-3	mg/kg	9	500	9	1,000	9	1,000	10,000								<0.083	<0.0013						<0.46	<0.17	**1.1**	**0.0024**	<0.0014	<0.0015						**0.24**	**1.6**	<0.0016	<0.0014		<0.0017	<0.0015	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	**3.4**	**0.52**
1,1-Dichloroethene	75-35-4	mg/kg	40	500	40	1,000	40	3,000	10,000								<0.083	<0.0026						<0.46	<0.17	<0.7	<0.0026	<0.0028	<0.0031						<0.036	<0.57	<0.0031	<0.0028		<0.0035	<0.0029	<0.46	<0.0027	<0.0027				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
1,2,4-Trichlorobenzene	120-82-1	mg/kg	6	700	6	3,000	6	5,000	10,000								<0.17	<0.0065						<0.93	<0.34	<1.4	<0.0064	<0.007	<0.0077						<0.036	<0.57	<0.0078	<0.007		<0.0086	<0.0073	<0.91	<0.0068	<0.0069				<0.91	<16	<3.9	<0.044				<8.9	<3.4	<1.1
1,2,4-Trimethylbenzene	95-63-6	mg/kg	--	--	--	--	--	--	--								**0.089**	**0.038**						<0.46	**0.22**	**3.3**	**0.0073**	**0.0034**	<0.0015						**0.052**	<0.57	<0.0031	<0.0028		<0.0017	**0.045**	<0.46	<0.0014	<0.0014				<0.91	**20**	**4.8**	**0.045**				**2.2**	<0.69	<0.22
1,2-Dichlorobenzene	95-50-1	mg/kg	100	300	100	300	100	300	10,000								<0.083	<0.0013						**0.7**	**1.7**	**9.4**	**0.027**	**0.015**	<0.0015						**0.97**	<0.57	<0.0016	<0.0014		<0.0017	**0.012**	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	**2.1**	<0.22
1,2-Dichloroethane	107-06-2	mg/kg	0	20	0	100	0	300	9,000								<0.083	<0.0013						<0.46	<0.17	<0.7	<0.0013	<0.0014	<0.0015						<0.18	<2.8	<0.0016	<0.0014		**0.0024**	<0.0015	<0.46	<0.0014	<0.0014				<4.6	<80	<19	<0.22				<1.8	<0.69	<0.22
1,3,5-Trimethylbenzene	108-67-8	mg/kg	--	--	--	--	--	--	--								**0.12**	**0.0095**						<0.46	<0.17	**1.5**	**0.0028**	<0.0014	<0.0015						**0.039**	<0.57	<0.0016	<0.0014		<0.0017	**0.011**	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
1,3-Dichlorobenzene	541-73-1	mg/kg	100	100	200	500	200	500	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	106-46-7	mg/kg	1	80	1	400	1	2,000	10,000								<0.083	<0.0013						<0.46	<0.17	<0.7	**0.0015**	<0.0014	<0.0015						**0.061**	<0.57	<0.0016	<0.0014		<0.0017	<0.0015	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
1,4-Dioxane	123-91-1	mg/kg	6	20	6	90	6	500	5,000								<4.1	<0.13						<23	<8.5	<35	<0.13	<0.14	<0.15						<1.8	<28	<0.078	<0.07		<0.17	<0.15	<23	<0.14	<0.14				<46	<800	<190	<2.2				<89	<34	<11
2-Butanone	78-93-3	mg/kg	50	400	50	400	50	400	10,000								<1.7	<0.026						<9.3	<3.4	<14	<0.026	<0.028	<0.031						<0.72	<11	<0.031	<0.028		<0.035	<0.029	<9.1	<0.027	<0.027				<18	<320	<78	<0.87				<36	<14	<4.3
4-Isopropyltoluene	99-87-6	mg/kg	--	--	--	--	--	--	--								**0.12**	**0.0038**						<0.46	<0.17	<0.7	<0.0013	<0.0014	<0.0015						<0.036	<0.57	<0.0016	<0.0014		<0.0017	**0.0035**	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
4-Methyl-2-pentanone	108-10-1	mg/kg	50	400	50	400	50	400	10,000								<0.83	<0.013						<4.6	<1.7	<7	<0.013	<0.014	<0.015						<0.36	<5.7	<0.016	<0.014		<0.017	<0.015	<4.6	<0.014	<0.014				<9.1	<160	<39	<0.44				<18	<6.9	<2.2
Acetone	67-64-1	mg/kg	50	400	50	400	50	400	10,000								<4.1	<0.065						<23	<8.5	<35	<0.064	<0.07	<0.077						<1.8	<28	<0.078	<0.07		<0.086	<0.073	<23	<0.068	<0.069				<46	<800	<190	<2.2				<89	<34	<11
Benzene**	71-43-2	mg/kg	40	40	200	200	400	1,000	10,000								<0.083	<0.0013						<0.46	<0.17	<0.7	<0.0013	<0.0014	<0.0015						<0.036	<0.57	<0.0016	<0.0014		<0.0017	<0.0015	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
Bromoform	75-25-2	mg/kg	1	300	1	800	1	800	10,000								<0.41	<0.0065						<2.3	<0.85	<3.5	<0.0064	<0.007	<0.0077						<0.036	<0.57	<0.0078	<0.007		<0.0086	<0.0073	<2.3	<0.0068	<0.0069				<4.6	<80	<19	<0.22				<8.9	<3.4	<1.1
Carbon Disulfide	75-15-0	mg/kg	--	--	--	--	--	--	--								<0.83	<0.0039						<4.6	<1.7	<7	<0.0038	<0.0042	<0.0046						<0.36	<5.7	<0.0047	<0.0042		<0.0052	<0.0044	<4.6	<0.0041	<0.0041				<9.1	<160	<39	<0.44				<18	<6.9	<2.2
Chlorobenzene	108-90-7	mg/kg	3	100	3	100	3	100	10,000								<0.083	<0.0013						<0.46	<0.17	<0.7	<0.0013	<0.0014	<0.0015						<0.036	<0.57	<0.0016	<0.0014		<0.0017	<0.0015	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
Chloroethane	75-00-3	mg/kg	--	--	--	--	--	--	--								<0.17	<0.0065						<0.93	<0.34	<1.4	<0.0064	<0.007	<0.0077						**0.2**	<1.1	<0.0078	<0.007		<0.0086	<0.0073	<0.91	<0.0068	<0.0069				<1.8	<32	<7.8	<0.087				<3.6	<1.4	<0.43
cis-1,2-Dichloroethene	156-59-2	mg/kg	0	100	0	500	0	500	5,000								<0.083	<0.0013						**2.6**	**1.4**	**25**	**0.052**	**0.013**	<0.0015						**0.43**	**43**	**0.005**	<0.0014		**0.0076**	**5**	**3.8**	**0.004**	**0.0038**				**9.6**	**31**	**9.5**	<0.044				<1.8	**56**	**8.9**
Dichlorodifluoromethane	75-71-8	mg/kg	--	--	--	--	--	--	--								<0.17	<0.0065						<0.93	<0.34	<1.4	<0.0064	<0.007	<0.0077						<0.072	<1.1	<0.0078	<0.007		<0.0086	<0.0073	<0.91	<0.0068	<0.0069				<1.8	<32	<7.8	<0.087				<3.6	<1.4	<0.43
Ethylbenzene**	100-41-4	mg/kg	500	500	1,000	1,000	1,000	3,000	10,000								<0.083	**0.037**						<0.46	**0.28**	**8.7**	**0.0099**	**0.0074**	<0.0015						**0.44**	**2.5**	<0.0016	<0.0014		<0.0017	**0.024**	**0.6**	<0.0014	<0.0014				<0.91	**53**	**6.8**	<0.044				<1.8	**1**	<0.22
Hexachlorobutadiene	87-68-3	mg/kg	30	30	100	100	100	100	1,000								<0.083	<0.0026						<0.46	<0.17	<0.7	<0.0026	<0.0028	<0.0031						<0.036	<0.57	<0.0031	<0.0028		<0.0035	<0.0029	<0.46	<0.0027	<0.0027				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
Isopropylbenzene	98-82-8	mg/kg	--	--	--	--	--	--	--								<0.083	**0.0052**						<0.46	<0.17	<0.7	<0.0013	<0.0014	<0.0015						<0.036	<0.57	<0.0016	<0.0014		<0.0017	<0.0015	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
Methyl tert-butyl ether**	1634-04-4	mg/kg	100	100	100	500	100	500	5,000								<0.083	<0.0026						<0.46	<0.17	<0.7	<0.0026	<0.0028	<0.0031						<0.036	<0.57	<0.0031	<0.0028		<0.0035	<0.0029	<0.46	<0.0027	<0.0027				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
Methylene Chloride	75-09-2	mg/kg	4	400	4	700	4	700	7,000								<0.41	<0.0065						<2.3	<0.85	<3.5	<0.0064	<0.007	<0.0077						**0.1**	<0.0073	<2.3	<0.0068	<0.0069				<4.6	<80	<19	<0.22				<8.9	<3.4	<1.1
Naphthalene**	91-20-3	mg/kg	20	500	20	1,000	20	3,000	10,000								**0.46**	**0.046**						<2.3	<0.85	<3.5	<0.0064	<0.007	<0.0077						**0.15**	<1.1	<0.0078	<0.007		<0.0086	**0.0073**	<2.3	<0.0068	<0.0069				<1.8	<32	<7.8	<0.087				<8.9	<3.4	<1.1
n-Butylbenzene	104-51-8	mg/kg	--	--	--	--	--	--	--								**0.31**	**0.0078**						**0.63**	**0.51**	**2.6**	**0.005**	<0.007	<0.0077						<0.036	<0.57	<0.0031	<0.0028		<0.0086	<0.0029	<0.46	<0.0027	<0.0027				**1.4**	<16	**6.1**	<0.044				**12**	**5.8**	<0.22
n-Propylbenzene	103-65-1	mg/kg	--	--	--	--	--	--	--								<0.083	**0.0084**						<0.46	<0.17	**0.75**	**0.0013**	<0.0014	<0.0015						<0.036	<0.57	<0.0016	<0.0014		<0.0017	**0.0034**	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
sec-Butylbenzene	135-98-8	mg/kg	--	--	--	--	--	--	--								**0.13**	**0.0055**						<0.46	<0.17	<0.7	<0.0013	<0.0014	<0.0015						<0.036	<0.57	<0.0016	<0.0014		<0.0017	<0.0015	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	**0.69**	<0.22
Styrene	100-42-5	mg/kg	4	70	4	300	4	2,000	10,000								<0.083	<0.0013						<0.46	<0.17	<0.7	<0.0013	<0.0014	<0.0015						<0.036	<0.57	<0.0016	<0.0014		<0.0017	<0.0015	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
tert-Butylbenzene	98-06-6	mg/kg	--	--	--	--	--	--	--								<0.083	<0.0013						<0.46	<0.17	<0.7	<0.0013	<0.0014	<0.0015						<0.036	<0.57	<0.0016	<0.0014		<0.0017	<0.0015	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
Tetrachloroethene	127-18-4	mg/kg	10	30	10	200	10	1,000	10,000								**0.63**	<0.0013						**0.97**	**0.31**	**3.3**	**0.0083**	**0.016**	<0.0015						**0.14**	<0.57	<0.0016	<0.0014		**70**	**0.049**	<0.46	**0.002**	**0.0044**				**100**	**710**	**210**	**0.92**				**58**	<0.69	<0.22
Toluene**	108-88-3	mg/kg	500	500	1,000	1,000	2,000	3,000	10,000								<0.083	<0.0013						**23**	**0.7**	**12**	**0.013**	**0.008**	<0.0015						**2.3**	**18**	**0.0016**	<0.0014		**0.011**	**0.0027**	**17**	**0.012**	**0.012**				**1.1**	**430**	**70**	**0.23**				**4.6**	**11**	**0.8**
trans-1,2-Dichloroethene	156-60-5	mg/kg	1	500	1	1,000	1	3,000	10,000								<0.083	<0.0013						<0.46	<0.17	<0.7	<0.0013	<0.0014	<0.0015						<0.036	<0.57	<0.0016	<0.0014		<0.0017	**0.0049**	<0.46	<0.0014	<0.0014				<0.91	<16	<3.9	<0.044				<1.8	<0.69	<0.22
Trichloroethene	79-01-6	mg/kg	0	30	0	60	0	60	600								**0.18**	<0.0013						<0.46	<0.17	<0.7	<0.0013	<0.0014	<0.0015						**0.06**	<0.57	<0.0016	<0.0014		**0.14**	**1.1**	<0.46	<0.0014	<0.0014				**50**	**1800**	**420**	**1.1**				**20**	<0.69	<0.22
Trichlorofluoromethane	75-69-4	mg/kg	--	--	--	--	--	--	--								<0.17	<0.0065						<0.93	<0.34	<1.4	<0.0064	<0.007	<0.0077						<0.072	<1.1	<0.0078	<0.007		<0.0086	<0.0073	<0.91	<0.0068	<0.0069				<1.8	<32	<7.8	<0.087				<3.6	<1.4	<0.43
Vinyl Chloride	75-01-4	mg/kg	1	1	1	7	1	60	600								<0.17	<0.0065						<0.93	<0.34	<1.4	<0.0064	<0.007	<0.0077						**0.13**	<1.1	<0.0078	<0.007		<0.0086	<0.0073	<0.91	<0.0068	<0.0069				<1.8	<32	<7.8	<0.087				<3.6	<1.4	<0.43
Xylenes, Total**	1330-20-7	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000								<0.253	**0.173**						<1.39	**1.1**	**42**	**0.054**	**0.038**	<0.0046						**1.68**	**8.8**	<0.0047	<0.0042		<0.0052	**0.0415**	**0.53**	<0.0041	<0.0041				<2.71	**293**	**33.9**	**0.205**				**6.7**	**2.2**	<0.65

Notes
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
** = compounds analyzed by multiple methods - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
NA = Not analyzed.
-- = Not available.
mg/kg = milligrams per kilogram
UJ = non-detect estimated
J = Detected result is qualified as estimated. A plus or minus sign indicates the direction of potential bias, if known.

Notes
All concentrations presented in units of milligrams per kilogram (mg/kg).
< = Analyte is not detected above the LRL presented.
Field duplicates (indicated by *) and compounds analyzed by multiple methods (indicated by **) are resolved by retaining the highest detected concentration or, if all results are non-detect, the lowest LRL.
BDL = Below detection limits.

Notes
All concentrations presented in units of milligrams per kilogram (mg/kg).
< = Analyte is not detected above the LRL presented.
Field duplicates (indicated by *) and compounds analyzed by multiple methods (indicated by **) are resolved by retaining the highest detected concer
BDL = Below detection limits.

TABLE 7
SUMMARY OF SOIL VOC ANALYSES
Former Lewis Chemical, Boston, Massachusetts

Grid									B-2	B-3	B-3	B-3	B-3	B-3	B-3	C-1	C-1	C-1	C-1	C-1	C-1	C-1	C-2	C-2	C-2	C-2	C-2	C-2	C-3	C-3	C-3	C-3	C-3	D-1	D-1	D-1	D-1	D-1	D-2	D-2	D-2	D-2	D-2	D-2	D-3	D-3	D-3	D-3	D-3	D-3
Soil Boring									G-B-2	G-B-3	G-B-3	G-B-3	G-B-3	G-B-3	G-B-3	G-C-1	G-C-1	G-C-1	G-C-1	G-C-1	G-C-1	G-C-1	G-C-2	G-C-2	G-C-2	G-C-2	G-C-2	G-C-2	G-C-3	G-C-3	G-C-3	G-C-3	G-C-3	G-D-1	G-D-1	G-D-1	G-D-1	G-D-1	G-D-2	G-D-2	G-D-2	G-D-2	G-D-2	G-D-2	G-D-3	G-D-3	G-D-3	G-D-3	G-D-3	G-D-3
Sample ID	S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	G-B-2 15+	G-B-3 0.5	G-B-3 2.5	G-B-3 5	G-B-3 10*	G-B-3 15	G-B-3 15+	G-C-1 0.5	G-C-1 2.5	G-C-1 5	G-C-1 10	G-C-1 15	G-C-1 15+	G-C-2 0.5	G-C-2 2.5	G-C-2 5	G-C-2 10	G-C-2 15	G-C-2 15+	G-C-3 0.5	G-C-3 2.5	G-C-3 5	G-C-3 10	G-C-3 15	G-C-3 15+	G-D-1 0.5	G-D-1 2.5	G-D-1 5	G-D-1 10*	G-D-1 15	G-D-2 0.5	G-D-2 2.5	G-D-2 5	G-D-2 10*	G-D-2 15	G-D-2 20	G-D-3 0.5	G-D-3 2.5	G-D-3 5	G-D-3 10	G-D-3 15	G-D-3 15+
Sample Depth (feet)								15-18.5	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-18	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-18	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-18	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-20	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-20	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-20	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-18
Date Sampled								11/12/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/18/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013
Analytes	CAS No.	units																																														
Volatile Organic Compounds																																																
1,1,1-Trichloroethane	71-55-6	mg/kg	500	500	600	1,000	600	3,000	10,000	<0.0013				**0.0074**	**0.03**	<0.0034	<0.0015				**0.73**	**16**	**0.0018**	<0.0017				<0.56	<0.42	<0.0017	<0.0016				**0.19**	<0.0019	<0.0014	<0.0015				**0.4**	<0.07	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
1,1,2-Trichloroethane	79-00-5	mg/kg	2	40	2	200	2	500	5,000	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	<0.42	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.096	<0.07	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
1,1,2-Trichlorotrifluoroethane	76-13-1	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	75-34-3	mg/kg	9	500	9	1,000	9	1,000	10,000	<0.0013				<0.0012	**0.43**	**0.07**	<0.0015				<0.18	**6.4**	<0.0015	<0.0017				<0.56	<0.42	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				**0.66**	**0.94**	<0.0017				<0.086	**1.5**	<0.0016	<0.0016			<0.0014	**2.2**	<0.0014	<0.0015
1,1-Dichloroethene	75-35-4	mg/kg	40	500	40	1,000	40	3,000	10,000	<0.0026				<0.0025	**0.0081**	**0.0082**	<0.003				<0.18	<0.78	<0.0031	<0.0034				<0.56	<0.42	<0.0034	<0.0031				<0.1	<0.0038	<0.0029	<0.003				<0.096	<0.07	<0.0035				<0.086	<0.68	<0.0032	<0.0032			<0.0029	<1.6	<0.0027	<0.0031
1,2,4-Trichlorobenzene	120-82-1	mg/kg	6	700	6	3,000	6	5,000	10,000	<0.0026				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<2.8	<2.1	<0.0034	<0.0031				<0.5	<0.0038	<0.0029	<0.003				<0.96	<0.7	<0.0087				<0.43	<3.4	<0.0081	<0.0081			<0.0072	<16	<0.0068	<0.0077
1,2,4-Trimethylbenzene	95-63-6	mg/kg	--	--	--	--	--	--	--	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	**0.79**	<0.0015	<0.0017				<0.56	**2.3**	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				**0.21**	**3.2**	<0.0035				<0.086	<0.68	<0.0032	<0.0032			**0.017**	**2.7**	<0.0027	<0.0031
1,2-Dichlorobenzene	95-50-1	mg/kg	100	300	100	300	100	300	10,000	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	**18**	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				**0.75**	**2.4**	**0.0022**				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
1,2-Dichloroethane	107-06-2	mg/kg	0	20	0	100	0	300	9,000	<0.0013				<0.0012	**0.0082**	**0.0076**	<0.0015				<0.88	<3.9	<0.0015	<0.0017				**0.71**	<0.42	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.096	<0.07	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
1,3,5-Trimethylbenzene	108-67-8	mg/kg	--	--	--	--	--	--	--	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	**0.94**	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.096	**0.99**	<0.0017				<0.086	<0.68	<0.0016	<0.0016			**0.0031**	<1.6	<0.0014	<0.0015
1,3-Dichlorobenzene	541-73-1	mg/kg	100	100	200	500	200	500	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	106-46-7	mg/kg	1	80	1	400	1	2,000	10,000	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	<0.42	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.096	<0.07	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
1,4-Dioxane	123-91-1	mg/kg	6	20	6	90	6	500	5,000	<0.064				<0.062	<0.12	<0.17	<0.074				<8.8	<39	<0.077	<0.086				<28	<21	<0.086	<0.078				<5	<0.095	<0.071	<0.076				<4.8	<3.5	<0.087				<4.3	<34	<0.081	<0.081			<0.072	<80	<0.068	<0.077
2-Butanone	78-93-3	mg/kg	50	400	50	400	50	400	10,000	<0.026				<0.025	<0.049	<0.068	<0.03				<3.5	<16	<0.031	<0.034				<11	<8.4	<0.034	<0.031				<2	<0.038	<0.029	<0.03				<1.9	<1.4	<0.035				<1.7	<14	<0.032	<0.032			<0.029	<32	<0.027	<0.031
4-Isopropyltoluene	99-87-6	mg/kg	--	--	--	--	--	--	--	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	**3.4**	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.096	**0.082**	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
4-Methyl-2-pentanone	108-10-1	mg/kg	50	400	50	400	50	400	10,000	<0.013				<0.012	<0.025	<0.034	<0.015				<1.8	<7.8	<0.015	<0.017				<5.6	<4.2	<0.017	<0.016				<1	<0.019	<0.014	<0.015				<0.96	<0.7	<0.017				<0.86	<6.8	<0.016	<0.016			<0.014	<16	<0.014	<0.015
Acetone	67-64-1	mg/kg	50	400	50	400	50	400	10,000	<0.064				<0.062	<0.12	<0.17	<0.074				<8.8	<39	<0.077	<0.086				<28	<21	<0.086	<0.078				<5	<0.095	<0.071	<0.076				<4.8	<3.5	<0.087				<4.3	<34	<0.081	<0.081			<0.072	<80	<0.068	<0.077
Benzene**	71-43-2	mg/kg	40	40	200	200	400	1,000	10,000	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	<0.42	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.096	<0.07	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
Bromoform	75-25-2	mg/kg	1	300	1	800	1	800	10,000	<0.0013				<0.0062	<0.0025	<0.017	<0.0074				<0.18	<0.78	<0.0077	<0.0086				<2.8	<2.1	<0.017	<0.0016				<0.5	<0.0019	<0.0014	<0.0015				<0.48	<0.35	<0.0087				<0.43	<3.4	<0.0081	<0.0081			<0.0072	<8	<0.0068	<0.0077
Carbon Disulfide	75-15-0	mg/kg	--	--	--	--	--	--	--	<0.0038				<0.0037	<0.0074	<0.01	<0.0045				<1.8	<7.8	<0.0046	<0.0052				<5.6	<4.2	<0.0051	<0.0047				<1	<0.0057	<0.0043	<0.0045				<0.96	<0.7	<0.0052				<0.86	<6.8	<0.0048	<0.0049			<0.0043	<16	<0.0041	<0.0046
Chlorobenzene	108-90-7	mg/kg	3	100	3	100	3	100	10,000	<0.0013				<0.0012	**0.8**	**0.14**	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	**1**	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.096	**0.19**	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
Chloroethane	75-00-3	mg/kg	--	--	--	--	--	--	--	<0.0064				<0.0062	<0.012	<0.017	<0.0074				<0.35	<1.6	<0.0077	<0.0086				<1.1	<0.84	<0.0086	<0.0078				<0.2	<0.0095	<0.0071	<0.0076				<0.19	<0.14	<0.0087				<0.17	<1.4	<0.0081	<0.0081			<0.0072	<3.2	<0.0068	<0.0077
cis-1,2-Dichloroethene	156-59-2	mg/kg	0	100	0	500	0	500	5,000	<0.0013				**0.0035**	**16**	**6.5**	**0.012**				<0.18	**38**	<0.0015	<0.0017				**4.1**	**3.2**	<0.0017	<0.0016				**1.2**	<0.0019	<0.0014	<0.0015				**4.2**	**0.67**	<0.0017				**0.22**	**5.5**	<0.0016	**0.0046**			<0.0014	**48**	<0.0014	**0.002**
Dichlorodifluoromethane	75-71-8	mg/kg	--	--	--	--	--	--	--	<0.0064				<0.0062	<0.012	<0.017	<0.0074				<0.35	<1.6	<0.0077	<0.0086				<1.1	<0.84	<0.0086	<0.0078				<0.2	<0.0095	<0.0071	<0.0076				<0.19	<0.14	<0.0087				<0.17	<1.4	<0.0081	<0.0081			<0.0072	<3.2	<0.0068	<0.0077
Ethylbenzene**	100-41-4	mg/kg	500	500	1,000	1,000	1,000	3,000	10,000	<0.0013				<0.0012	**0.92**	**0.087**	<0.0015				<0.18	**5.1**	<0.0015	<0.0017				<0.56	**13**	<0.0017	<0.0016				**0.28**	**0.0077**	<0.0014	<0.0015				**0.39**	**3.3**	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	**1.9**	<0.0014	<0.0015
Hexachlorobutadiene	87-68-3	mg/kg	30	30	100	100	100	100	1,000	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	<0.42	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.48	<0.35	<0.0035				<0.086	<0.68	<0.0032	<0.0032			<0.0029	<8	<0.0027	<0.0031
Isopropylbenzene	98-82-8	mg/kg	--	--	--	--	--	--	--	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	<0.42	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.096	**0.17**	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
Methyl tert-butyl ether**	1634-04-4	mg/kg	100	100	100	500	100	500	5,000	<0.0026				<0.0025	<0.0049	<0.0068	<0.003				<0.18	<0.78	<0.0031	<0.0034				<0.56	<0.42	<0.0034	<0.0031				<0.1	<0.0038	<0.0029	<0.003				<0.096	<0.07	<0.0035				<0.086	<0.68	<0.0032	<0.0032			<0.0029	<1.6	<0.0027	<0.0031
Methylene Chloride	75-09-2	mg/kg	4	400	4	700	4	700	7,000	<0.0064				<0.0062	<0.012	<0.017	<0.0074				<0.88	<3.9	<0.0077	<0.0086				**7.6**	<2.1	**0.012**	<0.0078				**0.96**	<0.0095	**0.0091**	<0.0076				<0.48	<0.35	<0.0087				<0.43	<3.4	<0.0081	<0.0081			<0.0072	<8	<0.0068	<0.0077
Naphthalene**	91-20-3	mg/kg	20	500	20	1,000	20	3,000	10,000	<0.0026				<0.0062	<0.012	<0.017	<0.0074				<0.35	<1.6	<0.0077	<0.0086				<2.8	<2.1	<0.0034	<0.0031				<0.5	<0.0038	<0.0029	<0.003				<0.96	**1.6**	<0.0087				<0.43	<3.4	<0.0081	<0.0081			<0.0072	<16	<0.0068	<0.0077
n-Butylbenzene	104-51-8	mg/kg	--	--	--	--	--	--	--	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	**1.6**	<0.0017	<0.0016				**0.15**	<0.0019	<0.0014	<0.0015				<0.19	**0.25**	<0.0035				<0.086	<0.68	<0.0032	<0.0032			<0.0029	<1.6	<0.0027	<0.0031
n-Propylbenzene	103-65-1	mg/kg	--	--	--	--	--	--	--	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	<0.42	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.096	**0.24**	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
sec-Butylbenzene	135-98-8	mg/kg	--	--	--	--	--	--	--	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	<0.42	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.096	<0.07	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
Styrene	100-42-5	mg/kg	4	70	4	300	4	2,000	10,000	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	<0.42	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.096	<0.07	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
tert-Butylbenzene	98-06-6	mg/kg	--	--	--	--	--	--	--	<0.0013				<0.0012	<0.0025	<0.0034	<0.0015				<0.18	<0.78	<0.0015	<0.0017				<0.56	<0.42	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				<0.096	<0.07	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
Tetrachloroethene	127-18-4	mg/kg	10	30	10	200	10	1,000	10,000	**0.0015**				**0.069**	**0.022**	**0.017**	<0.0015				**12**	<0.78	<0.0015	<0.0017				**14**	**0.59**	<0.0017	**0.024**				**2.3**	<0.0019	**0.0023**	<0.0015				**0.45**	**0.2**	<0.0017				**2**	<0.68	<0.0016	**0.012**			**0.0016**	<1.6	<0.0014	<0.0015
Toluene**	108-88-3	mg/kg	500	500	1,000	1,000	2,000	3,000	10,000	<0.0013				<0.0012	**0.67**	**0.11**	<0.0015				<0.18	**52**	<0.0015	<0.0017				<0.56	**0.98**	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				**0.6**	**0.71**	**0.0029**				<0.086	**30**	<0.0016	**0.0076**			**0.0093**	**79**	<0.0014	**0.0024**
trans-1,2-Dichloroethene	156-60-5	mg/kg	1	500	1	1,000	1	3,000	10,000	<0.0013				<0.0012	**0.022**	**0.015**	<0.0015				<0.18	**0.84**	<0.0015	<0.0017				<0.56	<0.42	<0.0017	<0.0016				<0.1	<0.0019	<0.0014	<0.0015				**0.35**	<0.07	<0.0017				<0.086	<0.68	<0.0016	<0.0016			<0.0014	<1.6	<0.0014	<0.0015
Trichloroethene	79-01-6	mg/kg	0	30	0	60	0	60	600	<0.0013				**0.095**	**0.29**	**0.019**	**0.0021**				**2.2**	<0.78	**0.0026**	<0.0017				**4.3**	<0.42	<0.0017	**0.011**				**3.2**	<0.0019	**0.0041**	<0.0015				**0.15**	<0.07	<0.0017				**0.43**	<0.68	<0.0016	**0.0072**			<0.0014	<1.6	<0.0014	<0.0015
Trichlorofluoromethane	75-69-4	mg/kg	--	--	--	--	--	--	--	<0.0064				<0.0062	<0.012	<0.017	<0.0074				<0.35	<1.6	<0.0077	<0.0086				<1.1	<0.84	<0.0086	<0.0078				<0.2	<0.0095	<0.0071	<0.0076				<0.19	<0.14	<0.0087				<0.17	<1.4	<0.0081	<0.0081			<0.0072	<3.2	<0.0068	<0.0077
Vinyl Chloride	75-01-4	mg/kg	1	1	1	7	1	60	600	<0.0064				<0.0062	**0.62**	**0.071**	<0.0074				<0.35	<1.6	<0.0077	<0.0086				<1.1	**0.9**	<0.0086	<0.0078				<0.2	<0.0095	<0.0071	<0.0076				**0.45**	**0.27**	<0.0087				<0.17	**3.6**	<0.0081	<0.0081			<0.0072	<3.2	<0.0068	<0.0077
Xylenes, Total**	1330-20-7	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	<0.0039				<0.0037	**0.652**	**0.083**	<0.0045				<0.53	**13.5**	<0.0046	<0.0051				<1.66	**12.91**	<0.0051	<0.0047				<0.3	**0.0022**	<0.0043	<0.0045				**0.44**	**7.3**	<0.0052				<0.256	<2.08	<0.0048	<0.0048			<0.0043	**6**	<0.0041	<0.0046

Notes

Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.

< = Analyte is not detected above the LRL presented.

* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

** = compounds analyzed by multiple methods - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

NA = Not analyzed.

-- = Not available.

mg/kg = milligrams per kilogram

UJ = non-detect estimated

J = Detected result is qualified as estimated. A plus or minus sign indicates the direction of potential bias, if known.

tration or, if all results are non-detect, the lowest LRL.

TABLE 7
SUMMARY OF SOIL VOC ANALYSES
Former Lewis Chemical, Boston, Massachusetts

Grid										E-1	E-1	E-1	E-1	E-1	E-2	E-2	E-2	E-2	E-2	E-2	E-2	E-3	E-3	E-3	E-3				5	5	5	5	9	9	9	14	14	14
Soil Boring										G-E-1	G-E-1	G-E-1	G-E-1	G-E-1	G-E-2	G-E-2	G-E-2	G-E-2	G-E-2	G-E-2	G-E-2	G-E-3	G-E-3	G-E-3	G-E-3	CDW-2	CDW-3	CDW-4	CDW-5	ESM-05	ESM-05	ESM-05	ESM-05	ESM-03	ESM-03	ESM-03	ESM-07	ESM-07	ESM-07
Sample ID		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL		G-E-1 0.5	G-E-1 2.5	G-E-1 5	G-E-1 10	G-E-1 15	G-E-2 0.5	G-E-2 2.5	G-E-2 5	G-E 2 10	G-E 2 15	G-E 2 15+	G-E-3 5	G-E-3 10	G-E-3 15	G-E-3 20	CDW-2/S-2	CDW-3/S-3	CDW-4/S-3	CDW-5/S-3	(5-10)	ANGLED (10-12)	(10-12.5)	(12.5-15)	(9-11)	(11-14)	(14-15)	(10-12.5)	(12.5-15)	(15-17.5)
Sample Depth (feet)										0.5	2.5	5	10	14	0-0.5	0.5-2.5	2.5-5	5-10	10-15	15-17.5	2.5-5	5-10	10-15	15-20					5-10	10-12	10-12.5	12.5-15	9-11	11-14	14-15	10-12.5	12.5-15	15-17.5
Date Sampled										11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	3/11/2015	3/11/2015	3/12/2015	3/12/2015	7/23/2015	7/23/2015	7/23/2015	7/23/2015	7/23/2015	7/23/2015	7/23/2015	7/23/2015	7/23/2015	7/23/2015
Analytes	**CAS No.**	**units**																																			
Volatile Organic Compounds																																					
1,1,1-Trichloroethane	71-55-6	mg/kg	500	500	600	1,000	600	3,000	10,000			**0.0016**	<0.004	<0.0014			**0.0084**	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	**0.365**	**126**	**2.17**	<0.292	**2.8**	**0.1**	**24**	**0.2**	**81**	**0.9 J+**	<0.1	<0.1	<0.1	<0.1
1,1,2-Trichloroethane	79-00-5	mg/kg	2	40	2	200	2	500	5,000			<0.0016	<0.004	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	<0.0364	<0.117	<0.292	<0.1	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-Trichlorotrifluoroethane	76-13-1	mg/kg	--	--	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.147**	**9.48**	**39.2**	**13.2**	**6.4**	**0.1**	**28**	<0.1	**66**	**1.6 J+**	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethane	75-34-3	mg/kg	9	500	9	1,000	9	1,000	10,000			<0.0016	**0.021**	<0.0014			<0.0016	**0.012**	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	**0.0523**	**0.541**	**0.834**	**0.292**	**0.1**	<0.1	**0.2**	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene	75-35-4	mg/kg	40	500	40	1,000	40	3,000	10,000			<0.0033	<0.008	<0.0028			<0.0031	<0.0057	<0.0029	<0.0027	<0.0036	<0.011	<0.0025	<0.0029	<0.0467	**0.622**	<0.117	<0.292	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<5.7 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ
1,2,4-Trichlorobenzene	120-82-1	mg/kg	6	700	6	3,000	6	5,000	10,000			<0.0081	<0.02	<0.0069			<0.0078	<0.014	<0.0071	<0.0069	<0.0089	<0.028	<0.0061	<0.0073	<0.0467	<0.0364	<0.117	<0.292	**0.1**	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-Trimethylbenzene	95-63-6	mg/kg	--	--	--	--	--	--	--			<0.0033	**0.013**	<0.0028			<0.0031	<0.0057	<0.0029	<0.0027	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	**0.243**	**0.384**	**6.24**	**2.5**	<0.1	**0.7**	<0.1	**43**	**0.8 J+**	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene	95-50-1	mg/kg	100	300	100	300	100	300	10,000			<0.0016	**0.029**	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	**0.202**	**5.63**	**11.8**	**8.3**	<0.1	**2.7**	<0.1	**140**	**0.9 J+**	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane	107-06-2	mg/kg	0	20	0	100	0	300	9,000			<0.0016	<0.004	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	<0.0364	<0.117	<0.292	<0.1	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-Trimethylbenzene	108-67-8	mg/kg	--	--	--	--	--	--	--			<0.0016	<0.004	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	**0.0927**	<0.117	**1.83**	**0.8**	<0.1	**0.2**	<0.1	**12**	**0.3 J+**	<0.1	<0.1	<0.1	<0.1
1,3-Dichlorobenzene	541-73-1	mg/kg	100	100	200	500	200	500	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0467	<0.0364	<0.117	<0.292	**0.3**	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-Dichlorobenzene	106-46-7	mg/kg	1	80	1	400	1	2,000	10,000			<0.0016	<0.004	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	<0.0364	<0.117	**0.546**	**0.3**	<0.1	**0.1**	<0.1	**13**	**0.1 J+**	<0.1	<0.1	<0.1	<0.1
1,4-Dioxane	123-91-1	mg/kg	6	20	6	90	6	500	5,000			<0.081	<0.2	<0.069			<0.078	<0.14	<0.071	<0.069	<0.18	<0.55	<0.12	<0.15	<0.933	<0.727	<2.35	<5.84	<2	<2	<2	<2	<140	<2	<2	<2	<3	<2
2-Butanone	78-93-3	mg/kg	50	400	50	400	50	400	10,000			<0.033	<0.08	<0.028			<0.031	<0.057	<0.029	<0.027	<0.036	<0.11	<0.025	<0.029	<0.467	<0.364	<1.17	<2.92	<0.3	<0.2	<0.3	<0.2	<17.1	<0.3	<0.2	<0.3	<0.3	<0.2
4-Isopropyltoluene	99-87-6	mg/kg	--	--	--	--	--	--	--			<0.0016	<0.004	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	**0.0763**	<0.117	**2.69**	**0.5**	<0.1	**0.1**	<0.1	**11**	**1.4 J+**	<0.1	<0.1	<0.1	<0.1
4-Methyl-2-pentanone	108-10-1	mg/kg	50	400	50	400	50	400	10,000			<0.016	<0.04	<0.014			<0.016	<0.029	<0.014	<0.014	<0.018	<0.055	<0.012	<0.015	<0.467	<0.364	<1.17	<2.92	<0.4	<0.3	<0.4	<0.4	<25.6	<0.4	<0.3	<0.4	<0.5	<0.4
Acetone	67-64-1	mg/kg	50	400	50	400	50	400	10,000			<0.081	<0.2	<0.069			<0.078	<0.14	<0.071	<0.069	<0.089	<0.28	<0.061	<0.073	<0.467	<0.364	<1.17	<2.92	<2	<2	<2	<2	<140	<2	<2	<2	<3	<2
Benzene**	71-43-2	mg/kg	40	40	200	200	400	1,000	10,000			<0.0016	<0.004	<0.0014			<0.0016	**0.01**	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0386	<0.0335	<0.117	<0.166	<0.1	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	75-25-2	mg/kg	1	300	1	800	1	800	10,000			<0.0081	<0.02	<0.0069			<0.0078	<0.014	<0.0071	<0.0069	<0.0089	<0.028	<0.0061	<0.0073	<0.0467	<0.0364	<0.117	<0.292	<0.1	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon Disulfide	75-15-0	mg/kg	--	--	--	--	--	--	--			<0.0049	<0.012	<0.0041			<0.0047	<0.0086	**0.0054**	<0.0041	<0.0054	<0.017	<0.0037	<0.0044	<0.0933	<0.0727	<0.235	<0.584	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<5.7 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ
Chlorobenzene	108-90-7	mg/kg	3	100	3	100	3	100	10,000			<0.0016	**0.0053**	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	<0.0364	**0.685**	<0.292	**0.4**	<0.1	**4.4**	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroethane	75-00-3	mg/kg	--	--	--	--	--	--	--			<0.0081	<0.02	<0.0069			<0.0078	<0.014	<0.0071	<0.0069	<0.0089	<0.028	<0.0061	<0.0073	<0.0933	<0.0727	<0.235	<0.584	<0.1	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	156-59-2	mg/kg	0	100	0	500	0	500	5,000			<0.0016	**0.0043**	<0.0014			**0.0024**	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	**0.0574**	**4.94**	**1.71**	**2.11**	**5.2**	**0.2**	**8.7**	**0.3**	**110**	**0.2 J+**	<0.1	**0.1**	<0.1	**0.1**
Dichlorodifluoromethane	75-71-8	mg/kg	--	--	--	--	--	--	--			<0.0081	<0.02	<0.0069			<0.0078	<0.014	<0.0071	<0.0069	<0.0089	<0.028	<0.0061	<0.0073	<0.0933	<0.0727	<0.235	<0.584	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<5.7 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ
Ethylbenzene**	100-41-4	mg/kg	500	500	1,000	1,000	1,000	3,000	10,000			<0.0016	**0.37**	<0.0014			<0.0016	**0.0034**	<0.0014	<0.0014	<0.0018	**0.11**	**0.0015**	<0.0015	**0.0928**	**0.673**	**8.99**	**11.3**	**2.3**	<0.1	**7.4**	<0.1	**69**	**0.6 J+**	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	87-68-3	mg/kg	30	30	100	100	100	100	1,000			<0.0033	<0.008	<0.0028			<0.0031	<0.0057	<0.0029	<0.0027	<0.0036	<0.011	<0.0025	<0.0029	<0.0467	<0.0364	<0.117	<0.292	<0.1	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
Isopropylbenzene	98-82-8	mg/kg	--	--	--	--	--	--	--			<0.0016	**0.0043**	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	<0.0364	<0.117	**0.345**	**0.2**	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
Methyl tert-butyl ether**	1634-04-4	mg/kg	100	100	100	500	100	500	5,000			<0.0033	<0.008	<0.0028			<0.0031	<0.0057	<0.0029	<0.0027	<0.0036	<0.011	<0.0025	<0.0029	<0.0386	<0.0335	<0.117	<0.166	<0.1	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene Chloride	75-09-2	mg/kg	4	400	4	700	4	700	7,000			<0.0081	<0.02	<0.0069			<0.0078	<0.014	<0.0071	<0.0069	<0.0089	<0.028	<0.0061	<0.0073	<0.0933	<0.0727	<0.235	<0.584	<0.2	<0.2	<0.2	<0.2	<14	<0.2	<0.2	<0.2	<0.3	<0.2
Naphthalene**	91-20-3	mg/kg	20	500	20	1,000	20	3,000	10,000			<0.0081	<0.02	<0.0069			<0.0078	<0.014	<0.0071	<0.0069	<0.0089	<0.028	<0.0061	<0.0073	<0.0386	**0.0756**	**0.253**	**2.84**	**0.4 J+**	<0.2	<0.2	<0.2	<14	<0.2	<0.2	<0.2	<0.3	<0.2
n-Butylbenzene	104-51-8	mg/kg	--	--	--	--	--	--	--			<0.0033	<0.008	<0.0028			<0.0031	<0.0057	<0.0029	<0.0027	<0.0036	<0.011	<0.0025	<0.0029	<0.0467	**1.33**	<0.117	**0.789**	<0.1	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
n-Propylbenzene	103-65-1	mg/kg	--	--	--	--	--	--	--			<0.0016	<0.004	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	**0.0494**	<0.117	**0.867**	**0.3**	<0.1	**0.1**	<0.1	**6.6**	**0.2 J+**	<0.1	<0.1	<0.1	<0.1
sec-Butylbenzene	135-98-8	mg/kg	--	--	--	--	--	--	--			<0.0016	<0.004	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	**0.217**	<0.117	<0.292	**0.3**	<0.1	**0.1**	<0.1	<5.7	**0.1 J+**	<0.1	<0.1	<0.1	<0.1
Styrene	100-42-5	mg/kg	4	70	4	300	4	2,000	10,000			<0.0016	<0.004	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	<0.0364	<0.117	<0.292	<0.1	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
tert-Butylbenzene	98-06-6	mg/kg	--	--	--	--	--	--	--			<0.0016	<0.004	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	<0.0364	<0.117	<0.292	<0.1	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	127-18-4	mg/kg	10	30	10	200	10	1,000	10,000			**0.063**	<0.004	<0.0014			**0.062**	<0.0029	<0.0014	<0.0014	**0.005**	<0.0055	<0.0012	<0.0015	**0.0961**	**27.4**	**0.848**	<0.292	**26**	<0.1	**240**	**0.1**	**42**	**0.5 J+**	<0.1	**0.4**	<0.1	**0.2**
Toluene**	108-88-3	mg/kg	500	500	1,000	1,000	2,000	3,000	10,000			<0.0016	**0.013**	<0.0014			**0.0025**	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	**0.168**	**7.6**	**2.36**	**30.4**	**0.6**	**0.3**	**18**	<0.1	**580**	**4.2 J+**	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene	156-60-5	mg/kg	1	500	1	1,000	1	3,000	10,000			<0.0016	<0.004	<0.0014			<0.0016	<0.0029	<0.0014	<0.0014	<0.0018	<0.0055	<0.0012	<0.0015	<0.0467	<0.0364	**0.135**	<0.292	<0.1	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	79-01-6	mg/kg	0	30	0	60	0	60	600			**0.004**	<0.004	<0.0014			**0.015**	<0.0029	<0.0014	<0.0014	**0.0049**	<0.0055	<0.0012	<0.0015	**0.195**	**69.6**	**0.216**	<0.292	**1**	<0.1	**26**	<0.1	**33**	**0.1 J+**	<0.1	**0.3**	<0.1	**0.1**
Trichlorofluoromethane	75-69-4	mg/kg	--	--	--	--	--	--	--			<0.0081	<0.02	<0.0069			<0.0078	<0.014	<0.0071	<0.0069	<0.0089	<0.028	<0.0061	<0.0073	<0.0467	<0.0364	<0.117	<0.292	<0.1	<0.1	<0.1	<0.1	<5.7	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl Chloride	75-01-4	mg/kg	1	1	1	7	1	60	600			<0.0081	<0.02	<0.0069			<0.0078	<0.014	<0.0071	<0.0069	<0.0089	<0.028	<0.0061	<0.0073	<0.0467	**0.0403**	**1.38**	**0.336**	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<5.7 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ
Xylenes, Total**	1330-20-7	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000			<0.0049	**0.123**	<0.0042			<0.0047	<0.0086	<0.0043	<0.0041	<0.0054	**0.077**	<0.0037	<0.0044	**0.2378**	**1.763**	**17.38**	**35.72**	**9.9**	**0.1**	**26.1**	<0.2	**322**	**2.8 J+**	<0.2	<0.2	<0.2	<0.2

Notes
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
** = compounds analyzed by multiple methods - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
NA = Not analyzed.
-- = Not available.
mg/kg = milligrams per kilogram
UJ = non-detect estimated
J = Detected result is qualified as estimated. A plus or minus sign indicates the direction of potential bias, if known.

TABLE 8
SUMMARY OF SOIL VPH & EPH ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	14	15	17	18	18	13	18	18	18	17	18	B-1	3	3	3	3	13	20	21	21	22
Soil Boring									TP-03	TP-04	TP-02	TP-01B	TP-06	ESM-11	ESM-13	ESM-13	ESM-14	I-A-03	I-B-05	ESM-15	GP-1	GP-1	GP-2	GP-2	GP-12	GP-3	GP-4	GP-4	GP-5
Sample ID									TP-03	TP-04	TP-02	TP-01B	TP-06	ESM-11	ESM-13	ESM-13	ESM-14	I-A-03-M	I-B-05-D*	ESM-15	GP-1/0-3'	GP-1/3-5'	GP-2/0-3'	GP-2/3-5'	GP-12/0-3'	GP-3/0-3'	GP-4/0-3'	GP-4/3-5'	GP-5/6-8'
Sample Depth (feet)									5.5	4	6	9	2.5	10-12	1-3	12-14	7-9	8-10	19-20	6-8	0-3	3-5	0-3	3-5	0-3	0-3	0-3	3-5	6-8
Date Sampled									6/1/05	6/1/05	6/1/05	6/1/05	6/1/05	7/13/05	7/13/05	7/13/05	7/13/05	8/30/05	8/30/05	8/31/05	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08
Analytes	units																												
Volatile Petroleum Hydrocarbons																													
C5-C8 Aliphatics **	mg/kg	100	100	500	500	500	500	5,000	**4.4**	**81**	<1.1	**44**	**110**	<1.0	**17**	<27	**4.9**	**5.4**	<1.0	**190**	**23**	**24**	**60**	**26**	NA	<9	**16**	<9	**8**
C9-C12 Aliphatics	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	20,000	<1.3	**7.9**	<1.1	**21**	**2**	<1.0	**6.2**	**110**	**4.4**	<1.4	<1.0	**91**	<10	<8	<8	**12**	NA	<9	<8	<9	<7
C9-C10 Aromatics	mg/kg	100	100	500	500	500	500	5,000	<1.3	<3.4	<1.1	**42**	<1.3	<1.0	<4.1	**150**	**3.6**	<1.4	<1.0	**97**	**32**	<8	<8	**49**	NA	<9	<8	<9	<7
Extractable Petroleum Hydrocarbons																													
C9-C18 Aliphatics	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	20,000	<32	**78**	<35	**150**	<34	<32	<34	<39	<30	<36	<33	**56**	<120	<120	<120	<110	<110	<110	<110	<110	<110
C19-C36 Aliphatics	mg/kg	3,000	3,000	5,000	5,000	5,000	5,000	20,000	**64**	**280**	<35	**410**	**86**	<32	**56**	**90**	<30	**61**	<33	**120**	**490**	<120	**190**	**240**	<110	<110	<110	<110	<110
C11-C22 Aromatics	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**62**	**320**	<35	**230**	**110**	**33**	**88**	**78**	<30	<36	<33	**98**	**220**	<120	**170**	**140**	**120**	<110	<110	<110	<110
2-Methylnaphthalene	mg/kg	80	300	80	500	80	500	5,000	<0.54	**0.66**	<0.59	<0.55	<0.56	<0.53	<0.57	<0.65	<0.50	<0.59	<0.55	<0.56	**0.2**	<0.1	<0.1	**0.3**	<0.6	**0.3**	<0.1	<0.1	**0.2**
Acenaphthene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	<0.54	**1.1**	<0.59	<0.55	<0.56	<0.53	<0.57	<0.65	<0.50	<0.59	<0.55	<0.56	**0.3**	<0.1	<0.1	<0.1	<0.6	**1**	**0.2**	<0.1	**0.8**
Acenaphthylene	mg/kg	600	10	600	10	600	10	10,000	<0.54	<0.57	<0.59	<0.55	<0.56	<0.53	<0.57	<0.65	<0.50	<0.59	<0.55	<0.56	<0.1	<0.1	<0.1	<0.1	<0.6	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**1.6**	**1.2**	<0.59	**2.9**	**2.9**	**0.99**	**3.1**	**2.4**	<0.50	<0.59	<0.55	<0.56	**1.3**	**0.3**	**0.1**	**0.2**	<0.6	**1.5**	**0.4**	<0.1	**1.5**
Benzo(a)anthracene	mg/kg	7	7	40	40	300	300	3,000	**0.6**	<0.57	<0.59	**0.82**	<0.56	<0.53	**1.3**	<0.65	<0.50	<0.59	<0.55	<0.56	**3.4**	**1.1**	**1.1**	**0.6**	<0.6	**4.6**	**1.2**	**0.4**	**4.3**
Benzo(a)pyrene	mg/kg	2	2	7	7	30	30	300	**1.7**	**1.4**	<0.59	**3.6**	**3.3**	**0.94**	**2.8**	<0.65	<0.50	**0.63**	<0.55	<0.56	**2.3**	**0.8**	**0.9**	**0.5**	<0.6	**3.7**	**1.1**	**0.4**	**3.2**
Benzo(b)fluoranthene	mg/kg	7	7	40	40	300	300	3,000	**1.6**	**1.5**	<0.59	**3.4**	**3.6**	**0.93**	**3.6**	**0.81**	<0.50	**0.66**	<0.55	<0.56	**2.6**	**0.9**	**1.4**	**0.6**	<0.6	**4.9**	**1.3**	**0.5**	**2.9**
Benzo(g,h,i)perylene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**1.2**	**1.2**	<0.59	**2.7**	**2.2**	**0.71**	**1.9**	**4.2**	<0.50	<0.59	<0.55	<0.56	**0.5**	**0.6**	**0.3**	**0.1**	<0.6	**0.8**	**0.3**	**0.2**	**1.1**
Benzo(k)fluoranthene	mg/kg	70	70	400	400	3,000	3,000	10,000	**1.3**	**1.1**	<0.59	**3.4**	**2.5**	**0.64**	**1.6**	<0.65	<0.50	<0.59	<0.55	<0.56	**1.9**	**0.6**	**0.9**	**0.5**	<0.6	**3.4**	**1**	**0.3**	**3**
Chrysene	mg/kg	70	70	400	400	3,000	3,000	10,000	**1.9**	**2.1**	<0.59	**3.4**	**2.7**	**1.1**	**3.3**	**2.3**	<0.50	**0.64**	<0.55	<0.56	**3.4**	**1.1**	**1.3**	**0.6**	<0.6	**4.4**	**1.2**	**0.4**	**4.4**
Dibenzo(a,h)anthracene	mg/kg	1	1	4	4	30	30	300	<0.54	<0.57	<0.59	**0.72**	**0.58**	<0.53	<0.57	<0.65	<0.50	<0.59	<0.55	<0.56	**0.2**	**0.2**	<0.1	<0.1	<0.6	**0.4**	<0.1	<0.1	**0.5**
Fluoranthene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**3.6**	**2.2**	<0.59	**5.5**	**4.6**	**1.8**	**6.8**	**1.4**	<0.50	**1**	<0.55	<0.56	**7.7**	**2.6**	**2.8**	**1.4**	**0.6**	**14**	**2.9**	**0.7**	**12**
Fluorene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	<0.54	<0.57	<0.59	<0.55	<0.56	<0.53	<0.57	<0.65	<0.50	<0.59	<0.55	<0.56	**0.4**	<0.1	<0.1	<0.1	<0.6	**0.7**	**0.2**	<0.1	**0.7**
Indeno(1,2,3-cd)pyrene	mg/kg	7	7	40	40	300	300	3,000	**0.97**	**0.64**	<0.59	**2.5**	**2.5**	**0.55**	**1.9**	<0.65	<0.50	<0.59	<0.55	<0.56	**0.5**	**0.5**	**0.3**	**0.1**	<0.6	**0.9**	**0.3**	**0.2**	**1.2**
Phenanthrene	mg/kg	500	500	1,000	1,000	3,000	3,000	10,000	**2.7**	**2.6**	<0.59	**3.6**	**2.1**	**1**	**5.5**	**0.92**	<0.50	**0.64**	<0.55	<0.56	**7**	**1.6**	**1.1**	**1.1**	<0.6	**11**	**2.1**	**0.3**	**11**
Pyrene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**3**	**2.1**	<0.59	**4.8**	**3.8**	**1.7**	**5.6**	**1.1**	<0.50	**0.91**	<0.55	<0.56	**6.5**	**2.2**	**2.4**	**1.2**	**0.6**	**12**	**3**	**0.7**	**9.4**

Notes

Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.

mg/kg = milligrams per kilogram

< = Analyte is not detected above the LRL presented.

* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

** = C5-C8 aliphatic hydrocarbons include chlorinated solvent concentrations including PCE, TCE, TCA, and associated daughter products and are not representative of petroleum concentrations.

NA = Not analyzed.

TABLE 8
SUMMARY OF SOIL VPH & EPH ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid									23	23	27	27	28	28	28	28	28	28	B-1	B-1	B-1	B-1	B-3	B-3	B-3	B-3	B-3	C-1	C-1
Soil Boring									GP-8	GP-8	GP-7	GP-7	GP-9	GP-9	GP-10	GP-10	GP-11	GP-11	SS-3	SS-3	SS-7	SS-7	SS-1	SS-2	SS-2	SS-4	SS-4	SS-6	SS-6
Sample ID		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	GP-8/0-3'	GP-8/10-12'	GP-7/0-3'	GP-7/7-10'	GP-9/0-3'	GP-9/10-12'	GP-10/0-3'	GP-10/10-12'	GP-11/0-3'	GP-11/10-12'	SS-3/0-3'	SS-3/3-5'	SS-7/0-3'	SS-7/3-4'	SS-1/0-3'	SS-2/0-3'	SS-2/3-5'	SS-4/0-3'	SS-4/3-4'	SS-6/0-3'	SS-6/3-5'
Sample Depth (feet)									0-3	10-12	0-3	7-10	0-3	10-12	0-3	10-12	0-3	10-12	0-3	3-5	0-3	3-4	0-3	0-3	3-5	0-3	3-4	0-3	3-5
Date Sampled									11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/25/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08	11/26/08
Analytes	units																												
Volatile Petroleum Hydrocarbons																													
C5-C8 Aliphatics **	mg/kg	100	100	500	500	500	500	5,000	<7	NA	<7	<11	<9	NA	NA	NA	<7	NA	**6600**	**1500**	**470**	**140**	**180**	**840**	**1200**	**4000**	**11000**	**61**	**160**
C9-C12 Aliphatics	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	20,000	<7	NA	<7	<11	<9	NA	NA	NA	<7	NA	**1200**	**480**	<16	**62**	<7	**57**	**65**	**800**	**2600**	**400**	**240**
C9-C10 Aromatics	mg/kg	100	100	500	500	500	500	5,000	<7	NA	<7	**18**	<9	NA	NA	NA	<7	NA	**1700**	**1200**	**31**	<7	<7	**320**	**440**	**940**	**1000**	**360**	**1300**
Extractable Petroleum Hydrocarbons																													
C9-C18 Aliphatics	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	20,000	NA	<110	<110	**210**	<110	<100	<110	<110	<100	<99	**160**	**190**	<110	<110	<110	**110**	<110	**330**	**950**	**290**	<100
C19-C36 Aliphatics	mg/kg	3,000	3,000	5,000	5,000	5,000	5,000	20,000	NA	**110**	<110	<120	<110	**140**	<110	<110	<100	<99	<120	**240**	<110	<110	**240**	**370**	**150**	**930**	**2300**	<100	<100
C11-C22 Aromatics	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	**110**	<110	<120	<110	**170**	**270**	**100**	<100	<99	<120	<120	<110	<110	<110	**140**	<110	**220**	**610**	<100	<100
2-Methylnaphthalene	mg/kg	80	300	80	500	80	500	5,000	NA	<2.1	<0.5	**0.2**	<0.1	<2.1	<0.5	<0.5	<0.5	<0.5	<0.6	**0.1**	<0.1	<0.1	<0.1	<0.1	<0.1	**0.8**	**8.7**	**0.3**	**0.1**
Acenaphthene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	<2.1	<0.5	**0.2**	<0.1	<2.1	**0.8**	<0.5	<0.5	<0.5	**0.9**	**0.2**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Acenaphthylene	mg/kg	600	10	600	10	600	10	10,000	NA	<2.1	<0.5	<0.1	<0.1	<2.1	**0.6**	<0.5	<0.5	<0.5	<0.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Anthracene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	<2.1	<0.5	**0.6**	**0.3**	<2.1	**2.8**	<0.5	<0.5	<0.5	**1**	**0.4**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.7**	<0.1	**0.1**
Benzo(a)anthracene	mg/kg	7	7	40	40	300	300	3,000	NA	<2.1	**1**	**1.8**	**0.7**	<2.1	**5.6**	<0.5	**0.8**	**0.5**	**4.8**	**1.3**	**0.1**	<0.1	**0.6**	<0.1	**0.2**	**0.4**	**1.5**	**0.5**	**1.8**
Benzo(a)pyrene	mg/kg	2	2	7	7	30	30	300	NA	<2.1	**0.8**	**1.5**	**0.5**	<2.1	**4.2**	<0.5	**0.7**	<0.5	**2.2**	**0.6**	**0.2**	<0.1	**0.6**	<0.1	<0.1	**0.3**	**1**	**0.2**	**0.6**
Benzo(b)fluoranthene	mg/kg	7	7	40	40	300	300	3,000	NA	<2.1	**0.8**	**1.6**	**0.4**	<2.1	**4.3**	<0.5	**0.9**	<0.5	**5.4**	**1**	**0.5**	<0.1	**0.6**	**0.3**	**0.2**	**0.6**	**1.3**	**0.4**	**1.6**
Benzo(g,h,i)perylene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	<2.1	<0.5	**0.4**	**0.3**	<2.1	**1.1**	<0.5	<0.5	<0.5	**1.7**	**0.9**	**0.4**	<0.1	**0.4**	**0.1**	<0.1	**0.1**	**0.2**	**0.3**	**0.8**
Benzo(k)fluoranthene	mg/kg	70	70	400	400	3,000	3,000	10,000	NA	<2.1	**0.9**	**1.4**	**0.4**	<2.1	**3.6**	<0.5	<0.5	<0.5	**3.6**	**1**	**0.3**	<0.1	**0.6**	**0.2**	<0.1	**0.4**	**1.4**	**0.3**	**1.4**
Chrysene	mg/kg	70	70	400	400	3,000	3,000	10,000	NA	<2.1	**0.8**	**1.7**	**0.7**	<2.1	**5.1**	<0.5	**0.8**	<0.5	**5.3**	**1.3**	**0.2**	<0.1	**0.7**	**0.3**	**0.2**	**0.5**	**1.7**	**0.5**	**2**
Dibenzo(a,h)anthracene	mg/kg	1	1	4	4	30	30	300	NA	<2.1	<0.5	**0.2**	<0.1	<2.1	<0.5	<0.5	<0.5	<0.5	**0.6**	**0.2**	**0.1**	<0.1	**0.1**	<0.1	<0.1	**0.2**	<0.1	<0.1	**0.3**
Fluoranthene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	<2.1	**1.8**	**4.4**	**1.5**	<2.1	**15**	<0.5	**1.5**	**0.9**	**14**	**4.7**	**0.3**	<0.1	**1.1**	**0.5**	**0.7**	**1.9**	**3.7**	**1.3**	**6.2**
Fluorene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	<2.1	<0.5	**0.2**	<0.1	<2.1	**1.1**	<0.5	<0.5	<0.5	**0.6**	**0.3**	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	**0.7**	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	7	7	40	40	300	300	3,000	NA	<2.1	<0.5	**0.4**	**0.3**	<2.1	**1.2**	<0.5	<0.5	<0.5	**1.5**	**0.7**	**0.3**	<0.1	**0.4**	<0.1	<0.1	**0.2**	**0.2**	**0.2**	**0.8**
Phenanthrene	mg/kg	500	500	1,000	1,000	3,000	3,000	10,000	NA	<2.1	**1**	**3.5**	**1.3**	<2.1	**15**	<0.5	**0.7**	**0.8**	**12**	**3.3**	<0.1	<0.1	**0.5**	**0.1**	**0.5**	**0.7**	**3.7**	**1.3**	**4.7**
Pyrene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	NA	<2.1	**2.1**	**4.6**	**1.3**	<2.1	**15**	<0.5	**1.3**	**0.9**	**13**	**3.5**	**0.3**	<0.1	**0.9**	**0.4**	**0.5**	**1.2**	**4.2**	**1.2**	**5.2**

Notes
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
mg/kg = milligrams per kilogram
< = Analyte is not detected above the LRL presented.
* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.
** = C5-C8 aliphatic hydrocarbons include chlorinated solvent concentrations including PCE, TCE, TCA, and associated daughter products and are not representative of petroleum concentrations.
NA = Not analyzed.

TABLE 8
SUMMARY OF SOIL VPH & EPH ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Grid		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3	UCL	C-3	C-3	D-1	D-1				
Soil Boring									SS-5	SS-5	SS-8	SS-8	CDW-2	CDW-3	CDW-4	CDW-5
Sample ID									SS-5/0-3'	SS-5/3-5'	SS-8/0-3'	SS-8/3-5'	CDW-2/S-2	CDW-3/S-3	CDW-4/S-3	CDW-5/S-3
Sample Depth (feet)									0-3	3-5	0-3	3-5				
Date Sampled									11/26/08	11/26/08	11/26/08	11/26/08	3/11/15	3/11/15	3/12/15	3/12/15
Analytes	units															
Volatile Petroleum Hydrocarbons																
C5-C8 Aliphatics **	mg/kg	100	100	500	500	500	500	5,000	**230**	**20**	**110**	**53**	**0.62**	**38.4**	**11.3**	**43.2**
C9-C12 Aliphatics	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	20,000	<7	<7	<7	**20**	<0.193	**15.4**	**0.923**	**28.1**
C9-C10 Aromatics	mg/kg	100	100	500	500	500	500	5,000	<7	<7	**38**	**150**	**0.561**	**18.6**	**1.41**	**51.2**
Extractable Petroleum Hydrocarbons																
C9-C18 Aliphatics	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	20,000	<110	NA	<100	<110	NA	NA	NA	NA
C19-C36 Aliphatics	mg/kg	3,000	3,000	5,000	5,000	5,000	5,000	20,000	<110	NA	<100	**280**	NA	NA	NA	NA
C11-C22 Aromatics	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	<110	NA	<100	<110	NA	NA	NA	NA
2-Methylnaphthalene	mg/kg	80	300	80	500	80	500	5,000	<0.1	NA	<0.1	<0.1	NA	NA	NA	NA
Acenaphthene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	<0.1	NA	**0.5**	<0.1	NA	NA	NA	NA
Acenaphthylene	mg/kg	600	10	600	10	600	10	10,000	<0.1	NA	<0.1	<0.1	NA	NA	NA	NA
Anthracene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**0.1**	NA	<0.1	<0.1	NA	NA	NA	NA
Benzo(a)anthracene	mg/kg	7	7	40	40	300	300	3,000	**0.9**	NA	**2.4**	**0.2**	NA	NA	NA	NA
Benzo(a)pyrene	mg/kg	2	2	7	7	30	30	300	**1.2**	NA	**1.8**	**0.1**	NA	NA	NA	NA
Benzo(b)fluoranthene	mg/kg	7	7	40	40	300	300	3,000	**1.1**	NA	**2.1**	**0.2**	NA	NA	NA	NA
Benzo(g,h,i)perylene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**0.9**	NA	**0.9**	**0.1**	NA	NA	NA	NA
Benzo(k)fluoranthene	mg/kg	70	70	400	400	3,000	3,000	10,000	**0.7**	NA	**1.3**	**0.1**	NA	NA	NA	NA
Chrysene	mg/kg	70	70	400	400	3,000	3,000	10,000	**0.9**	NA	**2.2**	**0.2**	NA	NA	NA	NA
Dibenzo(a,h)anthracene	mg/kg	1	1	4	4	30	30	300	**0.2**	NA	**0.3**	<0.1	NA	NA	NA	NA
Fluoranthene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**1.6**	NA	<0.1	**0.6**	NA	NA	NA	NA
Fluorene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	<0.1	NA	<0.1	<0.1	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	mg/kg	7	7	40	40	300	300	3,000	**0.8**	NA	**0.9**	**0.1**	NA	NA	NA	NA
Phenanthrene	mg/kg	500	500	1,000	1,000	3,000	3,000	10,000	**0.5**	NA	<0.1	**0.3**	NA	NA	NA	NA
Pyrene	mg/kg	1,000	1,000	3,000	3,000	5,000	5,000	10,000	**1.3**	NA	**6.5**	**0.5**	NA	NA	NA	NA

Notes

Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.

mg/kg = milligrams per kilogram

< = Analyte is not detected above the LRL presented.

* = Field duplicate - highest detected concentration or, if all results are non-detect, the lowest LRL is retained.

** = C5-C8 aliphatic hydrocarbons include chlorinated solvent concentrations including PCE, TCE, TCA, and associated daughter products and are not representative of petroleum concentrations.

NA = Not analyzed.

TABLE 9
SUMMARY OF SOIL OXYGEN DEMAND AND TOC
Former Lewis Chemical Facility, Boston, Massachusetts

Parameter	WC-ESM-3 (11-14) ft bgs	WC-ESM-3 (14-15) ft bgs	WC-ESM-3 (9-11) ft bgs	WC-ESM-5 (10-12.5) ft bgs	WC-ESM-5 (12.5-15) ft bgs	WC-ESM-5 (5-10) ft bgs	WC-ESM-7 (10-12.5) ft bgs	WC-ESM-7 (12.5-15) ft bgs	WC-ESM-7 (15-17.5) ft bgs
Chemical Oxygen Demand	209	<200	533	<200	<200	228	825	287	<200
Biochemical Oxygen Demand	70	<20	268	38.2	41.8	56.4	<20	34.2	<20
Total Organic Carbon	31.6	31.4	106	31.9	41.8	108	162	60.6	329

Notes:
1. All samples collected on July 23, 2015.
2. All results reported in milligrams per kilogram (mg/kg).

TABLE 10
SUMMARY OF SURFACE WATER METAL, PCB, AND VOC ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Analyte	Units	SW-10	SW-11	SW-12		SW-13	SW-14	SW-15	SW-16	SW-17	SW-18	REF-SW-01	REF-SW-02	REF-SW-03	REF-SW-04
		8/25/2015	8/25/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015
Other					Duplicate										
Hardness as calcium carbonate	mg/L	**80**	**76**	**88**	**104**	**100**	**88**	**92**	**84**	**90**	**88**	**88**	**84**	**80**	**32**
Dissolved Metals															
Barium	ug/L	**65.2**	**59.7**	**70.2**	**67.4**	**79.7**	**63.6**	**66.3**	**64.8**	**64.4**	**60.7**	**60.1**	**67.9**	**62.5**	**59**
Copper	ug/L	<1.6	<1.6	<1.6	**2.71**	**1.78**	**2.05**	<1.6	**2.3**	**2.44**	**2.48**	**2.74**	**1.6**	**2.31**	**2.2**
Mercury	ug/L	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	**0.142**	<0.12	<0.12	<0.12
Nickel	ug/L	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	**1.27**	**1.42**	<1.26	<1.26
Zinc	ug/L	**16.3**	**4.68**	**7.77**	**8.33**	**9.32**	**9.21**	**5.66**	**3.56**	**5.57**	**5.18**	**9.17**	**6.53**	**4.12**	**5.02**
PCBs															
Aroclor-1232	ug/L	<0.235	<0.229	<0.233	<0.235	**1.26 J**	<0.233	<0.232	**0.469 J**	**0.292**	<0.235	**1.25**	<0.234	<0.239	<0.235
VOCs															
1,1,1-Trichloroethane	ug/L	<1	<1	**1.24**	**1.03**	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/L	<1	<1	**1**	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	ug/L	**1.16**	<1	**1.59**	**1.64**	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	**1.89**	**1.93**	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
ug/L = micrograms per liter
mg/L = milligrams per liter

TABLE 11
SUMMARY OF PORE WATER METAL, PCB, AND VOC ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

Analyte	Units	PW-10	PW-12		PW-13	PW-14	PW-15		PW-16	REF-PW-01	REF-PW-02	REF-PW-03
		8/25/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015
Other				Duplicate								
Hardness as calcium carbonate	mg/L	372	476	484	532	410	390	NA	540	348	112	20
Total Metals												
Arsenic	ug/L	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	NA	<5.55	<5.55	<5.55	**5.66**
Barium	ug/L	**247**	**438**	**454**	**508**	**269**	**232**	NA	**169**	**234**	**98.7**	**42.3**
Cadmium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	<0.5	**0.63**	<0.5	<0.5
Chromium	ug/L	**1.07**	<1	<1	**1.98**	**6.35**	**5.17**	NA	**3.55**	<1	<1	**2.57**
Copper	ug/L	**1.72**	<1.6	<1.6	<1.6	<1.6	<1.6	NA	<1.6	<1.6	<1.6	<1.6
Mercury	ug/L	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	NA	**0.147**	<0.12	<0.12	<0.12
Nickel	ug/L	**2.63**	<1.26	<1.26	<1.26	**3.22**	**6.74**	NA	**2.71**	**15.4**	**1.4**	<1.26
Vanadium	ug/L	<1.5	<1.5	<1.5	<1.5	**2.72**	**4.29**	NA	**2.41**	<1.5	<1.5	**2.67**
Zinc	ug/L	**26.6**	<1.5	**1.85**	<1.5	**1.66**	**2.12**	NA	**3.15**	**440**	**7.99**	**3.35**
PCBs												
Aroclor-1232	ug/L	<0.233	**10.6 J**	**6.68 J**	**71.5 J**	**26.7 J**	**116 J ***	**0.742 J ****	**43 J**	**9.11**	**1.7**	<0.234
Aroclor-1242	ug/L	**2.93**	<0.23	<0.237	<0.24	<0.24	<0.234 *	<0.248 **	<0.277	<0.238	<0.236	**1.15**
Aroclor-1254	ug/L	**0.373**	<0.23	<0.237	**0.344 J**	**0.242 J**	**0.48 J ***	<0.248 **	**0.745 J**	<0.238	<0.236	**0.272**
VOCs												
1,1,1-Trichloroethane	ug/L	**2.03**	**498**	**446**	<1	<4	<20	NA	<4	<1	<1	<1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/L	**11.1**	**184**	**158**	<1	<4	<20	NA	<4	<1	<1	<1
1,1-Dichloroethane	ug/L	**10.8**	**447**	**412**	**3.28**	<4	<20	NA	<4	**9.57**	<1	<1
1,2-Dichlorobenzene	ug/L	**1.17**	**36.7**	**32.7**	**5.16**	<4	<20	NA	<4	<1	<1	<1
Benzene	ug/L	<1	<20	<20	**1.08**	<4	<20	NA	<4	<1	<1	<1
Chlorobenzene	ug/L	<1	<20	<20	**3.6**	<4	<20	NA	<4	<1	<1	<1
Chloroethane	ug/L	<2	<40	<40	**5.32**	**12.1**	**1800**	NA	**12.2**	<2	<2	<2
cis-1,2-Dichloroethylene	ug/L	**20.7**	**356**	**316**	**1.62**	<4	<20	NA	<4	**9.87**	<1	<1
Dichlorodifluoromethane	ug/L	<1	**122**	**113**	<1 UJ	<4 UJ	<20	NA	<4 UJ	<1	<1	<1
Methyl tert-Butyl Ether (MTBE)	ug/L	<1	<20	<20	<1	<4	<20	NA	**4.71**	<1	<1	<1
Methylene Chloride	ug/L	<1	**49.2**	**61.9**	<1	<4 U	**76.8**	NA	**9.25**	<1	<1	<1
Tetrachloroethene	ug/L	**19.7**	<20	<20	<1	<4	<20	NA	<4	<1	<1	<1
Toluene	ug/L	<1	**29.2**	**23.4**	<1	<4	<20	NA	<4	<1	<1	<1
trans-1,2-Dichloroethylene	ug/L	**1.98**	<20	<20	<1	<4	<20	NA	<4	<1	<1	<1
Trichloroethylene	ug/L	**18.3**	**21.4**	<20	<1	<4	<20	NA	<4	**4.38**	<1	<1
Vinyl Chloride	ug/L	**22.6**	**826**	**726**	**1.93**	<4	<20	NA	<4	**3.55**	<1	<1

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
ug/L = micrograms per liter.
mg/L = milligrams per liter.
NA = Not applicable.
* = Total PCB analytical data.
** = Filtered PCB analytical data.

TABLE 12
SUMMARY OF SEDIMENT METAL, PCB, VOC, AND SVOC ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

		Site Locations																Reference Locations						
		SED-DS	SED-MC	SED-SH	S-03	S-04	S-06	S-08	S-09	SED-10	SED-12		SED-13	SED-14	SED-15	SED-16	SED-17	SED-US	S-01	S-02	REF-SED-01	REF-SED-02	REF-SED-03	REF-SED-04
Analyte	Units	7/8/2002	7/8/2002	7/8/2002	5/30/2006	5/30/2006	5/30/2006	5/30/2006	5/30/2006	8/25/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	7/8/2002	5/30/2006	5/30/2006	8/27/2015	8/27/2015	8/27/2015	8/27/2015
Other											Duplicate													
Fractional Organic Carbon	%	NA	NA	NA	NA	NA	NA	NA	NA	**17.4 J**	**9.1**	**9.2**	**8.1**	**3**	**2.6**	**8.7**	**10.8 J**	NA	NA	NA	**5.3**	**16.5 J**	**1.4**	**4.3**
Metals																								
Antimony	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	**1.79 J**	**2.34**	**2.27**	<1.19	<0.79	**2.44**	**1.97**	**1.61 J**	NA	NA	NA	<0.643	<1.82 UJ	<0.45	<4.45
Arsenic	mg/Kg	**4.7**	**4.2**	**12.7**	NA	NA	NA	NA	NA	**2.51 J**	**11.1**	**8.87**	**3.56**	**3.82**	**7.99**	**7.36**	**7 J**	**9.9**	NA	NA	**3.29**	**7.81 J**	**1.74**	<4.45
Barium	mg/Kg	**48.2**	**54.9**	**164**	NA	NA	NA	NA	NA	**55.3 J**	**246 J+**	**164 J+**	**78 J+**	**51.6 J+**	**123 J+**	**113 J+**	**127 J+**	**115**	NA	NA	**40.1 J+**	**103 J+**	**16.7 J+**	**48.7 J+**
Beryllium	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	**0.18 J**	**0.896**	**0.606**	**0.315**	**0.257**	**0.517**	**0.428**	**0.475 J**	NA	NA	NA	**0.23**	**0.551 J**	**0.127**	<0.312
Cadmium	mg/Kg	**0.49**	**0.67**	**3.6**	NA	NA	NA	NA	NA	**1.11 J**	**4.57**	**3.18**	**1.05**	**0.699**	**2.57**	**1.94**	**1.87 J**	**2**	NA	NA	**0.5**	**1.82 J**	**0.146**	**0.757**
Chromium	mg/Kg	**20.8**	**37.6**	**100**	NA	NA	NA	NA	NA	**25.6 J**	**167**	**112**	**29.3**	**24.1**	**91.4**	**71.3**	**46 J**	**79.8**	NA	NA	**25.1**	**47.3 J**	**6.65**	**31.5**
Copper	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	**58.2 J**	**164**	**153**	**39.9**	**41.3**	**146**	**110**	**69 J**	NA	NA	NA	**55.9**	**75.3 J**	**17**	**26.1**
Lead	mg/Kg	**132**	**113**	**296**	**410**	**31**	**6.1**	NA	**89**	**83.9 J**	**544 J-**	**366 J-**	**88 J-**	**79.9 J-**	**427 J-**	**378 J-**	**131 J-**	**212**	NA	NA	**212 J-**	**144 J-**	**50.7 J-**	**60.5 J-**
Mercury	mg/Kg	**0.17**	**0.28**	**1.7**	**0.12**	<0.02	<0.06	NA	**0.09**	**0.368 J**	**2.01 J+**	**1.76 J+**	**0.213 J+**	**0.309 J+**	**1.16 J+**	**0.844 J+**	**0.495 J+**	**2.1**	NA	NA	**0.138 J+**	**0.464 J+**	**0.0266 J+**	**0.198 J+**
Nickel	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	**6.72 J**	**28.3**	**19.3**	**10.1**	**18.9**	**22.9**	**18.4**	**13.9 J**	NA	NA	NA	**11.5**	**15.8 J**	**5.97**	**7.25**
Selenium	mg/Kg	<0.57	<0.54	**4.3**	NA	NA	NA	NA	NA	<1.63 UJ	<1.22	<1.22	<1.19	<0.79	<1.25	<0.907	**1.63 J**	<0.99	NA	NA	<0.643	<1.82 UJ	<0.45	<4.45
Silver	mg/Kg	**1**	**2.1**	**2.3**	**3**	**0.9**	<0.7	NA	<0.5	<0.817 UJ	**1.14**	**0.721**	<0.594	<0.395	<0.623	<0.453	<0.665 UJ	**1.9**	NA	NA	<0.322	<0.911 UJ	<0.225	<2.23
Vanadium	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	**17.8 J**	**68.4**	**47.7**	**20.6**	**16.9**	**35.8**	**26.9**	**25.5 J**	NA	NA	NA	**16.6**	**30.4 J**	**12.2**	**16.1**
Zinc	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	**146 J**	**474 J+**	**323 J+**	**224 J+**	**207 J+**	**398 J+**	**335 J+**	**342 J+**	NA	NA	NA	**206 J+**	**333 J+**	**73.1 J+**	**134 J+**
PCBs																								
Aroclor-1232	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	<1.57 UJ	**768 J**	**963 J**	<12.8	<8.18	**218 J**	**128 J**	<15.8 UJ	NA	NA	NA	**8.4**	**47.4 J**	<0.974	<7.63
Aroclor-1242	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	**5.42 J**	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	NA	NA	NA	<1.42	<18.9 UJ	<0.974	<7.63
VOCs																								
1,1,1-Trichloroethane	mg/Kg	<0.008	<0.007	**0.23**	<0.6	<0.1	**0.8**	<0.3	<0.4	<0.0263 UJ	**0.129**	**0.0952**	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	**0.0771 J**	**0.0903 J-**	**0.132 J-**	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	NA	NA	NA	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1-Dichloroethane	mg/Kg	<0.008	<0.007	**0.16**	**0.7**	<0.1	<0.4	<0.3	<0.4	**0.0451 J**	**0.0725 J-**	**0.0845 J-**	<0.0166	**0.00948**	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1-Dichloroethylene	mg/Kg	<0.008	<0.007	**0.022**	<0.6	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2,4-Trichlorobenzene	mg/Kg	<0.008	<0.007	<0.026	<0.6	<0.1	**0.4**	<0.3	<0.4	<0.0263 UJ	**0.101**	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2,4-Trimethylbenzene	mg/Kg	<0.008	**0.004**	**0.087**	<0.6	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	**0.0153**	<0.0194 UJ	**0.004**	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2-Dichlorobenzene	mg/Kg	<0.008	<0.007	**0.32**	<0.6	<0.1	**6.3**	<0.3	<0.4	**0.14 J**	**0.381**	**0.32**	**0.274**	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2-Dichloroethane	mg/Kg	<0.008	<0.007	**0.022**	<0.6	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,3,5-Trimethylbenzene	mg/Kg	<0.008	<0.007	**0.033**	<0.6	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,4-Dichlorobenzene	mg/Kg	<0.008	<0.007	**0.008**	<0.6	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
2-Butanone (MEK)	mg/Kg	**0.007**	**0.007**	**0.048**	<3	<0.5	<2	<2	<2	<0.131 UJ	<7.75	<6.39	**0.177**	**0.167**	**0.312**	**0.153**	<0.0968 UJ	**0.018**	<2	<0.8	<0.0474	<0.125 UJ	<0.0216	<0.0563
4-Isopropyltoluene	mg/Kg	<0.008	<0.007	**0.013**	<0.6	**0.2**	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	**0.01**	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
4-Methyl-2-Pentanone (MIBK)	mg/Kg	<0.008	<0.007	**0.012**	<3	<0.5	<2	<2	<2	<0.131 UJ	<7.75	<6.39	<0.0831	<0.0468	<0.0924	<0.058	<0.0968 UJ	**0.006**	<2	<0.8	<0.0474	<0.125 UJ	<0.0216	<0.0563
Acetone	mg/Kg	**0.031**	**0.038**	**0.22**	<10	<3	<10	<8	<9	<1.31 UJ	<77.5	<63.9	<0.831	**0.553**	**1.07**	<0.58	<0.968 UJ	**0.1**	<10	<4	<0.474	<1.25 UJ	<0.216	<0.563
Benzene	mg/Kg	<0.008	<0.007	**0.018**	<0.6	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
Carbon Disulfide	mg/Kg	**0.007**	**0.005**	**0.022**	<0.6	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	**0.007**	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
Chlorobenzene	mg/Kg	<0.008	<0.007	**0.037**	<0.6	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	**0.0527**	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
Chloroethane	mg/Kg	<0.008	**0.009**	**1.4**	**22**	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	**0.13 J-**	**0.0651 J-**	**0.0198 J-**	**0.0665 J-**	**1.18 J-**	**0.228 J-**	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948 UJ	<0.025 UJ	<0.00431 UJ	<0.0113 UJ
cis-1,2-Dichloroethylene	mg/Kg	<0.008	<0.007	**0.62**	<0.6	<0.1	**0.8**	<0.3	<0.4	**0.178 J**	**0.469**	**0.398**	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	**0.004**	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
Ethylbenzene	mg/Kg	<0.008	**0.002**	**0.13**	**1**	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	**0.0311 J-**	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
m/p-Xylenes	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	<0.0263 UJ	**0.0498 J-**	<1.28	<0.0166	<0.00936	<0.0185	**0.0178**	<0.0194 UJ	NA	NA	NA	<0.00948	<0.025 UJ	<0.00431	<0.0113
Methyl tert-Butyl Ether (MTBE)	mg/Kg	<0.008	<0.007	<0.026	<0.6	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	**0.005**	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
Methylene Chloride	mg/Kg	<0.008	<0.007	**0.023**	<1	<0.3	<1	<0.8	<0.9	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<1	<0.4	<0.00948	<0.025 UJ	<0.00431	<0.0113
Naphthalene	mg/Kg	<0.008	**0.41**	**0.014**	<1	<0.3	<1	<0.8	<0.9	<0.131 UJ	<7.75	<6.39	<0.0831	<0.0468	<0.0924	<0.058	<0.0968 UJ	**0.004**	<1	<0.4	<0.0474	<0.125 UJ	<0.0216	<0.0563
n-Propylbenzene	mg/Kg	<0.008	<0.007	**0.012**	<0.6	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
o-Xylene	mg/Kg	NA	NA	NA	**0.8**	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	**0.079 J-**	**0.0234 J-**	<0.0166	<0.00936	<0.0185	**0.0285**	<0.0194 UJ	NA	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
sec-Butylbenzene	mg/Kg	<0.008	<0.007	**0.01**	<0.6	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
Tetrachloroethene	mg/Kg	<0.008	<0.007	**0.008**	<0.6	<0.1	**3.9**	<0.3	<0.4	**0.231 J**	**0.0195 J-**	**0.0251 J-**	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
Tetrahydrofuran (THF)	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	<0.263 UJ	<15.5	<12.8	<0.166	**0.112**	<0.185	**0.131**	<0.194 UJ	NA	NA	NA	<0.0948	<0.25 UJ	**0.0561**	<0.113
Toluene	mg/Kg	<0.008	**0.006**	**0.83**	**8.1**	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	**0.191**	<1.28	<0.0166	<0.00936	**0.0202**	**0.0128**	<0.0194 UJ	**0.049**	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
trans-1,2-Dichloroethylene	mg/Kg	<0.008	<0.007	**0.025**	**0.6**	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
Trichloroethylene	mg/Kg	<0.008	**0.002**	**0.015**	<0.6	<0.1	**1.1**	<0.3	<0.4	**0.107 J**	<1.55	**0.0228 J-**	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	**0.004**	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
Trichlorofluoromethane	mg/Kg	**0.002**	<0.007	<0.026	<0.6	<0.1	<0.4	<0.3	<0.4	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113
Vinyl Chloride	mg/Kg	<0.008	<0.007	**0.15**	<0.6	<0.1	<0.4	<0.3	<0.4	**0.0457 J**	<1.55	**0.0171 J-**	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.016	<0.4	<0.2	<0.00948	<0.025 UJ	<0.00431	<0.0113

TABLE 12
SUMMARY OF SEDIMENT METAL, PCB, VOC, AND SVOC ANALYSES
Former Lewis Chemical Facility, Boston, Massachusetts

		Site Locations																Reference Locations						
		SED-DS	SED-MC	SED-SH	S-03	S-04	S-06	S-08	S-09	SED-10	SED-12		SED-13	SED-14	SED-15	SED-16	SED-17	SED-US	S-01	S-02	REF-SED-01	REF-SED-02	REF-SED-03	REF-SED-04
Analyte	Units	7/8/2002	7/8/2002	7/8/2002	5/30/2006	5/30/2006	5/30/2006	5/30/2006	5/30/2006	8/25/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	7/8/2002	5/30/2006	5/30/2006	8/27/2015	8/27/2015	8/27/2015	8/27/2015
SVOCs																								
2-Methylnaphthalene	mg/Kg	<5.5	**0.28**	<2	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	<9.9	NA	NA	NA	NA	NA	NA
Acenaphthene	mg/Kg	**1**	**0.83**	<2	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	<9.9	NA	NA	NA	NA	NA	NA
Acenaphthylene	mg/Kg	<5.5	**0.21**	<2	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	<9.9	NA	NA	NA	NA	NA	NA
Anthracene	mg/Kg	**2**	**1.9**	**0.49**	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	<9.9	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	mg/Kg	**4.9**	**4.9**	**2**	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	**2.2**	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	mg/Kg	**4.6**	**4.7**	**2.3**	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	**2.4**	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	mg/Kg	**6.5**	**6.4**	**4**	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	**4.4**	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	mg/Kg	**2.1**	**2.2**	**1.4**	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	<9.9	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	mg/Kg	**2.7**	**2.8**	**1.8**	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	**1.8**	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	mg/Kg	**2.2**	**11**	**9.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.1**	NA	NA	NA	NA	NA	NA
Carbazole	mg/Kg	**1.1**	**0.73**	**0.44**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<9.9	NA	NA	NA	NA	NA	NA
Chrysene	mg/Kg	**5.9**	**6.2**	**3.4**	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	**3.7**	NA	NA	NA	NA	NA	NA
Dibenzofuran	mg/Kg	**0.62**	**0.42**	<2	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	<9.9	NA	NA	NA	NA	NA	NA
di-n-Octylphthalate	mg/Kg	<5.5	**0.53**	**1.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<9.9	NA	NA	NA	NA	NA	NA
Fluoranthene	mg/Kg	**11**	**10**	**4.6**	**3**	<0.6	<2	NA	**3**	NA	NA	NA	NA	NA	NA	NA	NA	**5.4**	NA	NA	NA	NA	NA	NA
Fluorene	mg/Kg	**0.95**	**0.95**	**0.24**	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	<9.9	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	mg/Kg	**2.2**	**2.2**	**1.5**	<2	<0.6	<2	NA	<2	NA	NA	NA	NA	NA	NA	NA	NA	**1.4**	NA	NA	NA	NA	NA	NA
Phenanthrene	mg/Kg	**10**	**9.2**	**2.7**	**2**	<0.6	<2	NA	**2**	NA	NA	NA	NA	NA	NA	NA	NA	**2.8**	NA	NA	NA	NA	NA	NA
Pyrene	mg/Kg	**13**	**13**	**6.4**	**2**	<0.6	<2	NA	**2**	NA	NA	NA	NA	NA	NA	NA	NA	**6.4**	NA	NA	NA	NA	NA	NA

Notes:
Analytes detected above the laboratory reporting limit (LRL) are presented in **bold** font.
< = Analyte is not detected above the LRL presented.
mg/kg = millograms per kilogram
NA = Not applicable.
J = estimated
J- = estimated, biased low
J+ = estimated, biased high
UJ = estimated, non-detect
R = rejected

TABLE 13
SUMMARY OF WATER TABLE ELEVATIONS - Hydraulic Evaluation
Fomer Lewis Chemical Facility, Boston, Massachusetts

Well	Unit	MP[1] (ft)	Well Screen		Diameter		DTW (ft)	WLE (ft)
			Top (ft bgs)	Bottom (ft bgs)	Borehole (in)	Well (in)		
ESM-01	Overburden	99.36	7	22	4.25	2	14.55	84.81
ESM-02	Overburden	98.66	5	20	4.25	2	14.21	84.45
ESM-03	Overburden	92.50	4	14	4.25	2	8.62	83.88
ESM-03B-D	Bedrock	92.71	60	70	3.00	2	9.45	83.26
ESM-03B-S	Bedrock	92.72	30	40	4.00	1	8.81	83.91
ESM-04	Overburden	92.08	4	14	4.25	2	8.71	83.37
ESM-05	Overburden	91.82	3	18	4.25	2	8.22	83.60
ESM-05B	Bedrock	92.75	30	40	4.00	2	9.40	83.35
ESM-06	Overburden	92.05	4.5	20	4.25	2	7.68	84.37
ESM-07	Overburden	98.36	8	23	4.25	2	14.60	83.76
ESM-08	Overburden	98.03	5	15	4.25	2	10.25	87.78
ESM-08B	Bedrock	98.89	45	55	3.00	2	13.35	85.54
ESM-09	Overburden	92.28	3	16	4.25	2	8.26	84.02
ESM-11	Overburden	95.48	8	18	4.25	2	13.38	82.10
ESM-12	Overburden	99.26	7	17	4.25	2	13.40	85.86
ESM-13	Overburden	98.44	6	16	4.25	2	11.05	87.39
ESM-14	Overburden	98.62	6	16	4.25	2	10.60	88.02
ESM-15	Overburden	92.07	3	18	2.25	2	8.41	83.66
G-A-2	Overburden	91.78	10.5	20.5	2.25	2	8.16	83.62
G-B-3	Overburden	92.25	8	18	2.25	2	8.64	83.61
G-B-1	Overburden	92.33	6	16	2.25	2	8.72	83.61
G-C-1	Overburden	91.48	8	18	2.25	2	7.87	83.61
G-D-1	Overburden	91.61	7	14	2.25	2	7.95	83.66
G-D-3	Overburden	91.76	8	18	2.25	2	8.06	83.70
G-E-2	Overburden	91.40	7.5	17.5	2.25	2	7.60	83.80
CDW-02	Overburden	--	--	--	--	2	9.18	--
CDW-03	Overburden	--	--	--	--	2	8.60	--
CDW-04B	Bedrock	--	--	--	--	2	7.85	--
CDW-05	Overburden	--	--	--	--	2	9.37	--

Notes:

MP = Measuring Point (PVC casing).

ft bgs = Feet Below Ground Surface.

DTW = Depth to Water.

WLE = Water Level Elevation.

-- = Data not available.

1. Assumed benchmark 100.00 feet at sewer manhole rim near ESM-01.
2. Water levels measured on June 29, 2015 prior to the start of the hydraulic evaluation.

TABLE 14
SUMMARY OF HYDRAULIC EVALUATION RESULTS

Former Lewis Chemical Facility, Boston, Massachusetts

Date	*Well*	*Unit*	*Hydraulic Observations*
4/11/06 *Historical**	ESM-03	Overburden	Hydraulic conductivity = 0.25 ft/day
	ESM-05	Overburden	Hydraulic conductivity = 26 ft/day
	ESM-13	Overburden	Hydraulic conductivity = 0.26 ft/day
6/29/2015	ESM-5B	Bedrock	Flow range: 0.26 - 1.4 gpm Well dry as flow decreased from 1.4 gpm to 1 gpm
	ESM-3B-D	Bedrock	Flow range: 0.5 to 1 gpm Drawdown 40 ft after 45 minutes of pumping
	ESM-8B	Bedrock	Measured flow range: 0.5 to 0.85 gpm Well dry when rate increased to approx. 1 gpm
6/30/2015	ESM-6	Overburden	Flow rate: 0.47 to 2 gpm Well dry at approx. 1.8-2 gpm
	ESM-3	Overburden	Well dry at 0.63 gpm
	CDW-5	Overburden	Well dry at 0.37 gpm
	G-D-1	Overburden	Sustained flow at 0.79 gpm Drawdown = 0.9 ft Specific capacity = 0.88 gpm/ft
7/1/2015	ESM-3B-D	Bedrock	Sustained flow at 0.42 gpm for 70 minutes Approx. 8.4 feet drawdown Specific capacity = 0.05 gpm/ft Hydraulic conductivity = 3.75 ft/day
	ESM-6	Overburden	Drawdown of 1.05 ft at 1.05 gpm (Test 1) Drawdown of 1.63 ft at 1.75 gpm (Test 2) Specific capacity = 0.65 gpm/ft Hydraulic conductivity = 0.95 ft/day

Notes:

* Environmental Strategies & Management, 2007. Draft Phase II CSA, MassDEP RTN 3-1616.

gpm = gallons per minute

TABLE 15
DETAILED EVALUATION OF SELECT REMEDIAL STRATEGIES
Former Lewis Chemical Facility, Boston, Massachusetts

Remedial Strategy	Remedial Strategy #1	Remedial Strategy #2	Remedial Strategy #3
	OB: AUL, Soil Excavation/Stabilization, Thermal **BR:** MNA **SW/Sed:** Assessment Only	**OB:** AUL, Soil Excavation/Stabilization, MPE **BR:** MNA **SW/Sed:** Assessment Only	**OB:** AUL, Soil Excavation/Stabilization, PRB **BR:** MNA **SW/Sed:** Assessment Only
Comparative Effectiveness (310 CMR 40.0858(1))	- Likely to achieve a Permanent Solution in the overburden and bedrock, and in the quickest timeframe compared to the other alternatives. - Shallow OB soils: Effective approach to eliminate exposure risks to surficial soils (0-5 ft bgs) by stabilizing leachable metals and removing PCBs, metals, and VOCs from the Site. - Deep OB soils: Thermal technologies would destroy, detoxify, and treat hazardous material in the deeper soils and overburden groundwater. - By removing and/or treating residual source areas, impacts to the groundwater in bedrock are reduced, making MNA an effective technology for monitoring long-term concentration reductions in the groundwater. - Similar to other alternatives evaluated, the AUL will limit exposure and future risk onsite. - Likely to approach background in soil, porewater, sediment, and groundwater as impacts will be destroyed, stabilized, or removed but residial imapcts may require AUL for overburden and bedrock. Additional assessment is required evaluate background concentrations in the river. - Remedial Strategy #1 is most likely to achieve a Permanent Solution in the quickest timeframe. The majority of the overburden mass is quickly destroyed and/or removed (less than two years) via thermal treatment technologies, which significantly reduces the mass discharge from the source area. The reduction in mass discharge dissolving to groundwater provides for a quicker timeframe in which natural processes can attenuate the residual groundwater impacts in the overburden and bedrock groundwater. Reduced concentrations in the overburden and bedrock groundwater will lead to reduced concentrations in the pore water and surface water as the source of the impacts has been eliminated or reduced.	- Likely to achieve a Permanent Solution in the overburden and bedrock; timeframe longer than Remedial Strategy #1. - Shallow OB soils: Effective approach to eliminate exposure risks to surficial soils (0-5 ft bgs) by stabilizing leachable metals and removing PCBs, metals, and VOCs from the Site. - Deep OB soils: MPE would destroy and treat oil and/or hazardous material in the overburden groundwater and vadose zone. - By removing and/or treating residual source areas, impacts to the groundwater in bedrock are reduced, making MNA an effective technology for monitoring long-term concentration reductions in the groundwater. - Similar to other alternatives evaluated, the AUL will limit exposure and future risk onsite. - Likely to approach background in soil, porewater, sediment, and groundwater as impacts will be destroyed, stabilized, or removed but residial imapcts may require AUL for overburden and bedrock. Additional assessment is required evaluate background concentrations in the river. - Remedial Strategy #2 will require a longer time frame than Remedial Strategy #1 to achieve a Permanent Solution. While much of the overburden mass will be extracted and treated through the use of MPE, the length of time generally increases as treatment rates are dependant on soil lithology, depth of impacts, and desorption rates. There is some long-term risk associated with being able to remove sorbed VOCs if soil drying does not occurr. Reduced concentrations in the overburden and bedrock groundwater lead to reduced concentrations in the pore water and surface water as the source of the impacts has been eliminated or reduced.	- Likely to achieve a Temporary Solution, however, the length of time greatly increases when treating source areas with a PRB (groundwater flow velocity dependant); longest timeframe of the three remedial strategies - Shallow OB soils: Effective approach to eliminate exposure risks to surficial soils (0-5 ft bgs) by stabilizing leachable metals and removing PCBs, metals, and VOCs from the Site. - Deep OB soils: The PRB will treat water from source areas prior to transport off-site. - Similar to the other remedial strategies, MNA provides an environmentally sustainable approach that utilizes natural in-situ processes to reduce groundwater concentrations. This strategy (#3) would rely more heavily on MNA since the PRB is not an active source zone remediation approach. - Similar to other alternatives evaluated, the AUL will limit exposure and future risk onsite. - Likely to approach background in soil, porewater, sediment, and groundwater as impacts will be destroyed, stabilized, or removed but residial imapcts may require AUL for overburden and bedrock. Additional assessment is required evaluate background concentrations in the river. - Remedial Strategy #3 will require the longest timeframe. The length of time required to treat source areas with a PRB is dependant on groundwater flow velocity. Therefore, it will be an extended amount of time before reductions in bedrock groundwater, pore water, and surface water are observed.
Short- and Long-Term Reliability (310 CMR 40.0858(2))	- Reliable in the short and long term as the shallow overburden material (0-5 ft bgs) will be removed and the deeper impacts will be destroyed and/or treated by thermal. While greenhouse gas and remediation waste generation are high utilizing these source area alternatives, it is comparable with the other remedial strategies evaluated. - MNA provides an environmentally sustainable approach, utilizing naturally occuring processes to reduce groundwater impacts. Greenhouse gas emisions and remediation wastes are minimal with a MNA approach post-source area treatment. - Achievement of No Significant Risk attainable after sufficient flushing of site groundwater through the bedrock has occurred to reduce contaminant levels below the UCL. The timeframe to achieve NSR is the quickest compared to the other alternatives as the majority of the overburden mass is destroyed and/or removed via thermal treatment processes.	- Reliable in the short term as the shallow overburden material (0-3 ft bgs) will be removed. Long term reliability for overburden groundwater will be dependent on MPE effectiveness in extracting residual contaminant mass from the subsurface. While greenhouse gas and remediation waste generation are high utilizing these source area alternatives, it is comparable with the other remedial strategies evaluated. - MNA provides an environmentally sustainable approach, utilizing naturally occuring processes to reduce groundwater impacts, and lowers remediation costs. Greenhouse gas emisions and remediation wastes are minimal with a MNA approach post-source area treatment. - Achievement of No Significant Risk only attainable after a significant flushing of Site groundwater through the bedrock has occurred to reduce contaminant levels below the UCL. The timeframe to achieve NSR is longer than Remedial Strategy #1, but quicker than Remedial Strategy #3 as MPE requires slightly longer timeframes to reduce the overburden mass.	- Reliable in the short term as the shallow overburden material (0-3 ft bgs) will be removed. Long term reliability for overburden groundwater is dependent on the timeframe for contaminants to dissolve into groundwater (from soil) and flow to/ through the PRB, and the potential need and ability to replenish the PRB in the future, should conditions warrant it. - MNA reduces the generation of remediation wastes and production of greenhouse gases, is environmentally sustainable, utilizes naturally occuring biological processes to stabilize and/or degrade impacts, and lowers remediation costs. However, achievement of No Significant Risk only attainable after a significant flushing of Site groundwater through both the PRB and the bedrock has occurred to reduce contaminant levels below the UCL. The timeframe to achieve NSR is the longest of the three remedial strategies, as the source area treatment method (PRB) is groundwater flow velocity dependant. - Significant uncertainty on whether the alternative will achieve remedial objectives for overburden and bedrock groundwater.
Implementability (310 CMR 40.0858(3))	- Widely used alternatives, proven to be implementable, and all are common and accepted technologies. - Low level of technical complexity for shallow soil excavation/stabilization as alternative can be conducted in wet or dry conditions and will most likely not require dewatering. Simple, readily available equipment, materials and binding agents are available for use. - High level of technical complexity for thermal treatment, requiring extensive design and permitting. - Significant transport efforts for off-site disposal of shallow soils (via roadways); similar for all three remedial strategies. - Requires large land area for equipment staging, material handling, and off-site transport. - Significant harm and damage to ecosystem caused during excavation. - Will require long-term monitoring of both overburden and bedrock groundwater concentrations to evaluate effectiveness in reducing concentrations.	- Widely used alternatives, proven to be implementable, and all are common and accepted technologies. - Low level of technical complexity for shallow soil excavation/stabilization as alternative can be conducted in wet or dry conditions and will most likely not require dewatering. Simple, readily available equipment, materials, and binding agents are available for use. - Moderate level of technical complexity for MPE, requiring an extensive understanding of subsurface conditions, stratigraphy, and presence of NAPL. - Significant transport efforts for off-site disposal of shallow soils (via roadways) as well as disposal of any potential sludge from MPE treatment; slightly higher than other alternatives due to sludge potential. - Significant harm and damage to ecosystem caused during excavation. - Will require long-term monitoring of both overburden and bedrock groundwater concentrations to evaluate effectiveness in reducing concentrations.	- Widely used alternatives, proven to be implementable, and all are common and accepted technologies. Some uncertainty exists surrounding ability to implement the PRB technology at this Site due to proximity of the river and steep embankment. - Low level of technical complexity for shallow soil excavation/stabilization as alternative can be conducted in wet or dry conditions and will most likely not require dewatering. Simple, readily available equipment, materials, and binding agents are available for use. - Moderate level of technical complexity for the PRB, requiring an extensive understanding of subsurface conditions and groundwater flow paths. - Significant transport efforts for off-site disposal of shallow soils (via roadways); similar for all three remedial strategies. - Significant harm and damage to ecosystem caused during excavation. - Will require long-term monitoring of both overburden and bedrock groundwater as well as surface water to evaluate effectiveness in reducing concentrations.

TABLE 15
DETAILED EVALUATION OF SELECT REMEDIAL STRATEGIES
Former Lewis Chemical Facility, Boston, Massachusetts

Remedial Strategy	Remedial Strategy #1	Remedial Strategy #2	Remedial Strategy #3
	OB: AUL, Soil Excavation/Stabilization, Thermal **BR:** MNA **SW/Sed:** Assessment Only	**OB:** AUL, Soil Excavation/Stabilization, MPE **BR:** MNA **SW/Sed:** Assessment Only	**OB:** AUL, Soil Excavation/Stabilization, PRB **BR:** MNA **SW/Sed:** Assessment Only
Relative Cost (310 CMR 40.0858(4))	- Costs of implementation - High - Costs of environmental restoration - High - Costs of energy consumption & greenhouse gas emissions - High	- Costs of implementation - Moderate to High - Costs of environmental restoration - High - Costs of energy consumption & greenhouse gas emissions - Moderate to High	- Costs of implementation - Low to Moderate - Costs of environmental restoration - High - Costs of energy consumption & greenhouse gas emissions - Low to Moderate
Risk (310 CMR 40.0858(5))	- Short term risks - impacts to neighbors during system construction and operation. - Long term risks - Reduced long term risks with this alternative given AUL on property preventing groundwater use and limiting re-use options. - Of harm to health, safety, public welfare, and/or the environment after completion - No Significant Risk will be achieved once remediation is complete.	- Short term risks - impacts to neighbors during system construction and operation. - Long term risks - Reduced long term risks with this alternative given AUL on property preventing groundwater use and limiting re-use options. - Of harm to health, safety, public welfare, and/or the environment - No Significant Risk will be achieved once remediation is complete.	- Short term risks - impacts to neighbors during system construction and operation. - Long term risks - Reduced long term risks with this alternative given AUL on property preventing groundwater use and limiting re-use options. - Of harm to health, safety, public welfare, and/or the environment - No Significant Risk will be achieved once remediation is complete.
Benefit (310 CMR 40.0858(6))	- Short term benefits are low due to the destruction of natural resources during implementation. However, upon completion, the Site can be restored. - Long term benefits (assuming ecological community and habitat are able to be restored) are comparable with other remedial approaches.	- Short term benefits are low due to the destruction of natural resources during implementation. However, upon completion, the Site can be restored. - Long term benefits (assuming ecological community and habitat are able to be restored) are comparable with other remedial approaches.	- Short term benefits are lowest due to the destruction of the natural resource during implementation. However, upon completion, the Site can be restored. - Long-term benefits (assuming ecological community and habitat are able to be restored) are comparable with other remedial approaches
Relative Timeliness (310 CMR 40.0858(7))	- Relatively short implementation time required for design, permitting, and implementation. Timing dependent on ability to attain permits. Thermal treatment quickest of the three remedial strategies for deep overburden soils. - Low to moderate post-construction monitoring to evaluate effectiveness of source area treatments on bedrock groundwater concentrations. - Estimated project duration: up to 10 years	- Moderate implementation time required (design, permitting and implementation) due to the extent of the remediation area and the moderate technical complexity associated with MPE. - Moderate to lengthy post-construction monitoring to evaluate effectiveness of source area treatments. - Estimated project duration: approximately 30 years	- Moderate implementation time required (design, permitting and implementation) due to the extent of the remediation area and the moderate technical complexity associated with the installation of a PRB. - Lengthy post-construction monitoring to evaluate reducing concentrations in groundwater as it flows through the PRB. - Estimated project duration: aproximately 30-45 years
Non-Pecuniary Interests (310 CMR 40.0858(8))	- Implementation will result in significant disruptions to the local community and ecological habitat during the short-term; however, upon completion, the Site can restored. - Potential traffic impacts to the surrounding area during transport of impacted material. - Use of Site will be restricted during remedial implementation.	- Implementation will result in some moderate disruption to the local community and ecological habitat during the short-term; however, upon completion, the Site can be restored. - Potential traffic impacts to the surrounding area during transport of impacted soils. - Use of Site will be restricted during remedial implementation. - MPE treatment may require construction of a treatment building to house equipment.	- Implementation will result in some moderate disruption to the local community and ecological habitat during the short-term; however upon completion, the Site can be restored. - Potential traffic impacts to the surrounding area during transport of impacted soils. - Use of Site will be restricted during remedial implementation.

Notes:
The following are abbreviations for:
OB - overburden.
BR - bedrock.
SW/Sed - surface water / sediment.
MNA - monitored natural attenuation.
MNR - monitored natural recovery.
AUL - activity and use limitation.
PRB - permeable reactive barrier
ft bgs - feet below ground surface
UCL - upper contaminant limit
NSR = no significant risk
NAPL - non-aqueous phase liquid

FIGURES

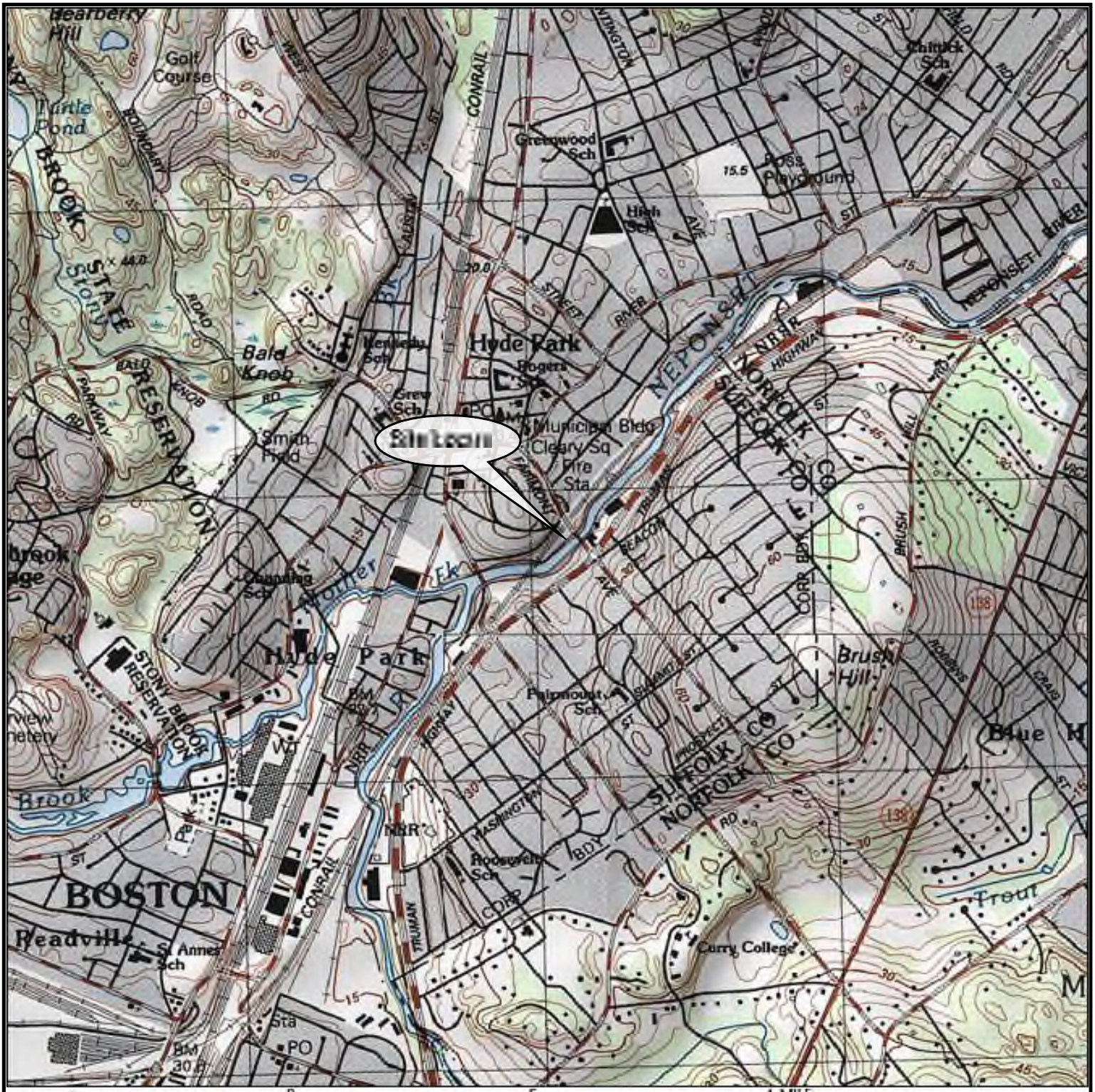
Figure 1: Site Locus

Figure 2: Groundwater Contour Map, Monitoring Well & Piezometer Locations

Figure 3: Soil Sampling Locations

Figure 4: Surface Water, Pore Water, and Sediment Sampling Locations

Figure 5: SVE Well Head & Discharge Locations



Base Map Source:
TOPO!™ © 2000
Wildflower Productions

LAT: 42°15'11.00"
LONG: 71°07'10.09"

DES.BY:	DR.BY: MES	CK.BY: CB

12-24 Fairmount Court
Hyde Park, MA 02136

FIGURE 1
SITE LOCUS

SCALE: AS SHOWN	JOB NO.: 229286.01
DATE: November 2015	FILE NAME:

WOODARD & CURRAN
COMMITMENT & INTEGRITY
DRIVE RESULTS
40 Shattuck Road
Andover, MA 01810
T. 978-557-8150

Legend

Site Features

- Approximate Fence Line
- Tax Parcel
- Updated Disposal Site Boundart
- Overburden Groundwater Contour (Dashed Where Inferred)

Locations

- Monitoring Well
- Bedrock Monitoring Well
- Piezometer
- Groundwater Flow Direction

WALNUT ST (2171)
MAPLE ST (22744)
27 WALNUT ST (2174)
31 MAPLE ST (2173)
40 WALNUT ST (2122)
WALNUT ST (2221)
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY FAIRMOUNT COMMUTER RAIL LINE
WALNUT ST (10022402)
New Disposal Site Boundary
ESM-7 83.76
G-B-3 83.61
ESM-8 87.78
ESM-8B
ESM-13
ESM-10 NM
ESM-14A NM
12 FAIRMOUNT CT (10531)
G-A-2 83.62
CDW-2 NS
G-D-3 83.70
ESM-1 84.81
G-E-2 83.80
ESM-15 83.66
G-B-1 83.61
G-C-1 83.61
CDW-3 NS
PZ-9S NM
PZ-9D NM
PZ-8D NM
PZ-8S NM
ESM-6 83.47
ESM-5B
ESM-5 83.60
G-D-1 83.66
ESM-16 NM
ESM-12 85.86
ESM-9 NM
OW-1 NM
ESM-4 83.57
CDW-4B NM
PZ-02D NM
PZ-02S NM
ESM-2 84.45
ESM-11 NM
ESM-3 83.88
CDW-5 NS
ESM-3B
PZ-01D NM
PZ-01S NM
PZ-03S NM
PZ-03D NM
FAIRMOUNT AV (10529)
FAIRMOUNT AV (10535)
FAIRMOUNT CT (10531)
FAIRMOUNT AVE
NEPONSET RIVER FLOW
PZ-07 NM
NEPONSET RIVER (11038)
PZ-06 NM
PZ-05 NM
PZ-04 NM
735 TRUMAN HW (10537)
731 TRUMAN HW (10539)
731 TRUMAN HW (10539)
733 TRUMAN HW (10538)
727 TRUMAN HW (10536)
691 TRUMAN HW (10535-1)
(11037)

0 20 40 80 Feet

Notes:
1. Orthophotography provided by USGS, 2013.
2. See city of Boston Assessor's Plan Ward #18, Block #199, Lot #10598 and #10601 for site reference. Site is known as #12 and #0 Fairmount Court.
3. See S.C.R.D. Book 8338, pg 650, and LC 38601 for site property line information
4. Parcel lines and road lines from MassGIS and City of Boston. Accessed July 14, 2015.
5. Monitoring locations, fence line, river bank georeferenced from Figure 2 of Phase II CSA report, April 22, 2015.
6. Groundwater contours are based on water levels of overburden wells measured on June 29, 2015 prior to the start of the hydraulic evaluation. Measured groundwater elevations used to create groundwater contours are provided underneath the corresponding measurement location.
NM indicates that a groundwater elevation was not measured
NS indicates that no survey data is available.

FORMER LEWIS CHEMICAL FACILITY
CITY OF BOSTON DND

Monitoring Well Locations & Groundwater Contour Plan - June 29, 2015

FIGURE 2

WOODARD &CURRAN

SCALE: 1 " = 20 '	DOC: Figure_2- GWContourPlan.mxd
DATE: NOVEMBER 2015	PROJECT #: 229286.01
DRAWN BY: SMO	SOURCE: USGS

Date Saved: 11/4/2015 By: Sidney Mong Path: N:\Projects\229286 Boston Port of Opportunity\Design\01 EWVS-15-01\CAD_GRAPHICS\MXD\2015-11 Phase II Figure 2 GWContourPlan.mxd



Legend

Site Features

- Approximate Fence Line
- Tax Parcel
- Updated Disposal Site Boundary

Locations

- Soil Boring
- Test Pit

Notes:
1. Orthophotography provided by USGS, 2013.
2. See city of Boston Assessor's Plan Ward #18, Block #199, Lot #10598 and #10601 for site reference. Site is known as #12 and #0 Fairmount Court.
3. See S.C.R.D. Book 8338, pg 650, and LC 38601 for site property line information
4. Parcel lines from MassGIS and City of Boston. Accessed July 14, 2015.
5. Sampling locations and fence line georeferenced from Figure 2 of Phase II CSA report, April 22, 2015.

FORMER LEWIS CHEMICAL FACILITY
CITY OF BOSTON DND

Soil Sampling Locations

FIGURE 3

WOODARD &CURRAN

SCALE: 1 " = 20 '	DOC: Figure_3- SoilSamplingLocations.mxd
DATE: NOVEMBER 2015	PROJECT #: 229286.01
DRAWN BY: SMO	SOURCE: USGS



Legend

Locations

- Surface Water, Sediment, and/or Pore Water

Site Features

- Approximate Fence Line
- Updated Disposal Site Boundary
- Tax Parcel

Notes:
1. Orthophotography provided by USGS, 2013.
2. See city of Boston Assessor's Plan Ward #18, Block #199, Lot #10598 and #10601 for site reference. Site is known as #12 and #0 Fairmount Court.
3. See S.C.R.D. Book 8338, pg 650, and LC 38601 for site property line information
4. Parcel lines and road lines from MassGIS and City of Boston. Accessed July 14, 2015.
5. Sampling locations and fence line georeferenced from Figure 2 of Phase II CSA report, April 22, 2015.

FORMER LEWIS CHEMICAL FACILITY
CITY OF BOSTON DND

Surface Water, Pore Water, and Sediment Sampling Locations

FIGURE 4

WOODARD &CURRAN

SCALE: 1 " = 30 '	DOC: Figure_4- SW_PW_SED.mxd
DATE: NOVEMBER 2015	PROJECT #: 229286.01
DRAWN BY: SMO	SOURCE: USGS



Legend

Locations

- Soil Gas
- SVE Wellhead
- SVE Pipe

Site Features

- Approximate Fence Line
- Tax Parcel
- Updated Disposal Site Boundary

Notes:
1. Orthophotography provided by USGS, 2013.
2. See city of Boston Assessor's Plan Ward #18, Block #199, Lot #10598 and #10601 for site reference. Site is known as #12 and #0 Fairmount Court.
3. See S.C.R.D. Book 8338, pg 650, and LC 38601 for site property line information
4. Parcel lines from MassGIS and City of Boston. Accessed July 14, 2015.
5. Monitoring locations, soil vapor extraction system, and fence line georeferenced from Figure 2 of Phase II CSA report, April 22, 2015.

FORMER LEWIS CHEMICAL FACILITY
CITY OF BOSTON DND

SVE Wellhead and Discharge Locations

FIGURE 5

WOODARD & CURRAN

SCALE: 1 " = 20 '	DOC: Figure_5- SVE_wellhead_discharge.mxd
DATE: NOVEMBER 2015	PROJECT #: 229286.01
DRAWN BY: SMO	SOURCE: USGS

APPENDIX A: MASSDEP FORMS

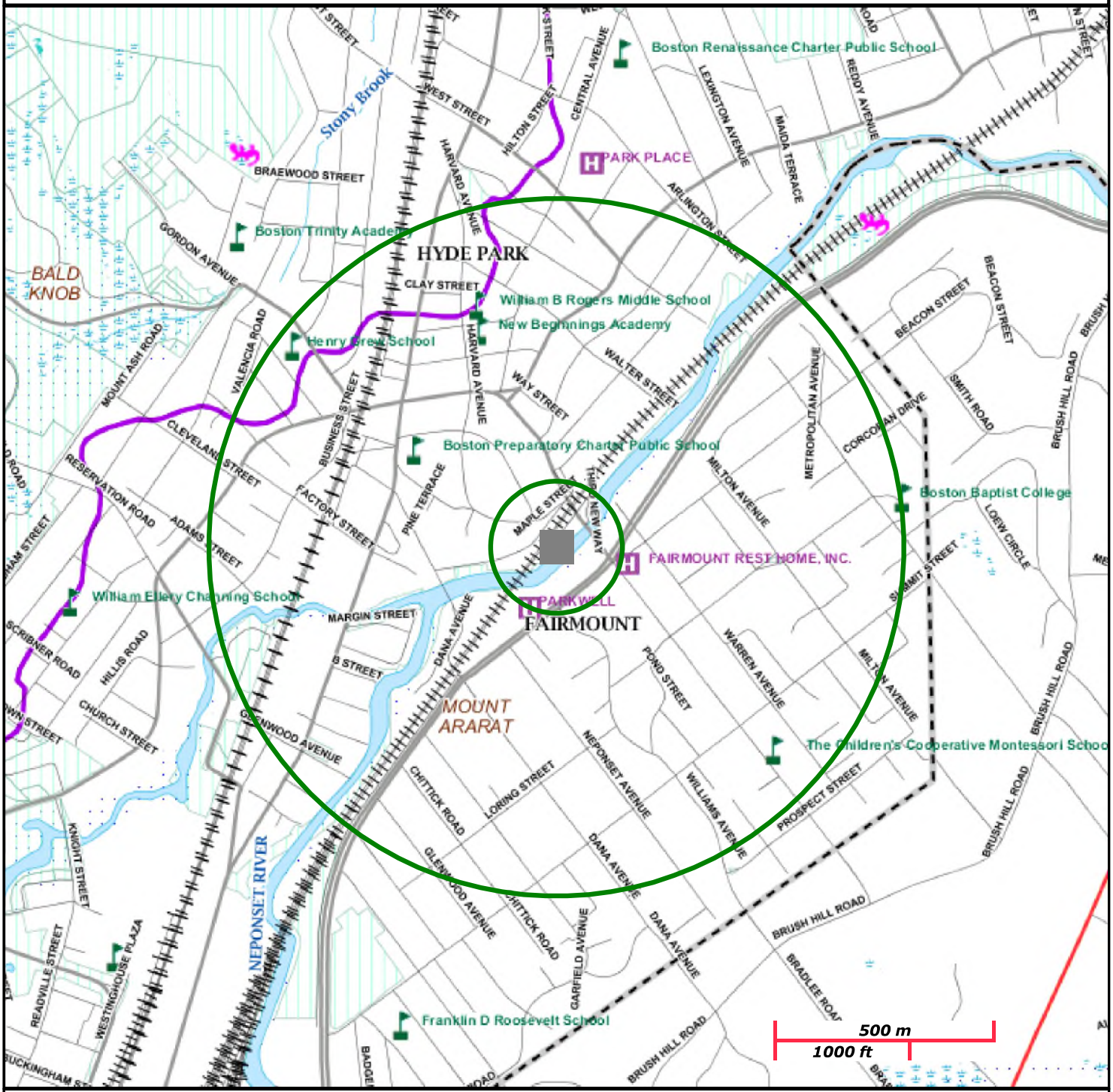
MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:
FORMER LEWIS CHEMICAL FACILITY
12-24 FAIRMOUNT COURT BOSTON, MA
3-000001616
NAD83 UTM Meters:
4680021mN , 325136mE (Zone: 19)
August 31, 2015

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: http://www.mass.gov/mgis/.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct
Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam
Aquifers: Medium Yield, High Yield, EPA Sole Source
Non Potential Drinking Water Source Area: Medium, High (Yield)
PWS Protection Areas: Zone II, IWPA, Zone A
Hydrography: Open Water, PWS Reservoir, Tidal Flat
Wetlands: Freshwater, Saltwater, Cranberry Bog
FEMA 100yr Floodplain; Protected Open Space; ACEC
Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential
Solid Waste Landfill; PWS: Com.GW,SW, Emerg., Non-Com.

Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username:	**KERISTEVENS**
Transaction ID:	**766616**
Document:	**BWSC103 Release Notification Form for120 Day Reporting**
Size of File:	**45.38K**
Status of Transaction:	**In Process**
Date and Time Created:	**8/26/2015:2:59:16 PM**

Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to “Download a Copy” from the Current Submittals page.

RELEASE NOTIFICATION FORM

Pursuant to 310 CMR 40.0371 (Subpart C)

BWSC103-120 DAY

Release Tracking Number
assigned upon receipt and
review by the Department

A. RELEASE OR THREAT OF RELEASE LOCATION:

1. Release Name/Location Aid: FORMER LEWIS CHEMICAL CORPORATION

2. Street Address: 12-24 FAIRMOUNT COURT

3. City/Town: HYDE PARK 4. ZIP Code: 021360000

5. Coordinates: a. Latitude: N 42.25319 b. Longitude: W 71.12027

B. THIS FORM IS BEING USED TO:

☐ 1. Submit a **Release Notification** for a 120 day reporting requirement

(All sections of this transmittal form must be filled out)

C. INFORMATION DESCRIBING THE RELEASE:

1. Date and time you obtained knowledge of the Release: 8/12/2015 (mm/dd/yyyy) Time: 01:30 (hh:mm) ☐ AM ☐ PM

2. Date and time release occurred, if known: (mm/dd/yyyy) Time: (hh:mm) ☐ AM ☐ PM

3. 120 DAY REPORTING CONDITIONS

Check all Notification Thresholds that apply to the Release:
(for more information see 310 CMR 40.0315)

☐ a. Release of Hazardous Material(s) to Soil or Groundwater Exceeding Reportable Concentration(s)

☐ b. Release of Oil to Soil Exceeding Reportable Concentration(s) and Affecting More than 2 Cubic Yards

☐ c. Release of Oil to Groundwater Exceeding Reportable Concentration(s)

☐ d. Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/8 Inch (.01 feet) and Less than 1/2 Inch (.04 feet)

C. INFORMATION DESCRIBING THE RELEASE (cont.)

4. List below the Oils (O) or Hazardous Materials (HM) that exceed their Reportable Concentration (RC) or Reportable Quantity (RQ) by the greatest amount.

☐ Check here if an amount or concentration is unknown or less than detectable.

O or HM Released	CAS Number, if known	O or HM	Amount or Concentration	Units	RCs Exceeded, if Applicable (RCS-1, RCS-2, RCGW-1, RCGW-2)
LNAPL		O	0.24	INCH	N/A

☐ Check here if a list of additional Oil and Hazardous Materials subject to reporting, or any other documentation relating to this notification is attached.

D. PERSON REQUIRED TO NOTIFY:

1. Name of Organization: BOSTON DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT

2. Contact First Name: JAMES 3. Last Name: SMITH

4. Street: 26 COURT STREET 9TH FLOOR 5. Title: SENIOR ENVIRO. COMPLIANCE MNGR

6. City/Town: BOSTON 7. State: MA 8. ZIP Code: 021080000

9. Telephone: 617-635-0103 10. Ext.: 11. Email: jasmith.dnd@cityofboston.gov

☐ 12. Check here if attaching names and addresses of owners of properties affected by the Release, other than an owner who is submitting this Release Notification (required).

E. RELATIONSHIP OF PERSON TO RELEASE:

☐ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☐ e. Other RP or PRP Specify:

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ 4. Any Other Person Otherwise Required to Notify Specify Relationship:

F. CERTIFICATION OF PERSON REQUIRED TO NOTIFY:

1. I, JAMES SMITH, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By : JAMES SMITH (Signature) 3. Title: SENIOR ENVIRO. COMPLIANCE MNGR

4. For: BOSTON DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT (Name of person or entity recorded in Section D) 5. Date : 8/26/2015 mm/dd/yyyy

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section D.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. Email: _____

YOU ARE SUBJECT TO ANNUAL COMPLIANCE ASSURANCE FEES FOR EACH BILLABLE YEAR FOR TIER CLASSIFIED DISPOSAL SITES. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

Received by DEP on 8/26/2015 2:37:54 PM

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

CERTIFIED MAIL
7014 1820 0001 3560 5038

SEP 30 2015

City of Boston Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108

RE: Hyde Park
12-14 Fairmount Court
RTN: 3-33111

Attention: James Smith

Dear Mr. Smith:

Based on information acquired from Massachusetts Department of Environmental Protection (MassDEP) files, MassDEP has reason to believe that the Property located at 12-14 Fairmount Court, Hyde Park, MA (Property), or portions thereof, is a disposal site (Site), which requires cleanup and response actions. The cleanup of disposal sites is governed by the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, M.G.L. c. 21E, which is implemented through regulations promulgated by MassDEP. These regulations are referred to as the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000 et seq.

The purpose of this letter is to ensure that you (as used in this letter, the term "you" refers to the City of Boston Department of Neighborhood Development (City)) are aware of your rights and responsibilities under M.G.L. c. 21E. MassDEP also wishes to ensure that the cleanup is conducted in accordance with the MCP. This letter and the attached information are intended to assist the City in deciding what actions to take in response to the conditions that are present at this Site.

According to information available to MassDEP, the Site is taken by the City for nonpayment of taxes under M.G.L. c. 60, §§ 43 and 53. Based upon this information, MassDEP acknowledges the City's assertion that it is exempt from liability under M.G.L. c. 21E for the above-referenced site. To maintain this liability exemption the City must meet certain statutory requirements set forth in M.G.L. c. 21E § 2(d)(1) (Municipal Tax Lien Exemption), including the requirements that the City act diligently to sell or otherwise divest itself of ownership or possession of the site, and the following:

This information is available in alternate format. Call Michelle Waters-Ekanem, Diversity Director, at 617-292-5751. TTY# MassRelay Service 1-800-439-2370
MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

(1) The city or town has purchased or taken the site for nonpayment of taxes under section forty-three or fifty-three or chapter sixty, respectively or has acquired an interest in the site by fee, easement, lease, license or otherwise, from the Massachusetts Bay Transportation Authority for purposes of the installation, operation, maintenance and use of a rail-trail, defined as a property converted from former use as a railroad right-of-way to a revitalized use as a publicly owned, improved and maintained corridor for bicycle, pedestrian, and other non-motorized public transportation, recreation and associated purposes.

(2) No act of the city or town, or of its employees or agents, causes or contributes to the release or threat of release or causes the release or threat of release to become worse than it otherwise would have been.

(3) After acquiring title to or commencing control or management of the site or vessel, the city or town satisfies all of the following conditions:

(A) the city or town notifies the department immediately upon obtaining knowledge of a release or threat of release for which notification is required pursuant to, and in compliance with, section seven or regulations promulgated pursuant thereto;

(B) the city or town provides reasonable access to the site or vessel to employees, agents, and contractors of MassDEP to conduct response actions, and to other persons intending to conduct necessary response actions;

(C) the city or town undertakes reasonable steps to (i) prevent the exposure of persons to oil or hazardous materials by fencing, paving, installing geo-textile membrane, or otherwise suitably preventing access to the site or vessel or to the oil or hazardous materials present at the site (ii) contain the further release or threat of release of oil or hazardous materials from a structure or container;

(D) if there is significant evidence of an imminent hazard to public health, safety, welfare, or the environment from oil or hazardous materials at or from the site or vessel, the city or town takes action to control the potential for health damage, human exposure, safety hazards, and environmental harm through appropriate short term measures;

(E) if the city or town elects to voluntarily undertake a response action or portion of a response action at a site or vessel, the city or town conducts such response action in compliance with the requirements of this chapter and the Massachusetts Contingency Plan; and

(F) the city or town acts diligently to sell or otherwise divest itself of ownership or possession of the site or vessel or, in the case of a site acquired from the Massachusetts Bay Transportation Authority for purposes of the installation, operation, maintenance and use of a rail-trail, the city or town acts diligently to develop the rail-trail for its intended purpose.

Please be aware that, in accordance with the Municipal Tax Lien Exemption, the City shall be deemed an owner or operator with respect to any release or threat of release that first begins to occur at or from the site or vessel during the time that the City has ownership or possession of it for any purpose.

For your convenience, below is a Summary of Liability intended to provide the City with information about liability under Chapter 21E.

You should be aware that the City might have claims against third parties for damages, including claims for contribution or reimbursement for the costs of cleanup. Such claims do not exist indefinitely but are governed by laws that establish the time allowed for bringing litigation. MassDEP encourages the City to take any action necessary to protect any such claims it may have against third parties. In addition, the City may be eligible to apply for and receive additional funding under the Commonwealth and the United States Environmental Protection Agency's Brownfields programs for conducting assessment and remedial activities with the availability of insurance to provide protection against unforeseen conditions. Detailed information on the state Brownfields program as well as various contacts can be found within MassDEP's Website at http://www.mass.gov/eea/agencies/massdep/cleanup/programs/ .

Summary of Liability Provisions - M.G.L. c.21E, Section 5

The following is provided to advise you of your potential liabilities for completing response actions at the Site. It is a summary of the liability provisions from M.G.L. c. 21E. Please refer to the statute for a complete description of the liability provisions.

Section 5 makes the following parties liable to the Commonwealth of Massachusetts: current owners or operators of a site from or at which there is or has been a release/threat of release of oil or hazardous material; any person who owned or operated a site at the time hazardous material was stored or disposed of; any person who arranged for the transport, disposal, storage or treatment of hazardous material to or at a site; any person who transported hazardous material to a transport, disposal, storage or treatment site from which there is or has been a release/threat of release of such material; and any person who otherwise caused or is legally responsible for a release/threat of release of oil or hazardous material at a site. This liability is "strict", meaning it is not based on fault, but solely on your status as an owner, operator, generator, transporter or disposer. It is also joint and several, meaning that you may be liable for all response action costs incurred at the site, regardless of the existence of any other liable parties.

The MCP requires responsible parties to take necessary response actions at properties where there is or has been a release or threat of release of oil and/or hazardous material. If you do not take the necessary response actions, or fail to perform them in an appropriate and timely manner, MassDEP is authorized by M.G.L. c. 21E to have the work performed by its contractors. By taking such actions, you can avoid potential liability for response action costs incurred by MassDEP and its contractors in performing these actions, and any sanctions which may be imposed for failure to perform response actions under the MCP.

You may be liable for up to three (3) times all response action costs incurred by MassDEP. Response action costs include, without limitation, the cost of direct hours spent by MassDEP employees arranging for response actions or overseeing work performed by persons other than MassDEP or their contractors, expenses incurred by MassDEP in support of those direct hours, and payments to MassDEP's contractors. (For more detail on cost liability, see 310 CMR 40.1200.) In addition to your liability for up to three (3) times all response action costs incurred by MassDEP, you may also be liable to the Commonwealth for damages to natural resources caused by the release.

Civil and criminal liability may also be imposed under M.G.L. c. 21E, § 11, and civil administrative penalties may be imposed under M.G.L. c. 21A, § 16 for each violation of M.G.L. c. 21E, the MCP, or any order, permit or approval issued thereunder. MassDEP may also assess interest on costs incurred at the rate of twelve percent (12%), compounded annually. To secure payment of this debt, the

Commonwealth may place liens on all of your property in the Commonwealth. To recover the debt, the Commonwealth may foreclose on these liens or the Attorney General may bring legal action against you.

RESPONSE ACTIONS AND APPLICABLE DEADLINES

The City, as owner of the Site, and as a Municipality with exempt status, is not required to conduct cleanup or response actions for this Site, with the few exceptions cited on page 2 of this letter. The City should take note of the requirements cited on page 2 to maintain exempt status. Should the City lose its exempt status or choose to perform response actions and/or conduct cleanup of the Site, such response actions and cleanup must adhere to the MCP. The following are some of the applicable MCP requirements and deadlines that must be satisfied should you choose to conduct response actions and cleanup at the Site:

- The MCP requires responsible parties and any other person undertaking response actions to continually assess and evaluate release and site conditions in order to determine if an Immediate Response Action is required in accordance with 310 CMR 40.0410.

- Unless otherwise provided by MassDEP, parties performing cleanup in accordance with the MCP have one year from the date of notifying MassDEP of a release of oil and or hazardous material pursuant to 310 CMR 40.0300 or from the date MassDEP issues a Notice of Responsibility (NOR), whichever occurs earlier, to file with MassDEP one of the following submittals: (1) a completed Tier Classification Submittal; or (2) a Permanent Solution Statement.

- No disposal site will be deemed to have had all the necessary and required response actions taken for it unless and until all substantial hazards presented by the release and/or threat of release have been eliminated and a level of No Significant Risk exists or has been achieved in compliance with the MCP.

PROCEDURES TO FOLLOW TO UNDERTAKE RESPONSE ACTIONS

Although you are not required to do so, MassDEP encourages you to complete preliminary and/or comprehensive response actions at the Site to achieve a Permanent solution. If you elect to voluntarily undertake response actions at this disposal site, you must notify MassDEP in writing of your intent to conduct response actions and conduct such response actions in compliance with the requirements of the MCP. In accordance with 310 CMR 40.0170(2), you must obtain all necessary permits and approvals before undertaking a response action.

DISCONTINUED RESPONSE ACTIONS

As a Municipality with exempt status, the extent to which you complete the MCP process is voluntary. Pursuant to 310 CMR 40.0170(9), if you undertake response actions, you may discontinue such response actions without being deemed by MassDEP as having acquired liability under M.G.L. c. 21E solely on the basis of having voluntarily conducted such response actions, and without being deemed in noncompliance with future deadlines, provided that you:

(a) Notify MassDEP in writing of your intent to discontinue response actions at the Site prior to the running of an applicable deadline for the Site;

(b) Submit a Status Report to MassDEP informing MassDEP of the status of the work conducted at the Site at the time of providing the notice required by 310 CMR 40.0170(9); and

(c) Do not cause or contribute to the release at the Site or cause the release, or the Site, to become worse than it otherwise would have been had such response actions not been performed.

You must employ or engage a Licensed Site Professional (LSP) to manage, supervise or perform all response actions and cleanup, which you intend to undertake at this disposal Site. You may obtain a list of the names and addresses of LSPs by contacting the Board of Registration of Hazardous Waste Site Cleanup Professionals by telephone at (617) 556-1091 or at http://www.mass.gov/eea/agencies/lsp/.

If you have any questions, you should contact the undersigned at the letterhead address or 978-694-3357. All future communications regarding this release must reference the Release Tracking Number (RTN # 3-33111) contained in the subject block of this letter.

Sincerely,

John F. Miano

John F. Miano
Chief, Site Management Section
Bureau of Waste Site Clean-up

cc: File NOR/NOONOR

CDW CONSULTANTS, INC.
CIVIL & ENVIRONMENTAL ENGINEERS

October 30, 2015

Massachusetts Department of Environmental Protection
Northeast Regional Office
Bureau of Waste Site Cleanup
205B Lowell Street
Wilmington, MA 01887

Re: Supporting Information for Permanent Solution Retraction
DCR Neponset River Reservation
Adjacent to the former Lewis Chemical, 12-24 Fairmount Court, Hyde Park, MA
CDW Project # 1363.00
DEP Release Tracking Numbers (RTN) 3-31697 and 3-31548

Dear Sir or Madam:

CDW Consultants, Inc. (CDW), on behalf of the Massachusetts Department of Conservation and Recreation (DCR) is hereby submitting a retraction of a Permanent Solution (PS) Statement submitted for RTN 3-31697. As a result of the retraction, this release will be linked to the second DCR RTN 3-31548. The purpose of the PS retraction is to better facilitate a more unified cleanup approach to co-mingled releases within the overall Disposal Site Boundaries of the former Lewis Chemical site, owned by the City of Boston, and the adjoining DCR owned parcel.

Release Notification

On May 17, 2013, CDW Consultants, Inc. (CDW), on behalf of the Massachusetts Department of Conservation and Recreation (DCR), submitted a 120-day release notification (RNF) to the Massachusetts DEP (RTN 3-31548). The RNF was submitted for a release condition of lead in soil and several VOCs, and a release to groundwater of several VOCs, VPH, and PCBs. These were described in site investigation reports completed by others and provided to DCR. The date that DCR obtained knowledge of the release condition was February 26, 2013. After a comprehensive review of previous data compiled by others, it was determined that the release condition of lead in soil was unique and unrelated to other contaminants. Therefore, a revised RNF for 3-31548 was submitted on August 2, 2013 to exclude lead in soil from that RTN. On August 2, 2013, CDW, on behalf of DCR, submitted a 120-day RNF to DEP for lead in soil to track the obligations under the MCP for the assessment and mitigation of this release condition.

Permanent Solution of Lead Release Condition – Historical Data

On August 8, 2014, CDW, on behalf of DCR, submitted a Permanent Solution (PS) report for the condition of lead in soil at the Site. The PS was based on a review of soil data obtained in 2005 by others, and field screening data obtained in 2013 by others for general comparison purposes. The highest concentrations of lead were consistently found in the top 6 inches of soil, with 2 of 20 samples (10 percent) exceeding applicable RA standards for lead. The Exposure Point Concentration (EPC) for lead was below the applicable Method 1 standards of 200 mg/kg. The results of the PS were based on the 2005 data only. Subsequently, Mr. Chris Pyott of MassDEP requested that additional historical data be reviewed, and additional samples be collected to confirm the Site conditions in support of the PS.

2014 Investigation and Discussion

On September 25, 2014, CDW collected 12 soil samples at the Site with a hand auger. The samples were collected from depths between 0 and 6 inches below ground surface (BGS). Of the 12 samples analyzed, 8 exceeded the applicable Method 1 standard. The concentrations of the samples that exceeded Method 1 standards were consistent with the highest concentrations previously detected in the same depth range. One of the samples was also analyzed for the presence of coal ash and lead paint, and a second sample was analyzed for lead paint. Light coal, coal ash and wood ash were detected by the laboratory in the sample along with moderate asphalt and paint chip identified as having lead. No lead paint was identified in the second sample. While evidence suggests that lead found on surface soils at the DCR property may be related to coal, coal ash, wood ash and lead paint, the data is generally inconclusive. However, lead concentrations found in surface soils during the 2014 sampling were generally consistent with concentrations found in 2005. Lead data from the Site soils collected in 2005 and 2014 is included in Table 1.

Concentrations of lead in soil on the adjacent City of Boston owned parcel are generally consistent with concentrations detected at the Site, with some noticeably higher concentrations than were detected on the adjacent City owned parcel. Lead data collected in 2002 and 2005 from the adjacent Lewis Chemical parcel is attached in Table 3.

Related DEP Submittals

In April 2015, Woodard and Curran, consultants on behalf of the City of Boston, submitted a Final Phase II Comprehensive Site Assessment. The boundary of the disposal Site was re-defined during that assessment, to include portions of the City of Boston owned parcel and the DCR owned parcel. A Method 3 Risk Characterization was completed, which evaluated cumulative risk for all contaminants (metals, VOCs, petroleum, and PCBs) within the disposal Site boundary. The Method 3 risk characterization confirmed that a condition of significant risk exists at the disposal Site.

Reason for Permanent Solution Retraction

As a result of discussions between DEP, the City of Boston and DCR, and at the request of DEP, the release condition of lead in soil on the DCR parcel would be combined with the primary RTN for the DCR parcel. In order to accomplish this through a regulatory mechanism, the PS for RTN 3-31697 is being retracted and that RTN is being linked to the primary RTN 3-31548 for the DCR parcel. Future assessment and response actions will be advanced in support of a Disposal Site-wide approach to releases likely related to both urban fill, and the use and operations of the former Lewis Chemical Corporation.

Very truly yours,
CDW CONSULTANTS, INC.

Brian J. Miller, LSP
Project Manager

cc: Robert Lowell, DCR

Attachments:

Figures
- Figure 1: Site Plan with Sampling Locations

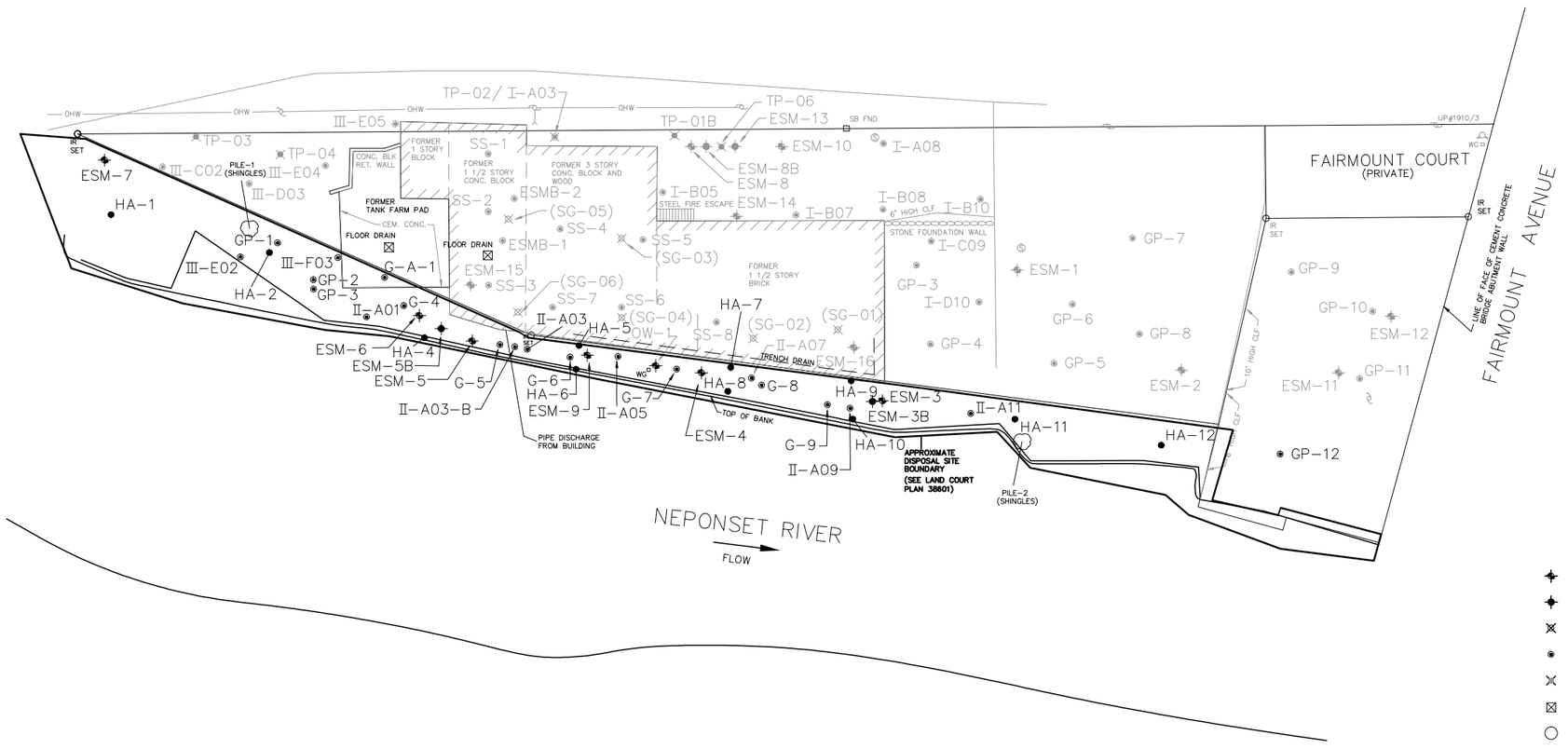
Tables:
- Table 1: Soil Analytical Results, 2005 ESM Investigation and 2014 CDW Investigation – Total Lead
- Table 2: Soil Analytical Results, 2003 Nobis Investigation – Total Lead
- Table 3: Soil Analytical Results on Adjacent Parcel – Total Lead

Attachment A: Laboratory Results and Chain of Custody Records

FIGURES

NOTES:

1. SEE CITY OF BOSTON ASSESSOR'S PLAN WARD #18, BLOCK #199, LOT #10598 AND #10601 FOR SITE REFERENCE. SITE IS KNOWN AS #12 AND #0 FAIRMOUNT COURT.
2. SEE S.C.R.D. BOOK 8338, PG 650, AND LC 38601 FOR SITE PROPERTY LINE INFORMATION.



SITE PLAN

LEGEND

(ESM-XX)	MONITORING WELL
(ESM-XXB)	BEDROCK WELL COUPLET
(SG-XX)	SOIL GAS SAMPLING POINT
	SOIL BORING
(TP-XX)	TEST PIT
	DRAIN
IR SET	IRON ROD SET
SB FND	STONE BOUND FOUND
	PROPERTY LINE
	BUILDING SLAB FOOT PRINT
	UTILITY POLE (UP)
	SEWER MANHOLE
	HYDRANT
WG	WATER GATE
RET.	RETAINING
CEM. CONC.	CEMENT CONCRETE
CONC. BLK	CONCRETE BLOCK
FND	FOUND
	CHAIN LINK FENCE (CLF)
OHW	OVERHEAD WIRES
	TRENCH DRAIN

20 0 20 40
SCALE IN FEET

CDW CONSULTANTS
40 SPEEN STREET
FRAMINGHAM, MA 01701
(508) 875-2657

SOURCE: SITE PLAN BY WOODARD AND CURRAN

SITE PLAN WITH SAMPLING LOCATIONS
SEPTEMBER 25, 2014

DCR NEPONSET RIVER PARCEL
ADJACENT TO FORMER LEWIS CHEMICAL

JOB NO.:	1363.20
DATE:	10/10/14
SCALE:	AS NOTED

FIGURE 1

TABLES

Table 1
Soil Analytical Results 2005 ESM Investigation and CDW 2014 Investigation - Total Lead (mg/kg)
DCR Neponset River Reservation
Adjacent to 12-24 Fairmount Court, Hyde Park, MA

Sample ID	Date	Depth	PLM and SEM/EDS	Total Lead
II-A-01-S	8/31/2005	0-6"	–	150
II-A-01-M	8/31/2005	5-7'	–	<14
II-A-01-D	8/31/2005	14-15'	–	<11
II-A-03-S	8/31/2005	0-6"	–	30
II-A-03-M	8/31/2005	5-7'	–	<13
II-A-03-D	8/31/2005	14-15'	–	<11
II-A-05-S	8/31/2005	0-6"	–	**420**
II-A-05-M	8/31/2005	4-6'	–	<12
II-A-05-D	8/31/2005	8-10.5'	–	<14
II-A-07-S	8/31/2005	0-6"	–	**710**
II-A-07-M	8/31/2005	5-7'	–	<12
II-A-09-S	8/30/2005	0-6"	–	150
II-A-09-M	8/30/2005	6-8'	–	<12
II-A-09-D	8/30/2005	13-14'	–	110
II-A-11-S	8/30/2005	0-6"	–	110
II-A-11-M	8/30/2005	9-10'	–	<13
III-E-02-S	8/31/2005	0-6"	–	120
III-E-02-M	8/31/2005	5-7'	–	<14
III-E-02-D	8/31/2005	17-19'	–	<12
III-F-03-S	9/1/2005	0-6"	–	120
III-F-03-M	9/1/2005	5-7'	–	<14
III-F-03-D	9/1/2005	17-19'	–	<12
HA-1	9/25/2014	0-6"	–	99.5
HA-2	9/25/2014	0-6"	–	**312**
HA-3	9/25/2014	0-6"	–	**251**
HA-4	9/25/2014	0-6"	–	**523**
HA-5	9/25/2014	0-6"	lead test only (no lead paint)	**397**
HA-6	9/25/2014	0-6"	–	**386**
HA-7	9/25/2014	0-6"	–	154
HA-8	9/25/2014	0-6"	–	**373**
HA-9	9/25/2014	0-6"	–	**208**
HA-10*	9/25/2014	0-6"	coal (light), coal ash (light), wood ash (light), asphalt (moderate), lead (detected in yellow chip)	**624***
HA-11	9/25/2014	0-6"	–	38.8
HA-12	9/25/2014	0-6"	–	138
Method 1 S-1/GW-3				**200**

All values in milligrams per kilogram (mg/kg)
Bold and Shaded Grey = Exceeds MCP Method 1 Standard of 200 mg/kg
* Duplicate collected here. Result is average of sample and duplicate
PLM = Polarized Light Microscopy
SEM/EDS = Scanning Electron Microscopy/Energy Dispersive X-Ray Spectroscopy

Table 2
Soil Analytical Results 2013 Nobis Investigation - Total Lead (mg/kg)
DCR Neponset River Reservation
Adjacent to 12-24 Fairmount Court, Hyde Park, MA

Sample ID	Date	Depth	Total Lead
G-3 5	9/30/2013	5'	97
G-3 10	9/30/2013	10'	4
G-3 15	9/30/2013	15'	3
G-3 20	9/30/2013	20'	2.9
G-4 5	9/30/2013	5'	41
G-4 10	9/30/2013	10'	4.5
G-4 15	9/30/2013	15'	2.6
G-4 20	9/30/2013	20'	6.1
G-4 20+	9/30/2013	21'	4.8
G-5 5	9/30/2013	5'	79
G-5 10	9/30/2013	10'	5.8
G-5 15	9/30/2013	15'	5.2
G-5 20	9/30/2013	20'	2.1
G-6 5	9/27/2013	5'	21
G-6 10	9/27/2013	10'	20
G-6 15	9/27/2013	15'	3.7
G-6 20	9/27/2013	20'	4.8
G-7 5	9/27/2013	5'	46
G-7 10	9/27/2013	10'	4.2
G-7 15	9/27/2013	15'	3.9
G-8 5	9/27/2013	5'	49
G-8 10	9/27/2013	10'	4.3
G-8 15	9/27/2013	15'	3.7
G-9 5	9/27/2013	5'	12
G-9 10	9/27/2013	10'	3.8
G-9 15	9/27/2013	15'	3.1
Method 1 S-1/GW-3			**200**

All values in milligrams per kilogram (mg/kg)
Bold and Shaded Grey = Exceeds MCP Method 1 Standard of 200 mg/kg

Table 3
Soil Analytical Results on Adjacent Parcel - Total Lead (mg/kg)
Former Lewis Chemical
12-24 Fairmount Court, Hyde Park, MA

Sample ID	Date	Depth	Total Lead
ESM-01	6/13/2002	16-18'	2.2
ESM-02	6/13/2002	14-16'	5
ESM-08	6/12/2002	12-14'	82.1
ESM-10	6/14/2002	12-13.5'	**223**
ESM-11	7/13/2005	10-12'	150
ESM-13	7/13/2005	1-3'	35
ESM-13	7/13/2005	12-14'	37
ESM-14	7/13/2005	7-9'	**420**
ESM-15	8/31/2005	0-2'	**670**
ESMB-02	8/31/2005	0-5'	**1600**
I-A-03-S	8/30/2005	0-6"	**950**
I-A-03-M	8/30/2005	8-10'	**590**
I-A-03-D	8/30/2005	10-12'	34
I-A-08-S	8/30/2005	0-6"	**310**
I-A-08-M	8/30/2005	12-14'	150
I-B-05-S	8/30/2005	0-6"	**350**
I-B-05-M	8/30/2005	14-16'	75
I-B-05-D	8/30/2005	19-20'	<11
I-B-08-S	8/30/2005	0-6"	**340**
I-B-08-M	8/30/2005	12-14'	<12
I-B-08-D	8/30/2005	19-20'	<11
I-B-10-S	8/30/2005	0-6"	210
I-B-10-M	8/30/2005	13-15'	<12
I-B-10-D	8/30/2005	18-20'	<11
I-C-09-S	8/31/2005	0-6"	**510**
I-C-09-M	8/31/2005	13-15'	<11
I-C-09-D	8/31/2005	15-17'	<11
I-D-10-S	8/31/2005	0-6"	**440**
I-D-10-M	8/31/2005	5-7'	<13
I-D-10-D	8/31/2005	12-14'	<13
III-C-02-M	8/31/2005	8.5-10'	190
III-C-02-D	8/31/2005	13-14'	<12
III-E-05-M	9/1/2005	5-10'	**260**
III-E-05-D	9/1/2005	10-15'	<11
TKFMDR	6/14/2002	–	79.7
TP-01B	6/1/2005	9'	38
TP-02	6/1/2005	6'	76
TP-03	6/1/2005	5.5'	**4800**
TP-04	6/1/2005	4'	**280**
TP-06	6/1/2005	2.5'	**540**
Method 1 S-1/GW-3			**200**

All values in milligrams per kilogram (mg/kg)
Bold and Shaded Grey = Exceeds MCP Method 1 Standard of 200 mg/kg

ATTACHMENT A

LABORATORY REPORTS AND CHAIN OF CUSTODY RECORDS

Report Date:
03-Oct-14 15:50

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

CDW Consultants, Inc.
40 Speen Street; Suite 301
Framingham, MA 01701
Attn: Brian Miller

Project: Adj to Lewis Chem - Hyde Park, MA
Project #: 1363.20

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB97077-01	HA - 1	Soil	25-Sep-14 00:00	26-Sep-14 16:45
SB97077-02	HA - 2	Soil	25-Sep-14 00:00	26-Sep-14 16:45
SB97077-03	HA - 3	Soil	25-Sep-14 00:00	26-Sep-14 16:45
SB97077-04	HA - 4	Soil	25-Sep-14 00:00	26-Sep-14 16:45
SB97077-05	HA - 5	Soil	25-Sep-14 00:00	26-Sep-14 16:45
SB97077-06	HA - 6	Soil	25-Sep-14 00:00	26-Sep-14 16:45
SB97077-07	HA - 7	Soil	25-Sep-14 00:00	26-Sep-14 16:45
SB97077-08	HA - 8	Soil	25-Sep-14 00:00	26-Sep-14 16:45
SB97077-09	HA - 9	Soil	25-Sep-14 00:00	26-Sep-14 16:45
SB97077-10	HA - 10	Soil	25-Sep-14 00:00	26-Sep-14 16:45
SB97077-11	HA - 10 DUP	Soil	25-Sep-14 00:00	26-Sep-14 16:45
SB97077-12	HA - 11	Soil	25-Sep-14 00:00	26-Sep-14 16:45
SB97077-13	HA - 12	Soil	25-Sep-14 00:00	26-Sep-14 16:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:



Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 11 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

MassDEP Analytical Protocol Certification Form

Laboratory Name: Spectrum Analytical, Inc.	**Project #:** 1363.20
Project Location: Adj to Lewis Chem - Hyde Park, MA	**RTN:**
This form provides certifications for the following data set:	SB97077-01 through SB97077-13
Matrices: Soil	

CAM Protocol

8260 VOC CAM II A	7470/7471 Hg CAM III B	MassDEP VPH CAM IV A	8081 Pesticides CAM V B	7196 Hex Cr CAM VI B	MassDEP APH CAM IX A
8270 SVOC CAM II B	7010 Metals CAM III C	MassDEP EPH CAM IV B	8151 Herbicides CAM V C	8330 Explosives CAM VIII A	TO-15 VOC CAM IX B
✓ 6010 Metals CAM III A	6020 Metals CAM III D	8082 PCB CAM V A	9012 Total Cyanide/PAC CAM VI A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate CAM VIII B

Affirmative responses to questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	✓ Yes No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	✓ Yes No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	✓ Yes No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	✓ Yes No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes No Yes No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to questions A through E)?	✓ Yes No

Responses to questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	✓ Yes No

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes ✓ No
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes ✓ No

All negative responses are addressed in a case narrative on the cover page of this report.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.



Nicole Leja
Laboratory Director
Date: 10/3/2014

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The samples were received 1.0 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

MADEP has published a list of analytical methods (CAM) which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of MCP decisions. "Presumptive Certainty" can be established only for those methods published by the MADEP in the MCP CAM. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

According to WSC-CAM 5/2009 Rev.1, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended recovery range, a range has been set based on historical control limits.

Some target analytes which are not listed as exceptions in the Summary of CAM Reporting Limits may exceed the recommended RL based on sample initial volume or weight provided, % moisture content, or responsiveness of a particular analyte to purge and trap instrumentation.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW846 6010C

Samples:

SB97077-10 *HA - 10*

Visual examination of HA-10 and HA-10DUP confirm the nonhomogeneity of the soil sample matrix

Lead

SB97077-11 *HA - 10 DUP*

Visual examination of HA-10 and HA-10DUP confirm the nonhomogeneity of the soil sample matrix

Lead

Sample Acceptance Check Form

Client:	CDW Consultants, Inc.
Project:	Adj to Lewis Chem - Hyde Park, MA / 1363.20
Work Order:	SB97077
Sample(s) received on:	9/26/2014

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	N/A
1. Were custody seals present?	☐	☑	☐
2. Were custody seals intact?	☐	☐	☑
3. Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
4. Were samples cooled on ice upon transfer to laboratory representative?	☐	☑	☐
5. Were samples refrigerated upon transfer to laboratory representative?	☑	☐	☐
6. Were sample containers received intact?	☑	☐	☐
7. Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☑	☐	☐
8. Were samples accompanied by a Chain of Custody document?	☑	☐	☐
9. Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☐	☑	☐
10. Did sample container labels agree with Chain of Custody document?	☑	☐	☐
11. Were samples received within method-specific holding times?	☑	☐	☐

Sample Identification
HA - 1
SB97077-01

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**99.5**		mg/kg dry	1.42	0.660	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**97.9**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422863	

Sample Identification
HA - 2
SB97077-02

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**312**		mg/kg dry	1.52	0.707	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**94.6**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422863	

Sample Identification
HA - 3
SB97077-03

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**251**		mg/kg dry	1.49	0.689	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**95.8**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422864	

Sample Identification
HA - 4
SB97077-04

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**523**		mg/kg dry	1.38	0.639	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**96.4**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422864	

Sample Identification
HA - 5
SB97077-05

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**397**		mg/kg dry	1.53	0.712	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**96.2**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422864	

Sample Identification
HA - 6
SB97077-06

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**386**		mg/kg dry	1.51	0.700	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**95.9**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422864	

Sample Identification
HA - 7
SB97077-07

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**154**		mg/kg dry	1.46	0.679	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**94.6**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422864	

Sample Identification
HA - 8
SB97077-08

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**373**		mg/kg dry	1.49	0.691	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**95.9**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422864	

Sample Identification
HA - 9
SB97077-09

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**208**		mg/kg dry	1.45	0.671	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**97.9**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422864	

Sample Identification
HA - 10
SB97077-10

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**804**	Z-2	mg/kg dry	1.45	0.674	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**95.5**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422864	

Sample Identification
HA - 10 DUP
SB97077-11

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**443**	Z-2	mg/kg dry	1.47	0.684	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**96.0**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422864	

Sample Identification
HA - 11
SB97077-12

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**38.8**		mg/kg dry	1.30	0.601	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**98.8**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422864	

Sample Identification
HA - 12
SB97077-13

Client Project #	Matrix	Collection Date/Time	Received
1363.20	Soil	25-Sep-14 00:00	26-Sep-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	**138**		mg/kg dry	1.46	0.678	1	SW846 6010C	01-Oct-14	02-Oct-14	SMR	1423014	
General Chemistry Parameters													
	% Solids	**95.7**		%			1	SM2540 G Mod.	29-Sep-14	29-Sep-14	DT	1422864	

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1423014 - SW846 3050B										
Blank (1423014-BLK1)						Prepared: 01-Oct-14 Analyzed: 02-Oct-14				
Lead	< 1.43		mg/kg wet	1.43						
Duplicate (1423014-DUP1)			**Source: SB97077-08**			Prepared: 01-Oct-14 Analyzed: 02-Oct-14				
Lead	**405**		mg/kg dry	1.54		373			8	20
Matrix Spike (1423014-MS1)			**Source: SB97077-08**			Prepared: 01-Oct-14 Analyzed: 02-Oct-14				
Lead	**471**		mg/kg dry	1.39	116	373	84	75-125		
Matrix Spike Dup (1423014-MSD1)			**Source: SB97077-08**			Prepared: 01-Oct-14 Analyzed: 02-Oct-14				
Lead	**481**		mg/kg dry	1.50	125	373	86	75-125	2	20
Reference (1423014-SRM1)						Prepared: 01-Oct-14 Analyzed: 02-Oct-14				
Lead	**59.0**		mg/kg wet	1.50	69.1		85	81.95-118.79		
Reference (1423014-SRM2)						Prepared: 01-Oct-14 Analyzed: 02-Oct-14				
Lead	**58.4**		mg/kg wet	1.50	68.0		86	81.95-118.79		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1422864 - General Preparation										
Duplicate (1422864-DUP1)			**Source: SB97077-03**			Prepared & Analyzed: 29-Sep-14				
% Solids	**96.0**		%			95.8			0.2	5
Duplicate (1422864-DUP2)			**Source: SB97077-04**			Prepared & Analyzed: 29-Sep-14				
% Solids	**96.1**		%			96.4			0.2	5

Notes and Definitions

Z-2	Visual examination of HA-10 and HA-10DUP confirm the nonhomogeneity of the soil sample matrix
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
June O'Connor

SB97077 AME

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: Oct 3rd
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: CDW Consultants Inc
40 Speen Street, Suite 301
Framingham, MA 01701

Telephone #: 508 875-2657 ext 24
Project Mgr. Brian Miller

Invoice To: CDW Consultants Inc
40 Speen Street, Suite 301
Framingham, MA 9701

P.O. No.: 1363.20 RQN:

Project No.: 1363.20
Site Name: Ads to Lewis Chem!
Location: Hyde Park State: MA
Sampler(s): Brian Miller / Corey Burke

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10= H_3PO_4 11=_____ 12=_____

List preservative code below:

QA/QC Reporting Notes:
* additional charges may apply

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: Total Lead	Total Lead
SB97077-01	HA - 1	9/25/14		C	SO			1			X
-02	2										
-03	3										
-04	4										
-05	5										
-06	6										
-07	7										
-08	8										
-09	9										
-10	10										

MA DEP MCP CAM Report: Yes ☒ No ☐
CT DPH RCP Report: Yes ☐ No ☐

QA/QC Reporting Level
☒ Standard ☐ No QC ☐ DQA*
☐ NY ASP A* ☐ NY ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ TIER II* ☐ TIER IV*
☐ Other _____

State-specific reporting standards:

10/10/14R 01 JA
9/26/14

Relinquished by:	Received by:	Date:	Time:	Temp°C
Amanda Leor		9/26/14	920	
	AM	9/26/14	1645	

☐ EDD Format _____
☐ E-mail to _____

Condition upon receipt:
☐ Ambient ☐ Iced ☒ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

SB97077 AME

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 2 of 2

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: Oct 3rd
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: CDW Consultants Inc
40 Speen St. Suite 301
Framingham, MA 01701

Telephone #: ~~978~~ 508-875-2657 ext 24
Project Mgr. Brian Miller

Invoice To: CDW Consultants Inc
40 Speen Street
Framingham, MA 01701

P.O. No.: 1363.20 RQN:

Project No.: 1363.20
Site Name: Adj to Lewis Chemical
Location: Hyde Park State: MA
Sampler(s): Brian Miller

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10= H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:
* additional charges may apply

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

G=Grab C=Composite

MA DEP MCP CAM Report: Yes ☒ No ☐
CT DPH RCP Report: Yes ☐ No ☐

QA/QC Reporting Level
☒ Standard ☐ No QC ☐ DQA*
☐ NY ASP A* ☐ NY ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ TIER II* ☐ TIER IV*
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		Total Lead							
SB97077-11	HA-10DUP	9/25/14		C	SO			1			X							
-12	-11	↓		↓	↓			↓			↓							
-13	-12																	

10/0/10 R01 JM

Relinquished by:	Received by:	Date:	Time:	Temp°C
[signature]	[signature]	9/26/14	2:20	
[signature]	JM	9/26/14	1645	

☐ EDD Format 9/26/14
☐ E-mail to

Condition upon receipt: ☐ Ambient ☐ Iced ☒ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

10/23/2014

CDW Consultants, Inc.
40 Speen Street
Framingham, MA 01701

Attn: Brian Miller

Project Name: DCR Four Lewis Chemical
Project#: 1363.20

MVL Job #: 8177

This report covers the methods and findings of the Coal/Coal Ash and Lead analysis that MicroVision Laboratories, Inc. conducted on two (2) soil samples you submitted for this testing from your project number 1363.20. The purpose of this analysis was to detect and document any coal, coal ash, wood ash or lead-bearing paint chips that may be present in the submitted soil sample HA-10, and any lead-bearing paint chips that may be present in the submitted soil sample HA-5, by use of a combination of microscopy techniques including SEM/EDS, PLM, and macroscopic inspection.

Methods:

The samples were dried and examined by eye and under the stereomicroscope for any suspect dark components to the soil. Dark suspect particles were separated from each soil sample and prepared for examination by Polarized Light Microscopy (PLM) and Scanning Electron Microscopy with Energy Dispersive X-Ray Spectroscopy (SEM/EDS).

For the PLM examination, the suspect particle types detected in each sample were ground in a mortar and pestle, mounted on glass slides in immersion oil (n=1.515) and covered with glass cover slips. These sample particles were then examined at various magnifications and digital images were taken.

For the SEM examination, the suspect particle types were mounted on an aluminum analysis stub with double sided adhesive tape, coated with evaporated graphite and examined under the SEM by EDS to obtain elemental data in the form of EDS spectra. Digital images were taken of the sample particles at various magnifications with the SEM.

Findings:

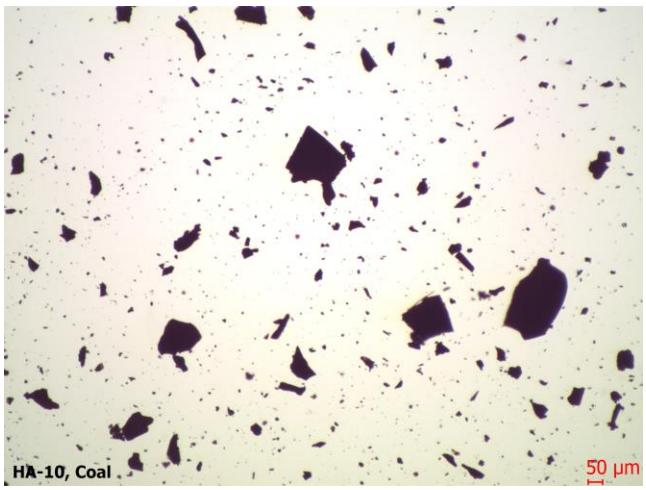
The following pages display the data for each particle type detected in each sample for this project. Each page contains a PLM image, SEM image, and EDS spectrum for the particle types detected for these samples as well as particle type descriptions and observations.

Coal Ash Test

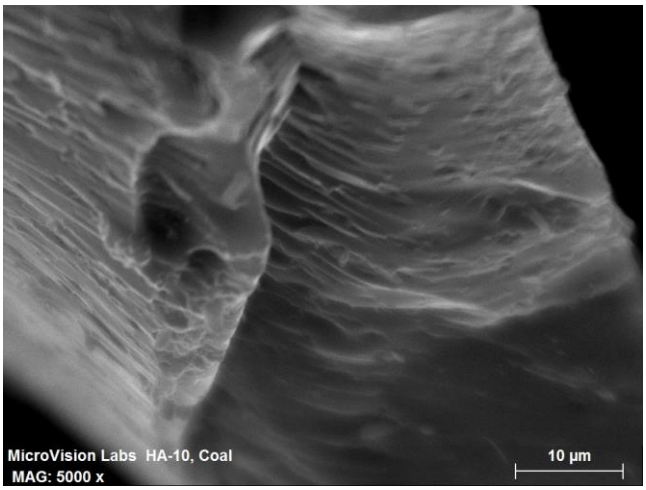
Sample: HA-10

Number of Suspect Particle Types: Four (4)

Particle type 1 consisted of nine (9) shiny, black grains approximately 1mm-8mm in diameter. The PLM examination indicated this particle type to be consistent with coal. The PLM and SEM images of this particle type show the angular edges and typical conchoidal fractures found in coal.

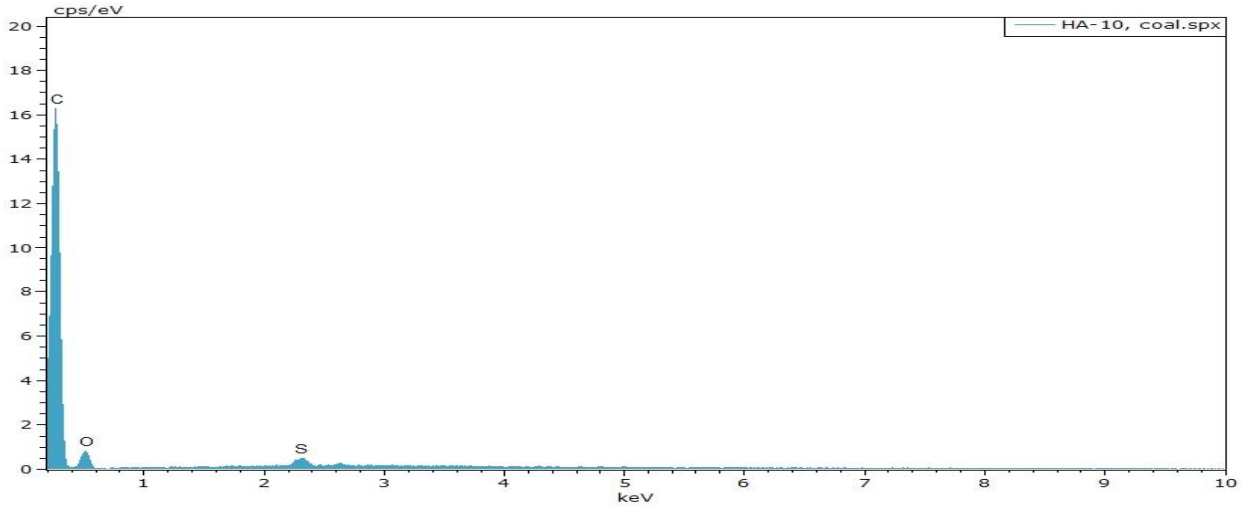


PLM Image



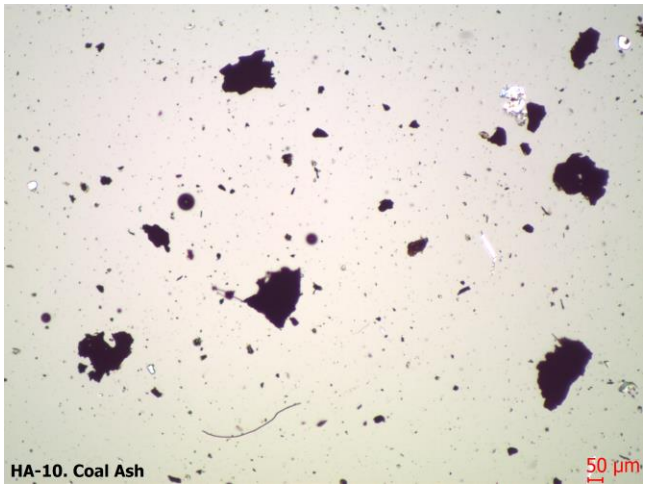
SEM Image

The EDS spectrum, shown below, confirms that this particle type is coal. The analysis for this particle shows a strong peak concentration of carbon, with lower peak concentrations of oxygen and sulfur.

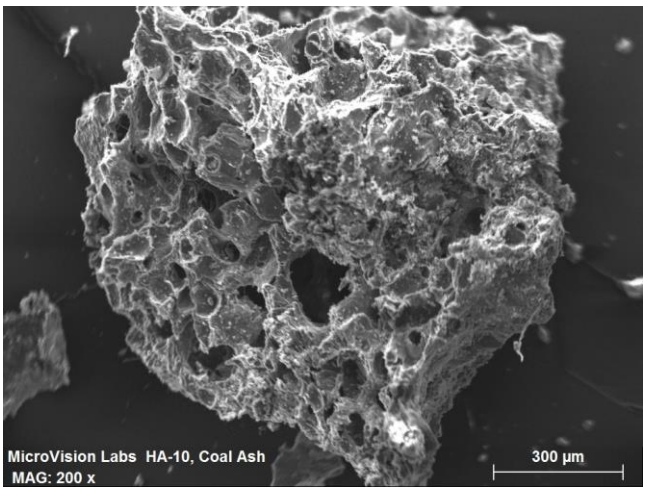


MicroVision Laboratories, Inc. 187 Billerica Road, Chelmsford, MA 01824
Phone: (978) 250-9909 Fax: (978) 250-9901 Email: Sales@MicroVisionLabs.com
www.MicroVisionLabs.com

Particle type 2 consisted of six (6) dark, porous grains approximately 2mm-5mm in diameter. The PLM examination indicated this particle type to be consistent with coal ash. The PLM and SEM images show the spherical gas voids that formed during combustion.

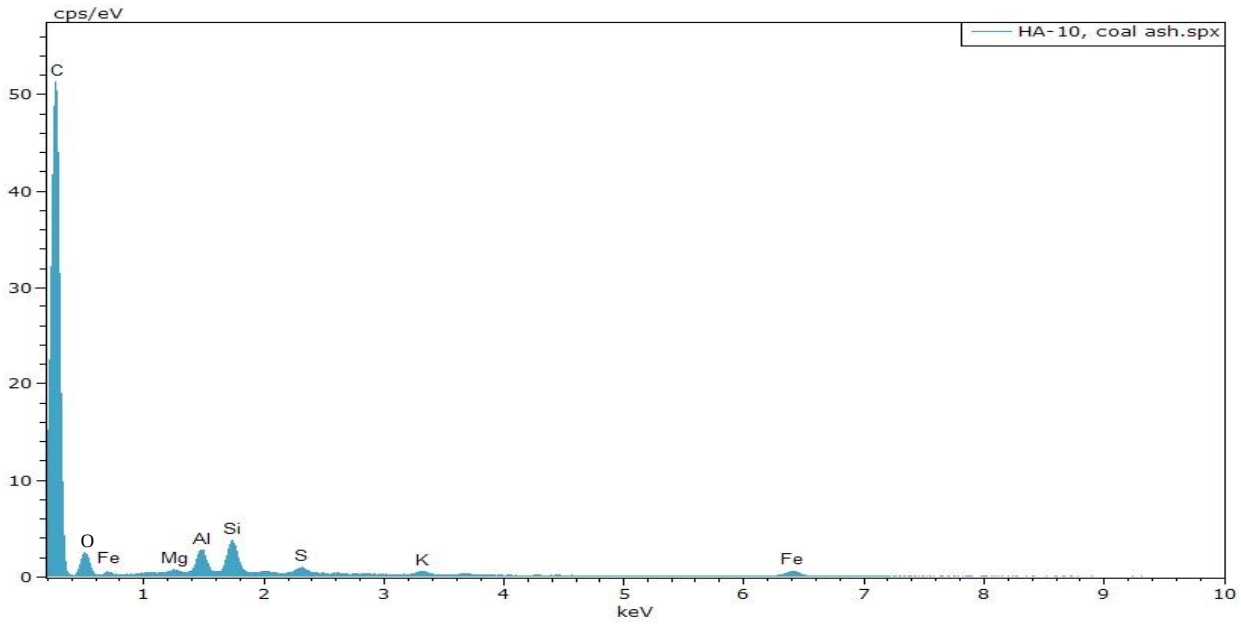


PLM Image



SEM Image

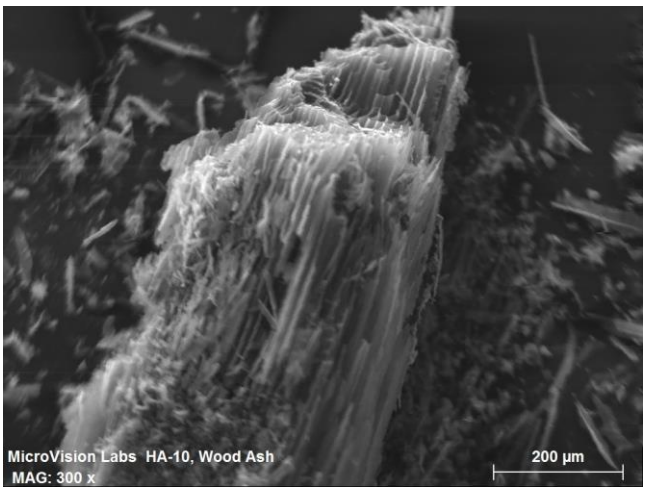
The EDS spectrum, shown below, confirms this particle type is coal ash. The analysis for this particle shows a peak concentration of carbon, with lower peak concentrations of oxygen, magnesium, aluminum, silicon, sulfur, potassium, and iron.



Particle type 3 consisted of five (5) friable, black grains approximately 3mm-5mm in length. The PLM examination indicated this particle type to be consistent with wood ash. The PLM and SEM photos show the cellular structure typical of wood still present in these grains.

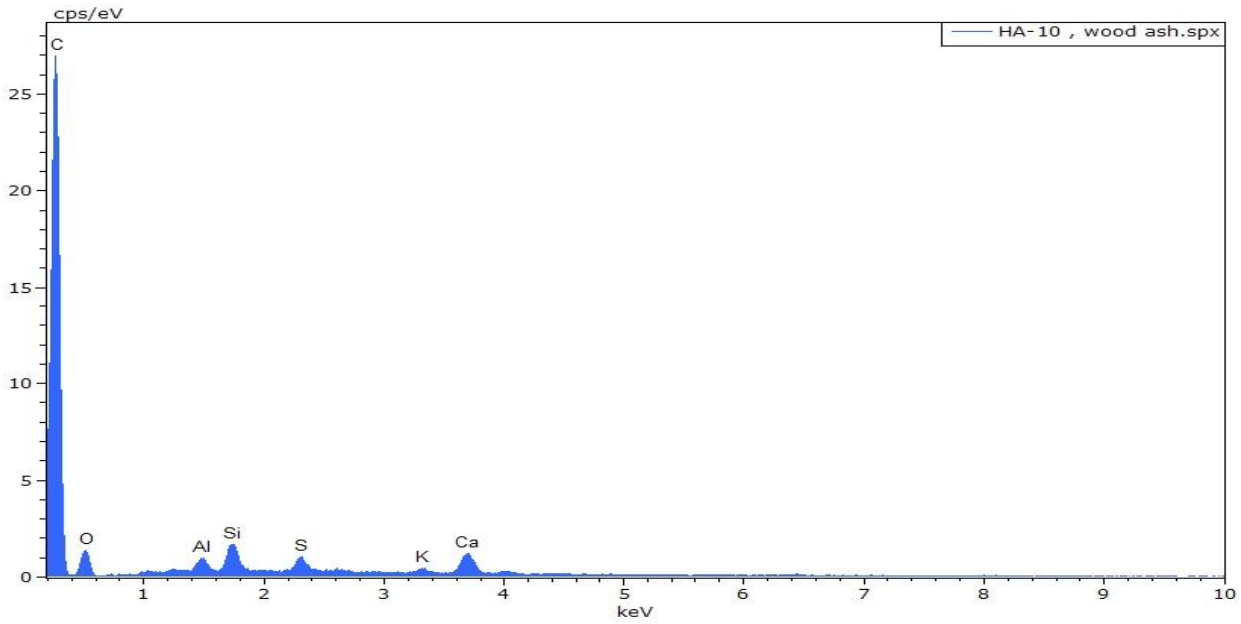


PLM Image

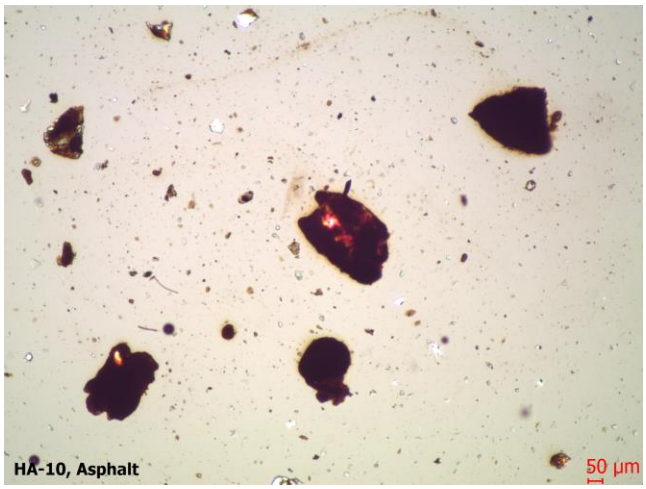


SEM Image

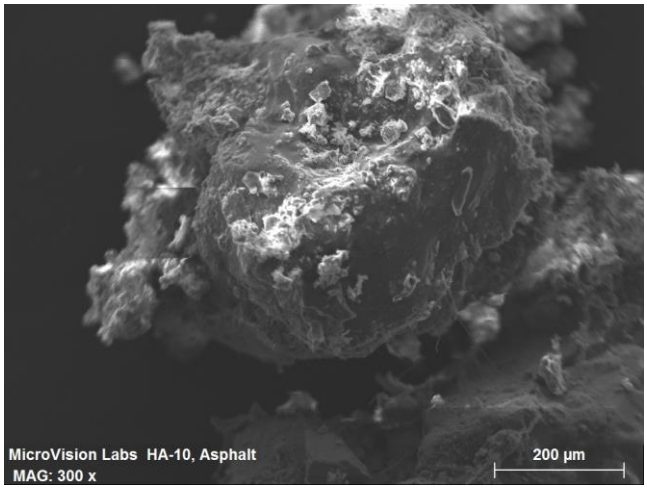
The EDS spectrum, shown below, confirms this particle type is wood ash. The analysis for this particle shows strong to moderate peak concentrations of carbon, with lower peak concentrations of oxygen, aluminum, silicon, sulfur, potassium, and calcium.



Particle type 4 consisted of fourteen (14) ductile, black grains approximately 3mm-8mm in diameter. These grains had mineral matter embedded in and stuck to them. During the PLM examination, these particles slowly dissolved in the mounting oil which is a typical characteristic of asphalt. The PLM image shows the dissolving asphalt particles, and the SEM image illustrates the morphology of asphalt with the embedded mineral grains.

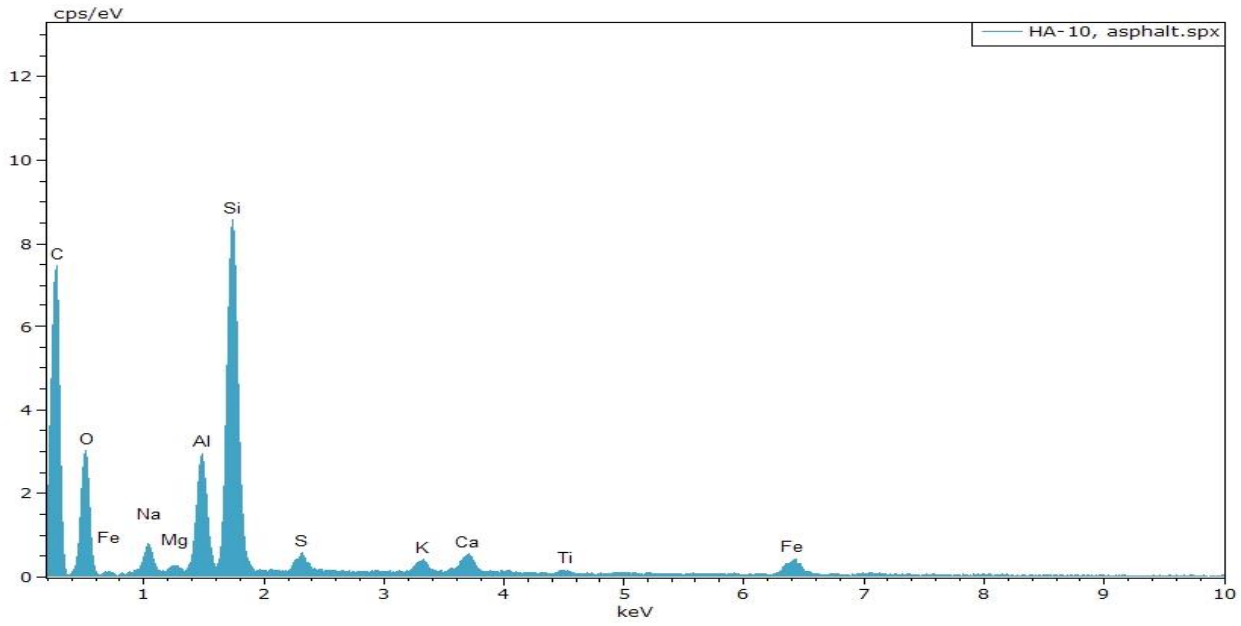


PLM Image



SEM Image

The EDS spectrum, shown below, confirms this particle type is asphalt. The EDS spectrum for this particle type shows strong to moderate peak concentrations of carbon, oxygen, aluminum, and silicon, with lower peak concentrations of sodium, magnesium, sulfur, potassium, calcium, titanium, and iron.



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www.MicroVisionLabs.com

Lead Analysis

The purpose of the lead analysis was to determine if any lead based paint or lead source may be present in these submitted soil samples by microscopy tests including Scanning Electron Microscopy and Energy Dispersive X-ray Spectroscopy (SEM/EDS) and macroscopic inspection.

Methods:

The samples were dried and examined by eye under the stereomicroscope for lead or any suspect colored components or particles that may potentially contain lead located in the soil samples. The suspect particles were mounted on an aluminum analysis SEM stub with double sided adhesive tape, coated with evaporated graphite and examined under the SEM by EDS and BSE to obtain elemental data in the form of EDS spectra. Backscatter electron (BSE) imaging correlates atomic density with image brightness and is used to detect the higher density particles. Digital images of these particles were taken at various magnifications.

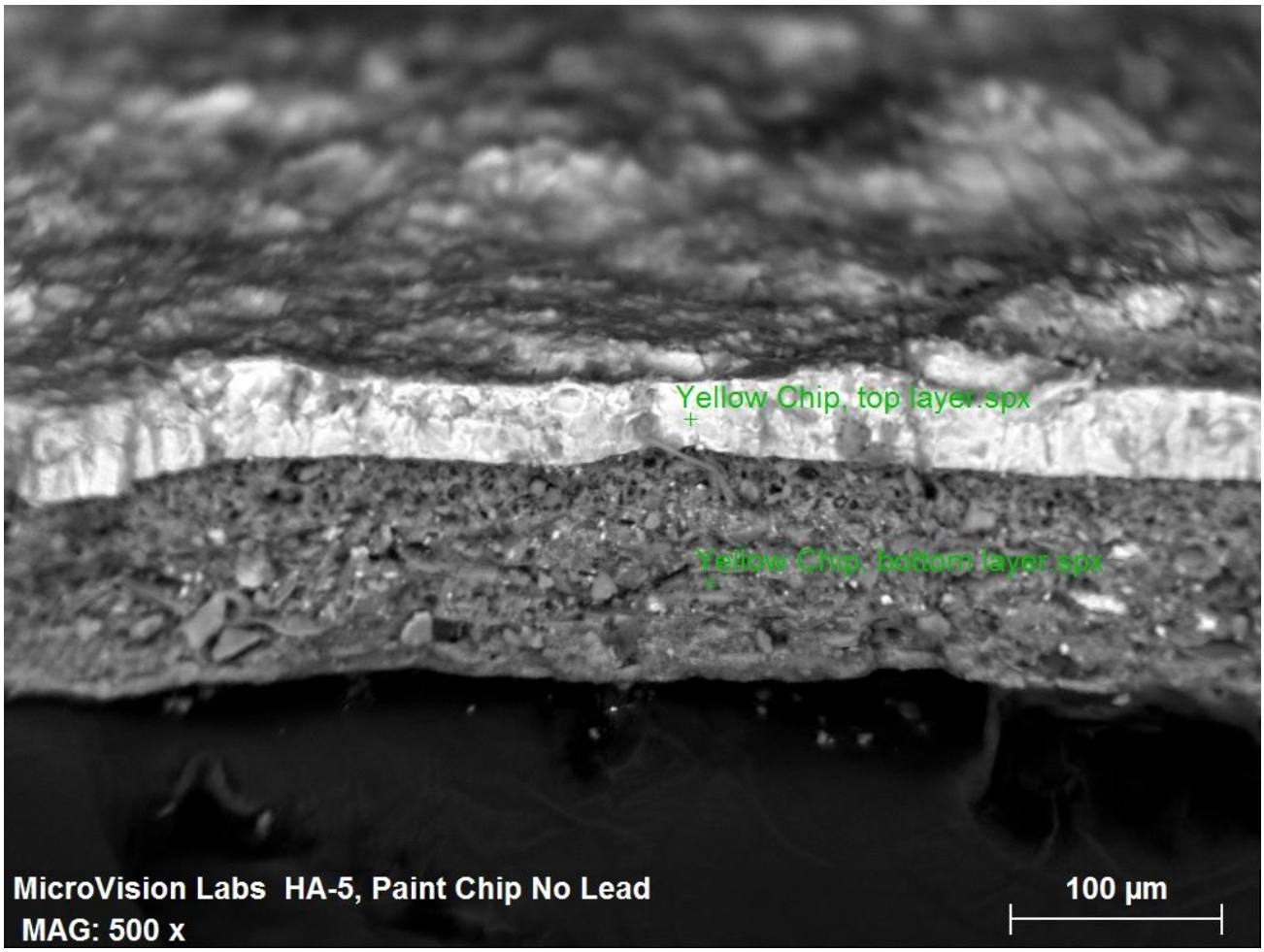
Findings:

The following pages display the data for the suspect particles detected in the submitted samples for this project. The pages contain an SEM image and EDS spectrum of the particles detected in these samples.

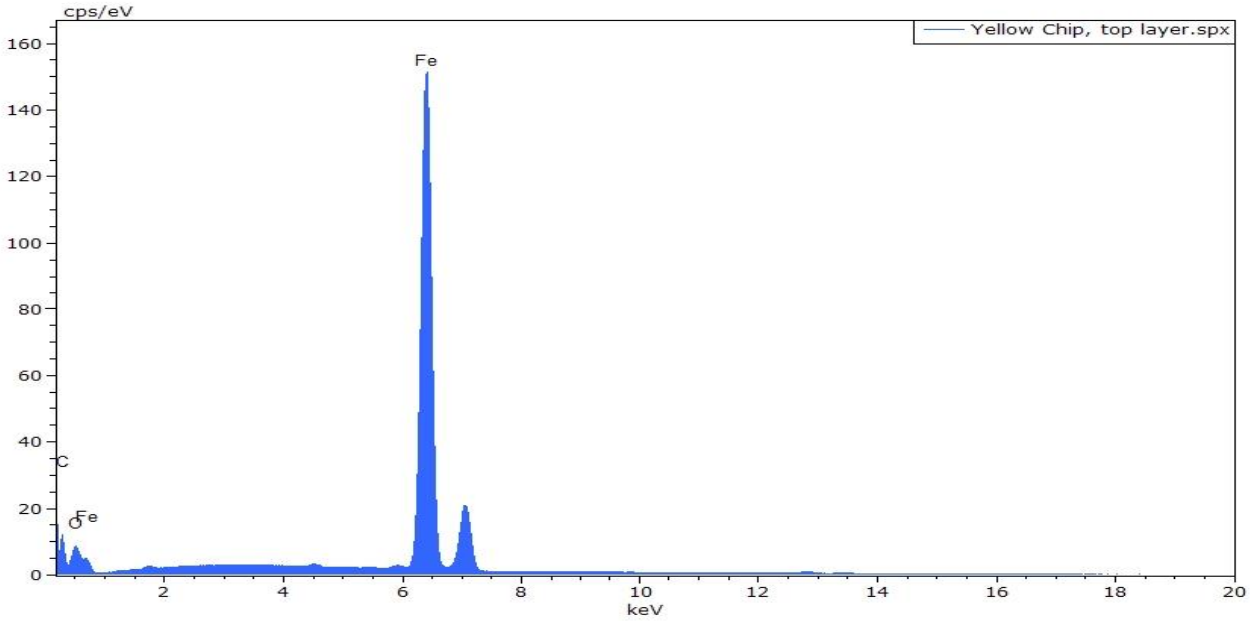
Sample: HA-5

This sample contained one yellow paint chip.

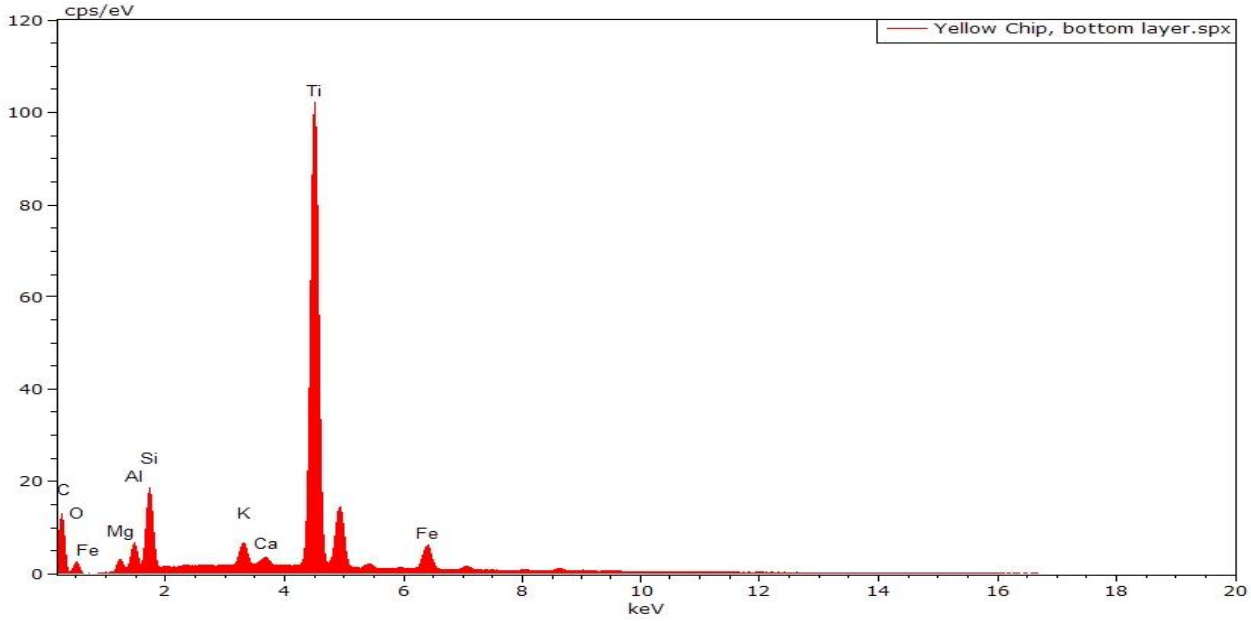
Lead was not detected in this paint chip when examined by EDS.



HA-5 Yellow Chip, No Lead, SEM Image



Ha-5 Yellow Chip, Top Layer, EDS Spectrum



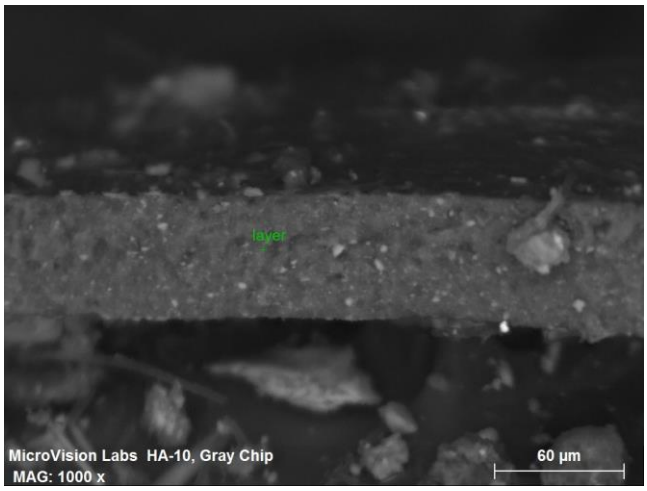
HA-5 Yellow Chip, Bottom Layer, EDS Spectrum

Sample: HA-10

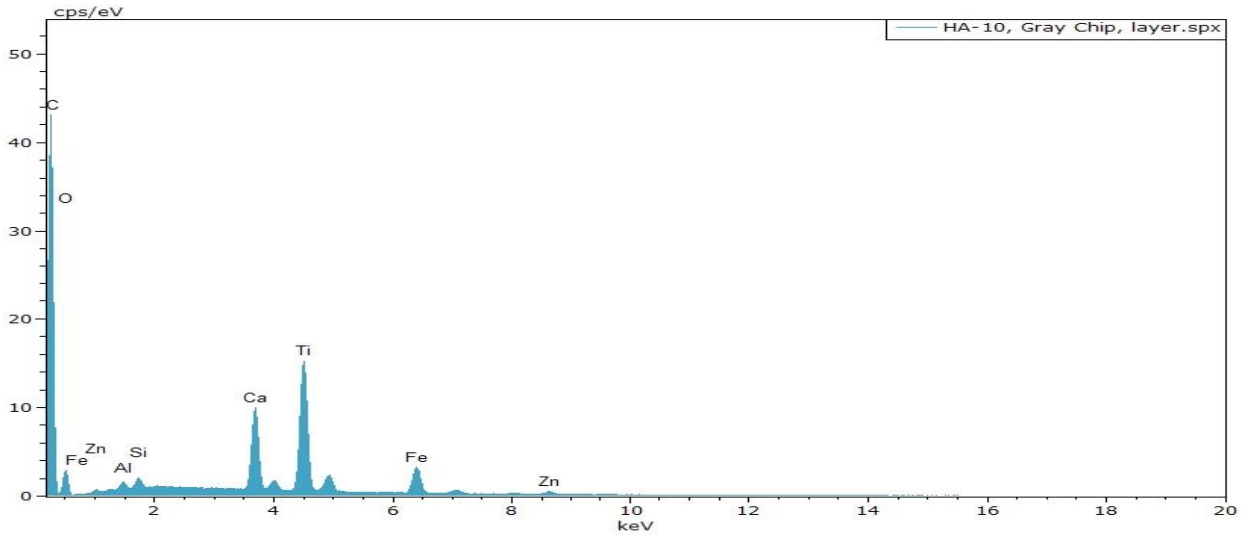
This sample contained one yellow paint chip and one grey chip.

Lead was not detected in the grey paint chip when examined by EDS.

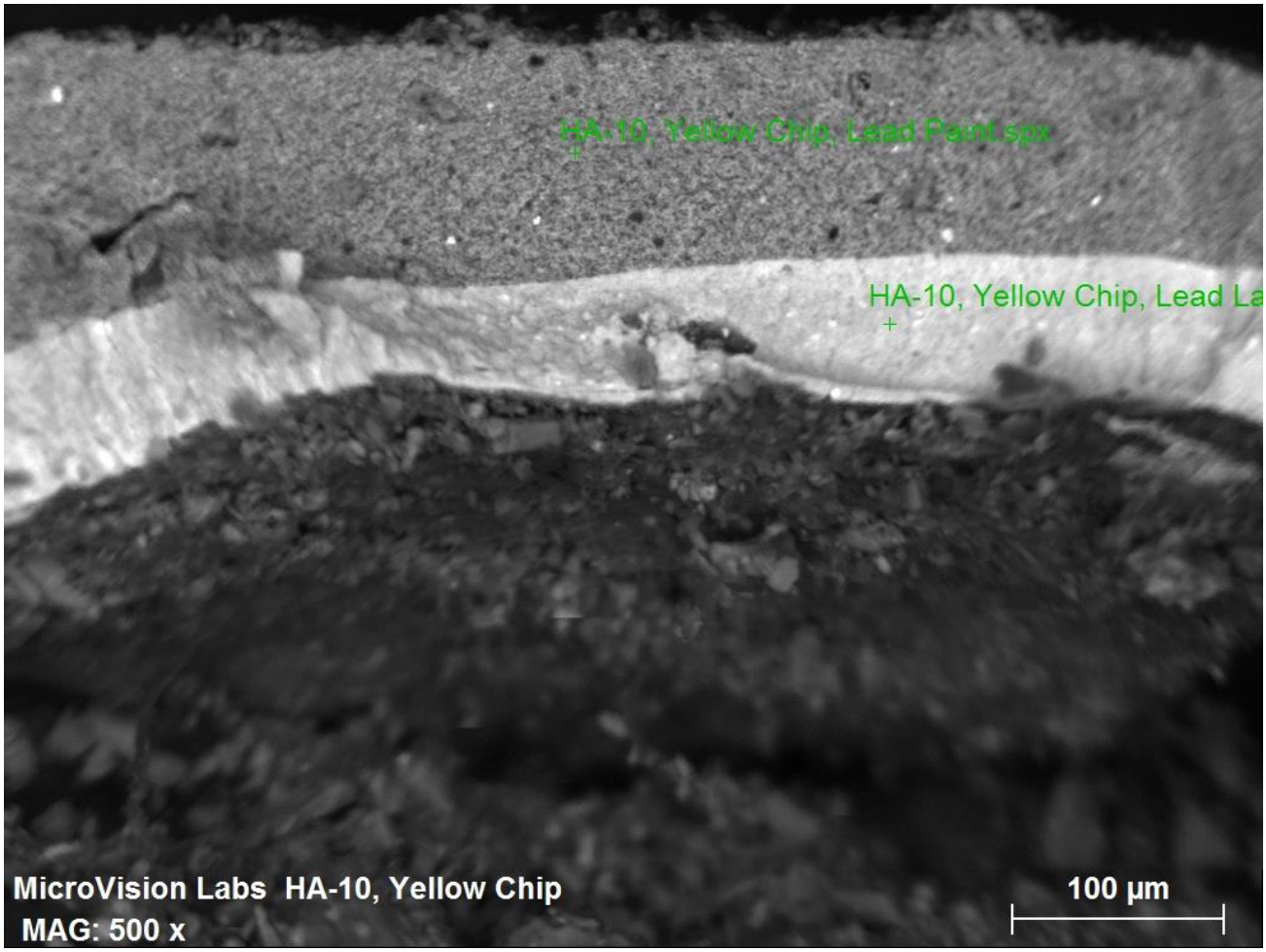
Lead was detected in the yellow paint chip when examined by EDS. Also, there was a metallic layer below the yellow paint layer.



HA-10 Grey Chip, No Lead, SEM



HA-10 Grey Chip, EDS Spectrum



HA-10 Yellow Chip, SEM Image

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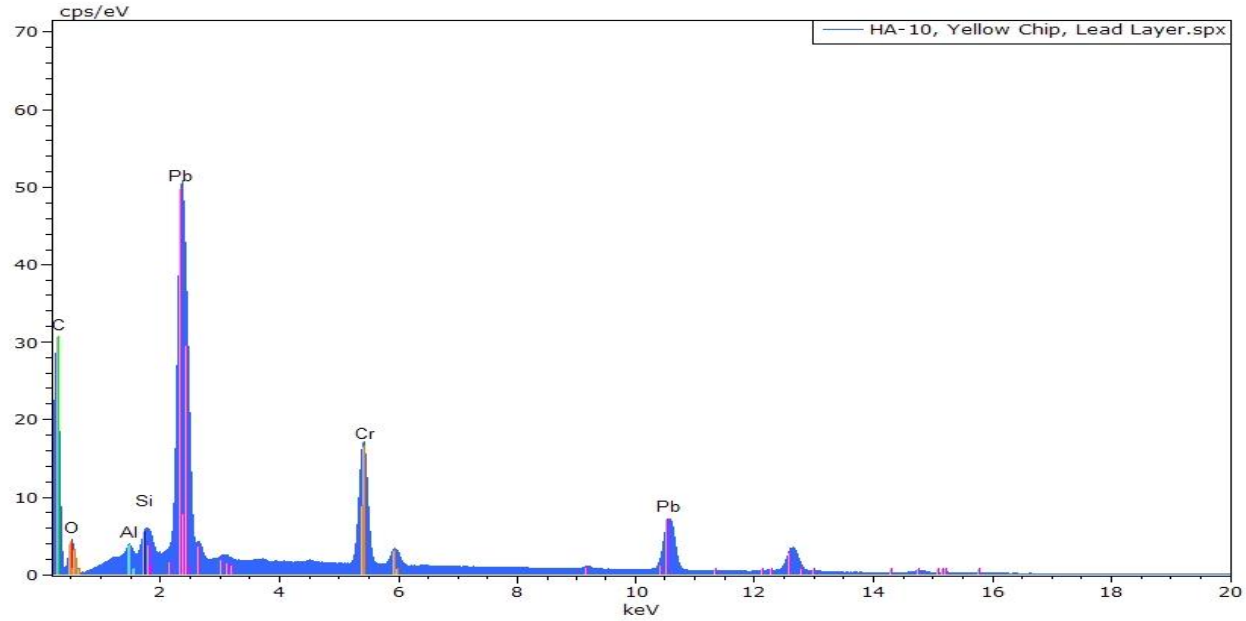
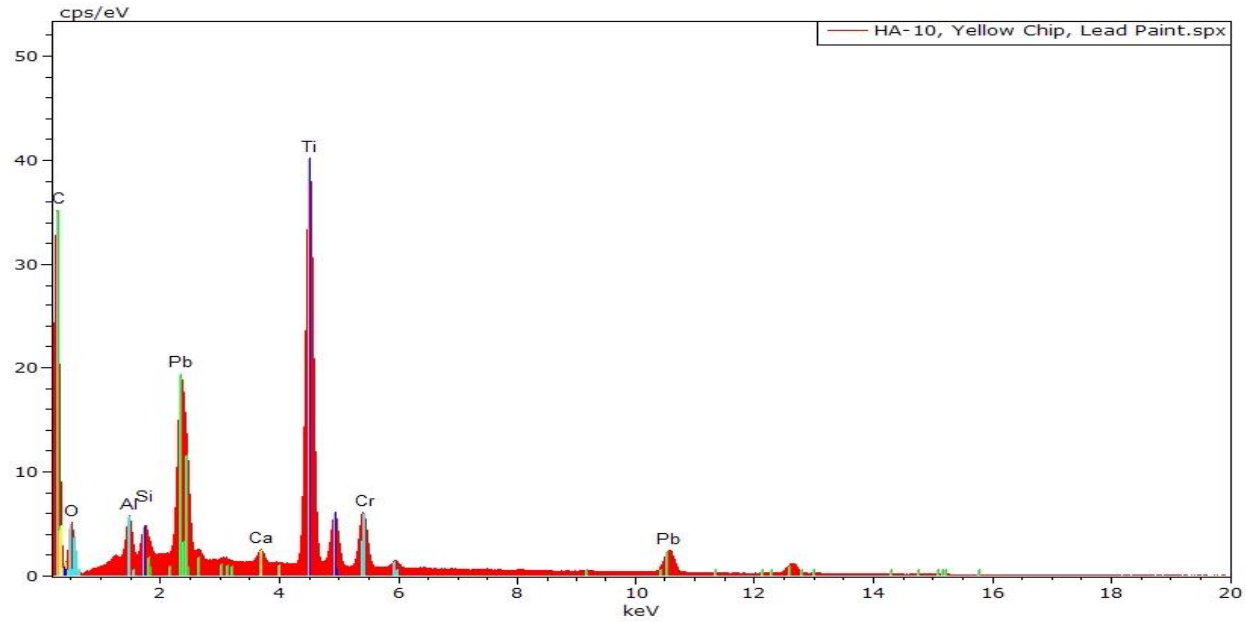


HA-10 Yellow Chip, EDS Spectrum



HA-10 Yellow Chip, EDS Spectrum

Lead Paint Summary:

Sample HA-05 had one paint chip but no lead. Sample HA-10 had two paint chips of which the yellow one had lead.

Results Summary Table:

Sample Name	Material Concentrations
HA-5	**Lead Test Only (no lead paint)**
HA-10	**Coal (light), Coal Ash (light), Wood Ash (light), Asphalt (moderate)** **Lead (detected in yellow chip)**

The concentrations of the particle types detected in this sample are listed in parenthesis in the table above and are based on the number of particles found and the relative difficultly in finding them. The concentration information is listed for informational purposes only and has no bearing on exemption status. Please let me know if you have any questions about this analysis or if there is anything else I can do for you.

Sincerely,

Tyler Wozmak
Optical Microscopist

Denise Weidler
Analytical Microscopist

MICROVISION LABORATORIES, INC.

Chain Of Custody

MicroVision Labs Job#: 8717

Client Information

Client: CDM Consultants
Billing Address: 40 Speen St. Framingham, MA 01701
Phone: 508-875-2657
Fax:
Email: bmiller@cdmconsultants.com

Project Information

Project Name: DCR Fmr Lewis Chemical
Project Location: Adjacent to 12-24 Fairmount Ct.
Project Number: 13633.20
Project Manager: Brian Miller
PO#:

Sample ID	Collected Date	Sampler's Initials	Requested Analyses: Coal Ash Test	Lead Paint	SEM/EDS	PLM/Light Microscopy	Soot ID	Dust ID	Unknow Mat'l ID	FTIR	Polished Cross Section	Particle Size Analysis	Wildfire	Other
1) HA-5	9/25/14			✓										
2) HA-10	9/25/14		✓	✓										
3)														
4)														
5)														
6)														
7)														
8)														
9)														
10)														
11)														
12)														

Relinquished By:	Date/Time	Received By:	Date/Time	Turn Around Time and Notes:
[signature]	10/7/14	[signature]	10/7/14 9:23	Quickest turnaround time without extra charges.

Hazardous Contaminants: (YES) NO If Yes, please list: lead & PCBs

Analytical Report Requested: (YES) / NO

MicroVision Laboratories, Inc.
187 Billerica Road, Chelmsford, MA 01824
Phone 978-250-9909 Fax 978-250-9901 Toll Free 1-877-250-9909
microvisionlabs.com

APPENDIX B: PREVIOUS REPORTS BY OTHERS

APPENDIX B
RELEVANT HISTORICAL ENVIRONMENTAL REPORTS
FORMER LEWIS CHEMICAL FACILITY
HYDE PARK, MASSACHUSETTS

RTN 3-1616 (City of Boston)
Notification Date = January 15, 1987

Environmental Strategies & Management (ES&M)

- Phase I Brownfields Site Investigation Report – March 2003
- Public Involvement Plan – May 2005
- Release Abatement Measure Plan – February 2006
- Release Abatement Measure Completion Report – June 2006
- Interim Phase II Comprehensive Site Assessment – May 2007

Woodard & Curran

- Release Abatement Measure Plan – July 2010
- Release Abatement Measure Completion Report – June 2013
- Phase II Comprehensive Site Assessment Report – April 2015

RTN 3-31548 (Department of Conservation and Recreation)
Notification Date = May 17, 2013
Linked to RTN 3-1616 with November 2015 Phase III RAP

CDW Consultants

- Phase I Initial Site Investigation and Phase II Scope of Work – November 2014
- Downgradient Property Status – January 2014
- Downgradient Property Status **TERMINATED** – June 2014

RTN 3-31697 (Department of Conservation and Recreation)
Notification Date = August 2, 2013
Linked to RTN 3-1616 with November 2015 Phase III RAP

CDW Consultants

- Permanent and Temporary Solution Statement – August 2014
- Permanent and Temporary Solution Statement **RETRACTION** – November 2015

APPENDIX B
RELEVANT HISTORICAL ENVIRONMENTAL REPORTS
FORMER LEWIS CHEMICAL FACILITY
HYDE PARK, MASSACHUSETTS

RTN 3-33111 (City of Boston)

Notification Date = August 26, 2015

Linked to RTN 3-1616 with November 2015 Phase III RAP

City of Boston

- 120-day Release Notification Form for LNAPL

Other Relevant Response Actions for the Disposal Site

Nobis Engineering

- Targeted Brownfields Assessment – February 2014

Linking RTN Summary

As summarized in an email dated June 12, 2015 from Christopher Pyott of MassDEP, the two DCR RTNs (3-31697 and 3-31548) could be linked to the overall Site RTN (3-1616); however, Mr. Pyott indicated that the linking would not relieve DCR of potential liability. Additionally, because the City of Boston is taking the lead on conducting response actions, the municipal exemption allows the City to stop work at any time upon written notification to MassDEP. In the event that the City ceases to conduct or does not complete all necessary response actions, DCR's obligations to conduct response actions as a PRP would remain for the portion of the disposal site that is currently owned by the Commonwealth of Massachusetts. Mr. Pyott also indicated that the Permanent Solution filed by DCR for RTN 3-31697 must be retracted prior to linking this RTN to RTN 3-1616. On October 30, 2015, the DCR submitted a report and transmittal form BWSC104 retracting the Permanent Solution for RTN 3-31697.

Because the City has agreed to take the lead for comprehensive response actions and assuming that the DCR continues to provide support to the City, the City agreed to link the two DCR RTNs to the original RTN for the disposal site with the submittal of Phase III Remedial Action Plan. In addition, the LNAPL RTN (3-33111) is being linked such that future comprehensive response actions may address this reporting condition under the original RTN (3-1616).

APPENDIX C: LABORATORY ANALYTICAL RESULTS – GROUNDWATER SAMPLING

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Jarrod Yoder
Woodard & Curran
40 Shattuck Road
Suite 110
Andover, MA 01810

PO Number: None
Job ID: 33653
Date Received: 7/16/15

Project: Lewis Chemical 229286.01

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

SS (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 8/11/2015
Total number of pages: 73

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Lewis Chemical 229286.01

Lab ID: 33653

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
ESM-6	Water	7/16/2015 13:20	33653-001	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-6 Dissolved	Water	7/16/2015 13:20	33653-002	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
ESM-3	Water	7/16/2015 13:45	33653-003	
				EPH in water by MADEP Method
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
Trip Blank-1	Water	7/14/2015 0:00	33653-004	
				Low level 1,4-dioxane in water by 8260 SIM
Trip Blank-2	Water	7/14/2015 0:00	33653-005	
				VOCs in water by 8260
ESM-3B-S	Water	7/16/2015 16:40	33653-006	
				EPH in water by MADEP Method
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
ESM-3B-D	Water	7/17/2015 11:30	33653-007	
				EPH in water by MADEP Method
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
ESM-5	Water	7/16/2015 15:35	33653-008	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
				EPH in water by MADEP Method
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
ESM-5B	Water	7/17/2015 10:20	33653-009	
				EPH in water by MADEP Method
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
ESM-9	Water	7/17/2015 7:45	33653-010	
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-13	Water	7/17/2015 9:35	33653-011	
				EPH in water by MADEP Method
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method

Absolute Resource associates

Project ID: Lewis Chemical 229286.01

Lab ID: 33653

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
ESM-5 Dissolved	Water	7/16/2015 15:35	33653-012	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
Trip Blank	Water	7/14/2015 0:00	33653-013	
				VOCs in water by 8260
ESM-7	Water	7/16/2015 11:30	33653-014	
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-001

Sample ID: ESM-6

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 13:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
chloromethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
vinyl chloride	**31**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
bromomethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
chloroethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
trichlorofluoromethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
diethyl ether	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
acetone	< 50	50	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1-dichloroethene	**17**	5	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
methylene chloride	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
carbon disulfide	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
methyl t-butyl ether (MTBE)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
trans-1,2-dichloroethene	**31**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
isopropyl ether (DIPE)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1-dichloroethane	**80**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
t-butanol (TBA)	< 150	150	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
2-butanone (MEK)	< 50	50	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
2,2-dichloropropane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
cis-1,2-dichloroethene	**2800**	40	ug/L	20	LMM		1501855	7/21/15	19:21	SW5030C8260C
chloroform	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
bromochloromethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1,1-trichloroethane	**1600**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1-dichloropropene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
t-amyl-methyl ether (TAME)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
carbon tetrachloride	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2-dichloroethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
benzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
trichloroethene	**1200**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2-dichloropropane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
bromodichloromethane	< 3.0	3.0	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,4-dioxane	< 250	250	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
dibromomethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 50	50	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
cis-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
toluene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
trans-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
2-hexanone	< 50	50	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1,2-trichloroethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,3-dichloropropane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
tetrachloroethene	**770**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-001

Sample ID: ESM-6

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 13:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2-dibromoethane (EDB)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
chlorobenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1,1,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
ethylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
m&p-xylenes	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
o-xylene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
styrene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
bromoform	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
isopropylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1,2,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2,3-trichloropropane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
n-propylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
bromobenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,3,5-trimethylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
2-chlorotoluene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
4-chlorotoluene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
tert-butylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2,4-trimethylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
sec-butylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,3-dichlorobenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
4-isopropyltoluene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,4-dichlorobenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2-dichlorobenzene	**16**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
n-butylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2,4-trichlorobenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
hexachlorobutadiene	< 2.5	2.5	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
naphthalene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2,3-trichlorobenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**340**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**98**	78-114	%	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
toluene-D8 SUR	**98**	88-110	%	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
4-bromofluorobenzene SUR	**98**	86-115	%	5	LMM		1501855	7/17/15	21:00	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-003

Sample ID: ESM-3

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
chloromethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
vinyl chloride	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
bromomethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
chloroethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
trichlorofluoromethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
diethyl ether	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
acetone	< 2000	2000	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1-dichloroethene	**380**	200	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
methylene chloride	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
carbon disulfide	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
methyl t-butyl ether (MTBE)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
trans-1,2-dichloroethene	**680**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
isopropyl ether (DIPE)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1-dichloroethane	**2200**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
t-butanol (TBA)	< 6000	6000	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
2-butanone (MEK)	< 2000	2000	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
2,2-dichloropropane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
cis-1,2-dichloroethene	**90000**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
chloroform	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
bromochloromethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
tetrahydrofuran (THF)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1,1-trichloroethane	**26000**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1-dichloropropene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
t-amyl-methyl ether (TAME)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
carbon tetrachloride	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2-dichloroethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
benzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
trichloroethene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2-dichloropropane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
bromodichloromethane	< 120	120	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,4-dioxane	< 10000	10000	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
dibromomethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 2000	2000	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
cis-1,3-dichloropropene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
toluene	**16000**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
trans-1,3-dichloropropene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
2-hexanone	< 2000	2000	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1,2-trichloroethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,3-dichloropropane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
tetrachloroethene	**430**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-003

Sample ID: ESM-3

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2-dibromoethane (EDB)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
chlorobenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1,1,2-tetrachloroethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
ethylbenzene	**530**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
m&p-xylenes	**1300**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
o-xylene	**490**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
styrene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
bromoform	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
isopropylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1,2,2-tetrachloroethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2,3-trichloropropane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
n-propylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
bromobenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,3,5-trimethylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
2-chlorotoluene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
4-chlorotoluene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
tert-butylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2,4-trimethylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
sec-butylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,3-dichlorobenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
4-isopropyltoluene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,4-dichlorobenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2-dichlorobenzene	**450**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
n-butylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2,4-trichlorobenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
hexachlorobutadiene	< 100	100	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
naphthalene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2,3-trichlorobenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**3400**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**98**	78-114	%	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
toluene-D8 SUR	**100**	88-110	%	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
4-bromofluorobenzene SUR	**93**	86-115	%	200	LMM		1501855	7/17/15	23:40	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-005

Sample ID: Trip Blank-2

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/14/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-005

Sample ID: Trip Blank-2

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/14/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
4-bromofluorobenzene SUR	**94**	86-115	%	1	LMM		1501855	7/17/15	15:20	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-006
Sample ID: ESM-3B-S
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
chloromethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
vinyl chloride	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
bromomethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
chloroethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
trichlorofluoromethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
diethyl ether	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
acetone	< 200	200	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1-dichloroethene	**400**	20	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
methylene chloride	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
carbon disulfide	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
methyl t-butyl ether (MTBE)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
trans-1,2-dichloroethene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
isopropyl ether (DIPE)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1-dichloroethane	**41**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
t-butanol (TBA)	< 600	600	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
2-butanone (MEK)	< 200	200	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
2,2-dichloropropane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
cis-1,2-dichloroethene	**210**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
chloroform	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
bromochloromethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
tetrahydrofuran (THF)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1,1-trichloroethane	**1700**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1-dichloropropene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
t-amyl-methyl ether (TAME)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
carbon tetrachloride	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2-dichloroethane	**68**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
benzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
trichloroethene	**6000**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2-dichloropropane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
bromodichloromethane	< 12	12	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,4-dioxane	< 1000	1000	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
dibromomethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 200	200	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
cis-1,3-dichloropropene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
toluene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
trans-1,3-dichloropropene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
2-hexanone	< 200	200	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1,2-trichloroethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,3-dichloropropane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
tetrachloroethene	**2900**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-006

Sample ID: ESM-3B-S

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2-dibromoethane (EDB)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
chlorobenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1,1,2-tetrachloroethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
ethylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
m&p-xylenes	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
o-xylene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
styrene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
bromoform	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
isopropylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1,2,2-tetrachloroethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2,3-trichloropropane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
n-propylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
bromobenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,3,5-trimethylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
2-chlorotoluene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
4-chlorotoluene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
tert-butylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2,4-trimethylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
sec-butylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,3-dichlorobenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
4-isopropyltoluene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,4-dichlorobenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2-dichlorobenzene	**42**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
n-butylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2,4-trichlorobenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
hexachlorobutadiene	< 10	10	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
naphthalene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2,3-trichlorobenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**1200**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**93**	78-114	%	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
toluene-D8 SUR	**100**	88-110	%	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
4-bromofluorobenzene SUR	**97**	86-115	%	20	LMM		1501897	7/21/15	19:52	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-007
Sample ID: ESM-3B-D
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
chloromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
vinyl chloride	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
bromomethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
chloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
trichlorofluoromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
diethyl ether	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
acetone	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1-dichloroethene	**5200**	200	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
methylene chloride	**12000**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
carbon disulfide	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
methyl t-butyl ether (MTBE)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
trans-1,2-dichloroethene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
isopropyl ether (DIPE)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1-dichloroethane	**660**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
t-butanol (TBA)	< 6000	6000	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
2-butanone (MEK)	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
2,2-dichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
cis-1,2-dichloroethene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
chloroform	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
bromochloromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
tetrahydrofuran (THF)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1,1-trichloroethane	**18000**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1-dichloropropene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
t-amyl-methyl ether (TAME)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
carbon tetrachloride	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2-dichloroethane	**1800**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
benzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
trichloroethene	**68000**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2-dichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
bromodichloromethane	< 120	120	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,4-dioxane	< 10000	10000	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
dibromomethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
cis-1,3-dichloropropene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
toluene	**1600**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
trans-1,3-dichloropropene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
2-hexanone	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1,2-trichloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,3-dichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
tetrachloroethene	**12000**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-007
Sample ID: ESM-3B-D
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2-dibromoethane (EDB)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
chlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1,1,2-tetrachloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
ethylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
m&p-xylenes	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
o-xylene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
styrene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
bromoform	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
isopropylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1,2,2-tetrachloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2,3-trichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
n-propylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
bromobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,3,5-trimethylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
2-chlorotoluene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
4-chlorotoluene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
tert-butylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2,4-trimethylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
sec-butylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,3-dichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
4-isopropyltoluene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,4-dichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2-dichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
n-butylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2,4-trichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
hexachlorobutadiene	< 100	100	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
naphthalene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2,3-trichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**5900**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**94**	78-114	%	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
toluene-D8 SUR	**103**	88-110	%	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
4-bromofluorobenzene SUR	**98**	86-115	%	200	LMM		1501897	7/21/15	20:54	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-008
Sample ID: ESM-5
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
chloromethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
vinyl chloride	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
bromomethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
chloroethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
trichlorofluoromethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
diethyl ether	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
acetone	< 4000	4000	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1-dichloroethene	**1700**	400	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
methylene chloride	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
carbon disulfide	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
methyl t-butyl ether (MTBE)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
trans-1,2-dichloroethene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
isopropyl ether (DIPE)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1-dichloroethane	**2300**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
t-butanol (TBA)	< 12000	12000	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
2-butanone (MEK)	< 4000	4000	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
2,2-dichloropropane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
cis-1,2-dichloroethene	**95000**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
chloroform	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
bromochloromethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
tetrahydrofuran (THF)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1,1-trichloroethane	**130000**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1-dichloropropene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
t-amyl-methyl ether (TAME)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
carbon tetrachloride	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2-dichloroethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
benzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
trichloroethene	**130000**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2-dichloropropane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
bromodichloromethane	< 240	240	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,4-dioxane	< 20000	20000	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
dibromomethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 4000	4000	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
cis-1,3-dichloropropene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
toluene	**31000**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
trans-1,3-dichloropropene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
2-hexanone	< 4000	4000	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1,2-trichloroethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,3-dichloropropane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
tetrachloroethene	**18000**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-008

Sample ID: ESM-5

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2-dibromoethane (EDB)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
chlorobenzene	**2900**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1,1,2-tetrachloroethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
ethylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
m&p-xylenes	**990**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
o-xylene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
styrene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
bromoform	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
isopropylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1,2,2-tetrachloroethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2,3-trichloropropane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
n-propylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
bromobenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,3,5-trimethylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
2-chlorotoluene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
4-chlorotoluene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
tert-butylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2,4-trimethylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
sec-butylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,3-dichlorobenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
4-isopropyltoluene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,4-dichlorobenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2-dichlorobenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
n-butylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2,4-trichlorobenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
hexachlorobutadiene	< 200	200	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
naphthalene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2,3-trichlorobenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**6300**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**99**	78-114	%	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
toluene-D8 SUR	**103**	88-110	%	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
4-bromofluorobenzene SUR	**98**	86-115	%	400	LMM		1501897	7/21/15	21:26	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-009

Sample ID: ESM-5B

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
chloromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
vinyl chloride	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
bromomethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
chloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
trichlorofluoromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
diethyl ether	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
acetone	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1-dichloroethene	**3300**	200	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
methylene chloride	**950**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
carbon disulfide	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
methyl t-butyl ether (MTBE)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
trans-1,2-dichloroethene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
isopropyl ether (DIPE)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1-dichloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
t-butanol (TBA)	< 6000	6000	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
2-butanone (MEK)	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
2,2-dichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
cis-1,2-dichloroethene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
chloroform	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
bromochloromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
tetrahydrofuran (THF)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1,1-trichloroethane	**27000**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1-dichloropropene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
t-amyl-methyl ether (TAME)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
carbon tetrachloride	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2-dichloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
benzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
trichloroethene	**34000**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2-dichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
bromodichloromethane	< 120	120	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,4-dioxane	< 10000	10000	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
dibromomethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
cis-1,3-dichloropropene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
toluene	**520**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
trans-1,3-dichloropropene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
2-hexanone	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1,2-trichloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,3-dichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
tetrachloroethene	**14000**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-009
Sample ID: ESM-5B
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2-dibromoethane (EDB)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
chlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1,1,2-tetrachloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
ethylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
m&p-xylenes	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
o-xylene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
styrene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
bromoform	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
isopropylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1,2,2-tetrachloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2,3-trichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
n-propylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
bromobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,3,5-trimethylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
2-chlorotoluene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
4-chlorotoluene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
tert-butylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2,4-trimethylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
sec-butylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,3-dichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
4-isopropyltoluene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,4-dichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2-dichlorobenzene	**1100**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
n-butylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2,4-trichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
hexachlorobutadiene	< 100	100	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
naphthalene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2,3-trichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**14000**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**90**	78-114	%	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
toluene-D8 SUR	**98**	88-110	%	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
4-bromofluorobenzene SUR	**91**	86-115	%	200	LMM		1501897	7/21/15	20:24	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-010
Sample ID: ESM-9
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/17/15 7:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
chloromethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
vinyl chloride	**340**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
bromomethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
chloroethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
trichlorofluoromethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
diethyl ether	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
acetone	< 50	50	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1-dichloroethene	**39**	5	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
methylene chloride	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
carbon disulfide	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
methyl t-butyl ether (MTBE)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
trans-1,2-dichloroethene	**87**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
isopropyl ether (DIPE)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1-dichloroethane	**640**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
t-butanol (TBA)	< 150	150	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
2-butanone (MEK)	< 50	50	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
2,2-dichloropropane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
cis-1,2-dichloroethene	**4100**	40	ug/L	20	LMM		1501897	7/23/15	20:31	SW5030C8260C
chloroform	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
bromochloromethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1,1-trichloroethane	**3500**	40	ug/L	20	LMM		1501897	7/23/15	20:31	SW5030C8260C
1,1-dichloropropene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
t-amyl-methyl ether (TAME)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
carbon tetrachloride	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2-dichloroethane	**42**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
benzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
trichloroethene	**510**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2-dichloropropane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
bromodichloromethane	< 3.0	3.0	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,4-dioxane	< 250	250	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
dibromomethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 50	50	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
cis-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
toluene	**36**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
trans-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
2-hexanone	< 50	50	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1,2-trichloroethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,3-dichloropropane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
tetrachloroethene	**420**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-010
Sample ID: ESM-9
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/17/15 7:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2-dibromoethane (EDB)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
chlorobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1,1,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
ethylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
m&p-xylenes	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
o-xylene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
styrene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
bromoform	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
isopropylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1,2,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2,3-trichloropropane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
n-propylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
bromobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,3,5-trimethylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
2-chlorotoluene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
4-chlorotoluene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
tert-butylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2,4-trimethylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
sec-butylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,3-dichlorobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
4-isopropyltoluene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,4-dichlorobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2-dichlorobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
n-butylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2,4-trichlorobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
hexachlorobutadiene	< 2.5	2.5	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
naphthalene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2,3-trichlorobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**480**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
toluene-D8 SUR	**98**	88-110	%	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
4-bromofluorobenzene SUR	**98**	86-115	%	5	LMM		1501897	7/21/15	18:50	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-011

Sample ID: ESM-13

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1-dichloroethane	**4**	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
cis-1,2-dichloroethene	**29**	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1,1-trichloroethane	**5**	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
trichloroethene	**38**	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
tetrachloroethene	**45**	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-011

Sample ID: ESM-13

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**18**	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**97**	78-114	%	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
toluene-D8 SUR	**103**	88-110	%	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
4-bromofluorobenzene SUR	**99**	86-115	%	1	LMM		1501900	7/23/15	19:59	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-013
Sample ID: Trip Blank
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/14/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-013

Sample ID: Trip Blank

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/14/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**92**	78-114	%	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
toluene-D8 SUR	**99**	88-110	%	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
4-bromofluorobenzene SUR	**96**	86-115	%	1	LMM		1501897	7/21/15	12:45	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-014

Sample ID: ESM-7

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1-dichloroethane	**14**	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
cis-1,2-dichloroethene	**43**	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1,1-trichloroethane	**25**	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
trichloroethene	**39**	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
tetrachloroethene	**20**	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-014

Sample ID: ESM-7

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
toluene-D8 SUR	**96**	88-110	%	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
4-bromofluorobenzene SUR	**90**	86-115	%	1	LMM		1501855	7/17/15	18:25	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653

Sample#: 33653-003
Sample ID: ESM-3
Matrix: Water
Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 2.5	2.5	ug/L	10	LMM		1501918	7/23/15	18:22	modSW8260C

Note: Dilution was necessary due to the presence of non-target compound(s).

Sample#: 33653-004
Sample ID: Trip Blank-1
Matrix: Water
Sampled: 7/14/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 0.25	0.25	ug/L	1	LMM		1501918	7/23/15	14:21	modSW8260C

Sample#: 33653-006
Sample ID: ESM-3B-S
Matrix: Water
Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 0.25	0.25	ug/L	1	LMM		1501918	7/23/15	14:54	modSW8260C

Sample#: 33653-007
Sample ID: ESM-3B-D
Matrix: Water
Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 1.2	1.2	ug/L	5	LMM		1501918	7/23/15	17:11	modSW8260C

Note: Dilution was necessary due to the presence of non-target compound(s).

Sample#: 33653-008
Sample ID: ESM-5
Matrix: Water
Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	**55**	5.0	ug/L	20	LMM		1501918	7/23/15	19:32	modSW8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-009
Sample ID: ESM-5B
Matrix: Water
Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 1.2	1.2	ug/L	5	LMM		1501918	7/23/15	16:01	modSW8260C

Note: Dilution was necessary due to the presence of non-target compound(s).

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-003

Sample ID: ESM-3

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	**60000**	20000	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
Unadjusted C9-C12 Aliphatics	< 20000	20000	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
methyl t-butyl ether (MTBE)	< 400	400	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
benzene	< 200	200	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
toluene	**12000**	400	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
ethylbenzene	< 400	400	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
m&p-xylenes	**790**	400	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
o-xylene	< 400	400	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
naphthalene	< 1000	1000	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
C5-C8 Aliphatics	**47000**	20000	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
C9-C12 Aliphatics	< 20000	20000	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
C9-C10 Aromatics	< 20000	20000	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**95**	70-130	%	200	LMM		1501919	7/23/15	20:55	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**107**	70-130	%	200	LMM		1501919	7/23/15	20:55	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-006

Sample ID: ESM-3B-S

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	< 2000	2000	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
Unadjusted C9-C12 Aliphatics	< 2000	2000	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
methyl t-butyl ether (MTBE)	< 40	40	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
benzene	< 20	20	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
toluene	< 40	40	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
ethylbenzene	< 40	40	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
m&p-xylenes	< 40	40	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
o-xylene	< 40	40	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
naphthalene	< 100	100	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
C5-C8 Aliphatics	< 2000	2000	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
C9-C12 Aliphatics	< 2000	2000	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
C9-C10 Aromatics	< 2000	2000	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**95**	70-130	%	20	LMM		1501919	7/23/15	17:55	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**106**	70-130	%	20	LMM		1501919	7/23/15	17:55	MA VPH

Note: Dilution was necessary due to the presence of non-target compounds.

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-007

Sample ID: ESM-3B-D

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	**23000**	10000	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
Unadjusted C9-C12 Aliphatics	< 10000	10000	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
methyl t-butyl ether (MTBE)	< 200	200	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
benzene	< 100	100	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
toluene	**1100**	200	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
ethylbenzene	< 200	200	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
m&p-xylenes	< 200	200	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
o-xylene	< 200	200	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
naphthalene	< 500	500	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
C5-C8 Aliphatics	**22000**	10000	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
C9-C12 Aliphatics	< 10000	10000	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
C9-C10 Aromatics	< 10000	10000	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**94**	70-130	%	100	LMM		1501953	7/24/15	22:47	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**106**	70-130	%	100	LMM		1501953	7/24/15	22:47	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-008

Sample ID: ESM-5

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	**130000**	50000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
Unadjusted C9-C12 Aliphatics	< 50000	50000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
methyl t-butyl ether (MTBE)	< 1000	1000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
benzene	< 500	500	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
toluene	**22000**	1000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
ethylbenzene	**2900**	1000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
m&p-xylenes	< 1000	1000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
o-xylene	< 1000	1000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
naphthalene	< 2500	2500	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
C5-C8 Aliphatics	**100000**	50000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
C9-C12 Aliphatics	< 50000	50000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
C9-C10 Aromatics	< 50000	50000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**94**	70-130	%	500	LMM		1501919	7/23/15	21:55	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**106**	70-130	%	500	LMM		1501919	7/23/15	21:55	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-009

Sample ID: ESM-5B

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	**20000**	5000	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
Unadjusted C9-C12 Aliphatics	< 5000	5000	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
methyl t-butyl ether (MTBE)	< 100	100	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
benzene	< 50	50	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
toluene	**380**	100	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
ethylbenzene	**140**	100	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
m&p-xylenes	**170**	100	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
o-xylene	< 100	100	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
naphthalene	< 250	250	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
C5-C8 Aliphatics	**19000**	5000	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
C9-C12 Aliphatics	< 5000	5000	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
C9-C10 Aromatics	< 5000	5000	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**95**	70-130	%	50	LMM		1501953	7/24/15	21:44	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**110**	70-130	%	50	LMM		1501953	7/24/15	21:44	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-011

Sample ID: ESM-13

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	< 100	100	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
Unadjusted C9-C12 Aliphatics	< 100	100	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
benzene	< 1	1	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
toluene	< 2	2	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
ethylbenzene	< 2	2	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
m&p-xylenes	< 2	2	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
o-xylene	< 2	2	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
naphthalene	< 5	5	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
C5-C8 Aliphatics	< 100	100	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
C9-C12 Aliphatics	< 100	100	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
C9-C10 Aromatics	< 100	100	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**91**	70-130	%	1	LMM		1501919	7/23/15	15:49	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**102**	70-130	%	1	LMM		1501919	7/23/15	15:49	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-001

Sample ID: ESM-6

Matrix: Water

Sampled: 7/16/15 13:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
PCB-1221	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
PCB-1232	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
PCB-1242	**1.2**	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
PCB-1248	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
PCB-1254	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
PCB-1260	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**88**	30-150	%	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
decachlorobiphenyl SUR	**44**	30-150	%	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A

Sample#: 33653-002

Sample ID: ESM-6 Dissolved

Matrix: Water

Sampled: 7/16/15 13:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
PCB-1221	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
PCB-1232	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
PCB-1242	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
PCB-1248	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
PCB-1254	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
PCB-1260	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**75**	30-150	%	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
decachlorobiphenyl SUR	**41**	30-150	%	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A

Project ID: Lewis Chemical 229286.01
Job ID: 33653

Sample#: 33653-008
Sample ID: ESM-5
Matrix: Water
Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 5.0	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
PCB-1221	< 5.0	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
PCB-1232	< 5.0	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
PCB-1242	**28**	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
PCB-1248	< 5.0	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
PCB-1254	< 5.0	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
PCB-1260	< 5.0	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**DOR**	30-150	%	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
decachlorobiphenyl SUR	**DOR**	30-150	%	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A

DOR = Diluted out of calibration range.

Sample#: 33653-012
Sample ID: ESM-5 Dissolved
Matrix: Water
Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
PCB-1221	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
PCB-1232	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
PCB-1242	**1.3**	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
PCB-1248	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
PCB-1254	**0.80**	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
PCB-1260	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**79**	30-150	%	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
decachlorobiphenyl SUR	**31**	30-150	%	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-003
Sample ID: ESM-3
Matrix: Water
Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**9.3**	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	5:32	MA EPH
C9-C18 Aliphatics	**110**	100	ug/L	1	AM	7/21/15	8033	7/22/15	16:13	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	16:13	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	5:32	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**26** *	40-140	%	1	AM	7/21/15	8033	7/22/15	16:13	MA EPH
o-terphenyl SUR	**25** *	40-140	%	1	AM	7/21/15	8033	7/23/15	5:32	MA EPH
2-fluorobiphenyl SUR	**68**	40-140	%	1	AM	7/21/15	8033	7/23/15	5:32	MA EPH
2-bromonaphthalene SUR	**65**	40-140	%	1	AM	7/21/15	8033	7/23/15	5:32	MA EPH

**** The surrogate showed recovery outside the acceptance limits as a result of an obvious matrix interference.***

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-006
Sample ID: ESM-3B-S
Matrix: Water
Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**0.8**	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	5:57	MA EPH
C9-C18 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	16:31	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	16:31	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	5:57	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**51**	40-140	%	1	AM	7/21/15	8033	7/22/15	16:31	MA EPH
o-terphenyl SUR	**51**	40-140	%	1	AM	7/21/15	8033	7/23/15	5:57	MA EPH
2-fluorobiphenyl SUR	**69**	40-140	%	1	AM	7/21/15	8033	7/23/15	5:57	MA EPH
2-bromonaphthalene SUR	**71**	40-140	%	1	AM	7/21/15	8033	7/23/15	5:57	MA EPH

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-007
Sample ID: ESM-3B-D
Matrix: Water
Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**4.2**	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	6:23	MA EPH
C9-C18 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	16:50	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	16:50	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	6:23	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**44**	40-140	%	1	AM	7/21/15	8033	7/22/15	16:50	MA EPH
o-terphenyl SUR	**44**	40-140	%	1	AM	7/21/15	8033	7/23/15	6:23	MA EPH
2-fluorobiphenyl SUR	**70**	40-140	%	1	AM	7/21/15	8033	7/23/15	6:23	MA EPH
2-bromonaphthalene SUR	**71**	40-140	%	1	AM	7/21/15	8033	7/23/15	6:23	MA EPH

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-008
Sample ID: ESM-5
Matrix: Water
Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**5.8**	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
2-methylnaphthalene	**0.5**	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	6:49	MA EPH
C9-C18 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	17:09	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	17:09	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	6:49	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**36** *	40-140	%	1	AM	7/21/15	8033	7/22/15	17:09	MA EPH
o-terphenyl SUR	**36** *	40-140	%	1	AM	7/21/15	8033	7/23/15	6:49	MA EPH
2-fluorobiphenyl SUR	**73**	40-140	%	1	AM	7/21/15	8033	7/23/15	6:49	MA EPH
2-bromonaphthalene SUR	**75**	40-140	%	1	AM	7/21/15	8033	7/23/15	6:49	MA EPH

**** The surrogate showed recovery outside the acceptance limits as a result of an obvious matrix interference.***

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-009
Sample ID: ESM-5B
Matrix: Water
Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**2.7**	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	7:15	MA EPH
C9-C18 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	17:27	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	17:27	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	7:15	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**45**	40-140	%	1	AM	7/21/15	8033	7/22/15	17:27	MA EPH
o-terphenyl SUR	**48**	40-140	%	1	AM	7/21/15	8033	7/23/15	7:15	MA EPH
2-fluorobiphenyl SUR	**71**	40-140	%	1	AM	7/21/15	8033	7/23/15	7:15	MA EPH
2-bromonaphthalene SUR	**72**	40-140	%	1	AM	7/21/15	8033	7/23/15	7:15	MA EPH

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-011
Sample ID: ESM-13
Matrix: Water
Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	7:41	MA EPH
C9-C18 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	17:45	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	17:45	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	7:41	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**44**	40-140	%	1	AM	7/21/15	8033	7/22/15	17:45	MA EPH
o-terphenyl SUR	**42**	40-140	%	1	AM	7/21/15	8033	7/23/15	7:41	MA EPH
2-fluorobiphenyl SUR	**71**	40-140	%	1	AM	7/21/15	8033	7/23/15	7:41	MA EPH
2-bromonaphthalene SUR	**73**	40-140	%	1	AM	7/21/15	8033	7/23/15	7:41	MA EPH

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 229286.01

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **33653**

Matrices: Groundwater/Surface Water ☑ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☑	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☑	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☑	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☑	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☑ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☐ No*☑

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☑ No*☐

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: (for) **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 8/11/15**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 33653

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 5 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

The samples for congeners analysis were received on hold. The report was finalized without the congeners being analyzed at the customer's request.

Calibration

PCB: Quantification is quadratic.

See the included table for a list of compounds quantitated by quadratic equation.

Method Blank

No exceptions noted.

Surrogate Recoveries

No exceptions noted.

EPH: The extraction surrogates in the samples 33653-003 and -008 showed recoveries outside the acceptance limits as a result of an obvious matrix interference. It is suspected that the large concentration of chlorinated solvents interfered with the extraction and fractionation process.

PCB: The surrogates were diluted out of the calibration range in the following sample: 33653-008.

Laboratory Control Sample Results

VOC: The relative percent difference between the LCS and LCSD1501855 was outside the acceptance criteria for bromomethane. The percent recovery for this analyte in each QC parameter was within the acceptance criteria. No impact to the data suspected.

VOC: The LCS/D1501900 did not meet the acceptance criteria for bromomethane, chloroethane, t-butanol (TBA), 2-butanone (MEK), tetrahydrofuran (THF), 1,4-dioxane, 4-methyl-2-pentanone (MIBK), 2-hexanone, and naphthalene. These compounds showed high recovery. There is no impact to the data as these analytes were not detected in the associated samples.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

Low Level 1,4-dioxane: Sample dilution was required for 33653-003, -007, and -009 due to the presence of non-target compounds.

VOC: The compound, hexachloroethane, was evaluated in the VOC analysis as a tentatively identified compound (TIC), as requested by the customer.

VPH: The C5-C8 aliphatic range will include concentrations from chlorinated solvents as well as hydrocarbons when large concentrations of chlorinated solvents are present in the sample. Sample 33653-006 required dilution due to non-target compounds.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.

Question G: The CAM protocol reporting limits were not achieved for this project due to dilutions necessary for sample analysis. Box G is "No."

Question H: See surrogate section above. Box H is "No."

Quantitation by Quadratic Equation
Lab # 33653

Quantitation of the following compounds was based on a quadratic equation

dichlorodifluoromethane
Bromomethane
Acetone
Carbon disulfide
tetrahydrofuran (THF)
Carbon tetrachloride
1,2-Dichloroethane
Bromodichloromethane
2-Hexanone
cis-1,3-dichloropropene
trans-1,3-Dichloropropene
Dibromochloromethane
1,1,1,2-Tetrachloroethane
Bromoform
bromobenzene
1,2-dibromo-3-chloropropane (DBCP)
hexachlorobutadiene

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA VPH	BLK1501919	Unadjusted C5-C8 Aliphatics		<	100	ug/L						
		Unadjusted C9-C12 Aliphatics		<	100	ug/L						
		methyl t-butyl ether (MTBE)		<	2	ug/L						
		benzene		<	1	ug/L						
		toluene		<	2	ug/L						
		ethylbenzene		<	2	ug/L						
		m&p-xylenes		<	2	ug/L						
		o-xylene		<	2	ug/L						
		naphthalene		<	5	ug/L						
		C5-C8 Aliphatics		<	100	ug/L						
		C9-C12 Aliphatics		<	100	ug/L						
		C9-C10 Aromatics		<	100	ug/L						
		2,5-dibromotoluene as Aromatic SUR			94	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			105	%			70	130		
MA VPH	LCS1501919	Unadjusted C5-C8 Aliphatics			700	ug/L	600	117	70	130		
		Unadjusted C9-C12 Aliphatics			980	ug/L	800	123	70	130		
		methyl t-butyl ether (MTBE)			96	ug/L	100	96	70	130		
		benzene			94	ug/L	100	94	70	130		
		toluene			95	ug/L	100	95	70	130		
		ethylbenzene			95	ug/L	100	95	70	130		
		m&p-xylenes			190	ug/L	200	96	70	130		
		o-xylene			95	ug/L	100	95	70	130		
		naphthalene			100	ug/L	100	102	70	130		
		C5-C8 Aliphatics			300	ug/L	300	100	70	130		
		C9-C12 Aliphatics			270	ug/L	300	90	70	130		
		C9-C10 Aromatics			86	ug/L	100	86	70	130		
		2,5-dibromotoluene as Aromatic SUR			97	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			109	%			70	130		
MA VPH	LCSD1501919	Unadjusted C5-C8 Aliphatics			710	ug/L	600	118	70	130	1	25
		Unadjusted C9-C12 Aliphatics			1000	ug/L	800	125	70	130	2	25
		methyl t-butyl ether (MTBE)			97	ug/L	100	97	70	130	1	25
		benzene			94	ug/L	100	94	70	130	0	25
		toluene			95	ug/L	100	95	70	130	0	25
		ethylbenzene			95	ug/L	100	95	70	130	0	25
		m&p-xylenes			190	ug/L	200	97	70	130	0	25
		o-xylene			95	ug/L	100	95	70	130	0	25
		naphthalene			100	ug/L	100	104	70	130	2	25
		C5-C8 Aliphatics			310	ug/L	300	103	70	130	3	25
		C9-C12 Aliphatics			280	ug/L	300	94	70	130	5	25
		C9-C10 Aromatics			87	ug/L	100	87	70	130	1	25
		2,5-dibromotoluene as Aromatic SUR			98	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			109	%			70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA VPH	BLK1501953	Unadjusted C5-C8 Aliphatics		<	100	ug/L						
		Unadjusted C9-C12 Aliphatics		<	100	ug/L						
		methyl t-butyl ether (MTBE)		<	2	ug/L						
		benzene		<	1	ug/L						
		toluene		<	2	ug/L						
		ethylbenzene		<	2	ug/L						
		m&p-xylenes		<	2	ug/L						
		o-xylene		<	2	ug/L						
		naphthalene		<	5	ug/L						
		C5-C8 Aliphatics		<	100	ug/L						
		C9-C12 Aliphatics		<	100	ug/L						
		C9-C10 Aromatics		<	100	ug/L						
		2,5-dibromotoluene as Aromatic SUR			101	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			112	%			70	130		
MA VPH	LCS1501953	Unadjusted C5-C8 Aliphatics			680	ug/L	600	114	70	130		
		Unadjusted C9-C12 Aliphatics			980	ug/L	800	123	70	130		
		methyl t-butyl ether (MTBE)			86	ug/L	100	86	70	130		
		benzene			92	ug/L	100	92	70	130		
		toluene			92	ug/L	100	92	70	130		
		ethylbenzene			93	ug/L	100	93	70	130		
		m&p-xylenes			190	ug/L	200	95	70	130		
		o-xylene			93	ug/L	100	93	70	130		
		naphthalene			90	ug/L	100	90	70	130		
		C5-C8 Aliphatics			300	ug/L	300	99	70	130		
		C9-C12 Aliphatics			280	ug/L	300	92	70	130		
		C9-C10 Aromatics			93	ug/L	100	93	70	130		
		2,5-dibromotoluene as Aromatic SUR			95	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			107	%			70	130		
MA VPH	LCSD1501953	Unadjusted C5-C8 Aliphatics			690	ug/L	600	114	70	130	1	25
		Unadjusted C9-C12 Aliphatics			990	ug/L	800	123	70	130	0	25
		methyl t-butyl ether (MTBE)			86	ug/L	100	86	70	130	0	25
		benzene			92	ug/L	100	92	70	130	0	25
		toluene			92	ug/L	100	92	70	130	0	25
		ethylbenzene			93	ug/L	100	93	70	130	0	25
		m&p-xylenes			190	ug/L	200	95	70	130	0	25
		o-xylene			93	ug/L	100	93	70	130	0	25
		naphthalene			92	ug/L	100	92	70	130	2	25
		C5-C8 Aliphatics			300	ug/L	300	100	70	130	1	25
		C9-C12 Aliphatics			280	ug/L	300	93	70	130	1	25
		C9-C10 Aromatics			91	ug/L	100	91	70	130	2	25
		2,5-dibromotoluene as Aromatic SUR			97	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			108	%			70	130		
modSW8260C	BLK1501918	1,4-dioxane		<	0.25	ug/L						
modSW8260C	LCS1501918	1,4-dioxane			7.8	ug/L	8	98	70	130		
modSW8260C	LCSD1501918	1,4-dioxane			8.1	ug/L	8	101	70	130	3	20

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1501855	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1501855	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			98	%			78	114		
		toluene-D8 SUR			101	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501855	dichlorodifluoromethane			15	ug/L	20	75	70	130		
		chloromethane			15	ug/L	20	73	70	130		
		vinyl chloride			16	ug/L	20	82	70	130		
		bromomethane			18	ug/L	20	90	70	130		
		chloroethane			19	ug/L	20	96	70	130		
		trichlorofluoromethane			19	ug/L	20	96	70	130		
		diethyl ether			20	ug/L	20	101	70	130		
		acetone		<	50	ug/L	20	122				
		1,1-dichloroethene			17	ug/L	20	87	70	130		
		methylene chloride			17	ug/L	20	87	70	130		
		carbon disulfide			17	ug/L	20	85	70	130		
		methyl t-butyl ether (MTBE)			20	ug/L	20	99	70	130		
		trans-1,2-dichloroethene			19	ug/L	20	93	70	130		
		isopropyl ether (DIPE)			19	ug/L	20	96	70	130		
		ethyl t-butyl ether (ETBE)			19	ug/L	20	94	70	130		
		1,1-dichloroethane			17	ug/L	20	85	70	130		
		t-butanol (TBA)			100	ug/L	100	104	70	130		
		2-butanone (MEK)			22	ug/L	20	108	70	130		
		2,2-dichloropropane			17	ug/L	20	87	70	130		
		cis-1,2-dichloroethene			18	ug/L	20	90	70	130		
		chloroform			18	ug/L	20	88	70	130		
		bromochloromethane			17	ug/L	20	86	70	130		
		tetrahydrofuran (THF)			24	ug/L	20	118	70	130		
		1,1,1-trichloroethane			20	ug/L	20	98	70	130		
		1,1-dichloropropene			17	ug/L	20	84	70	130		
		t-amyl-methyl ether (TAME)			19	ug/L	20	93	70	130		
		carbon tetrachloride			18	ug/L	20	88	70	130		
		1,2-dichloroethane			20	ug/L	20	99	70	130		
		benzene			19	ug/L	20	97	70	130		
		trichloroethene			19	ug/L	20	97	70	130		
		1,2-dichloropropane			18	ug/L	20	92	70	130		
		bromodichloromethane			20	ug/L	20	98	70	130		
		1,4-dioxane		<	50	ug/L	40	98	70	130		
		dibromomethane			18	ug/L	20	89	70	130		
		4-methyl-2-pentanone (MIBK)			23	ug/L	20	114	70	130		
		cis-1,3-dichloropropene			19	ug/L	20	93	70	130		
		toluene			18	ug/L	20	91	70	130		
		trans-1,3-dichloropropene			18	ug/L	20	92	70	130		
		2-hexanone			23	ug/L	20	115	70	130		
		1,1,2-trichloroethane			18	ug/L	20	92	70	130		
		1,3-dichloropropane			19	ug/L	20	93	70	130		
		tetrachloroethene			19	ug/L	20	93	70	130		
		dibromochloromethane			17	ug/L	20	87	70	130		
		1,2-dibromoethane (EDB)			18	ug/L	20	88	70	130		
		chlorobenzene			17	ug/L	20	86	70	130		
		1,1,1,2-tetrachloroethane			18	ug/L	20	88	70	130		
		ethylbenzene			19	ug/L	20	94	70	130		
		m&p-xylenes			38	ug/L	40	96	70	130		
		o-xylene			19	ug/L	20	97	70	130		
		styrene			20	ug/L	20	102	70	130		
		bromoform			19	ug/L	20	94	70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501855	isopropylbenzene		20	ug/L	20	98	70	130		
		1,1,2,2-tetrachloroethane		22	ug/L	20	108	70	130		
		1,2,3-trichloropropane		22	ug/L	20	110	70	130		
		n-propylbenzene		19	ug/L	20	97	70	130		
		bromobenzene		19	ug/L	20	94	70	130		
		1,3,5-trimethylbenzene		21	ug/L	20	104	70	130		
		2-chlorotoluene		19	ug/L	20	97	70	130		
		4-chlorotoluene		19	ug/L	20	97	70	130		
		tert-butylbenzene		20	ug/L	20	99	70	130		
		1,2,4-trimethylbenzene		20	ug/L	20	102	70	130		
		sec-butylbenzene		19	ug/L	20	95	70	130		
		1,3-dichlorobenzene		20	ug/L	20	101	70	130		
		4-isopropyltoluene		18	ug/L	20	90	70	130		
		1,4-dichlorobenzene		18	ug/L	20	92	70	130		
		1,2-dichlorobenzene		19	ug/L	20	93	70	130		
		n-butylbenzene		19	ug/L	20	96	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		22	ug/L	20	110	70	130		
		1,2,4-trichlorobenzene		21	ug/L	20	106	70	130		
		hexachlorobutadiene		20	ug/L	20	101	70	130		
		naphthalene		24	ug/L	20	122	70	130		
		1,2,3-trichlorobenzene		23	ug/L	20	114	70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		19	ug/L	20	97	70	130		
		dibromofluoromethane SUR		97	%			78	114		
		toluene-D8 SUR		100	%			88	110		
		4-bromofluorobenzene SUR		98	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD		RPD Limit
SW5030C8260C	LCSD1501855	dichlorodifluoromethane			15	ug/L	20	77	70	130	2		20
		chloromethane			15	ug/L	20	75	70	130	4		20
		vinyl chloride			16	ug/L	20	81	70	130	0		20
		bromomethane			23	ug/L	20	113	70	130	23	*	20
		chloroethane			20	ug/L	20	98	70	130	1		20
		trichlorofluoromethane			20	ug/L	20	98	70	130	2		20
		diethyl ether			20	ug/L	20	101	70	130	0		20
		acetone		<	50	ug/L	20	125			2		20
		1,1-dichloroethene			18	ug/L	20	88	70	130	1		20
		methylene chloride			18	ug/L	20	89	70	130	2		20
		carbon disulfide			18	ug/L	20	90	70	130	5		20
		methyl t-butyl ether (MTBE)			20	ug/L	20	100	70	130	1		20
		trans-1,2-dichloroethene			19	ug/L	20	93	70	130	0		20
		isopropyl ether (DIPE)			20	ug/L	20	99	70	130	3		20
		ethyl t-butyl ether (ETBE)			19	ug/L	20	97	70	130	3		20
		1,1-dichloroethane			17	ug/L	20	87	70	130	2		20
		t-butanol (TBA)			110	ug/L	100	105	70	130	1		20
		2-butanone (MEK)			21	ug/L	20	103	70	130	5		20
		2,2-dichloropropane			18	ug/L	20	90	70	130	4		20
		cis-1,2-dichloroethene			19	ug/L	20	93	70	130	3		20
		chloroform			18	ug/L	20	92	70	130	4		20
		bromochloromethane			18	ug/L	20	89	70	130	3		20
		tetrahydrofuran (THF)			22	ug/L	20	109	70	130	8		20
		1,1,1-trichloroethane			21	ug/L	20	103	70	130	5		20
		1,1-dichloropropene			17	ug/L	20	84	70	130	0		20
		t-amyl-methyl ether (TAME)			19	ug/L	20	95	70	130	2		20
		carbon tetrachloride			18	ug/L	20	89	70	130	1		20
		1,2-dichloroethane			20	ug/L	20	101	70	130	2		20
		benzene			20	ug/L	20	99	70	130	2		20
		trichloroethene			20	ug/L	20	99	70	130	2		20
		1,2-dichloropropane			19	ug/L	20	93	70	130	2		20
		bromodichloromethane			21	ug/L	20	103	70	130	5		20
		1,4-dioxane		<	50	ug/L	40	97	70	130	2		20
		dibromomethane			18	ug/L	20	90	70	130	1		20
		4-methyl-2-pentanone (MIBK)			22	ug/L	20	109	70	130	5		20
		cis-1,3-dichloropropene			19	ug/L	20	95	70	130	3		20
		toluene			18	ug/L	20	92	70	130	1		20
		trans-1,3-dichloropropene			20	ug/L	20	98	70	130	5		20
		2-hexanone			21	ug/L	20	106	70	130	8		20
		1,1,2-trichloroethane			19	ug/L	20	94	70	130	1		20
		1,3-dichloropropane			20	ug/L	20	98	70	130	5		20
		tetrachloroethene			20	ug/L	20	101	70	130	9		20
		dibromochloromethane			19	ug/L	20	93	70	130	7		20
		1,2-dibromoethane (EDB)			19	ug/L	20	93	70	130	7		20
		chlorobenzene			18	ug/L	20	92	70	130	7		20
		1,1,1,2-tetrachloroethane			20	ug/L	20	99	70	130	11		20
		ethylbenzene			20	ug/L	20	101	70	130	7		20
		m&p-xylenes			41	ug/L	40	102	70	130	6		20
		o-xylene			21	ug/L	20	105	70	130	7		20
		styrene			21	ug/L	20	106	70	130	4		20
		bromoform			20	ug/L	20	101	70	130	7		20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501855	isopropylbenzene		21	ug/L	20	104	70	130	7	20
		1,1,2,2-tetrachloroethane		21	ug/L	20	105	70	130	3	20
		1,2,3-trichloropropane		20	ug/L	20	101	70	130	9	20
		n-propylbenzene		19	ug/L	20	96	70	130	1	20
		bromobenzene		19	ug/L	20	96	70	130	2	20
		1,3,5-trimethylbenzene		21	ug/L	20	103	70	130	1	20
		2-chlorotoluene		19	ug/L	20	96	70	130	1	20
		4-chlorotoluene		20	ug/L	20	98	70	130	1	20
		tert-butylbenzene		20	ug/L	20	99	70	130	0	20
		1,2,4-trimethylbenzene		20	ug/L	20	101	70	130	1	20
		sec-butylbenzene		19	ug/L	20	95	70	130	0	20
		1,3-dichlorobenzene		21	ug/L	20	103	70	130	2	20
		4-isopropyltoluene		18	ug/L	20	90	70	130	0	20
		1,4-dichlorobenzene		19	ug/L	20	94	70	130	2	20
		1,2-dichlorobenzene		19	ug/L	20	94	70	130	1	20
		n-butylbenzene		19	ug/L	20	96	70	130	0	20
		1,2-dibromo-3-chloropropane (DBCP)		21	ug/L	20	106	70	130	4	20
		1,2,4-trichlorobenzene		21	ug/L	20	105	70	130	1	20
		hexachlorobutadiene		20	ug/L	20	99	70	130	2	20
		naphthalene		24	ug/L	20	118	70	130	3	20
		1,2,3-trichlorobenzene		23	ug/L	20	117	70	130	2	20
		1,1,2-trichloro-1,2,2-trifluoroethane		20	ug/L	20	102	70	130	4	20
		dibromofluoromethane SUR		99	%			78	114		
		toluene-D8 SUR		101	%			88	110		
		4-bromofluorobenzene SUR		105	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1501897	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1501897	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			99	%			78	114		
		toluene-D8 SUR			98	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501897	dichlorodifluoromethane			16	ug/L	20	80	70	130		
		chloromethane			19	ug/L	20	93	70	130		
		vinyl chloride			18	ug/L	20	89	70	130		
		bromomethane			20	ug/L	20	99	70	130		
		chloroethane			20	ug/L	20	101	70	130		
		trichlorofluoromethane			20	ug/L	20	98	70	130		
		diethyl ether			20	ug/L	20	102	70	130		
		acetone		<	50	ug/L	20	113				
		1,1-dichloroethene			18	ug/L	20	91	70	130		
		methylene chloride			19	ug/L	20	93	70	130		
		carbon disulfide			16	ug/L	20	78	70	130		
		methyl t-butyl ether (MTBE)			20	ug/L	20	99	70	130		
		trans-1,2-dichloroethene			19	ug/L	20	95	70	130		
		isopropyl ether (DIPE)			20	ug/L	20	100	70	130		
		ethyl t-butyl ether (ETBE)			19	ug/L	20	97	70	130		
		1,1-dichloroethane			18	ug/L	20	89	70	130		
		t-butanol (TBA)			95	ug/L	100	95	70	130		
		2-butanone (MEK)			22	ug/L	20	108	70	130		
		2,2-dichloropropane			18	ug/L	20	88	70	130		
		cis-1,2-dichloroethene			19	ug/L	20	94	70	130		
		chloroform			19	ug/L	20	94	70	130		
		bromochloromethane			18	ug/L	20	90	70	130		
		tetrahydrofuran (THF)			23	ug/L	20	114	70	130		
		1,1,1-trichloroethane			21	ug/L	20	104	70	130		
		1,1-dichloropropene			17	ug/L	20	87	70	130		
		t-amyl-methyl ether (TAME)			19	ug/L	20	96	70	130		
		carbon tetrachloride			18	ug/L	20	92	70	130		
		1,2-dichloroethane			21	ug/L	20	105	70	130		
		benzene			21	ug/L	20	103	70	130		
		trichloroethene			22	ug/L	20	109	70	130		
		1,2-dichloropropane			19	ug/L	20	96	70	130		
		bromodichloromethane			20	ug/L	20	101	70	130		
		1,4-dioxane		<	50	ug/L	40	100	70	130		
		dibromomethane			18	ug/L	20	92	70	130		
		4-methyl-2-pentanone (MIBK)			21	ug/L	20	107	70	130		
		cis-1,3-dichloropropene			19	ug/L	20	95	70	130		
		toluene			19	ug/L	20	95	70	130		
		trans-1,3-dichloropropene			19	ug/L	20	96	70	130		
		2-hexanone			23	ug/L	20	113	70	130		
		1,1,2-trichloroethane			19	ug/L	20	96	70	130		
		1,3-dichloropropane			19	ug/L	20	94	70	130		
		tetrachloroethene			20	ug/L	20	99	70	130		
		dibromochloromethane			16	ug/L	20	81	70	130		
		1,2-dibromoethane (EDB)			17	ug/L	20	87	70	130		
		chlorobenzene			18	ug/L	20	89	70	130		
		1,1,1,2-tetrachloroethane			18	ug/L	20	90	70	130		
		ethylbenzene			20	ug/L	20	98	70	130		
		m&p-xylenes			39	ug/L	40	98	70	130		
		o-xylene			20	ug/L	20	101	70	130		
		styrene			21	ug/L	20	104	70	130		
		bromoform			16	ug/L	20	82	70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501897	isopropylbenzene		20	ug/L	20	102	70	130		
		1,1,2,2-tetrachloroethane		21	ug/L	20	104	70	130		
		1,2,3-trichloropropane		21	ug/L	20	103	70	130		
		n-propylbenzene		20	ug/L	20	99	70	130		
		bromobenzene		19	ug/L	20	96	70	130		
		1,3,5-trimethylbenzene		21	ug/L	20	103	70	130		
		2-chlorotoluene		20	ug/L	20	99	70	130		
		4-chlorotoluene		20	ug/L	20	99	70	130		
		tert-butylbenzene		20	ug/L	20	102	70	130		
		1,2,4-trimethylbenzene		20	ug/L	20	101	70	130		
		sec-butylbenzene		19	ug/L	20	97	70	130		
		1,3-dichlorobenzene		21	ug/L	20	103	70	130		
		4-isopropyltoluene		18	ug/L	20	92	70	130		
		1,4-dichlorobenzene		19	ug/L	20	93	70	130		
		1,2-dichlorobenzene		19	ug/L	20	94	70	130		
		n-butylbenzene		19	ug/L	20	96	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		19	ug/L	20	95	70	130		
		1,2,4-trichlorobenzene		21	ug/L	20	103	70	130		
		hexachlorobutadiene		18	ug/L	20	92	70	130		
		naphthalene		22	ug/L	20	111	70	130		
		1,2,3-trichlorobenzene		23	ug/L	20	113	70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		20	ug/L	20	102	70	130		
		dibromofluoromethane SUR		97	%			78	114		
		toluene-D8 SUR		100	%			88	110		
		4-bromofluorobenzene SUR		100	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501897	dichlorodifluoromethane			16	ug/L	20	79	70	130	1	20
		chloromethane			18	ug/L	20	90	70	130	4	20
		vinyl chloride			18	ug/L	20	88	70	130	1	20
		bromomethane			21	ug/L	20	104	70	130	5	20
		chloroethane			20	ug/L	20	100	70	130	0	20
		trichlorofluoromethane			20	ug/L	20	99	70	130	2	20
		diethyl ether			20	ug/L	20	99	70	130	3	20
		acetone		<	50	ug/L	20	116			3	20
		1,1-dichloroethene			18	ug/L	20	92	70	130	1	20
		methylene chloride			18	ug/L	20	92	70	130	1	20
		carbon disulfide			17	ug/L	20	83	70	130	7	20
		methyl t-butyl ether (MTBE)			20	ug/L	20	98	70	130	0	20
		trans-1,2-dichloroethene			19	ug/L	20	95	70	130	1	20
		isopropyl ether (DIPE)			20	ug/L	20	99	70	130	0	20
		ethyl t-butyl ether (ETBE)			20	ug/L	20	98	70	130	0	20
		1,1-dichloroethane			18	ug/L	20	88	70	130	2	20
		t-butanol (TBA)			95	ug/L	100	95	70	130	0	20
		2-butanone (MEK)			20	ug/L	20	102	70	130	5	20
		2,2-dichloropropane			18	ug/L	20	91	70	130	3	20
		cis-1,2-dichloroethene			19	ug/L	20	94	70	130	1	20
		chloroform			19	ug/L	20	95	70	130	1	20
		bromochloromethane			18	ug/L	20	91	70	130	0	20
		tetrahydrofuran (THF)			21	ug/L	20	104	70	130	9	20
		1,1,1-trichloroethane			21	ug/L	20	104	70	130	0	20
		1,1-dichloropropene			17	ug/L	20	87	70	130	0	20
		t-amyl-methyl ether (TAME)			19	ug/L	20	95	70	130	0	20
		carbon tetrachloride			18	ug/L	20	92	70	130	1	20
		1,2-dichloroethane			21	ug/L	20	105	70	130	0	20
		benzene			21	ug/L	20	103	70	130	0	20
		trichloroethene			22	ug/L	20	110	70	130	2	20
		1,2-dichloropropane			20	ug/L	20	98	70	130	2	20
		bromodichloromethane			21	ug/L	20	103	70	130	2	20
		1,4-dioxane		<	50	ug/L	40	106	70	130	6	20
		dibromomethane			18	ug/L	20	91	70	130	0	20
		4-methyl-2-pentanone (MIBK)			21	ug/L	20	107	70	130	0	20
		cis-1,3-dichloropropene			19	ug/L	20	97	70	130	2	20
		toluene			19	ug/L	20	97	70	130	1	20
		trans-1,3-dichloropropene			20	ug/L	20	99	70	130	3	20
		2-hexanone			20	ug/L	20	102	70	130	10	20
		1,1,2-trichloroethane			20	ug/L	20	98	70	130	2	20
		1,3-dichloropropane			19	ug/L	20	96	70	130	2	20
		tetrachloroethene			20	ug/L	20	100	70	130	2	20
		dibromochloromethane			17	ug/L	20	84	70	130	4	20
		1,2-dibromoethane (EDB)			18	ug/L	20	90	70	130	4	20
		chlorobenzene			18	ug/L	20	91	70	130	2	20
		1,1,1,2-tetrachloroethane			19	ug/L	20	95	70	130	6	20
		ethylbenzene			20	ug/L	20	99	70	130	1	20
		m&p-xylenes			40	ug/L	40	99	70	130	2	20
		o-xylene			20	ug/L	20	102	70	130	1	20
		styrene			21	ug/L	20	107	70	130	3	20
		bromoform			18	ug/L	20	90	70	130	9	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501897	isopropylbenzene		21	ug/L	20	103	70	130	1	20
		1,1,2,2-tetrachloroethane		20	ug/L	20	100	70	130	5	20
		1,2,3-trichloropropane		20	ug/L	20	99	70	130	4	20
		n-propylbenzene		19	ug/L	20	97	70	130	3	20
		bromobenzene		19	ug/L	20	94	70	130	2	20
		1,3,5-trimethylbenzene		20	ug/L	20	101	70	130	2	20
		2-chlorotoluene		19	ug/L	20	96	70	130	3	20
		4-chlorotoluene		19	ug/L	20	96	70	130	2	20
		tert-butylbenzene		20	ug/L	20	98	70	130	4	20
		1,2,4-trimethylbenzene		20	ug/L	20	99	70	130	2	20
		sec-butylbenzene		19	ug/L	20	94	70	130	4	20
		1,3-dichlorobenzene		20	ug/L	20	101	70	130	2	20
		4-isopropyltoluene		18	ug/L	20	89	70	130	4	20
		1,4-dichlorobenzene		18	ug/L	20	92	70	130	1	20
		1,2-dichlorobenzene		18	ug/L	20	91	70	130	3	20
		n-butylbenzene		19	ug/L	20	93	70	130	3	20
		1,2-dibromo-3-chloropropane (DBCP)		19	ug/L	20	94	70	130	1	20
		1,2,4-trichlorobenzene		20	ug/L	20	98	70	130	5	20
		hexachlorobutadiene		19	ug/L	20	97	70	130	5	20
		naphthalene		21	ug/L	20	106	70	130	4	20
		1,2,3-trichlorobenzene		21	ug/L	20	106	70	130	6	20
		1,1,2-trichloro-1,2,2-trifluoroethane		21	ug/L	20	104	70	130	2	20
		dibromofluoromethane SUR		99	%			78	114		
		toluene-D8 SUR		103	%			88	110		
		4-bromofluorobenzene SUR		101	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1501900	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1501900	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			99	%			78	114		
		toluene-D8 SUR			102	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1501900	dichlorodifluoromethane			17	ug/L	20	83		70	130		
		chloromethane			21	ug/L	20	107		70	130		
		vinyl chloride			18	ug/L	20	91		70	130		
		bromomethane			33	ug/L	20	164	*	70	130		
		chloroethane			36	ug/L	20	178	*	70	130		
		trichlorofluoromethane			21	ug/L	20	104		70	130		
		diethyl ether			22	ug/L	20	108		70	130		
		acetone		<	50	ug/L	20	135					
		1,1-dichloroethene			19	ug/L	20	95		70	130		
		methylene chloride			19	ug/L	20	97		70	130		
		carbon disulfide			16	ug/L	20	82		70	130		
		methyl t-butyl ether (MTBE)			22	ug/L	20	111		70	130		
		trans-1,2-dichloroethene			20	ug/L	20	102		70	130		
		isopropyl ether (DIPE)			21	ug/L	20	107		70	130		
		ethyl t-butyl ether (ETBE)			22	ug/L	20	108		70	130		
		1,1-dichloroethane			18	ug/L	20	91		70	130		
		t-butanol (TBA)			130	ug/L	100	131	*	70	130		
		2-butanone (MEK)			26	ug/L	20	128		70	130		
		2,2-dichloropropane			19	ug/L	20	94		70	130		
		cis-1,2-dichloroethene			19	ug/L	20	97		70	130		
		chloroform			20	ug/L	20	98		70	130		
		bromochloromethane			19	ug/L	20	96		70	130		
		tetrahydrofuran (THF)			27	ug/L	20	133	*	70	130		
		1,1,1-trichloroethane			21	ug/L	20	106		70	130		
		1,1-dichloropropene			18	ug/L	20	90		70	130		
		t-amyl-methyl ether (TAME)			21	ug/L	20	103		70	130		
		carbon tetrachloride			19	ug/L	20	95		70	130		
		1,2-dichloroethane			21	ug/L	20	107		70	130		
		benzene			21	ug/L	20	106		70	130		
		trichloroethene			22	ug/L	20	110		70	130		
		1,2-dichloropropane			20	ug/L	20	99		70	130		
		bromodichloromethane			21	ug/L	20	103		70	130		
		1,4-dioxane			54	ug/L	40	135	*	70	130		
		dibromomethane			20	ug/L	20	99		70	130		
		4-methyl-2-pentanone (MIBK)			26	ug/L	20	130		70	130		
		cis-1,3-dichloropropene			20	ug/L	20	98		70	130		
		toluene			20	ug/L	20	98		70	130		
		trans-1,3-dichloropropene			21	ug/L	20	104		70	130		
		2-hexanone			27	ug/L	20	133	*	70	130		
		1,1,2-trichloroethane			20	ug/L	20	101		70	130		
		1,3-dichloropropane			20	ug/L	20	101		70	130		
		tetrachloroethene			22	ug/L	20	109		70	130		
		dibromochloromethane			18	ug/L	20	89		70	130		
		1,2-dibromoethane (EDB)			20	ug/L	20	98		70	130		
		chlorobenzene			19	ug/L	20	97		70	130		
		1,1,1,2-tetrachloroethane			20	ug/L	20	100		70	130		
		ethylbenzene			20	ug/L	20	102		70	130		
		m&p-xylenes			41	ug/L	40	104		70	130		
		o-xylene			22	ug/L	20	110		70	130		
		styrene			22	ug/L	20	112		70	130		
		bromoform			19	ug/L	20	97		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1501900	isopropylbenzene		22	ug/L	20	108		70	130		
		1,1,2,2-tetrachloroethane		22	ug/L	20	109		70	130		
		1,2,3-trichloropropane		21	ug/L	20	105		70	130		
		n-propylbenzene		19	ug/L	20	94		70	130		
		bromobenzene		19	ug/L	20	95		70	130		
		1,3,5-trimethylbenzene		21	ug/L	20	103		70	130		
		2-chlorotoluene		19	ug/L	20	93		70	130		
		4-chlorotoluene		19	ug/L	20	94		70	130		
		tert-butylbenzene		19	ug/L	20	97		70	130		
		1,2,4-trimethylbenzene		20	ug/L	20	100		70	130		
		sec-butylbenzene		19	ug/L	20	94		70	130		
		1,3-dichlorobenzene		21	ug/L	20	103		70	130		
		4-isopropyltoluene		18	ug/L	20	90		70	130		
		1,4-dichlorobenzene		19	ug/L	20	94		70	130		
		1,2-dichlorobenzene		19	ug/L	20	96		70	130		
		n-butylbenzene		19	ug/L	20	95		70	130		
		1,2-dibromo-3-chloropropane (DBCP)		22	ug/L	20	111		70	130		
		1,2,4-trichlorobenzene		23	ug/L	20	115		70	130		
		hexachlorobutadiene		20	ug/L	20	98		70	130		
		naphthalene		27	ug/L	20	136	*	70	130		
		1,2,3-trichlorobenzene		25	ug/L	20	127		70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		23	ug/L	20	115		70	130		
		dibromofluoromethane SUR		104	%				78	114		
		toluene-D8 SUR		101	%				88	110		
		4-bromofluorobenzene SUR		109	%				86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501900	dichlorodifluoromethane			17	ug/L	20	83		70	130	0	20
		chloromethane			21	ug/L	20	106		70	130	1	20
		vinyl chloride			18	ug/L	20	92		70	130	1	20
		bromomethane			36	ug/L	20	178	*	70	130	9	20
		chloroethane			35	ug/L	20	176	*	70	130	1	20
		trichlorofluoromethane			21	ug/L	20	107		70	130	2	20
		diethyl ether			21	ug/L	20	106		70	130	2	20
		acetone		<	50	ug/L	20	140				4	20
		1,1-dichloroethene			18	ug/L	20	92		70	130	2	20
		methylene chloride			19	ug/L	20	93		70	130	4	20
		carbon disulfide			17	ug/L	20	86		70	130	4	20
		methyl t-butyl ether (MTBE)			22	ug/L	20	109		70	130	2	20
		trans-1,2-dichloroethene			20	ug/L	20	101		70	130	1	20
		isopropyl ether (DIPE)			21	ug/L	20	104		70	130	2	20
		ethyl t-butyl ether (ETBE)			21	ug/L	20	107		70	130	1	20
		1,1-dichloroethane			18	ug/L	20	91		70	130	0	20
		t-butanol (TBA)			130	ug/L	100	134	*	70	130	2	20
		2-butanone (MEK)			26	ug/L	20	131	*	70	130	2	20
		2,2-dichloropropane			19	ug/L	20	93		70	130	1	20
		cis-1,2-dichloroethene			19	ug/L	20	97		70	130	1	20
		chloroform			20	ug/L	20	98		70	130	0	20
		bromochloromethane			19	ug/L	20	94		70	130	1	20
		tetrahydrofuran (THF)			27	ug/L	20	137	*	70	130	3	20
		1,1,1-trichloroethane			22	ug/L	20	108		70	130	2	20
		1,1-dichloropropene			18	ug/L	20	90		70	130	0	20
		t-amyl-methyl ether (TAME)			21	ug/L	20	103		70	130	0	20
		carbon tetrachloride			19	ug/L	20	96		70	130	1	20
		1,2-dichloroethane			22	ug/L	20	108		70	130	1	20
		benzene			21	ug/L	20	105		70	130	1	20
		trichloroethene			22	ug/L	20	110		70	130	0	20
		1,2-dichloropropane			20	ug/L	20	100		70	130	0	20
		bromodichloromethane			21	ug/L	20	103		70	130	0	20
		1,4-dioxane			55	ug/L	40	137	*	70	130	1	20
		dibromomethane			20	ug/L	20	100		70	130	2	20
		4-methyl-2-pentanone (MIBK)			26	ug/L	20	132	*	70	130	1	20
		cis-1,3-dichloropropene			20	ug/L	20	100		70	130	2	20
		toluene			20	ug/L	20	98		70	130	0	20
		trans-1,3-dichloropropene			21	ug/L	20	104		70	130	0	20
		2-hexanone			28	ug/L	20	138	*	70	130	3	20
		1,1,2-trichloroethane			21	ug/L	20	104		70	130	3	20
		1,3-dichloropropane			20	ug/L	20	99		70	130	2	20
		tetrachloroethene			21	ug/L	20	105		70	130	4	20
		dibromochloromethane			18	ug/L	20	89		70	130	1	20
		1,2-dibromoethane (EDB)			19	ug/L	20	97		70	130	1	20
		chlorobenzene			19	ug/L	20	95		70	130	3	20
		1,1,1,2-tetrachloroethane			20	ug/L	20	98		70	130	2	20
		ethylbenzene			20	ug/L	20	99		70	130	3	20
		m&p-xylenes			40	ug/L	40	101		70	130	3	20
		o-xylene			21	ug/L	20	105		70	130	4	20
		styrene			22	ug/L	20	109		70	130	3	20
		bromoform			20	ug/L	20	101		70	130	5	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501900	isopropylbenzene		21	ug/L	20	105		70	130	2	20
		1,1,2,2-tetrachloroethane		21	ug/L	20	105		70	130	4	20
		1,2,3-trichloropropane		21	ug/L	20	104		70	130	1	20
		n-propylbenzene		18	ug/L	20	91		70	130	3	20
		bromobenzene		19	ug/L	20	93		70	130	2	20
		1,3,5-trimethylbenzene		20	ug/L	20	100		70	130	3	20
		2-chlorotoluene		18	ug/L	20	89		70	130	4	20
		4-chlorotoluene		18	ug/L	20	91		70	130	3	20
		tert-butylbenzene		19	ug/L	20	94		70	130	2	20
		1,2,4-trimethylbenzene		19	ug/L	20	97		70	130	4	20
		sec-butylbenzene		18	ug/L	20	91		70	130	3	20
		1,3-dichlorobenzene		20	ug/L	20	99		70	130	4	20
		4-isopropyltoluene		17	ug/L	20	86		70	130	4	20
		1,4-dichlorobenzene		19	ug/L	20	93		70	130	1	20
		1,2-dichlorobenzene		19	ug/L	20	93		70	130	4	20
		n-butylbenzene		18	ug/L	20	89		70	130	6	20
		1,2-dibromo-3-chloropropane (DBCP)		22	ug/L	20	110		70	130	1	20
		1,2,4-trichlorobenzene		22	ug/L	20	110		70	130	5	20
		hexachlorobutadiene		19	ug/L	20	96		70	130	2	20
		naphthalene		27	ug/L	20	134	*	70	130	1	20
		1,2,3-trichlorobenzene		25	ug/L	20	127		70	130	0	20
		1,1,2-trichloro-1,2,2-trifluoroethane		22	ug/L	20	110		70	130	4	20
		dibromofluoromethane SUR		107	%				78	114		
		toluene-D8 SUR		106	%				88	110		
		4-bromofluorobenzene SUR		111	%				86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA EPH	BLK8033	naphthalene		<	0.5	ug/L						
		2-methylnaphthalene		<	0.5	ug/L						
		phenanthrene		<	0.5	ug/L						
		acenaphthene		<	0.5	ug/L						
		acenaphthylene		<	0.5	ug/L						
		fluorene		<	0.5	ug/L						
		anthracene		<	0.5	ug/L						
		fluoranthene		<	0.5	ug/L						
		pyrene		<	0.5	ug/L						
		benzo(a)anthracene		<	0.5	ug/L						
		chrysene		<	0.5	ug/L						
		benzo(b)fluoranthene		<	0.5	ug/L						
		benzo(k)fluoranthene		<	0.5	ug/L						
		benzo(a)pyrene		<	0.2	ug/L						
		indeno(1,2,3-cd)pyrene		<	0.5	ug/L						
		dibenzo(a,h)anthracene		<	0.5	ug/L						
		benzo(g,h,i)perylene		<	0.5	ug/L						
		Unadjusted C11-C22 Aromatics		<	100	ug/L						
		C9-C18 Aliphatics		<	100	ug/L						
		C19-C36 Aliphatics		<	100	ug/L						
		C11-C22 Aromatics		<	100	ug/L						
		1-chloro-octadecane SUR			47	%			40	140		
		o-terphenyl SUR			44	%			40	140		
		2-fluorobiphenyl SUR			69	%			40	140		
		2-bromonaphthalene SUR			68	%			40	140		
MA EPH	LCS8033	naphthalene			31	ug/L	60	51	40	140		
		2-methylnaphthalene			35	ug/L	60	58	40	140		
		phenanthrene			44	ug/L	60	73	40	140		
		acenaphthene			35	ug/L	60	58	40	140		
		acenaphthylene			37	ug/L	60	62	40	140		
		fluorene			39	ug/L	60	65	40	140		
		anthracene			38	ug/L	60	63	40	140		
		fluoranthene			44	ug/L	60	74	40	140		
		pyrene			46	ug/L	60	76	40	140		
		benzo(a)anthracene			45	ug/L	60	75	40	140		
		chrysene			49	ug/L	60	82	40	140		
		benzo(b)fluoranthene			45	ug/L	60	75	40	140		
		benzo(k)fluoranthene			45	ug/L	60	75	40	140		
		benzo(a)pyrene			46	ug/L	60	76	40	140		
		indeno(1,2,3-cd)pyrene			40	ug/L	60	66	40	140		
		dibenzo(a,h)anthracene			48	ug/L	60	80	40	140		
		benzo(g,h,i)perylene			48	ug/L	60	79	40	140		
		Unadjusted C11-C22 Aromatics			700	ug/L	1020	68	40	140		
		C9-C18 Aliphatics			200	ug/L	360	55	40	140		
		C19-C36 Aliphatics			380	ug/L	480	79	40	140		
		C11-C22 Aromatics		<	100	ug/L						
		1-chloro-octadecane SUR			48	%			40	140		
		o-terphenyl SUR			50	%			40	140		
		2-fluorobiphenyl SUR			78	%			40	140		
		2-bromonaphthalene SUR			80	%			40	140		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA EPH	LCSD8033	naphthalene			36	ug/L	60	60	40	140	16	25
		2-methylnaphthalene			41	ug/L	60	69	40	140	17	25
		phenanthrene			49	ug/L	60	82	40	140	12	25
		acenaphthene			40	ug/L	60	67	40	140	14	25
		acenaphthylene			43	ug/L	60	72	40	140	16	25
		fluorene			45	ug/L	60	74	40	140	13	25
		anthracene			42	ug/L	60	71	40	140	12	25
		fluoranthene			49	ug/L	60	82	40	140	10	25
		pyrene			53	ug/L	60	88	40	140	14	25
		benzo(a)anthracene			49	ug/L	60	81	40	140	8	25
		chrysene			54	ug/L	60	89	40	140	9	25
		benzo(b)fluoranthene			47	ug/L	60	78	40	140	5	25
		benzo(k)fluoranthene			52	ug/L	60	87	40	140	14	25
		benzo(a)pyrene			50	ug/L	60	83	40	140	9	25
		indeno(1,2,3-cd)pyrene			44	ug/L	60	74	40	140	11	25
		dibenzo(a,h)anthracene			53	ug/L	60	89	40	140	10	25
		benzo(g,h,i)perylene			53	ug/L	60	88	40	140	10	25
		Unadjusted C11-C22 Aromatics			710	ug/L	1020	69	40	140	1	25
		C9-C18 Aliphatics			210	ug/L	360	60	40	140	7	25
		C19-C36 Aliphatics			400	ug/L	480	84	40	140	6	25
		C11-C22 Aromatics		<	100	ug/L						
		1-chloro-octadecane SUR			52	%			40	140		
		o-terphenyl SUR			51	%			40	140		
		2-fluorobiphenyl SUR			73	%			40	140		
		2-bromonaphthalene SUR			76	%			40	140		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3510C8082A	BLK8044	PCB-1016		<	0.30	ug/L						
		PCB-1221		<	0.30	ug/L						
		PCB-1232		<	0.30	ug/L						
		PCB-1242		<	0.30	ug/L						
		PCB-1248		<	0.30	ug/L						
		PCB-1254		<	0.30	ug/L						
		PCB-1260		<	0.30	ug/L						
		tetrachloro-m-xylene SUR			65	%			30	150		
		decachlorobiphenyl SUR			63	%			30	150		
SW3510C8082A	LCS8044	PCB-1016			0.9	ug/L	1	86	40	140		
		PCB-1221		<	0.3	ug/L						
		PCB-1232		<	0.3	ug/L						
		PCB-1242		<	0.3	ug/L						
		PCB-1248		<	0.3	ug/L						
		PCB-1254		<	0.3	ug/L						
		PCB-1260			1.0	ug/L	1	97	40	140		
		tetrachloro-m-xylene SUR			86	%			30	150		
		decachlorobiphenyl SUR			42	%			30	150		
SW3510C8082A	LCSD8044	PCB-1016			0.9	ug/L	1	85	40	140	1	20
		PCB-1221		<	0.3	ug/L						
		PCB-1232		<	0.3	ug/L						
		PCB-1242		<	0.3	ug/L						
		PCB-1248		<	0.3	ug/L						
		PCB-1254		<	0.3	ug/L						
		PCB-1260			0.8	ug/L	1	85	40	140	13	20
		tetrachloro-m-xylene SUR			78	%			30	150		
		decachlorobiphenyl SUR			34	%			30	150		

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33653

Company Name: Woodard + Curran
Company Address: 40 Shattuck Rd #110
Report To: Keri Stevens / Jarrod Yoder
Phone #: 978-557-8150
Invoice to Email: JYoder@woodardcurran.com
☐ Hard Copy Invoice Required

Project Name: Lewis Chemical
Project #: 229286.01
Project Location: NH (MA) ME VT NY Other
Protocol: RCRA (MCP) SDWA NHDES NPDES OTHER
Reporting Limits: QAPP EPA DW GW-1 Other S-1
Quote # 2014 Fee Schedule ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	☐ VOC 8260 ☐ VOC 8260 NHDES ☒ VOC 8260 MADEP	☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT	☒ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☒ 1,4-Dioxane	☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:	☐ TPH ☐ DRO 8015 ☐ MEDRO ☒ EPH MADEP ☐ TPH Fingerprint	☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB	☒ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB	☐ O&G 1664 ☐ Mineral O&G SM5520F Total + Dissolved Aroclor	☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity	☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity	☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness	☐ Total Metals-list:	☐ Dissolved Metals-list:	☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC	☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN	☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P	☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride	☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde	8082 Total + Dissolved PCB - Congener (ON HOLD)			Grab (G) or Composite (C)
33653-14	ESM-7	2	X			2					7/16/15	1130	JG	2																								G
diss -02 -01	ESM-6	2	X			2					7/16/15	1320	JG	2						2														2			G
-03	ESM-~~+3~~ per A. Rocco Tip Blanks	8	X			6					7/16/15	1345	AR	2		4		2*		[illegible]														[illegible]			G
-04	Trip Blank-1	2	X			2					7/14/15	LAB	–	1		1																						G
-05	Trip Blank 2	1																																				

ESM-7 on 33654 AD

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed _____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS * EPH samples unpreserved. PCB congeners samples to be placed on hold.

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) JYoder@woodardcurran.com ; KStevens@ n
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☑ YES ☐ NO
TEMPERATURE 5 °C

CUSTODY RECORD
QSD-01 Revision 08/05/14

Relinquished by/Sampler:	Date	Time	Received by:	Date	Time
[signature]	7/16/15	1535	[signature]	7/16/15	1535
Relinquished by: [signature]	7/16/15	1755	Received by:		
Relinquished by:			Received by Laboratory: [signature]	7-16-15	17:55

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

~~33675~~ 33653

Company Name: Woodard + Curran

Company Address: 40 Shattuck Rd #110 Andover, MA

Report To: Jarod Yoder

Phone #: 978-557-8150

Invoice to Email: JYoder@woodardcurran.com

☐ Hard Copy Invoice Required

Project Name: Lewis Chemical

Project #: 229286.01

Project Location: NH (MA) ME VT NY Other

Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER

Reporting Limits: QAPP GW-1 S-1 EPA DW Other

Quote # 2014 Rates ☐ NH Reimbursement Pricing

PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	☒ VOC 8260 MADEP	☐ VOC 8260 NHDES	☐ VOC 624	☐ VOC BTEX	☐ VOC 524.2	☒ VPH MADEP	☐ MEGRO	☐ DRO 8015	☐ 8270PAH	☒ 8082 PCB	☐ 8081 Pesticides	☐ O&G 1664	☐ pH	☐ TSS	☐ RCRA Metals	☐ Total Metals-list:	☐ Dissolved Metals-list:	☐ Ammonia	☐ T-Phosphorus	☐ Cyanide	☐ Nitrate	☐ Nitrite	☐ Corrosivity	☐ TCLP Metals	Subcontract:	8082 Total + diss. PCB - Congeners (on HOLD)	Grab (G) or Composite (C)
33653-06	ESM-3B-S	8	X			X					7/16/15	1640	AR	2					4		2																			
-07	ESM-3B-SD	8	X			X					7/17/15	1130	AR	2					4		2																			
div -12 -08	ESM-5	12	X			X					7/16/15	1535	JG	2					4		2		2																	2	
-09	ESM-5B	8	X			X					7/17/15	1020	JG	2					4		2																			
-10	ESM-9	2	X			X					7/17/15	0745	JG	2																											
-11	ESM-13	6	X			X					7/17/15	0935	AR	2					2		2																			
-13	TRIP Blank	2d																																						

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed ____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS
PCB Congeners ON HOLD

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) See above
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☑ YES ☐ NO
TEMPERATURE 5.5 °C

CUSTODY RECORD
QSD-01 Revision 01/09/15

	Relinquished by Sampler:	Date	Time	Received by:	Date	Time
1		7/17/15	1430		7/17/15	1435
2	Relinquished by:	7/17/15	1730	Received by:	Date	Time
3	Relinquished by:	Date	Time	Received by Laboratory:	7/17/15	17:30

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Jarrod Yoder
Woodard & Curran
40 Shattuck Road
Suite 110
Andover, MA 01810

PO Number: None
Job ID: 33711
Date Received: 7/21/15

Project: Lewis Chemical 229286.01

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

JSylvester (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 8/11/2015
Total number of pages: 59

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Lewis Chemical 229286.01

Lab ID: 33711

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
ESM-1	Water	7/20/2015 13:40	33711-001	
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-14	Water	7/20/2015 15:05	33711-002	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
G-C-1	Water	7/20/2015 8:25	33711-003	
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
CDW-3	Water	7/20/2015 9:15	33711-004	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
				EPH in water by MADEP Method
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
PZ-01D	Water	7/20/2015 11:00	33711-005	
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
PZ-08D	Water	7/20/2015 10:30	33711-006	
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
PZ-02D	Water	7/17/2015 15:30	33711-007	
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
ESM-14 Dissolved	Water	7/20/2015 15:05	33711-008	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
CDW-3 Dissolved	Water	7/20/2015 9:15	33711-009	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
Trip Blank	Water	7/20/2015 0:00	33711-010	
				Low level 1,4-dioxane in water by 8260 SIM
Trip Blank	Water	7/20/2015 0:00	33711-011	
				VOCs in water by 8260

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-001
Sample ID: ESM-1
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 13:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
chloromethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
vinyl chloride	**12**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
bromomethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
chloroethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
trichlorofluoromethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
diethyl ether	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
acetone	< 50	50	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1-dichloroethene	< 5	5	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
methylene chloride	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
carbon disulfide	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
methyl t-butyl ether (MTBE)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
trans-1,2-dichloroethene	**12**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
isopropyl ether (DIPE)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1-dichloroethane	**360**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
t-butanol (TBA)	< 150	150	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
2-butanone (MEK)	< 50	50	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
2,2-dichloropropane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
cis-1,2-dichloroethene	**1600**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
chloroform	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
bromochloromethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1,1-trichloroethane	**660**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1-dichloropropene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
t-amyl-methyl ether (TAME)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
carbon tetrachloride	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2-dichloroethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
benzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
trichloroethene	**96**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2-dichloropropane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
bromodichloromethane	< 3.0	3.0	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,4-dioxane	< 250	250	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
dibromomethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 50	50	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
cis-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
toluene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
trans-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
2-hexanone	< 50	50	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1,2-trichloroethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,3-dichloropropane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
tetrachloroethene	**34**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-001

Sample ID: ESM-1

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 13:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2-dibromoethane (EDB)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
chlorobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1,1,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
ethylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
m&p-xylenes	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
o-xylene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
styrene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
bromoform	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
isopropylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1,2,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2,3-trichloropropane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
n-propylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
bromobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,3,5-trimethylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
2-chlorotoluene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
4-chlorotoluene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
tert-butylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2,4-trimethylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
sec-butylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,3-dichlorobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
4-isopropyltoluene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,4-dichlorobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2-dichlorobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
n-butylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2,4-trichlorobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
hexachlorobutadiene	< 2.5	2.5	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
naphthalene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2,3-trichlorobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**34**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**101**	78-114	%	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
toluene-D8 SUR	**101**	88-110	%	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
4-bromofluorobenzene SUR	**93**	86-115	%	5	LMM		1501943	7/24/15	23:17	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-002
Sample ID: ESM-14
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 15:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1-dichloroethane	**4**	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
cis-1,2-dichloroethene	**8**	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1,1-trichloroethane	**4**	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
trichloroethene	**32**	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
tetrachloroethene	**22**	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-002

Sample ID: ESM-14

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 15:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**5**	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**87**	78-114	%	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
toluene-D8 SUR	**94**	88-110	%	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
4-bromofluorobenzene SUR	**96**	86-115	%	1	LMM		1502032	7/29/15	18:02	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-003

Sample ID: G-C-1

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 8:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
chloromethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
vinyl chloride	**430**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
bromomethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
chloroethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
trichlorofluoromethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
diethyl ether	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
acetone	< 50	50	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1-dichloroethene	**15**	5	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
methylene chloride	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
carbon disulfide	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
methyl t-butyl ether (MTBE)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
trans-1,2-dichloroethene	**39**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
isopropyl ether (DIPE)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1-dichloroethane	**260**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
t-butanol (TBA)	< 150	150	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
2-butanone (MEK)	< 50	50	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
2,2-dichloropropane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
cis-1,2-dichloroethene	**870**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
chloroform	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
bromochloromethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1,1-trichloroethane	**260**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1-dichloropropene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
t-amyl-methyl ether (TAME)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
carbon tetrachloride	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2-dichloroethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
benzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
trichloroethene	**200**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2-dichloropropane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
bromodichloromethane	< 3.0	3.0	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,4-dioxane	< 250	250	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
dibromomethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 50	50	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
cis-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
toluene	**19**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
trans-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
2-hexanone	< 50	50	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1,2-trichloroethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,3-dichloropropane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
tetrachloroethene	**36**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-003
Sample ID: G-C-1
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 8:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2-dibromoethane (EDB)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
chlorobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1,1,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
ethylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
m&p-xylenes	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
o-xylene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
styrene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
bromoform	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
isopropylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1,2,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2,3-trichloropropane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
n-propylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
bromobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,3,5-trimethylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
2-chlorotoluene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
4-chlorotoluene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
tert-butylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2,4-trimethylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
sec-butylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,3-dichlorobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
4-isopropyltoluene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,4-dichlorobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2-dichlorobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
n-butylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2,4-trichlorobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
hexachlorobutadiene	< 2.5	2.5	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
naphthalene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2,3-trichlorobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**71**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
toluene-D8 SUR	**94**	88-110	%	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
4-bromofluorobenzene SUR	**93**	86-115	%	5	LMM		1502032	7/29/15	18:33	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-004
Sample ID: CDW-3
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
chloromethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
vinyl chloride	**400**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
bromomethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
chloroethane	**28**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
trichlorofluoromethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
diethyl ether	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
acetone	< 100	100	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1-dichloroethene	**1000**	10	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
methylene chloride	**33**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
carbon disulfide	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
methyl t-butyl ether (MTBE)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
trans-1,2-dichloroethene	**620**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
isopropyl ether (DIPE)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1-dichloroethane	**1100**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
t-butanol (TBA)	< 300	300	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
2-butanone (MEK)	< 100	100	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
2,2-dichloropropane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
cis-1,2-dichloroethene	**28000**	800	ug/L	400	LMM		1501970	7/28/15	23:29	SW5030C8260C
chloroform	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
bromochloromethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
tetrahydrofuran (THF)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1,1-trichloroethane	**100000**	800	ug/L	400	LMM		1501970	7/28/15	23:29	SW5030C8260C
1,1-dichloropropene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
t-amyl-methyl ether (TAME)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
carbon tetrachloride	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2-dichloroethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
benzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
trichloroethene	**23000**	800	ug/L	400	LMM		1501970	7/28/15	23:29	SW5030C8260C
1,2-dichloropropane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
bromodichloromethane	< 6.0	6.0	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,4-dioxane	< 500	500	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
dibromomethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 100	100	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
cis-1,3-dichloropropene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
toluene	**1600**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
trans-1,3-dichloropropene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
2-hexanone	< 100	100	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1,2-trichloroethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,3-dichloropropane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
tetrachloroethene	**1200**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-004

Sample ID: CDW-3

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2-dibromoethane (EDB)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
chlorobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1,1,2-tetrachloroethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
ethylbenzene	**64**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
m&p-xylenes	**120**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
o-xylene	**43**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
styrene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
bromoform	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
isopropylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1,2,2-tetrachloroethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2,3-trichloropropane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
n-propylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
bromobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,3,5-trimethylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
2-chlorotoluene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
4-chlorotoluene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
tert-butylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2,4-trimethylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
sec-butylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,3-dichlorobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
4-isopropyltoluene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,4-dichlorobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2-dichlorobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
n-butylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2,4-trichlorobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
hexachlorobutadiene	< 5.0	5.0	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
naphthalene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2,3-trichlorobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**2100**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**99**	78-114	%	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
toluene-D8 SUR	**98**	88-110	%	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
4-bromofluorobenzene SUR	**96**	86-115	%	10	LMM		1501970	7/27/15	21:58	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-005
Sample ID: PZ-01D
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
vinyl chloride	**37**	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
acetone	**25**	10	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1-dichloroethane	**24**	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
cis-1,2-dichloroethene	**44**	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1,1-trichloroethane	**9**	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2-dichloroethane	**3**	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-005
Sample ID: PZ-01D
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**6**	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
toluene-D8 SUR	**97**	88-110	%	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
4-bromofluorobenzene SUR	**91**	86-115	%	1	LMM		1502018	7/28/15	17:18	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-006

Sample ID: PZ-08D

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
vinyl chloride	**18**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
chloroethane	**12**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
trans-1,2-dichloroethene	**10**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1-dichloroethane	**41**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
cis-1,2-dichloroethene	**83**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1,1-trichloroethane	**29**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2-dichloroethane	**4**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
trichloroethene	**2**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-006
Sample ID: PZ-08D
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**7**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
toluene-D8 SUR	**95**	88-110	%	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
4-bromofluorobenzene SUR	**94**	86-115	%	1	LMM		1502018	7/28/15	20:24	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-007
Sample ID: PZ-02D
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/17/15 15:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
chloromethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
vinyl chloride	**320**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
bromomethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
chloroethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
trichlorofluoromethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
diethyl ether	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
acetone	< 1000	1000	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1-dichloroethene	**250**	100	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
methylene chloride	**460**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
carbon disulfide	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
methyl t-butyl ether (MTBE)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
trans-1,2-dichloroethene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
isopropyl ether (DIPE)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1-dichloroethane	**1700**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
t-butanol (TBA)	< 3000	3000	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
2-butanone (MEK)	< 1000	1000	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
2,2-dichloropropane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
cis-1,2-dichloroethene	**19000**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
chloroform	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
bromochloromethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
tetrahydrofuran (THF)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1,1-trichloroethane	**9200**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1-dichloropropene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
t-amyl-methyl ether (TAME)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
carbon tetrachloride	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2-dichloroethane	**1800**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
benzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
trichloroethene	**710**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2-dichloropropane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
bromodichloromethane	< 60	60	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,4-dioxane	< 5000	5000	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
dibromomethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 1000	1000	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
cis-1,3-dichloropropene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
toluene	**10000**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
trans-1,3-dichloropropene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
2-hexanone	< 1000	1000	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1,2-trichloroethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,3-dichloropropane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
tetrachloroethene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-007
Sample ID: PZ-02D
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/17/15 15:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2-dibromoethane (EDB)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
chlorobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1,1,2-tetrachloroethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
ethylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
m&p-xylenes	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
o-xylene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
styrene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
bromoform	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
isopropylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1,2,2-tetrachloroethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2,3-trichloropropane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
n-propylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
bromobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,3,5-trimethylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
2-chlorotoluene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
4-chlorotoluene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
tert-butylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2,4-trimethylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
sec-butylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,3-dichlorobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
4-isopropyltoluene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,4-dichlorobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2-dichlorobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
n-butylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2,4-trichlorobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
hexachlorobutadiene	< 50	50	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
naphthalene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2,3-trichlorobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**760**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**92**	78-114	%	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
toluene-D8 SUR	**93**	88-110	%	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
4-bromofluorobenzene SUR	**90**	86-115	%	100	LMM		1502032	7/30/15	0:15	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-011

Sample ID: Trip Blank

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-011
Sample ID: Trip Blank
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**98**	78-114	%	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
toluene-D8 SUR	**107**	88-110	%	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
4-bromofluorobenzene SUR	**96**	86-115	%	1	LMM		1501943	7/24/15	17:41	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-004

Sample ID: CDW-3

Matrix: Water

Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 0.25	0.25	ug/L	1	LMM		1501964	7/27/15	14:45	modSW8260C

Sample#: 33711-007

Sample ID: PZ-02D

Matrix: Water

Sampled: 7/17/15 15:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 0.25	0.25	ug/L	1	LMM		1501964	7/27/15	15:50	modSW8260C

Sample#: 33711-010

Sample ID: Trip Blank

Matrix: Water

Sampled: 7/20/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 0.25	0.25	ug/L	1	LMM		1501946	7/24/15	15:15	modSW8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-004

Sample ID: CDW-3

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	**34000**	10000	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
Unadjusted C9-C12 Aliphatics	< 10000	10000	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
methyl t-butyl ether (MTBE)	< 200	200	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
benzene	< 100	100	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
toluene	**1400**	200	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
ethylbenzene	< 200	200	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
m&p-xylenes	< 200	200	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
o-xylene	< 200	200	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
naphthalene	< 500	500	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
C5-C8 Aliphatics	**33000**	10000	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
C9-C12 Aliphatics	< 10000	10000	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
C9-C10 Aromatics	< 10000	10000	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**84**	70-130	%	100	LMM		1502017	7/29/15	14:28	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**96**	70-130	%	100	LMM		1502017	7/29/15	14:28	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-007

Sample ID: PZ-02D

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/17/15 15:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	**28000**	5000	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
Unadjusted C9-C12 Aliphatics	< 5000	5000	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
methyl t-butyl ether (MTBE)	< 100	100	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
benzene	**56**	50	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
toluene	**11000**	100	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
ethylbenzene	**100**	100	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
m&p-xylenes	**170**	100	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
o-xylene	< 100	100	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
naphthalene	< 250	250	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
C5-C8 Aliphatics	**17000**	5000	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
C9-C12 Aliphatics	< 5000	5000	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
C9-C10 Aromatics	< 5000	5000	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**84**	70-130	%	50	LMM		1502017	7/29/15	15:30	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**96**	70-130	%	50	LMM		1502017	7/29/15	15:30	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-002

Sample ID: ESM-14

Matrix: Water

Sampled: 7/20/15 15:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
PCB-1221	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
PCB-1232	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
PCB-1242	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
PCB-1248	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
PCB-1254	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
PCB-1260	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**84**	30-150	%	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
decachlorobiphenyl SUR	**31**	30-150	%	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A

Sample#: 33711-004

Sample ID: CDW-3

Matrix: Water

Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
PCB-1221	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
PCB-1232	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
PCB-1242	**1.7**	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
PCB-1248	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
PCB-1254	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
PCB-1260	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**81**	30-150	%	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
decachlorobiphenyl SUR	**24** *	30-150	%	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A

**** The surrogate showed recovery outside the acceptance limits as a result of an obvious matrix interference.***

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-008

Sample ID: ESM-14 Dissolved

Matrix: Water

Sampled: 7/20/15 15:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
PCB-1221	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
PCB-1232	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
PCB-1242	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
PCB-1248	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
PCB-1254	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
PCB-1260	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**80**	30-150	%	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
decachlorobiphenyl SUR	**46**	30-150	%	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A

Sample#: 33711-009

Sample ID: CDW-3 Dissolved

Matrix: Water

Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
PCB-1221	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
PCB-1232	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
PCB-1242	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
PCB-1248	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
PCB-1254	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
PCB-1260	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**77**	30-150	%	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
decachlorobiphenyl SUR	**48**	30-150	%	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-004
Sample ID: CDW-3
Matrix: Water
Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**1.4**	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/22/15	8033	7/23/15	8:07	MA EPH
C9-C18 Aliphatics	< 100	100	ug/L	1	AM	7/22/15	8033	7/22/15	18:04	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/22/15	8033	7/22/15	18:04	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/22/15	8033	7/23/15	8:07	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**45**	40-140	%	1	AM	7/22/15	8033	7/22/15	18:04	MA EPH
o-terphenyl SUR	**47**	40-140	%	1	AM	7/22/15	8033	7/23/15	8:07	MA EPH
2-fluorobiphenyl SUR	**71**	40-140	%	1	AM	7/22/15	8033	7/23/15	8:07	MA EPH
2-bromonaphthalene SUR	**72**	40-140	%	1	AM	7/22/15	8033	7/23/15	8:07	MA EPH

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 229286.01

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **33711**

Matrices: Groundwater/Surface Water ☑ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☑	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☑	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☑	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☑	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☑ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

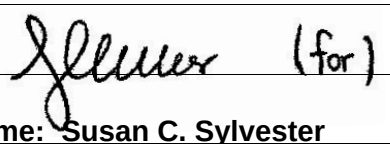
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☐ No*☑

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☑ No*☐

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:  **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 8/11/15**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
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Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 33711

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 6 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.
The samples for congeners analysis were received on hold. The report was finalized without the congeners being analyzed at the customer's request.

Calibration

PCB: Quantification is quadratic.
See the included table for a list of compounds quantitated by quadratic equation.

Method Blank

No exceptions noted.

Surrogate Recoveries

PCB: The surrogate, decachlorobiphenyl in the sample 33711-004 showed recovery outside the acceptance limits as a result of an obvious matrix interference. It is suspected that the large concentration of chlorinated solvents interfered with the extraction process.

Laboratory Control Sample Results

VOC: The LCS/D1501970 did not meet the acceptance criteria for dichlorodifluoromethane. This compound is known to be problematic in the method. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.
VOC: The LCS/D1502018 did not meet the acceptance criteria for dichlorodifluoromethane, carbon disulfide, and 1,4-dioxane. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.
VOC: The LCS/D1502032 did not meet the acceptance criteria for dichlorodifluoromethane, chloromethane, carbon disulfide, and 1,4-dioxane. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

VOC: The compound, hexachloroethane, was evaluated in the VOC analysis as a tentatively identified compound (TIC), as requested by the customer.
VPH: The C5-C8 aliphatic range will include concentrations from chlorinated solvents as well as hydrocarbons when large concentrations of chlorinated solvents are present in the sample.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question G: The CAM protocol reporting limits were not achieved for this project due to dilutions necessary for sample analysis. Box G is "No."
Question H: See surrogate section above. Box H is "No."

Quantitation by Quadratic Equation
Lab # 33711

Quantitation of the following compounds was based on a quadratic equation

dichlorodifluoromethane
Bromomethane
Acetone
Carbon disulfide
tetrahydrofuran (THF)
Carbon tetrachloride
1,2-Dichloroethane
Bromodichloromethane
2-Hexanone
cis-1,3-dichloropropene
trans-1,3-Dichloropropene
Dibromochloromethane
1,1,1,2-Tetrachloroethane
Bromoform
bromobenzene
1,2-dibromo-3-chloropropane (DBCP)
hexachlorobutadiene

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA VPH	BLK1502017	Unadjusted C5-C8 Aliphatics		<	100	ug/L						
		Unadjusted C9-C12 Aliphatics		<	100	ug/L						
		methyl t-butyl ether (MTBE)		<	2	ug/L						
		benzene		<	1	ug/L						
		toluene		<	2	ug/L						
		ethylbenzene		<	2	ug/L						
		m&p-xylenes		<	2	ug/L						
		o-xylene		<	2	ug/L						
		naphthalene		<	5	ug/L						
		C5-C8 Aliphatics		<	100	ug/L						
		C9-C12 Aliphatics		<	100	ug/L						
		C9-C10 Aromatics		<	100	ug/L						
		2,5-dibromotoluene as Aromatic SUR			88	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			101	%			70	130		
MA VPH	LCS1502017	Unadjusted C5-C8 Aliphatics			680	ug/L	600	113	70	130		
		Unadjusted C9-C12 Aliphatics			990	ug/L	800	124	70	130		
		methyl t-butyl ether (MTBE)			80	ug/L	100	80	70	130		
		benzene			90	ug/L	100	90	70	130		
		toluene			91	ug/L	100	91	70	130		
		ethylbenzene			91	ug/L	100	91	70	130		
		m&p-xylenes			190	ug/L	200	93	70	130		
		o-xylene			91	ug/L	100	91	70	130		
		naphthalene			87	ug/L	100	87	70	130		
		C5-C8 Aliphatics			300	ug/L	300	100	70	130		
		C9-C12 Aliphatics			290	ug/L	300	96	70	130		
		C9-C10 Aromatics			86	ug/L	100	86	70	130		
		2,5-dibromotoluene as Aromatic SUR			84	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			95	%			70	130		
MA VPH	LCSD1502017	Unadjusted C5-C8 Aliphatics			680	ug/L	600	113	70	130	0	25
		Unadjusted C9-C12 Aliphatics			990	ug/L	800	123	70	130	0	25
		methyl t-butyl ether (MTBE)			80	ug/L	100	80	70	130	0	25
		benzene			91	ug/L	100	91	70	130	0	25
		toluene			91	ug/L	100	91	70	130	0	25
		ethylbenzene			92	ug/L	100	92	70	130	0	25
		m&p-xylenes			190	ug/L	200	93	70	130	0	25
		o-xylene			92	ug/L	100	92	70	130	0	25
		naphthalene			89	ug/L	100	89	70	130	3	25
		C5-C8 Aliphatics			300	ug/L	300	99	70	130	1	25
		C9-C12 Aliphatics			280	ug/L	300	94	70	130	2	25
		C9-C10 Aromatics			86	ug/L	100	86	70	130	0	25
		2,5-dibromotoluene as Aromatic SUR			85	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			98	%			70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
modSW8260C	BLK1501946	1,4-dioxane		<	0.25	ug/L						
modSW8260C	BLK1501964	1,4-dioxane		<	0.25	ug/L						
modSW8260C	LCS1501964	1,4-dioxane			7.8	ug/L	8	97	70	130		
modSW8260C	LCSD1501964	1,4-dioxane			8.2	ug/L	8	103	70	130	6	20

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1501943	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1501943	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			96	%			78	114		
		toluene-D8 SUR			101	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501943	dichlorodifluoromethane			16	ug/L	20	80	70	130		
		chloromethane			22	ug/L	20	109	70	130		
		vinyl chloride			18	ug/L	20	90	70	130		
		bromomethane			22	ug/L	20	108	70	130		
		chloroethane			21	ug/L	20	103	70	130		
		trichlorofluoromethane			21	ug/L	20	103	70	130		
		diethyl ether			20	ug/L	20	99	70	130		
		acetone		<	50	ug/L	20	129				
		1,1-dichloroethene			18	ug/L	20	91	70	130		
		methylene chloride			18	ug/L	20	90	70	130		
		carbon disulfide			15	ug/L	20	77	70	130		
		methyl t-butyl ether (MTBE)			20	ug/L	20	101	70	130		
		trans-1,2-dichloroethene			19	ug/L	20	96	70	130		
		isopropyl ether (DIPE)			20	ug/L	20	101	70	130		
		ethyl t-butyl ether (ETBE)			20	ug/L	20	100	70	130		
		1,1-dichloroethane			18	ug/L	20	88	70	130		
		t-butanol (TBA)			100	ug/L	100	104	70	130		
		2-butanone (MEK)			22	ug/L	20	109	70	130		
		2,2-dichloropropane			17	ug/L	20	84	70	130		
		cis-1,2-dichloroethene			18	ug/L	20	92	70	130		
		chloroform			19	ug/L	20	93	70	130		
		bromochloromethane			19	ug/L	20	95	70	130		
		tetrahydrofuran (THF)			23	ug/L	20	116	70	130		
		1,1,1-trichloroethane			20	ug/L	20	102	70	130		
		1,1-dichloropropene			17	ug/L	20	87	70	130		
		t-amyl-methyl ether (TAME)			19	ug/L	20	95	70	130		
		carbon tetrachloride			18	ug/L	20	89	70	130		
		1,2-dichloroethane			20	ug/L	20	101	70	130		
		benzene			20	ug/L	20	102	70	130		
		trichloroethene			21	ug/L	20	104	70	130		
		1,2-dichloropropane			19	ug/L	20	97	70	130		
		bromodichloromethane			19	ug/L	20	96	70	130		
		1,4-dioxane		<	50	ug/L	40	110	70	130		
		dibromomethane			18	ug/L	20	91	70	130		
		4-methyl-2-pentanone (MIBK)			20	ug/L	20	102	70	130		
		cis-1,3-dichloropropene			18	ug/L	20	92	70	130		
		toluene			19	ug/L	20	93	70	130		
		trans-1,3-dichloropropene			19	ug/L	20	93	70	130		
		2-hexanone			22	ug/L	20	112	70	130		
		1,1,2-trichloroethane			19	ug/L	20	96	70	130		
		1,3-dichloropropane			18	ug/L	20	91	70	130		
		tetrachloroethene			20	ug/L	20	98	70	130		
		dibromochloromethane			16	ug/L	20	80	70	130		
		1,2-dibromoethane (EDB)			18	ug/L	20	88	70	130		
		chlorobenzene			18	ug/L	20	89	70	130		
		1,1,1,2-tetrachloroethane			18	ug/L	20	89	70	130		
		ethylbenzene			19	ug/L	20	94	70	130		
		m&p-xylenes			38	ug/L	40	96	70	130		
		o-xylene			20	ug/L	20	100	70	130		
		styrene			20	ug/L	20	101	70	130		
		bromoform			17	ug/L	20	84	70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501943	isopropylbenzene		20	ug/L	20	99	70	130		
		1,1,2,2-tetrachloroethane		19	ug/L	20	94	70	130		
		1,2,3-trichloropropane		18	ug/L	20	90	70	130		
		n-propylbenzene		17	ug/L	20	86	70	130		
		bromobenzene		18	ug/L	20	88	70	130		
		1,3,5-trimethylbenzene		18	ug/L	20	92	70	130		
		2-chlorotoluene		17	ug/L	20	85	70	130		
		4-chlorotoluene		17	ug/L	20	86	70	130		
		tert-butylbenzene		18	ug/L	20	88	70	130		
		1,2,4-trimethylbenzene		18	ug/L	20	90	70	130		
		sec-butylbenzene		17	ug/L	20	86	70	130		
		1,3-dichlorobenzene		19	ug/L	20	95	70	130		
		4-isopropyltoluene		16	ug/L	20	82	70	130		
		1,4-dichlorobenzene		17	ug/L	20	85	70	130		
		1,2-dichlorobenzene		17	ug/L	20	85	70	130		
		n-butylbenzene		17	ug/L	20	84	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		16	ug/L	20	79	70	130		
		1,2,4-trichlorobenzene		19	ug/L	20	95	70	130		
		hexachlorobutadiene		18	ug/L	20	90	70	130		
		naphthalene		21	ug/L	20	104	70	130		
		1,2,3-trichlorobenzene		20	ug/L	20	102	70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		21	ug/L	20	105	70	130		
		dibromofluoromethane SUR		104	%			78	114		
		toluene-D8 SUR		106	%			88	110		
		4-bromofluorobenzene SUR		107	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501943	dichlorodifluoromethane			15	ug/L	20	77	70	130	5	20
		chloromethane			20	ug/L	20	99	70	130	9	20
		vinyl chloride			17	ug/L	20	86	70	130	4	20
		bromomethane			23	ug/L	20	114	70	130	5	20
		chloroethane			20	ug/L	20	99	70	130	3	20
		trichlorofluoromethane			20	ug/L	20	101	70	130	2	20
		diethyl ether			20	ug/L	20	100	70	130	1	20
		acetone		<	50	ug/L	20	114			12	20
		1,1-dichloroethene			18	ug/L	20	89	70	130	2	20
		methylene chloride			18	ug/L	20	92	70	130	2	20
		carbon disulfide			16	ug/L	20	80	70	130	4	20
		methyl t-butyl ether (MTBE)			20	ug/L	20	101	70	130	1	20
		trans-1,2-dichloroethene			19	ug/L	20	97	70	130	1	20
		isopropyl ether (DIPE)			20	ug/L	20	100	70	130	1	20
		ethyl t-butyl ether (ETBE)			20	ug/L	20	98	70	130	2	20
		1,1-dichloroethane			18	ug/L	20	88	70	130	0	20
		t-butanol (TBA)			96	ug/L	100	96	70	130	8	20
		2-butanone (MEK)			22	ug/L	20	108	70	130	1	20
		2,2-dichloropropane			16	ug/L	20	82	70	130	2	20
		cis-1,2-dichloroethene			19	ug/L	20	93	70	130	1	20
		chloroform			19	ug/L	20	93	70	130	1	20
		bromochloromethane			19	ug/L	20	93	70	130	2	20
		tetrahydrofuran (THF)			22	ug/L	20	110	70	130	5	20
		1,1,1-trichloroethane			20	ug/L	20	102	70	130	0	20
		1,1-dichloropropene			17	ug/L	20	83	70	130	5	20
		t-amyl-methyl ether (TAME)			19	ug/L	20	95	70	130	1	20
		carbon tetrachloride			18	ug/L	20	90	70	130	2	20
		1,2-dichloroethane			20	ug/L	20	102	70	130	1	20
		benzene			20	ug/L	20	101	70	130	2	20
		trichloroethene			20	ug/L	20	102	70	130	2	20
		1,2-dichloropropane			19	ug/L	20	94	70	130	3	20
		bromodichloromethane			20	ug/L	20	100	70	130	3	20
		1,4-dioxane		<	50	ug/L	40	114	70	130	3	20
		dibromomethane			18	ug/L	20	92	70	130	1	20
		4-methyl-2-pentanone (MIBK)			21	ug/L	20	104	70	130	2	20
		cis-1,3-dichloropropene			19	ug/L	20	95	70	130	3	20
		toluene			19	ug/L	20	93	70	130	0	20
		trans-1,3-dichloropropene			19	ug/L	20	95	70	130	2	20
		2-hexanone			21	ug/L	20	106	70	130	6	20
		1,1,2-trichloroethane			19	ug/L	20	93	70	130	2	20
		1,3-dichloropropane			18	ug/L	20	90	70	130	1	20
		tetrachloroethene			19	ug/L	20	94	70	130	4	20
		dibromochloromethane			16	ug/L	20	81	70	130	1	20
		1,2-dibromoethane (EDB)			17	ug/L	20	85	70	130	3	20
		chlorobenzene			17	ug/L	20	86	70	130	3	20
		1,1,1,2-tetrachloroethane			18	ug/L	20	90	70	130	0	20
		ethylbenzene			18	ug/L	20	92	70	130	3	20
		m&p-xylenes			37	ug/L	40	93	70	130	3	20
		o-xylene			19	ug/L	20	97	70	130	3	20
		styrene			19	ug/L	20	97	70	130	4	20
		bromoform			17	ug/L	20	85	70	130	2	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501943	isopropylbenzene		19	ug/L	20	95	70	130	4	20
		1,1,2,2-tetrachloroethane		19	ug/L	20	95	70	130	2	20
		1,2,3-trichloropropane		18	ug/L	20	90	70	130	0	20
		n-propylbenzene		18	ug/L	20	88	70	130	2	20
		bromobenzene		18	ug/L	20	90	70	130	2	20
		1,3,5-trimethylbenzene		19	ug/L	20	93	70	130	1	20
		2-chlorotoluene		17	ug/L	20	87	70	130	2	20
		4-chlorotoluene		17	ug/L	20	87	70	130	0	20
		tert-butylbenzene		18	ug/L	20	91	70	130	3	20
		1,2,4-trimethylbenzene		18	ug/L	20	90	70	130	0	20
		sec-butylbenzene		17	ug/L	20	87	70	130	0	20
		1,3-dichlorobenzene		19	ug/L	20	95	70	130	0	20
		4-isopropyltoluene		16	ug/L	20	82	70	130	1	20
		1,4-dichlorobenzene		17	ug/L	20	86	70	130	1	20
		1,2-dichlorobenzene		18	ug/L	20	88	70	130	3	20
		n-butylbenzene		17	ug/L	20	85	70	130	2	20
		1,2-dibromo-3-chloropropane (DBCP)		17	ug/L	20	83	70	130	5	20
		1,2,4-trichlorobenzene		19	ug/L	20	97	70	130	2	20
		hexachlorobutadiene		18	ug/L	20	90	70	130	0	20
		naphthalene		21	ug/L	20	105	70	130	0	20
		1,2,3-trichlorobenzene		21	ug/L	20	103	70	130	1	20
		1,1,2-trichloro-1,2,2-trifluoroethane		20	ug/L	20	102	70	130	2	20
		dibromofluoromethane SUR		100	%			78	114		
		toluene-D8 SUR		101	%			88	110		
		4-bromofluorobenzene SUR		102	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1501970	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1501970	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			95	%			78	114		
		toluene-D8 SUR			99	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1501970	dichlorodifluoromethane			13	ug/L	20	65	*	70	130		
		chloromethane			16	ug/L	20	79		70	130		
		vinyl chloride			15	ug/L	20	73		70	130		
		bromomethane			14	ug/L	20	71		70	130		
		chloroethane			17	ug/L	20	85		70	130		
		trichlorofluoromethane			17	ug/L	20	87		70	130		
		diethyl ether			17	ug/L	20	86		70	130		
		acetone		<	50	ug/L	20	96					
		1,1-dichloroethene			16	ug/L	20	78		70	130		
		methylene chloride			15	ug/L	20	77		70	130		
		carbon disulfide			14	ug/L	20	72		70	130		
		methyl t-butyl ether (MTBE)			17	ug/L	20	85		70	130		
		trans-1,2-dichloroethene			17	ug/L	20	83		70	130		
		isopropyl ether (DIPE)			17	ug/L	20	86		70	130		
		ethyl t-butyl ether (ETBE)			17	ug/L	20	84		70	130		
		1,1-dichloroethane			15	ug/L	20	75		70	130		
		t-butanol (TBA)			80	ug/L	100	80		70	130		
		2-butanone (MEK)			17	ug/L	20	84		70	130		
		2,2-dichloropropane			15	ug/L	20	73		70	130		
		cis-1,2-dichloroethene			16	ug/L	20	78		70	130		
		chloroform			17	ug/L	20	83		70	130		
		bromochloromethane			16	ug/L	20	79		70	130		
		tetrahydrofuran (THF)			18	ug/L	20	88		70	130		
		1,1,1-trichloroethane			18	ug/L	20	88		70	130		
		1,1-dichloropropene			15	ug/L	20	75		70	130		
		t-amyl-methyl ether (TAME)			16	ug/L	20	82		70	130		
		carbon tetrachloride			16	ug/L	20	79		70	130		
		1,2-dichloroethane			17	ug/L	20	87		70	130		
		benzene			18	ug/L	20	88		70	130		
		trichloroethene			18	ug/L	20	91		70	130		
		1,2-dichloropropane			17	ug/L	20	83		70	130		
		bromodichloromethane			17	ug/L	20	87		70	130		
		1,4-dioxane		<	50	ug/L	40	91		70	130		
		dibromomethane			17	ug/L	20	85		70	130		
		4-methyl-2-pentanone (MIBK)			18	ug/L	20	90		70	130		
		cis-1,3-dichloropropene			16	ug/L	20	82		70	130		
		toluene			16	ug/L	20	82		70	130		
		trans-1,3-dichloropropene			16	ug/L	20	81		70	130		
		2-hexanone			18	ug/L	20	91		70	130		
		1,1,2-trichloroethane			17	ug/L	20	83		70	130		
		1,3-dichloropropane			18	ug/L	20	88		70	130		
		tetrachloroethene			19	ug/L	20	95		70	130		
		dibromochloromethane			16	ug/L	20	82		70	130		
		1,2-dibromoethane (EDB)			17	ug/L	20	84		70	130		
		chlorobenzene			17	ug/L	20	86		70	130		
		1,1,1,2-tetrachloroethane			17	ug/L	20	86		70	130		
		ethylbenzene			19	ug/L	20	94		70	130		
		m&p-xylenes			37	ug/L	40	93		70	130		
		o-xylene			19	ug/L	20	95		70	130		
		styrene			20	ug/L	20	98		70	130		
		bromoform			18	ug/L	20	88		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501970	isopropylbenzene		19	ug/L	20	96	70	130		
		1,1,2,2-tetrachloroethane		21	ug/L	20	104	70	130		
		1,2,3-trichloropropane		20	ug/L	20	102	70	130		
		n-propylbenzene		20	ug/L	20	98	70	130		
		bromobenzene		19	ug/L	20	97	70	130		
		1,3,5-trimethylbenzene		21	ug/L	20	105	70	130		
		2-chlorotoluene		19	ug/L	20	97	70	130		
		4-chlorotoluene		19	ug/L	20	96	70	130		
		tert-butylbenzene		20	ug/L	20	100	70	130		
		1,2,4-trimethylbenzene		21	ug/L	20	104	70	130		
		sec-butylbenzene		19	ug/L	20	96	70	130		
		1,3-dichlorobenzene		21	ug/L	20	103	70	130		
		4-isopropyltoluene		18	ug/L	20	91	70	130		
		1,4-dichlorobenzene		19	ug/L	20	95	70	130		
		1,2-dichlorobenzene		19	ug/L	20	94	70	130		
		n-butylbenzene		19	ug/L	20	93	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		19	ug/L	20	93	70	130		
		1,2,4-trichlorobenzene		20	ug/L	20	101	70	130		
		hexachlorobutadiene		19	ug/L	20	94	70	130		
		naphthalene		22	ug/L	20	109	70	130		
		1,2,3-trichlorobenzene		21	ug/L	20	104	70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		18	ug/L	20	88	70	130		
		dibromofluoromethane SUR		100	%			78	114		
		toluene-D8 SUR		98	%			88	110		
		4-bromofluorobenzene SUR		93	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501970	dichlorodifluoromethane			13	ug/L	20	65	*	70	130	0	20
		chloromethane			15	ug/L	20	77		70	130	3	20
		vinyl chloride			14	ug/L	20	72		70	130	2	20
		bromomethane			16	ug/L	20	81		70	130	13	20
		chloroethane			17	ug/L	20	83		70	130	2	20
		trichlorofluoromethane			17	ug/L	20	85		70	130	3	20
		diethyl ether			17	ug/L	20	84		70	130	2	20
		acetone		<	50	ug/L	20	98				3	20
		1,1-dichloroethene			15	ug/L	20	75		70	130	3	20
		methylene chloride			15	ug/L	20	76		70	130	2	20
		carbon disulfide			15	ug/L	20	73		70	130	1	20
		methyl t-butyl ether (MTBE)			17	ug/L	20	83		70	130	3	20
		trans-1,2-dichloroethene			16	ug/L	20	81		70	130	2	20
		isopropyl ether (DIPE)			17	ug/L	20	86		70	130	0	20
		ethyl t-butyl ether (ETBE)			17	ug/L	20	83		70	130	1	20
		1,1-dichloroethane			15	ug/L	20	75		70	130	1	20
		t-butanol (TBA)			80	ug/L	100	81		70	130	1	20
		2-butanone (MEK)			18	ug/L	20	90		70	130	6	20
		2,2-dichloropropane			14	ug/L	20	71		70	130	3	20
		cis-1,2-dichloroethene			16	ug/L	20	79		70	130	1	20
		chloroform			16	ug/L	20	78		70	130	5	20
		bromochloromethane			15	ug/L	20	76		70	130	3	20
		tetrahydrofuran (THF)			17	ug/L	20	87		70	130	1	20
		1,1,1-trichloroethane			17	ug/L	20	86		70	130	2	20
		1,1-dichloropropene			14	ug/L	20	72		70	130	3	20
		t-amyl-methyl ether (TAME)			16	ug/L	20	80		70	130	2	20
		carbon tetrachloride			15	ug/L	20	77		70	130	2	20
		1,2-dichloroethane			17	ug/L	20	87		70	130	1	20
		benzene			17	ug/L	20	85		70	130	4	20
		trichloroethene			18	ug/L	20	88		70	130	3	20
		1,2-dichloropropane			16	ug/L	20	81		70	130	2	20
		bromodichloromethane			17	ug/L	20	86		70	130	1	20
		1,4-dioxane		<	50	ug/L	40	93		70	130	3	20
		dibromomethane			15	ug/L	20	77		70	130	10	20
		4-methyl-2-pentanone (MIBK)			18	ug/L	20	92		70	130	2	20
		cis-1,3-dichloropropene			16	ug/L	20	80		70	130	1	20
		toluene			16	ug/L	20	79		70	130	4	20
		trans-1,3-dichloropropene			16	ug/L	20	81		70	130	0	20
		2-hexanone			18	ug/L	20	89		70	130	3	20
		1,1,2-trichloroethane			16	ug/L	20	80		70	130	4	20
		1,3-dichloropropane			17	ug/L	20	86		70	130	2	20
		tetrachloroethene			18	ug/L	20	90		70	130	5	20
		dibromochloromethane			16	ug/L	20	80		70	130	2	20
		1,2-dibromoethane (EDB)			16	ug/L	20	82		70	130	1	20
		chlorobenzene			16	ug/L	20	82		70	130	4	20
		1,1,1,2-tetrachloroethane			17	ug/L	20	85		70	130	2	20
		ethylbenzene			18	ug/L	20	89		70	130	5	20
		m&p-xylenes			36	ug/L	40	90		70	130	4	20
		o-xylene			18	ug/L	20	92		70	130	4	20
		styrene			19	ug/L	20	96		70	130	2	20
		bromoform			17	ug/L	20	86		70	130	2	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501970	isopropylbenzene		18	ug/L	20	92	70	130	4	20
		1,1,2,2-tetrachloroethane		19	ug/L	20	97	70	130	7	20
		1,2,3-trichloropropane		19	ug/L	20	94	70	130	8	20
		n-propylbenzene		18	ug/L	20	91	70	130	7	20
		bromobenzene		18	ug/L	20	91	70	130	6	20
		1,3,5-trimethylbenzene		20	ug/L	20	98	70	130	7	20
		2-chlorotoluene		18	ug/L	20	92	70	130	5	20
		4-chlorotoluene		18	ug/L	20	91	70	130	6	20
		tert-butylbenzene		19	ug/L	20	94	70	130	7	20
		1,2,4-trimethylbenzene		19	ug/L	20	97	70	130	7	20
		sec-butylbenzene		18	ug/L	20	90	70	130	6	20
		1,3-dichlorobenzene		20	ug/L	20	98	70	130	6	20
		4-isopropyltoluene		17	ug/L	20	85	70	130	7	20
		1,4-dichlorobenzene		18	ug/L	20	91	70	130	4	20
		1,2-dichlorobenzene		18	ug/L	20	89	70	130	6	20
		n-butylbenzene		17	ug/L	20	87	70	130	7	20
		1,2-dibromo-3-chloropropane (DBCP)		19	ug/L	20	93	70	130	1	20
		1,2,4-trichlorobenzene		20	ug/L	20	99	70	130	2	20
		hexachlorobutadiene		19	ug/L	20	95	70	130	1	20
		naphthalene		21	ug/L	20	106	70	130	2	20
		1,2,3-trichlorobenzene		22	ug/L	20	109	70	130	4	20
		1,1,2-trichloro-1,2,2-trifluoroethane		17	ug/L	20	86	70	130	3	20
		dibromofluoromethane SUR		100	%			78	114		
		toluene-D8 SUR		95	%			88	110		
		4-bromofluorobenzene SUR		96	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1502018	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1502018	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			98	%			78	114		
		toluene-D8 SUR			96	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1502018	dichlorodifluoromethane			13	ug/L	20	65	*	70	130		
		chloromethane			15	ug/L	20	76		70	130		
		vinyl chloride			14	ug/L	20	72		70	130		
		bromomethane			17	ug/L	20	85		70	130		
		chloroethane			17	ug/L	20	86		70	130		
		trichlorofluoromethane			17	ug/L	20	83		70	130		
		diethyl ether			18	ug/L	20	88		70	130		
		acetone		<	50	ug/L	20	98					
		1,1-dichloroethene			15	ug/L	20	75		70	130		
		methylene chloride			15	ug/L	20	76		70	130		
		carbon disulfide			13	ug/L	20	66	*	70	130		
		methyl t-butyl ether (MTBE)			17	ug/L	20	85		70	130		
		trans-1,2-dichloroethene			16	ug/L	20	80		70	130		
		isopropyl ether (DIPE)			17	ug/L	20	85		70	130		
		ethyl t-butyl ether (ETBE)			16	ug/L	20	82		70	130		
		1,1-dichloroethane			15	ug/L	20	76		70	130		
		t-butanol (TBA)			75	ug/L	100	75		70	130		
		2-butanone (MEK)			18	ug/L	20	92		70	130		
		2,2-dichloropropane			14	ug/L	20	72		70	130		
		cis-1,2-dichloroethene			16	ug/L	20	79		70	130		
		chloroform			16	ug/L	20	78		70	130		
		bromochloromethane			16	ug/L	20	78		70	130		
		tetrahydrofuran (THF)			19	ug/L	20	96		70	130		
		1,1,1-trichloroethane			17	ug/L	20	84		70	130		
		1,1-dichloropropene			15	ug/L	20	75		70	130		
		t-amyl-methyl ether (TAME)			16	ug/L	20	80		70	130		
		carbon tetrachloride			15	ug/L	20	75		70	130		
		1,2-dichloroethane			17	ug/L	20	87		70	130		
		benzene			17	ug/L	20	86		70	130		
		trichloroethene			17	ug/L	20	85		70	130		
		1,2-dichloropropane			16	ug/L	20	80		70	130		
		bromodichloromethane			17	ug/L	20	83		70	130		
		1,4-dioxane		<	50	ug/L	40	64	*	70	130		
		dibromomethane			16	ug/L	20	79		70	130		
		4-methyl-2-pentanone (MIBK)			18	ug/L	20	92		70	130		
		cis-1,3-dichloropropene			16	ug/L	20	78		70	130		
		toluene			16	ug/L	20	79		70	130		
		trans-1,3-dichloropropene			16	ug/L	20	79		70	130		
		2-hexanone			18	ug/L	20	92		70	130		
		1,1,2-trichloroethane			17	ug/L	20	83		70	130		
		1,3-dichloropropane			18	ug/L	20	89		70	130		
		tetrachloroethene			18	ug/L	20	90		70	130		
		dibromochloromethane			15	ug/L	20	76		70	130		
		1,2-dibromoethane (EDB)			16	ug/L	20	81		70	130		
		chlorobenzene			16	ug/L	20	81		70	130		
		1,1,1,2-tetrachloroethane			16	ug/L	20	81		70	130		
		ethylbenzene			18	ug/L	20	90		70	130		
		m&p-xylenes			36	ug/L	40	89		70	130		
		o-xylene			18	ug/L	20	91		70	130		
		styrene			19	ug/L	20	94		70	130		
		bromoform			16	ug/L	20	81		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1502018	isopropylbenzene		18	ug/L	20	92	70	130		
		1,1,2,2-tetrachloroethane		20	ug/L	20	101	70	130		
		1,2,3-trichloropropane		20	ug/L	20	101	70	130		
		n-propylbenzene		18	ug/L	20	91	70	130		
		bromobenzene		18	ug/L	20	89	70	130		
		1,3,5-trimethylbenzene		19	ug/L	20	97	70	130		
		2-chlorotoluene		18	ug/L	20	91	70	130		
		4-chlorotoluene		18	ug/L	20	90	70	130		
		tert-butylbenzene		19	ug/L	20	93	70	130		
		1,2,4-trimethylbenzene		19	ug/L	20	95	70	130		
		sec-butylbenzene		18	ug/L	20	90	70	130		
		1,3-dichlorobenzene		20	ug/L	20	98	70	130		
		4-isopropyltoluene		17	ug/L	20	85	70	130		
		1,4-dichlorobenzene		18	ug/L	20	90	70	130		
		1,2-dichlorobenzene		18	ug/L	20	89	70	130		
		n-butylbenzene		18	ug/L	20	89	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		18	ug/L	20	90	70	130		
		1,2,4-trichlorobenzene		20	ug/L	20	100	70	130		
		hexachlorobutadiene		18	ug/L	20	90	70	130		
		naphthalene		22	ug/L	20	108	70	130		
		1,2,3-trichlorobenzene		21	ug/L	20	106	70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		17	ug/L	20	84	70	130		
		dibromofluoromethane SUR		98	%			78	114		
		toluene-D8 SUR		99	%			88	110		
		4-bromofluorobenzene SUR		93	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCSD1502018	dichlorodifluoromethane			13	ug/L	20	66	*	70	130	3	20
		chloromethane			15	ug/L	20	75		70	130	1	20
		vinyl chloride			15	ug/L	20	74		70	130	3	20
		bromomethane			19	ug/L	20	97		70	130	14	20
		chloroethane			17	ug/L	20	85		70	130	2	20
		trichlorofluoromethane			17	ug/L	20	86		70	130	3	20
		diethyl ether			17	ug/L	20	87		70	130	0	20
		acetone		<	50	ug/L	20	99				1	20
		1,1-dichloroethene			15	ug/L	20	76		70	130	2	20
		methylene chloride			15	ug/L	20	77		70	130	1	20
		carbon disulfide			14	ug/L	20	71		70	130	7	20
		methyl t-butyl ether (MTBE)			17	ug/L	20	84		70	130	1	20
		trans-1,2-dichloroethene			17	ug/L	20	85		70	130	6	20
		isopropyl ether (DIPE)			18	ug/L	20	88		70	130	3	20
		ethyl t-butyl ether (ETBE)			17	ug/L	20	83		70	130	1	20
		1,1-dichloroethane			15	ug/L	20	76		70	130	0	20
		t-butanol (TBA)			70	ug/L	100	70		70	130	7	20
		2-butanone (MEK)			17	ug/L	20	86		70	130	6	20
		2,2-dichloropropane			15	ug/L	20	73		70	130	2	20
		cis-1,2-dichloroethene			16	ug/L	20	79		70	130	0	20
		chloroform			16	ug/L	20	80		70	130	3	20
		bromochloromethane			16	ug/L	20	79		70	130	1	20
		tetrahydrofuran (THF)			18	ug/L	20	91		70	130	5	20
		1,1,1-trichloroethane			18	ug/L	20	88		70	130	5	20
		1,1-dichloropropene			15	ug/L	20	76		70	130	1	20
		t-amyl-methyl ether (TAME)			16	ug/L	20	81		70	130	1	20
		carbon tetrachloride			16	ug/L	20	78		70	130	3	20
		1,2-dichloroethane			18	ug/L	20	88		70	130	1	20
		benzene			17	ug/L	20	87		70	130	1	20
		trichloroethene			18	ug/L	20	90		70	130	5	20
		1,2-dichloropropane			17	ug/L	20	83		70	130	3	20
		bromodichloromethane			17	ug/L	20	87		70	130	5	20
		1,4-dioxane		<	50	ug/L	40	68	*	70	130	6	20
		dibromomethane			16	ug/L	20	79		70	130	1	20
		4-methyl-2-pentanone (MIBK)			18	ug/L	20	89		70	130	3	20
		cis-1,3-dichloropropene			16	ug/L	20	80		70	130	3	20
		toluene			16	ug/L	20	80		70	130	1	20
		trans-1,3-dichloropropene			16	ug/L	20	80		70	130	1	20
		2-hexanone			18	ug/L	20	88		70	130	5	20
		1,1,2-trichloroethane			16	ug/L	20	82		70	130	1	20
		1,3-dichloropropane			18	ug/L	20	89		70	130	0	20
		tetrachloroethene			19	ug/L	20	95		70	130	6	20
		dibromochloromethane			16	ug/L	20	78		70	130	3	20
		1,2-dibromoethane (EDB)			17	ug/L	20	85		70	130	5	20
		chlorobenzene			17	ug/L	20	87		70	130	6	20
		1,1,1,2-tetrachloroethane			18	ug/L	20	88		70	130	8	20
		ethylbenzene			19	ug/L	20	94		70	130	4	20
		m&p-xylenes			38	ug/L	40	94		70	130	5	20
		o-xylene			19	ug/L	20	96		70	130	6	20
		styrene			20	ug/L	20	99		70	130	5	20
		bromoform			17	ug/L	20	85		70	130	6	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1502018	isopropylbenzene		19	ug/L	20	97	70	130	6	20
		1,1,2,2-tetrachloroethane		20	ug/L	20	98	70	130	3	20
		1,2,3-trichloropropane		19	ug/L	20	96	70	130	5	20
		n-propylbenzene		19	ug/L	20	94	70	130	3	20
		bromobenzene		19	ug/L	20	94	70	130	5	20
		1,3,5-trimethylbenzene		20	ug/L	20	98	70	130	2	20
		2-chlorotoluene		18	ug/L	20	92	70	130	1	20
		4-chlorotoluene		18	ug/L	20	92	70	130	2	20
		tert-butylbenzene		19	ug/L	20	96	70	130	3	20
		1,2,4-trimethylbenzene		20	ug/L	20	98	70	130	3	20
		sec-butylbenzene		18	ug/L	20	92	70	130	2	20
		1,3-dichlorobenzene		20	ug/L	20	98	70	130	0	20
		4-isopropyltoluene		17	ug/L	20	87	70	130	3	20
		1,4-dichlorobenzene		18	ug/L	20	91	70	130	1	20
		1,2-dichlorobenzene		18	ug/L	20	89	70	130	1	20
		n-butylbenzene		18	ug/L	20	91	70	130	1	20
		1,2-dibromo-3-chloropropane (DBCP)		18	ug/L	20	89	70	130	2	20
		1,2,4-trichlorobenzene		20	ug/L	20	100	70	130	0	20
		hexachlorobutadiene		19	ug/L	20	96	70	130	7	20
		naphthalene		21	ug/L	20	104	70	130	4	20
		1,2,3-trichlorobenzene		22	ug/L	20	108	70	130	1	20
		1,1,2-trichloro-1,2,2-trifluoroethane		18	ug/L	20	88	70	130	4	20
		dibromofluoromethane SUR		98	%			78	114		
		toluene-D8 SUR		96	%			88	110		
		4-bromofluorobenzene SUR		99	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1502032	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1502032	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			96	%			78	114		
		toluene-D8 SUR			95	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1502032	dichlorodifluoromethane			13	ug/L	20	63	*	70	130		
		chloromethane			14	ug/L	20	68	*	70	130		
		vinyl chloride			14	ug/L	20	71		70	130		
		bromomethane			13	ug/L	20	64	*	70	130		
		chloroethane			17	ug/L	20	87		70	130		
		trichlorofluoromethane			17	ug/L	20	83		70	130		
		diethyl ether			17	ug/L	20	86		70	130		
		acetone		<	50	ug/L	20	106					
		1,1-dichloroethene			15	ug/L	20	77		70	130		
		methylene chloride			16	ug/L	20	78		70	130		
		carbon disulfide			13	ug/L	20	65	*	70	130		
		methyl t-butyl ether (MTBE)			17	ug/L	20	86		70	130		
		trans-1,2-dichloroethene			16	ug/L	20	82		70	130		
		isopropyl ether (DIPE)			17	ug/L	20	86		70	130		
		ethyl t-butyl ether (ETBE)			17	ug/L	20	83		70	130		
		1,1-dichloroethane			15	ug/L	20	75		70	130		
		t-butanol (TBA)			81	ug/L	100	81		70	130		
		2-butanone (MEK)			18	ug/L	20	92		70	130		
		2,2-dichloropropane			14	ug/L	20	72		70	130		
		cis-1,2-dichloroethene			16	ug/L	20	79		70	130		
		chloroform			16	ug/L	20	78		70	130		
		bromochloromethane			16	ug/L	20	79		70	130		
		tetrahydrofuran (THF)			18	ug/L	20	92		70	130		
		1,1,1-trichloroethane			17	ug/L	20	84		70	130		
		1,1-dichloropropene			15	ug/L	20	73		70	130		
		t-amyl-methyl ether (TAME)			16	ug/L	20	82		70	130		
		carbon tetrachloride			15	ug/L	20	75		70	130		
		1,2-dichloroethane			17	ug/L	20	87		70	130		
		benzene			17	ug/L	20	86		70	130		
		trichloroethene			19	ug/L	20	97		70	130		
		1,2-dichloropropane			16	ug/L	20	82		70	130		
		bromodichloromethane			17	ug/L	20	83		70	130		
		1,4-dioxane		<	50	ug/L	40	76		70	130		
		dibromomethane			16	ug/L	20	78		70	130		
		4-methyl-2-pentanone (MIBK)			19	ug/L	20	95		70	130		
		cis-1,3-dichloropropene			16	ug/L	20	80		70	130		
		toluene			16	ug/L	20	80		70	130		
		trans-1,3-dichloropropene			16	ug/L	20	80		70	130		
		2-hexanone			19	ug/L	20	94		70	130		
		1,1,2-trichloroethane			16	ug/L	20	81		70	130		
		1,3-dichloropropane			18	ug/L	20	90		70	130		
		tetrachloroethene			19	ug/L	20	93		70	130		
		dibromochloromethane			16	ug/L	20	79		70	130		
		1,2-dibromoethane (EDB)			17	ug/L	20	87		70	130		
		chlorobenzene			17	ug/L	20	85		70	130		
		1,1,1,2-tetrachloroethane			18	ug/L	20	88		70	130		
		ethylbenzene			18	ug/L	20	92		70	130		
		m&p-xylenes			37	ug/L	40	92		70	130		
		o-xylene			19	ug/L	20	97		70	130		
		styrene			20	ug/L	20	100		70	130		
		bromoform			17	ug/L	20	87		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1502032	isopropylbenzene		19	ug/L	20	97	70	130		
		1,1,2,2-tetrachloroethane		17	ug/L	20	86	70	130		
		1,2,3-trichloropropane		21	ug/L	20	107	70	130		
		n-propylbenzene		19	ug/L	20	94	70	130		
		bromobenzene		19	ug/L	20	94	70	130		
		1,3,5-trimethylbenzene		20	ug/L	20	100	70	130		
		2-chlorotoluene		19	ug/L	20	94	70	130		
		4-chlorotoluene		19	ug/L	20	93	70	130		
		tert-butylbenzene		20	ug/L	20	98	70	130		
		1,2,4-trimethylbenzene		20	ug/L	20	99	70	130		
		sec-butylbenzene		19	ug/L	20	93	70	130		
		1,3-dichlorobenzene		20	ug/L	20	102	70	130		
		4-isopropyltoluene		18	ug/L	20	89	70	130		
		1,4-dichlorobenzene		19	ug/L	20	93	70	130		
		1,2-dichlorobenzene		19	ug/L	20	94	70	130		
		n-butylbenzene		18	ug/L	20	92	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		18	ug/L	20	90	70	130		
		1,2,4-trichlorobenzene		21	ug/L	20	104	70	130		
		hexachlorobutadiene		19	ug/L	20	97	70	130		
		naphthalene		23	ug/L	20	113	70	130		
		1,2,3-trichlorobenzene		22	ug/L	20	109	70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		17	ug/L	20	87	70	130		
		dibromofluoromethane SUR		94	%			78	114		
		toluene-D8 SUR		95	%			88	110		
		4-bromofluorobenzene SUR		105	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD		RPD Limit
SW5030C8260C	LCSD1502032	dichlorodifluoromethane			12	ug/L	20	62	*	70	130	2		20
		chloromethane			13	ug/L	20	67	*	70	130	1		20
		vinyl chloride			14	ug/L	20	70		70	130	1		20
		bromomethane			19	ug/L	20	96		70	130	40	*	20
		chloroethane			16	ug/L	20	82		70	130	5		20
		trichlorofluoromethane			17	ug/L	20	85		70	130	3		20
		diethyl ether			17	ug/L	20	86		70	130	1		20
		acetone		<	50	ug/L	20	109				3		20
		1,1-dichloroethene			15	ug/L	20	74		70	130	4		20
		methylene chloride			15	ug/L	20	77		70	130	1		20
		carbon disulfide			14	ug/L	20	68	*	70	130	4		20
		methyl t-butyl ether (MTBE)			17	ug/L	20	87		70	130	1		20
		trans-1,2-dichloroethene			17	ug/L	20	83		70	130	2		20
		isopropyl ether (DIPE)			17	ug/L	20	87		70	130	1		20
		ethyl t-butyl ether (ETBE)			17	ug/L	20	85		70	130	2		20
		1,1-dichloroethane			15	ug/L	20	75		70	130	1		20
		t-butanol (TBA)			78	ug/L	100	78		70	130	3		20
		2-butanone (MEK)			18	ug/L	20	92		70	130	1		20
		2,2-dichloropropane			14	ug/L	20	72		70	130	1		20
		cis-1,2-dichloroethene			16	ug/L	20	78		70	130	1		20
		chloroform			16	ug/L	20	80		70	130	2		20
		bromochloromethane			16	ug/L	20	78		70	130	2		20
		tetrahydrofuran (THF)			19	ug/L	20	93		70	130	1		20
		1,1,1-trichloroethane			17	ug/L	20	84		70	130	0		20
		1,1-dichloropropene			14	ug/L	20	72		70	130	2		20
		t-amyl-methyl ether (TAME)			16	ug/L	20	82		70	130	0		20
		carbon tetrachloride			15	ug/L	20	77		70	130	2		20
		1,2-dichloroethane			17	ug/L	20	87		70	130	0		20
		benzene			17	ug/L	20	85		70	130	0		20
		trichloroethene			20	ug/L	20	101		70	130	4		20
		1,2-dichloropropane			17	ug/L	20	83		70	130	1		20
		bromodichloromethane			17	ug/L	20	86		70	130	4		20
		1,4-dioxane		<	50	ug/L	40	69	*	70	130	10		20
		dibromomethane			16	ug/L	20	79		70	130	1		20
		4-methyl-2-pentanone (MIBK)			18	ug/L	20	90		70	130	5		20
		cis-1,3-dichloropropene			16	ug/L	20	81		70	130	0		20
		toluene			16	ug/L	20	80		70	130	0		20
		trans-1,3-dichloropropene			16	ug/L	20	82		70	130	2		20
		2-hexanone			19	ug/L	20	93		70	130	1		20
		1,1,2-trichloroethane			16	ug/L	20	81		70	130	1		20
		1,3-dichloropropane			18	ug/L	20	89		70	130	1		20
		tetrachloroethene			18	ug/L	20	89		70	130	5		20
		dibromochloromethane			16	ug/L	20	81		70	130	3		20
		1,2-dibromoethane (EDB)			17	ug/L	20	83		70	130	4		20
		chlorobenzene			17	ug/L	20	84		70	130	1		20
		1,1,1,2-tetrachloroethane			17	ug/L	20	85		70	130	3		20
		ethylbenzene			18	ug/L	20	89		70	130	4		20
		m&p-xylenes			36	ug/L	40	89		70	130	3		20
		o-xylene			19	ug/L	20	96		70	130	1		20
		styrene			20	ug/L	20	98		70	130	2		20
		bromoform			17	ug/L	20	86		70	130	1		20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1502032	isopropylbenzene		19	ug/L	20	93	70	130	4	20
		1,1,2,2-tetrachloroethane		17	ug/L	20	84	70	130	3	20
		1,2,3-trichloropropane		20	ug/L	20	99	70	130	7	20
		n-propylbenzene		19	ug/L	20	93	70	130	1	20
		bromobenzene		19	ug/L	20	96	70	130	2	20
		1,3,5-trimethylbenzene		20	ug/L	20	99	70	130	0	20
		2-chlorotoluene		18	ug/L	20	92	70	130	1	20
		4-chlorotoluene		19	ug/L	20	93	70	130	1	20
		tert-butylbenzene		19	ug/L	20	95	70	130	3	20
		1,2,4-trimethylbenzene		20	ug/L	20	98	70	130	1	20
		sec-butylbenzene		18	ug/L	20	92	70	130	1	20
		1,3-dichlorobenzene		20	ug/L	20	101	70	130	1	20
		4-isopropyltoluene		18	ug/L	20	88	70	130	1	20
		1,4-dichlorobenzene		19	ug/L	20	94	70	130	1	20
		1,2-dichlorobenzene		18	ug/L	20	92	70	130	2	20
		n-butylbenzene		18	ug/L	20	91	70	130	1	20
		1,2-dibromo-3-chloropropane (DBCP)		19	ug/L	20	95	70	130	5	20
		1,2,4-trichlorobenzene		21	ug/L	20	103	70	130	1	20
		hexachlorobutadiene		18	ug/L	20	92	70	130	6	20
		naphthalene		22	ug/L	20	111	70	130	1	20
		1,2,3-trichlorobenzene		22	ug/L	20	111	70	130	2	20
		1,1,2-trichloro-1,2,2-trifluoroethane		18	ug/L	20	88	70	130	1	20
		dibromofluoromethane SUR		100	%			78	114		
		toluene-D8 SUR		99	%			88	110		
		4-bromofluorobenzene SUR		99	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA EPH	BLK8033	naphthalene		<	0.5	ug/L						
		2-methylnaphthalene		<	0.5	ug/L						
		phenanthrene		<	0.5	ug/L						
		acenaphthene		<	0.5	ug/L						
		acenaphthylene		<	0.5	ug/L						
		fluorene		<	0.5	ug/L						
		anthracene		<	0.5	ug/L						
		fluoranthene		<	0.5	ug/L						
		pyrene		<	0.5	ug/L						
		benzo(a)anthracene		<	0.5	ug/L						
		chrysene		<	0.5	ug/L						
		benzo(b)fluoranthene		<	0.5	ug/L						
		benzo(k)fluoranthene		<	0.5	ug/L						
		benzo(a)pyrene		<	0.2	ug/L						
		indeno(1,2,3-cd)pyrene		<	0.5	ug/L						
		dibenzo(a,h)anthracene		<	0.5	ug/L						
		benzo(g,h,i)perylene		<	0.5	ug/L						
		Unadjusted C11-C22 Aromatics		<	100	ug/L						
		C9-C18 Aliphatics		<	100	ug/L						
		C19-C36 Aliphatics		<	100	ug/L						
		C11-C22 Aromatics		<	100	ug/L						
		1-chloro-octadecane SUR			47	%			40	140		
		o-terphenyl SUR			44	%			40	140		
		2-fluorobiphenyl SUR			69	%			40	140		
		2-bromonaphthalene SUR			68	%			40	140		
MA EPH	LCS8033	naphthalene			31	ug/L	60	51	40	140		
		2-methylnaphthalene			35	ug/L	60	58	40	140		
		phenanthrene			44	ug/L	60	73	40	140		
		acenaphthene			35	ug/L	60	58	40	140		
		acenaphthylene			37	ug/L	60	62	40	140		
		fluorene			39	ug/L	60	65	40	140		
		anthracene			38	ug/L	60	63	40	140		
		fluoranthene			44	ug/L	60	74	40	140		
		pyrene			46	ug/L	60	76	40	140		
		benzo(a)anthracene			45	ug/L	60	75	40	140		
		chrysene			49	ug/L	60	82	40	140		
		benzo(b)fluoranthene			45	ug/L	60	75	40	140		
		benzo(k)fluoranthene			45	ug/L	60	75	40	140		
		benzo(a)pyrene			46	ug/L	60	76	40	140		
		indeno(1,2,3-cd)pyrene			40	ug/L	60	66	40	140		
		dibenzo(a,h)anthracene			48	ug/L	60	80	40	140		
		benzo(g,h,i)perylene			48	ug/L	60	79	40	140		
		Unadjusted C11-C22 Aromatics			700	ug/L	1020	68	40	140		
		C9-C18 Aliphatics			200	ug/L	360	55	40	140		
		C19-C36 Aliphatics			380	ug/L	480	79	40	140		
		C11-C22 Aromatics		<	100	ug/L						
		1-chloro-octadecane SUR			48	%			40	140		
		o-terphenyl SUR			50	%			40	140		
		2-fluorobiphenyl SUR			78	%			40	140		
		2-bromonaphthalene SUR			80	%			40	140		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA EPH	LCSD8033	naphthalene			36	ug/L	60	60	40	140	16	25
		2-methylnaphthalene			41	ug/L	60	69	40	140	17	25
		phenanthrene			49	ug/L	60	82	40	140	12	25
		acenaphthene			40	ug/L	60	67	40	140	14	25
		acenaphthylene			43	ug/L	60	72	40	140	16	25
		fluorene			45	ug/L	60	74	40	140	13	25
		anthracene			42	ug/L	60	71	40	140	12	25
		fluoranthene			49	ug/L	60	82	40	140	10	25
		pyrene			53	ug/L	60	88	40	140	14	25
		benzo(a)anthracene			49	ug/L	60	81	40	140	8	25
		chrysene			54	ug/L	60	89	40	140	9	25
		benzo(b)fluoranthene			47	ug/L	60	78	40	140	5	25
		benzo(k)fluoranthene			52	ug/L	60	87	40	140	14	25
		benzo(a)pyrene			50	ug/L	60	83	40	140	9	25
		indeno(1,2,3-cd)pyrene			44	ug/L	60	74	40	140	11	25
		dibenzo(a,h)anthracene			53	ug/L	60	89	40	140	10	25
		benzo(g,h,i)perylene			53	ug/L	60	88	40	140	10	25
		Unadjusted C11-C22 Aromatics			710	ug/L	1020	69	40	140	1	25
		C9-C18 Aliphatics			210	ug/L	360	60	40	140	7	25
		C19-C36 Aliphatics			400	ug/L	480	84	40	140	6	25
		C11-C22 Aromatics		<	100	ug/L						
		1-chloro-octadecane SUR			52	%			40	140		
		o-terphenyl SUR			51	%			40	140		
		2-fluorobiphenyl SUR			73	%			40	140		
		2-bromonaphthalene SUR			76	%			40	140		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3510C8082A	BLK8044	PCB-1016		<	0.30	ug/L						
		PCB-1221		<	0.30	ug/L						
		PCB-1232		<	0.30	ug/L						
		PCB-1242		<	0.30	ug/L						
		PCB-1248		<	0.30	ug/L						
		PCB-1254		<	0.30	ug/L						
		PCB-1260		<	0.30	ug/L						
		tetrachloro-m-xylene SUR			65	%			30	150		
		decachlorobiphenyl SUR			63	%			30	150		
SW3510C8082A	LCS8044	PCB-1016			0.9	ug/L	1	86	40	140		
		PCB-1221		<	0.3	ug/L						
		PCB-1232		<	0.3	ug/L						
		PCB-1242		<	0.3	ug/L						
		PCB-1248		<	0.3	ug/L						
		PCB-1254		<	0.3	ug/L						
		PCB-1260			1.0	ug/L	1	97	40	140		
		tetrachloro-m-xylene SUR			86	%			30	150		
		decachlorobiphenyl SUR			42	%			30	150		
SW3510C8082A	LCSD8044	PCB-1016			0.9	ug/L	1	85	40	140	1	20
		PCB-1221		<	0.3	ug/L						
		PCB-1232		<	0.3	ug/L						
		PCB-1242		<	0.3	ug/L						
		PCB-1248		<	0.3	ug/L						
		PCB-1254		<	0.3	ug/L						
		PCB-1260			0.8	ug/L	1	85	40	140	13	20
		tetrachloro-m-xylene SUR			78	%			30	150		
		decachlorobiphenyl SUR			34	%			30	150		

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33711

Company Name: Woodard + Curran
Company Address: 40 Shattuck Rd #110, Andover, MA
Report To: Jarrod Yoder
Phone #: 978-557-8150
Invoice to Email: JYoder@woodardcurran.com
☐ Hard Copy Invoice Required

Project Name: Lewis Chemical
Project #: 229286.01
Project Location: NH (MA) ME VT NY Other
Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER
Reporting Limits: QAPP GW-1 S-1 EPA DW Other
Quote #204 Rate Schedule ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	VOC 8260	VPH MADEP	EPH MADEP	8082 PCB	Grab (G) or Composite (C)
33711-01	ESM-1	2	X			X					7/20/15	1340	AR	2				G
-02	ESM-14	6	X			X					7/20/15	1505	AR	2			2	G
-03	G-C-1	2	X			X					7/20/15	0825	AR	2				G
-04	CDW-3	12	X			X					7/20/15	0915	AR	2	4	2	2	G
-05	PZ-01D	1	X			X					7/20/15	1100	AR	1				G
-06	PZ-08D	2	X			X					7/20/15	1030	AR	2				G
-07	PZ-02D	4	X			X					7/17/15	1530	AR	2	2			G
-10	Trip Blank (4)																	
-11	Trip Blank (VOC)																	

Total + dissolved

8082 Total + dissolved PCB - Congeners (ON HOLD)

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) X
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS PCB Congeners samples ON HOLD. Please provide WIC GIS key EDD.

REPORTING INSTRUCTIONS X PDF (e-mail address)
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE X YES ☐ NO
TEMPERATURE 6 °C

CUSTODY RECORD
QSD-01 Revision 01/09/15

	Date	Time
Relinquished by Sampler:	7/21/15	1215
Relinquished by:	7/21/15	16:14
Relinquished by:		

	Date	Time
Received by:	7/21/15	12:15
Received by:		
Received by Laboratory:	7/21/15	16:14

APPENDIX D: IN-SITU BIOLOGICAL ANALYSIS RESULTS

10515 Research Drive
Knoxville, TN 37932
Phone: (865) 573-8188
Fax: (865) 573-8133

Client: Jarrod Yoder
Woodard & Curran
40 Shattuck Rd
Suite 110
Andover, MA 01810

Phone: 978-557-8150

Fax:

Identifier: 052MG **Date Rec:** 07/18/2015 **Report Date:** 07/21/2015

Client Project #: 229286.01 **Client Project Name:** Lewis Chemical

Purchase Order #:

Analysis Requested: CENSUS

Reviewed By:



NOTICE: This report is intended only for the addressee shown above and may contain confidential or privileged information. If the recipient of this material is not the intended recipient or if you have received this in error, please notify Microbial Insights, Inc. immediately. The data and other information in this report represent only the sample(s) analyzed and are rendered upon condition that it is not to be reproduced without approval from Microbial Insights, Inc. Thank you for your cooperation.

MICROBIAL INSIGHTS, INC.

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Woodard & Curran**
Project: Lewis Chemical

MI Project Number: **052MG**
Date Received: 07/18/2015

Sample Information

Client Sample ID:		**ESM-3**	**ESM-3B-D**	**ESM-5**	**ESM-5B**	**ESM-9**
Sample Date:		07/16/2015	07/17/2015	07/16/2015	07/17/2015	07/17/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		JS	JS	JS	JS	JS
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	**6.35E+04**	**3.40E+00**	**1.12E+05**	<5.00E-01	**6.30E+01**
tceA Reductase	TCE	**3.64E+02**	<3.00E-01	**2.07E+02**	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	**4.67E+04**	**5.80E+00**	**4.52E+04**	<5.00E-01	**2.91E+01**
Vinyl Chloride Reductase	VCR	**3.84E+03**	**1.00E-01 (J)**	**9.98E+03**	<5.00E-01	**5.00E-01**
Dehalobacter spp.	*DHBt*	**7.76E+02**	**3.00E-01 (J)**	**1.62E+02**	**8.60E+00**	**1.31E+02**

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

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Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Woodard & Curran**
Project: Lewis Chemical

MI Project Number: **052MG**
Date Received: 07/18/2015

Sample Information

Client Sample ID:	**ESM-13**
Sample Date:	07/17/2015
Units:	cells/mL
Analyst:	JS

Dechlorinating Bacteria

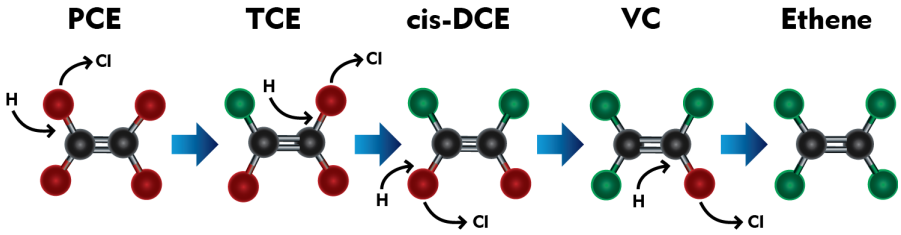
Dehalococcoides	*DHC*	**1.11E+03**
tceA Reductase	TCE	**1.89E+01**
BAV1 Vinyl Chloride Reductase	BVC	**6.95E+01**
Vinyl Chloride Reductase	VCR	**7.29E+01**

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

DHC Interpretation

Dehalococcoides 16S rRNA gene (qDHC)

Under anaerobic conditions, tetrachloroethene (PCE) and trichloroethene (TCE) can undergo sequential reductive dechlorination through the daughter products *cis*-dichloroethene (*cis*-DCE) and vinyl chloride to nontoxic ethene (1,2).



While a number of bacterial cultures capable of utilizing PCE and TCE as growth supporting electron acceptors have been isolated (3-7), *Dehalococcoides* spp. may be the most important because they are the only bacterial group that has been isolated to date which is capable of complete reductive dechlorination of PCE to ethene (8). In fact, the presence of *Dehalococcoides* spp. has been associated with complete dechlorination to ethene at sites across North America and Europe (9).

Status	*Dehalococcoides spp.*	Observation
	**≥ 10^4** (cells/mL)	Lu et al. proposed that a concentration of 1 x 10^4 DHC cells/mL could be used as a screening criterion to identify sites where reductive dechlorination will yield a generally useful biodegradation rate (10). Similarly, in an internal study conducted with nearly 1000 groundwater samples obtained from sites across the US, ethene production was observed in approximately 80% of samples in which CENSUS® qDHC results were greater than or equal to 10^4 DHC cells/mL.
	**10^1 to < 10^4** (cells/mL)	When vinyl chloride reductase genes (See DHC functional genes discussion below) are also detected, complete reductive dechlorination of PCE and TCE to ethene may still occur even with moderate DHC concentrations. When the DHC population is below the 10^4 cells/mL criterion proposed by Lu et al. (10), project managers should carefully consider other site-specific data to determine whether subsurface conditions may be limiting reductive dechlorination. For example, the addition of an electron donor may be able to stimulate DHC growth and enhance anaerobic bioremediation.
	**< 10^1** (cells/mL)	DHC concentrations are low suggesting that complete reductive dechlorination of PCE and TCE to ethene is unlikely to occur under existing conditions. Enhanced anaerobic bioremediation options (biostimulation or bioaugmentation) may need to be considered.

10515 Research Drive
Knoxville, TN 37932
Phone: 865.573.8188
Fax: 865.573.8133
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DHC Functional Genes (*tce*A, *bvc*A, *vcr*A)

A "stall" where daughter products *cis*-DCE and vinyl chloride accumulate can occur at PCE- and TCE-impacted sites especially under MNA conditions. The accumulation of vinyl chloride, generally considered more carcinogenic than the parent compounds, is particularly problematic. Although elevated *Dehalococcoides* concentrations correspond to ethene production in numerous studies, the range of chlorinated ethenes metabolized and cometabolized varies among species and strains within the *Dehalococcoides* genus. For example, *Dehalococcoides ethenogenes* str. 195 metabolizes PCE, TCE, and *cis*-DCE and cometabolizes vinyl chloride (8) to produce ethene. Conversely, *Dehalococcoides* sp. CBDB1 utilizes PCE and TCE but does not cometabolize additional chloroethenes (11). Other *Dehalococcoides* strains, such as BAV1, GT and VS, are known to fully dechlorinate cis-DCE and VC to ethene (14,16,19). Quantification of reductive dehalogenase genes is used to more definitively confirm the potential for reductive dechlorination of TCE, cis-DCE, and vinyl chloride (12-15).

Functional Gene	Observation
TCE Reductase	
***tce*A gene**	The *tce*A gene encodes the enzyme responsible for reductive dechlorination of TCE to *cis*-DCE in some strains of *Dehalococcoides*. Absence of *tce*A does not preclude the potential for reductive dechlorination of TCE in the field since the *tce*A gene is not universally distributed among all DHC and is not present in other microorganisms capable of reductive dechlorination of TCE (e.g. *Dehalobacter*). Detection of the *tce*A gene provides an additional line of evidence indicating the potential for dechlorination of TCE.
Vinyl Chloride Reductase	
***bvc*A gene**	The *bvc*A gene encodes the vinyl chloride reductase enzyme responsible for reductive dechlorination of vinyl chloride to ethene by *Dehalococcoides* sp. str. BAV1 (16). Presence of *bvc*A gene indicates the potential for reductive dechlorination of VC to ethene. Absence of both *bvc*A and *vcr*A genes suggests VC may accumulate. An internal study with ~1,000 samples showed ethene production was observed in 80% of the samples that the DHC population was greater than or equal to 10^4 cells/mL. The *bvc*A gene was detected in over 50% of these samples. Van Der Zaan et al (17) noted that the bvcA gene was the only VC reductase gene detected at three of their sites. Alfred Spormann's laboratory at Stanford University (18) reported that the *bvc*A gene was the most abundant and active at the outflow of a PCE fed column study. This section of the column was in the DCE to VC stages of reductive dechlorination thus confirming the importance of the *bvc*A gene for complete reductive dechlorination.
***vcr*A gene**	The *vcr*A gene encodes the vinyl chloride reductase enzyme responsible for reductive dechlorination of *cis*-DCE and vinyl chloride by *Dehalococcoides* sp. strain VS (14). Presence of *vcr*A gene indicates the potential for reductive dechlorination of DCE and/or VC to ethene. Absence of both *bvc*A and *vcr*A genes suggest VC may accumulate. As with the *bvc*A gene, detection of the *vcr*A gene is associated with ethene production in internal studies (67%) and vinyl chloride reduction in independent studies (14, 17).

10515 Research Drive
Knoxville, TN 37932
Phone: 865.573.8188
Fax: 865.573.8133
www.microbe.com

Reporting

Microbial Insights can provide a variety of data packages and reporting levels to suit the needs of any project. Data packages range from simple analytical reports with results only to more complex data packages that include a report narrative, analytical results, QC data, and supporting materials including all raw data and chain-of-custody documentation. The figure below shows our standard report and explains the way values are reported.

Microbial Insights, Inc.

2340 Stock Creek Blvd. Rockford, TN 37853-3044
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: Company Name
Project: Your Project Name

MI Project Number: Unique Laboratory Identifier
Date Received: Date Samples Arrived

Sample Information

Client Sample ID:		Sample A	Sample B	Sample C
Sample Date:		00/00/0000	00/00/0000	00/00/0000
Units:		cells/mL	cells/mL	cells/mL
Analyst:		Intials	Intials	Intials
Dechlorinating Bacteria				
Dehalococcoides spp.	DHC	**1.84E+05**	**2.76E+02**	**2.28E+01 (J)**
Functional Genes				
tceA Reductase	TCE	**6.00E+01**	**3.23E+01**	<4.00E-01
bvcA Reductase	BVC	**1.17E+04**	**1.81E+01**	<4.00E-01
vcrA Reducatase	VCR	**8.42E+04**	**1.74E+02**	<4.00E-01

"J" value
Result is an estimated value. This data qualifier (flag) is used when the target gene is detected but at a concentration or abundance below the practical quantification limit (PQL).

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

< value
The target gene was not detected at the limit of quantitation (LOQ) reported for that sample.

"I" value
QA Procedure indicated that the sample may have exhibited PCR inhibition. Although relatively rare, PCR inhibition can occur due to the presence of metals or humic acids at high concentrations in the sample.

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Knoxville, TN 37932
Phone: 865.573.8188
Fax: 865.573.8133
www.microbe.com

Quality Assurance

Microbial Insights' comprehensive Quality Assurance (QA) Program is the foundation of all laboratory analyses, ensuring that our clients receive high-quality analytical services that are timely, reliable, and meet their intended purpose in a cost effective manner. MI is committed to providing quality data that surpasses regulatory and industry standards, thus enabling the client to make well-informed decisions. MI maintains strict standard operating procedures and QA/QC measures throughout all of the analyses offered. The following Table details specific QA/QC procedures that are used for CENSUS.

QA/QC	Description
Date of Extraction	DNA and RNA extractions are performed the day the samples are received by MI to minimize the possibility of any changes to the microbial community prior to analysis.
Laboratory Method Blanks	An extraction blank (no sample added) is processed alongside each set of field samples from DNA extraction through CENSUS® analysis to ensure that cross contamination has not occurred. Although MI has never experienced this issue, the detection of the CENSUS® target (e.g. *Dehalococcoides*) in an extraction blank is direct evidence of cross contamination with a sample or contamination of a reagent and would invalidate the results. If this were to occur, MI would re-extract the sample. If not possible to re-extract, MI would contact the client immediately and notate it on the laboratory report.
Laboratory Control Samples (LCS)	A laboratory control sample (LCS) or positive control (target DNA) is included with each CENSUS® plate to confirm amplification and as a continuing calibration check.
Negative Controls	A negative control (no DNA) is included with each CENSUS plate to ensure that cross contamination has not occurred during amplification. As with the extraction blank, detection of CENSUS target (e.g. DHC) in a negative control is direct evidence of contamination and would invalidate the results. If this were to occur, MI would rerun the analysis.

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10515 Research Drive
Knoxville, TN 37932
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Fax: 865.573.8133
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10515 Research Drive
Knoxville, TN 37932
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Fax: 865.573.8133
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APPENDIX E: BORING LOGS

Woodard and Curran
40 Shattuck Rd
Andover MA 01810
Telephone: 9785578150
Fax: 9785577948

BORING NUMBER ESM-3

CLIENT Boston DND
PROJECT NAME Lewis Chemical
PROJECT NUMBER 229286
PROJECT LOCATION Hyde Park, Massachusetts
DATE STARTED 7/23/15 **COMPLETED** 7/23/15
GROUND ELEVATION (NAD83, ft) _____ **HOLE SIZE (in)** 2
DRILLING CONTRACTOR Technical Drilling Services
GROUND WATER LEVELS (ft):
DRILLING METHOD GeoProbe
AT TIME OF DRILLING ---
LOGGED BY JMP **CHECKED BY** KBS
Northing, Easting (NAD83, ft) ,
NOTES VOC samples taken from 9 to 11 feet (WC-ESM-3 (9-11)), 11 to 14 (WC-ESM-3 (11-14)) feet and 14 to 15 feet (WC-ESM-3 (14-15)).

DEPTH (ft)	RECOVERY (in/in)	U.S.C.S. Letter Symbol	GRAPHIC LOG	ft. BGS	MATERIAL DESCRIPTION	ft. AMSL	PID RESULT (ppmv)
0							
2	19/30	SW			Brown, dry, loose, fine to coarse SAND, little fine to medium gravel.		1.9
				3.6			
4	19/30	SW			Light grey, dry, loose, fine to coarse SAND and fine to coarse GRAVEL.		6.1
				5.5			
6	21/30	SP-SM			Grey, damp to moist, medium dense, fine SAND, little silt.		10.9
8							
	21/30						464.9
				9.4			
10		SP-SM			Black, wet, medium dense, fine SAND, little silt.		
	16/30						487.5
12				11.7			
		SW			Grey, wet, medium dense to dense, fine to coarse SAND, some fine gravel, trace silt.		
14	16/30			13.9			476
		SW		14.5	Dark tan, wet, medium dense, fine to coarse SAND, some gravel, trace silt.		

Refusal at 14.5 feet.
Bottom of borehole at 15.0 feet.

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NOTES
1. Material description depicted across entire sample interval based on noted recoveries.
2. Soil samples composited over 2.5 ft interval for headspace screening with a photoionization detector (PID) with a 10.6 eV, where applicable.
3. "<0.1" PID result "not-detected" by field instrument

Woodard and Curran
40 Shattuck Rd
Andover MA 01810
Telephone: 9785578150
Fax: 9785577948

BORING NUMBER ESM-5

CLIENT Boston DND
PROJECT NAME Lewis Chemical
PROJECT NUMBER 229286
PROJECT LOCATION Hyde Park, Massachusetts
DATE STARTED 7/23/15 **COMPLETED** 7/23/15
GROUND ELEVATION (NAD83, ft) _____ **HOLE SIZE (in)** 2
DRILLING CONTRACTOR Technical Drilling Services
GROUND WATER LEVELS (ft):
DRILLING METHOD GeoProbe
AT TIME OF DRILLING ---
LOGGED BY JMP **CHECKED BY** KBS
Northing, Easting (NAD83, ft) ,
NOTES VOC samples taken from 0 to 5 feet (ESM-5 (5-10)), 10 to 12.5 (ESM-5 (10-12.5)) feet and 12.5 to 15 feet (ESM-5 (12.5-15)).

DEPTH (ft)	RECOVERY (in/in)	U.S.C.S. Letter Symbol	GRAPHIC LOG	ft. BGS	MATERIAL DESCRIPTION	ft. AMSL	PID RESULT (ppmv)
0							
2	18/30	SW		2.7	Dark grey, dry, medium dense, fine SAND, little fine gravel, trace fill (glass, brick).		5.5
4	18/30	SP-SM		3.9	Dark grey, dry, medium dense, fine SAND, some silt, trace fine gravel.		40.3
6	21/30	SP-SM		5.6	Brown, moist, medium dense, fine SAND, little silt, trace organics.		525.6
8	21/30	SP-SM		7.7	Grey, moist, medium dense, fine SAND, little silt, odor observed.		96.7
10	14/30	SW		9.0	Brown, moist, medium dense, fine SAND, some silt, odor observed.		124.3
12	14/30	SW		12.1	Grey-brown, wet, medium dense, fine to coarse SAND, little fine gravel.		193.4
14	14/30	SW		16.0	Grey-brown, wet, medium dense, fine to coarse SAND.		148.5
16					Refusal at 16.0 feet. Bottom of borehole at 16.0 feet.		

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NOTES
1. Material description depicted across entire sample interval based on noted recoveries.
2. Soil samples composited over 2.5 ft interval for headspace screening with a photoionization detector (PID) with a 10.6 eV, where applicable.
3. "<0.1" PID result "not-detected" by field instrument

Woodard and Curran
40 Shattuck Rd
Andover MA 01810
Telephone: 9785578150
Fax: 9785577948

BORING NUMBER ESM-5 (Angled)

CLIENT Boston DND
PROJECT NAME Lewis Chemical
PROJECT NUMBER 229286
PROJECT LOCATION Hyde Park, Massachusetts
DATE STARTED 7/23/15 **COMPLETED** 7/23/15
GROUND ELEVATION (NAD83, ft) _____ **HOLE SIZE (in)** 2
DRILLING CONTRACTOR Technical Drilling Services
GROUND WATER LEVELS (ft):
DRILLING METHOD GeoProbe
AT TIME OF DRILLING ---
LOGGED BY JMP **CHECKED BY** KBS
Northing, Easting (NAD83, ft) ,
NOTES VOC samples taken from 10 to 12 feet (ESM-5 angled (10-12)).

DEPTH (ft)	RECOVERY (in/in)	U.S.C.S. Letter Symbol	GRAPHIC LOG	ft. BGS / ft. AMSL	MATERIAL DESCRIPTION	PID RESULT (ppmv)
0					See ESM-5.	
10				10.0		
12	30/84	SW			Dark grey, wet, loose, fine to coarse SAND, little fine to medium gravel.	
				12.6		
14		SW			Grey-black, wet, loose, fine to coarse SAND and fine to coarse GRAVEL.	35.3
				15.6		
16		SW			Tan-grey, wet, medium dense, fine to coarse SAND, some fine to coarse gravel.	
				17.0		

Bottom of borehole at 17.0 feet.

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NOTES
1. Material description depicted across entire sample interval based on noted recoveries.
2. Soil samples composited over 2.5 ft interval for headspace screening with a photoionization detector (PID) with a 10.6 eV, where applicable.
3. "<0.1" PID result "not-detected" by field instrument

Woodard and Curran
40 Shattuck Rd
Andover MA 01810
Telephone: 9785578150
Fax: 9785577948

BORING NUMBER ESM-7

CLIENT Boston DND
PROJECT NAME Lewis Chemical
PROJECT NUMBER 229286
PROJECT LOCATION Hyde Park, Massachusetts
DATE STARTED 7/23/15 **COMPLETED** 7/23/15
GROUND ELEVATION (NAD83, ft) _____ **HOLE SIZE (in)** 2
DRILLING CONTRACTOR Technical Drilling Services
GROUND WATER LEVELS (ft):
DRILLING METHOD GeoProbe
AT TIME OF DRILLING ---
LOGGED BY JMP **CHECKED BY** KBS
Northing, Easting (NAD83, ft) ,
NOTES VOC samples taken from 10 to 12.5 feet (ESM-7 (10-12.5)), 12.5 to 15 feet (ESM-7 (12.5-15)) and from 15 to 17.5 feet (ESM-7 (15-17.5)).

DEPTH (ft)	RECOVERY (in/in)	U.S.C.S. Letter Symbol	GRAPHIC LOG	ft. BGS	MATERIAL DESCRIPTION	ft. AMSL	PID RESULT (ppmv)
0							
	12/30	SP			Brown, dry, loose, fine to medium SAND, some leather pieces.		
				1.7			0.1
2					Brown layers of leather.		
4	12/30						0
6							
	12/30						0
				7.5			
8					White, black and orange brown, co-mingled, fine to coarse SAND, some ash and burnt wood.		
	12/30	SW					1
10				10.0			
		SP-SM			Brown, wet, medium dense, fine to medium SAND, little silt.		
	20/30			11.6			0.5
12					Grey, wet, medium dense, fine SAND, trace silt.		
		SP		13.5			
14	20/30				Olive grey, wet, medium dense, SILT, little fine sand.		0
		ML		15.3			
16					Grey, to dark grey, wet, loose, fine to coarse SAND, little fine gravel.		
	9/30						0
18		SW					
	9/30						0.1
20				20.0			

Bottom of borehole at 20.0 feet.

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NOTES
1. Material description depicted across entire sample interval based on noted recoveries.
2. Soil samples composited over 2.5 ft interval for headspace screening with a photoionization detector (PID) with a 10.6 eV, where applicable.
3. "<0.1" PID result "not-detected" by field instrument

Woodard and Curran
40 Shattuck Rd
Andover MA 01810
Telephone: 9785578150
Fax: 9785577948

BORING NUMBER ESMB-02

CLIENT Boston DND
PROJECT NAME Lewis Chemical
PROJECT NUMBER 229286
PROJECT LOCATION Hyde Park, Massachusetts
DATE STARTED 7/23/15 **COMPLETED** 7/23/15
GROUND ELEVATION (NAD83, ft) _____ **HOLE SIZE (in)** 2
DRILLING CONTRACTOR Technical Drilling Services
GROUND WATER LEVELS (ft):
DRILLING METHOD GeoProbe
AT TIME OF DRILLING ---
LOGGED BY JMP **CHECKED BY** KBS
Northing, Easting (NAD83, ft) ,
NOTES TCLP lead sample taken from 0 to 5 feet (ESMB-02 (0-5)).

DEPTH (ft)	RECOVERY (in/in)	U.S.C.S. Letter Symbol	GRAPHIC LOG	ft. BGS	MATERIAL DESCRIPTION	ft. AMSL	PID RESULT (ppmv)
0							
	26/60			1.0	Crushed concrete.		10.2
		SW		1.7	Brown, damp, loose, fine to coarse SAND, trace fine gravel, trace silt.		
2				1.9	Asphalt		
		SP-SM		3.1	Brown, damp, medium dense, fine to medium SAND, little silt, trace fine to coarse gravel.		
		SW		3.8	Dark grey, damp, medium dense, fine to medium SAND, little find to coarse gravel.		
4		SP		4.4	Orange-grey, damp, medium dense, fine to medium SAND, little fine to coarse gravel.		
				4.8	Light grey, crushed rock.		
		SW		5.0	Orange, grey, damp, medium dense, fine to coarse SAND.		

Bottom of borehole at 5.0 feet.

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NOTES
1. Material description depicted across entire sample interval based on noted recoveries.
2. Soil samples composited over 2.5 ft interval for headspace screening with a photoionization detector (PID) with a 10.6 eV, where applicable.
3. "<0.1" PID result "not-detected" by field instrument

Woodard and Curran
40 Shattuck Rd
Andover MA 01810
Telephone: 9785578150
Fax: 9785577948

BORING NUMBER GP-2

CLIENT Boston DND
PROJECT NAME Lewis Chemical
PROJECT NUMBER 229286
PROJECT LOCATION Hyde Park, Massachusetts
DATE STARTED 7/23/15 **COMPLETED** 7/23/15
GROUND ELEVATION (NAD83, ft) _____ **HOLE SIZE (in)** 2
DRILLING CONTRACTOR Technical Drilling Services
GROUND WATER LEVELS (ft):
DRILLING METHOD GeoProbe
AT TIME OF DRILLING ---
LOGGED BY JMP **CHECKED BY** KBS
Northing, Easting (NAD83, ft) ,
NOTES TCLP lead sample taken from 0 to 3 feet (WC-GP-2 (0-3)).

DEPTH (ft)	RECOVERY (in/in)	U.S.C.S. Letter Symbol	GRAPHIC LOG	ft. BGS	MATERIAL DESCRIPTION	ft. AMSL	PID RESULT (ppmv)
0							
	33/60	SW		0.6	Brown, dry, loose, fine to coarse SAND, trace fine gravel.		15.3
2		SW		3.9	Black, grey and red brick comingled, moist, loose, fine to coarse SAND, little fine gravel, little silt, lots of brick, ash, charred wood, leather/cloth.		
4		SW		5.0	Light grey and grey, dry, loose, fine to coarse SAND, little fine to medium gravel.		

Bottom of borehole at 5.0 feet.

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NOTES
1. Material description depicted across entire sample interval based on noted recoveries.
2. Soil samples composited over 2.5 ft interval for headspace screening with a photoionization detector (PID) with a 10.6 eV, where applicable.
3. "<0.1" PID result "not-detected" by field instrument

Woodard and Curran
40 Shattuck Rd
Andover MA 01810
Telephone: 9785578150
Fax: 9785577948

BORING NUMBER GP-5

CLIENT Boston DND
PROJECT NAME Lewis Chemical
PROJECT NUMBER 229286
PROJECT LOCATION Hyde Park, Massachusetts
DATE STARTED 7/23/15 **COMPLETED** 7/23/15
GROUND ELEVATION (NAD83, ft) _____ **HOLE SIZE (in)** 2
DRILLING CONTRACTOR Technical Drilling Services
GROUND WATER LEVELS (ft):
DRILLING METHOD GeoProbe
AT TIME OF DRILLING ---
LOGGED BY JMP **CHECKED BY** KBS
Northing, Easting (NAD83, ft) ,
NOTES TCPL lead sample taken from 6 to 8 feet (WC-GP-5 (6-8)).

DEPTH (ft)	RECOVERY (in/in)	U.S.C.S. Letter Symbol	GRAPHIC LOG	ft. BGS	MATERIAL DESCRIPTION	ft. AMSL	PID RESULT (ppmv)
0							
	24/60	SW		0.8	Black, dry, loose, fine to coarse SAND.		3.4
2		SW		3.3	Brown, dry, loose, fine to coarse SAND, brick, little fine to coarse gravel, trace silt.		
		SW		3.5	Light grey, dry, loose, fine to coarse SAND.		
4		SW		5.1	Dark brown and black, damp, loose, fine to coarse SAND, trace fine gravel, trace silt.		
	34/60	SW		5.9	Light grey, dry, loose, fine to corse SAND, some fine to coarse gravel.		
6		SW		7.1	Dark tan and brown, damp, loose, fine to coarse SAND, trace silt.		
		SW		8.2	Tan, damp, loose, fine to coarse SAND, little fine gravel, little silt.		6.1
8		SW		9.1	Light gray, damp, loose, fine to coarse SAND, little fine gravel.		
		ML		10.0	Grey, moist-wet, medium dense, SILT, little fine sand.		
10					Bottom of borehole at 10.0 feet.		

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NOTES
1. Material description depicted across entire sample interval based on noted recoveries.
2. Soil samples composited over 2.5 ft interval for headspace screening with a photoionization detector (PID) with a 10.6 eV, where applicable.
3. "<0.1" PID result "not-detected" by field instrument

Woodard and Curran
40 Shattuck Rd
Andover MA 01810
Telephone: 9785578150
Fax: 9785577948

BORING NUMBER GP-7

CLIENT Boston DND
PROJECT NAME Lewis Chemical
PROJECT NUMBER 229286
PROJECT LOCATION Hyde Park, Massachusetts
DATE STARTED 7/23/15 **COMPLETED** 7/23/15
GROUND ELEVATION (NAD83, ft) _____ **HOLE SIZE (in)** 2
DRILLING CONTRACTOR Technical Drilling Services
GROUND WATER LEVELS (ft):
DRILLING METHOD GeoProbe
AT TIME OF DRILLING ---
LOGGED BY JMP **CHECKED BY** KBS
Northing, Easting (NAD83, ft) ,
NOTES TCLP lead sample taken from 7 to 10 feet (WC-GP-7 (7-10)).

DEPTH (ft)	RECOVERY (in/in)	U.S.C.S. Letter Symbol	GRAPHIC LOG	ft. BGS	MATERIAL DESCRIPTION	ft. AMSL	PID RESULT (ppmv)
0							
	28/60	SW			Black, dry, loose, fine to coarse SAND, little fine gravel, little asphalt.		
2				2.1			
		SW			Dark tan, dry, loose, fine to course SAND, little fine gravel, trace silt.		0.2
				3.4			
		SW		3.8	Light grey, dry, loose, fine to coarse SAND, some fine gravel.		
4					Brown, dry, loose, fine to coarse SAND, little fine to medium gravel.		
		SW					
6							
				6.9			
	34/60	SW			Dark brown, damp, loose, fine to coarse SAND, little fine gravel, trace silt.		0.7
8				8.5			
		SP		8.8	Brown and light grey, fine to medium SAND, some brick and charred wood.		
		SP-SM		9.4	Brown, moist, loose, fine to medium SAND, trace fine gravel.		
10		SW		10.0	Brown, moist, loose, fine to coarse SAND, trace fine gravel.		

Bottom of borehole at 10.0 feet.

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NOTES
1. Material description depicted across entire sample interval based on noted recoveries.
2. Soil samples composited over 2.5 ft interval for headspace screening with a photoionization detector (PID) with a 10.6 eV, where applicable.
3. "<0.1" PID result "not-detected" by field instrument

Woodard and Curran
40 Shattuck Rd
Andover MA 01810
Telephone: 9785578150
Fax: 9785577948

BORING NUMBER I-AO3

CLIENT Boston DND
PROJECT NAME Lewis Chemical
PROJECT NUMBER 229286
PROJECT LOCATION Hyde Park, Massachusetts
DATE STARTED 7/23/15 **COMPLETED** 7/23/15
GROUND ELEVATION (NAD83, ft) _____ **HOLE SIZE (in)** 2
DRILLING CONTRACTOR Technical Drilling Services
GROUND WATER LEVELS (ft):
DRILLING METHOD GeoProbe
AT TIME OF DRILLING ---
LOGGED BY JMP **CHECKED BY** KBS
Northing, Easting (NAD83, ft) ,
NOTES TCLP lead sample taken from 0 to 0.5 feet (WC-I-AO3 (0-0.5)).

DEPTH (ft)	U.S.C.S. Letter Symbol	GRAPHIC LOG	MATERIAL DESCRIPTION	PID RESULT (ppmv)
0			ft. BGS / ft. AMSL	
2	SW		Black and grey, dry, loose, fine to coarse SAND, trace fine gravel.	0.2
4			4.2	
			5.0	

Bottom of borehole at 5.0 feet.

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NOTES
1. Material description depicted across entire sample interval based on noted recoveries.
2. Soil samples composited over 2.5 ft interval for headspace screening with a photoionization detector (PID) with a 10.6 eV, where applicable.
3. "<0.1" PID result "not-detected" by field instrument

Woodard and Curran
40 Shattuck Rd
Andover MA 01810
Telephone: 9785578150
Fax: 9785577948

BORING NUMBER II-A01

CLIENT Boston DND
PROJECT NAME Lewis Chemical
PROJECT NUMBER 229286
PROJECT LOCATION Hyde Park, Massachusetts
DATE STARTED 7/23/15 **COMPLETED** 7/23/15
GROUND ELEVATION (NAD83, ft) **HOLE SIZE (in)** 2
DRILLING CONTRACTOR Technical Drilling Services
GROUND WATER LEVELS (ft):
DRILLING METHOD GeoProbe
AT TIME OF DRILLING ---
LOGGED BY JMP **CHECKED BY** KBS
Northing, Easting (NAD83, ft) ,
NOTES TCLP lead sample taken from 0 to 0.5 feet (WC-II-AO1 (0-0.5)).

DEPTH (ft)	RECOVERY (in/in)	U.S.C.S. Letter Symbol	GRAPHIC LOG	ft. BGS	MATERIAL DESCRIPTION	ft. AMSL	PID RESULT (ppmv)
0							
	13/24	SP		0.6	Brown, dry, loose, fine to medium SAND.		2.8
		SW		0.9	Light grey, dry, loose, fine to coarse SAND, little fine gravel.		
		SP		1.5	Brown, dry, loose, fine to medium SAND, some fine gravel.		
2		SW		2.0	Light brown, dry, loose, fine to coarse SAND, some gravel.		

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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NOTES
1. Material description depicted across entire sample interval based on noted recoveries.
2. Soil samples composited over 2.5 ft interval for headspace screening with a photoionization detector (PID) with a 10.6 eV, where applicable.
3. "<0.1" PID result "not-detected" by field instrument

Woodard and Curran
40 Shattuck Rd
Andover MA 01810
Telephone: 9785578150
Fax: 9785577948

BORING NUMBER II-AO7

CLIENT Boston DND
PROJECT NAME Lewis Chemical
PROJECT NUMBER 229286
PROJECT LOCATION Hyde Park, Massachusetts
DATE STARTED 7/23/15 **COMPLETED** 7/23/15
GROUND ELEVATION (NAD83, ft) _____ **HOLE SIZE (in)** 2
DRILLING CONTRACTOR Technical Drilling Services
GROUND WATER LEVELS (ft):
DRILLING METHOD GeoProbe
AT TIME OF DRILLING ---
LOGGED BY JMP **CHECKED BY** KBS
Northing, Easting (NAD83, ft) ,
NOTES TCLP lead sample taken from 0 to 0.5 feet (WC-II-AO7 (0-0.5).

DEPTH (ft)	RECOVERY (in/in)	U.S.C.S. Letter Symbol	GRAPHIC LOG	ft. BGS	MATERIAL DESCRIPTION	ft. AMSL	PID RESULT (ppmv)
0							
	27/60	SW		1.1	Black, dry, loose, fine to coarse SAND, little fine gravel.		0.3
		SW		1.7	Light grey, dry, loose, fine to coarse SAND, little gravel.		
2		SW		2.8	Brown, dry, loose, fine to coarse SAND, trace fine gravel.		
		SW		3.3	Brown and dark brown, dry, loose, fine to coarse SAND, little fine to medium gravel.		
4		SW		5.0	Rusty brown and brown, dry, loose, fine to coarse SAND, little fine to medium gravel.		

Bottom of borehole at 5.0 feet.

ANDOVER_STANDARD - GINT STD US.GDT - 10/14/15 17:51 - C:\USERS\JPERRY\DESKTOP\2015.07.23 BORING LOGS.GPJ

NOTES
1. Material description depicted across entire sample interval based on noted recoveries.
2. Soil samples composited over 2.5 ft interval for headspace screening with a photoionization detector (PID) with a 10.6 eV, where applicable.
3. "<0.1" PID result "not-detected" by field instrument

Woodard and Curran
40 Shattuck Rd
Andover MA 01810
Telephone: 9785578150
Fax: 9785577948

TEST PIT NUMBER TP-3

CLIENT Boston DND
PROJECT NAME Lewis Chemical
PROJECT NUMBER 229286
PROJECT LOCATION Hyde Park, Massachusetts
DATE STARTED 7/23/15 **COMPLETED** 7/23/15
GROUND ELEVATION (NAD83, ft) _____ **TEST PIT SIZE (in)** 2
EXCAVATION CONTRACTOR Technical Drilling Services
GROUND WATER LEVELS (ft):
EXCAVATION METHOD GeoProbe
AT TIME OF EXCAVATION ---
LOGGED BY JMP **CHECKED BY** KBS
Northing, Easting (NAD83, ft) ,
NOTES TCLP lead sample taken from 5.5 feet (WC-3 (5.5)).

DEPTH (ft)	RECOVERY (in/in)	U.S.C.S. Letter Symbol	GRAPHIC LOG	ft. BGS	MATERIAL DESCRIPTION	ft. AMSL	PID RESULT (ppmv)
0							
		SP		0.8	Light brown, dry, loose, fine to medium SAND, trace organics.		
		SP		1.6	Red, dry, loose, fine SAND and organics.		
2	26/60			3.5	Layers of red-brown leather.		0.9
4		SP		6.7	Black and light grey, dry, loose, fine to medium SAND, trace organics, trace fine gravel.		
6							
8	16/60	SW		10.0	Light grey to black, damp to wet, fine to coarse SAND, little fine to coarse gravel, trace ash.		2.1
10							

Bottom of test pit at 10.0 feet.

ANDOVER_STANDARD - GINT STD US.GDT - 10/14/15 17:51 - C:\USERS\JPERRY\DESKTOP\2015.07.23 BORING LOGS.GPJ

NOTES
1. Material description depicted across entire sample interval based on noted recoveries.
2. Soil samples composited over 2.5 ft interval for headspace screening with a photoionization detector (PID) with a 10.6 eV, where applicable.
3. "<0.1" PID result "not-detected" by field instrument

APPENDIX F: LABORATORY ANALYTICAL RESULTS – SOIL SAMPLING

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Jarrod Yoder
Woodard & Curran
40 Shattuck Road
Suite 110
Andover, MA 01810

PO Number: None
Job ID: 33756
Date Received: 7/24/15

Project: Lewis Chemical

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

JSylvester (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 8/10/2015
Total number of pages: 14

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Lewis Chemical
Lab ID: 33756

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
WC-GP-7 (7-10)	TCLP	7/23/2015 7:55	33756-001	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-GP-5 (6-8)	TCLP	7/23/2015 8:20	33756-002	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-II-A07 (0-0.5)	TCLP	7/23/2015 8:30	33756-003	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-II-A01 (0-0.5)	TCLP	7/23/2015 8:45	33756-004	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-GP-2 (0-3)	Solid	7/23/2015 9:05	33756-005	
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
WC-TP-3 (5.5)	TCLP	7/23/2015 9:35	33756-006	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-ESMB-2 (0-5)	TCLP	7/23/2015 9:50	33756-007	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-I-A03 (0-0.5)	TCLP	7/23/2015 10:15	33756-008	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-GP-7 (7-10)	Solid	7/23/2015 7:55	33756-009	
				Solid Digestion for ICP Analysis
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
WC-GP-5 (6-8)	Solid	7/23/2015 8:20	33756-010	
				Solid Digestion for ICP Analysis
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
WC-II-A07 (0-0.5)	Solid	7/23/2015 8:30	33756-011	
				Solid Digestion for ICP Analysis
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
WC-II-A01 (0-0.5)	Solid	7/23/2015 8:45	33756-012	
				Solid Digestion for ICP Analysis
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
WC-TP-3 (5.5)	Solid	7/23/2015 9:35	33756-013	

Absolute Resource associates

Project ID: Lewis Chemical
Lab ID: 33756

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
WC-TP-3 (5.5)	Solid	7/23/2015 9:35	33756-013	Solid Digestion for ICP Analysis Lead in solids by 6010 Percent Dry Matter for Sample Calc by SM2540B,G

Project ID: Lewis Chemical
Job ID: 33756
Sample#: 33756-005
Sample ID: WC-GP-2 (0-3)
Matrix: Solid Percent Dry: 90.7% Results expressed on a dry weight basis.
Sampled: 7/23/15 9:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**0.63**	0.44	ug/g	1	AJD		1502098	8/6/15		SW3060A7196A

Project ID: Lewis Chemical
Job ID: 33756

Sample#: 33756-009
Sample ID: WC-GP-7 (7-10)
Matrix: Solid Percent Dry: 85.5% Results expressed on a dry weight basis.
Sampled: 7/23/15 7:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**1300**	1.1	ug/g	1	AC	7/30/15	8055	7/30/15	19:52	SW3051A6010C

Sample#: 33756-010
Sample ID: WC-GP-5 (6-8)
Matrix: Solid Percent Dry: 93.4% Results expressed on a dry weight basis.
Sampled: 7/23/15 8:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**130**	1.0	ug/g	1	AC	7/30/15	8055	7/30/15	19:59	SW3051A6010C

Sample#: 33756-011
Sample ID: WC-II-A07 (0-0.5)
Matrix: Solid Percent Dry: 94.2% Results expressed on a dry weight basis.
Sampled: 7/23/15 8:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**400**	1.0	ug/g	1	AC	7/30/15	8055	7/30/15	20:06	SW3051A6010C

Sample#: 33756-012
Sample ID: WC-II-A01 (0-0.5)
Matrix: Solid Percent Dry: 95% Results expressed on a dry weight basis.
Sampled: 7/23/15 8:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**330**	1.0	ug/g	1	AC	7/30/15	8055	7/30/15	20:13	SW3051A6010C

Sample#: 33756-013
Sample ID: WC-TP-3 (5.5)
Matrix: Solid Percent Dry: 90.4% Results expressed on a dry weight basis.
Sampled: 7/23/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**310**	1.1	ug/g	1	AC	7/30/15	8055	7/30/15	20:42	SW3051A6010C

Project ID: Lewis Chemical
Job ID: 33756
Sample #: 33756-001
Sample ID: WC-GP-7 (7-10)
Matrix: TCLP Extract
Sampled: 7/23/15 7:55
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**5.8**	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	15:37	SW1311 SW3005A6010C

Sample #: 33756-002
Sample ID: WC-GP-5 (6-8)
Matrix: TCLP Extract
Sampled: 7/23/15 8:20
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	< 0.080	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	16:05	SW1311 SW3005A6010C

Sample #: 33756-003
Sample ID: WC-II-A07 (0-0.5)
Matrix: TCLP Extract
Sampled: 7/23/15 8:30
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**0.28**	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	16:12	SW1311 SW3005A6010C

Sample #: 33756-004
Sample ID: WC-II-A01 (0-0.5)
Matrix: TCLP Extract
Sampled: 7/23/15 8:45
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	< 0.080	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	16:19	SW1311 SW3005A6010C

Sample #: 33756-006
Sample ID: WC-TP-3 (5.5)
Matrix: TCLP Extract
Sampled: 7/23/15 9:35
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	< 0.080	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	16:26	SW1311 SW3005A6010C

Sample #: 33756-007
Sample ID: WC-ESMB-2 (0-5)
Matrix: TCLP Extract
Sampled: 7/23/15 9:50
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**2.4**	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	16:33	SW1311 SW3005A6010C

Project ID: Lewis Chemical
Job ID: 33756
Sample #: 33756-008
Sample ID: WC-I-A03 (0-0.5)
Matrix: TCLP Extract
Sampled: 7/23/15 10:15
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**0.34**	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	16:41	SW1311 SW3005A6010C

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #:

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **33756**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☑	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

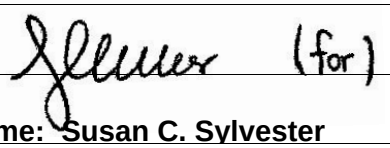
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☑ No*☐

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☑ No*☐
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:  **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 8/10/15**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 33756

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at -1 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW3005A6010C	BLK8072	Lead		<	0.01	mg/L							
SW3005A6010C	DUP8072	Lead	33839-001	<	0.01	mg/L						170	20
SW3005A6010C	LCS8072	Lead			27	ug/g	25	110		80	120		
SW3005A6010C	LCSD8072	Lead			0.54	mg/L	0.5	108		80	120		20
SW3005A6010C	MS8072	Lead	33839-001		0.52	mg/L	0.5	103		70	130		
SW3051A6010C	BLK8055	Lead		<	0.50	ug/g							
SW3051A6010C	CRM8055	Lead			5600	ug/g	5100			3750	6470		
SW3051A6010C	CRMD8055	Lead			5500	ug/g	5100			3750	6470	1	35
SW3051A6010C	DUP8055	Lead	33777-007		390	ug/g						1	35
SW3051A6010C	MS8055	Lead	33777-007		470	ug/g	58.4	129	*	75	125		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3060A7196A	CRM1502098	Chromium, Hexavalent			57	ug/g	93		26.2	288		
SW3060A7196A	CRMD1502098	Chromium, Hexavalent			62	ug/g	93		26.2	288	10	30
SW3060A7196A	PB1502098	Chromium, Hexavalent		<	0.40	ug/g						

SDG#1

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33756

Company Name: Woodard + Curran
Company Address: 40 Shattuck Rd #110, Andover, MA
Report To: Jarod Yoder
Phone #: 978-557-8150
Invoice to Email: JYoder@woodardcurran.com
☐ Hard Copy Invoice Required

Project Name: Lewis Chemical
Project #:
Project Location: NH (MA) ME VT NY Other
Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER
Reporting Limits: QAPP GW-1 S-1 EPA DW Other
Quote # ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP
☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT
☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane
☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:
☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint
☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB
☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB
☐ O&G 1664 ☐ Mineral O&G SM5520F
☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity
☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity
☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness
☐ Total Metals-list:
☐ Dissolved Metals-list:
☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TOC
☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN
☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P
☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride
☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitability/FP
☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide
Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde
TCLP Lead
Cr^{6+}
Grab (G) or Composite (C)

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	TCLP Lead	Cr^{6+}	Grab (G) or Composite (C)
33756-01	WC-GP-7 (7-10)	1		X							7-23-15	7:55	KS	X		
-02	WC-GP-5 (6-8)	1		X							7-23-15	08:20	KS	X		
-03	WC-II-A07 (0-0.5)	1		X							7-23-15	0830	KS	X		
-04	WC-II-A01 (0-0.5)	1		X							7-23-15	0845	KS	X		
-05	WC-GP-2 (0-3)	1		X							7-23-15	0905	KS	X		
-06	WC-GP-3 (5.5)	1		X							7-23-15	0935	KS		X	
-07	WC-ESMB-2 (0-5)	1		X							7-23-15	0950	KS	X		
-08	WC-I-A03 (0-0.5)	1		X							7-23-15	1015	KS	X		

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☐
*Date Needed _____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS
WSC GIS Key EDD

REPORTING INSTRUCTIONS ☒PDF (e-mail address) JYoder@woodardcurran.com; KSteven@ ☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☑ YES ☐ NO
TEMPERATURE -1 °C

CUSTODY RECORD
QSD-01 Revision 01/09/15

		Date	Time
Relinquished by Sampler:	Ken B. Lane	7-24-15	11:00
Relinquished by:		7/24/15	1325
Relinquished by:			
Received by:		7/24/15	1100
Received by:			
Received by Laboratory:		7/24/15	13:35

14

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Jarred Yoder
Woodard & Curran
40 Shattuck Road
Suite 110
Andover, MA 01810

PO Number: None
Job ID: 33758
Date Received: 7/24/15

Project: Lewis Chemical 229286.01

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

JSylvester (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 8/6/2015
Total number of pages: 11

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Lewis Chemical 229286.01

Lab ID: 33758

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
WC-GP-2 (0-3)	Solid	7/23/2015 9:05	33758-001	
				Percent Dry Matter for Sample Calc by SM2540B,G
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
WC-GP-2 (0-3)	TCLP	7/23/2015 9:05	33758-002	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Chromium in water by 6010

Project ID: Lewis Chemical 229286.01
Job ID: 33758
Sample#: 33758-001
Sample ID: WC-GP-2 (0-3)
Matrix: Solid
Sampled: 7/23/15 9:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Oxidation Reduction Potential	**370**		mV	1	APA		1501989	7/29/15	4:45	ASTM1498-08
pH	**5.9**		pH	1	APA		1501962	7/28/15	4:25	SW9045C

Project ID: 229286.01 Lewis Chemical
Job ID: 33758
Sample #: 33758-002
Sample ID: WC-GP-2 (0-3)
Matrix: TCLP Extract
Sampled: 7/23/15 9:05
TCLP: 7/29/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium	< 0.50	0.50	5	mg/L	1	AC	7/30/15	8054	7/30/15	17:01	SW1311 SW3005A6010C

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 229286.01

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **33758**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☑ No*☐

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☑ No*☐
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: SCSylvester (for) **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 8/6/15**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 33758

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 1 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3005A6010C	BLK8054	Chromium		<	0.05	mg/L						
SW3005A6010C	LCS8054	Chromium			0.53	mg/L	0.5	105	80	120		
SW3005A6010C	LCSD8054	Chromium			0.54	mg/L	0.5	108	80	120	2	20
SW3005A6010C	MS8054	Chromium	33758-002		0.52	mg/L	0.5	102	75	125		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW9045C	DUP1501962	pH	33758-001	5.9	pH					

SDG #3

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33758

Company Name: Woodard + Curran

Company Address: 40 Shattuck Rd #110, Andover, MA

Report To: Jarrod Yoder

Phone #: 978-557-8150

Invoice to Email: JYoder@woodardcurran.com

☐ Hard Copy Invoice Required

Project Name: Lewis Chemical

Project #: 229286.01

Project Location: NH (MA) ME VT NY Other

Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER

Reporting Limits: QAPP GW-1 S-1 EPA DW Other

Quote # ☐ NH Reimbursement Pricing

PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	Sampling: SAMPLER
33758-01	WC-GP-2 (0-3)	3		X							7/23/15	0905	KS

☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT ☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane ☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List: ☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint ☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB ☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB ☐ O&G 1664 ☐ Mineral O&G SM5520F ☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness ☐ Total Metals-list: ☐ Dissolved Metals-list: ☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN ☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride ☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP ☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde

| | | | | | | |

APPENDIX G: LABORATORY ANALYTICAL RESULTS – ISCO TREATABILITY

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-84571-1
Client Project/Site: Boston DND Lewis Chemical

For:
Woodard & Curran, Inc.
40 Shattuck Road
Suite 110
Andover, Massachusetts 01810

Attn: Mr. Jarrod Yoder

Authorized for release by:
8/6/2015 12:10:12 PM

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Job ID: 480-84571-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-84571-1

Receipt
The samples were received on 7/25/2015 2:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

Receipt Exceptions

The following sample was canceled by the client on 7/27/15: WC-ESM-5 ANGLED (10-12) (480-84571-4).

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method SM 5210B: The glucose-glutamic acid standard (LCS) recovered outside the recovery limits specified in the method in batch 480-256502 for Biochemical Oxygen Demand .

Method 9060A: The relative standard deviation for the following samples WC-ESM-5 (10-12.5) (480-84571-2), WC-ESM-5 (12.5-15) (480-84571-3), WC-ESM-3 (11-14) (480-84571-9) and WC-ESM-3 (14-15) (480-84571-10) was outside the method required control limit: WC-ESM-5 (10-12.5) (480-84571-2), WC-ESM-5 (12.5-15) (480-84571-3), WC-ESM-3 (11-14) (480-84571-9) and WC-ESM-3 (14-15) (480-84571-10). Sample matrix interference is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-84571-1**

Project Location: **Boston DND Lewis Chemical** RTN:

This form provides certifications for the data set for the following Laboratory Sample ID Number(s):

480-84571-1[1-10]

Matrices: ☐ Groundwater/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☒	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☒	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	☒ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☒ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☒ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☒ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

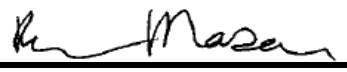
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☒ Yes ☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350**

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☒ Yes ☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☒ Yes ☐ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature:  Position: Project Manager

Printed Name: Becky Mason Date: 8/6/15 10:34

This form has been electronically signed and approved

Detection Summary

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Client Sample ID: WC-ESM-5 (5-10) — Lab Sample ID: 480-84571-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.942	J	1.32	0.529	mg/Kg	1	☼	6010	Total/NA
Barium	24.0		0.662	0.146	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.238	J	0.265	0.0371	mg/Kg	1	☼	6010	Total/NA
Cadmium	16.5		0.265	0.0397	mg/Kg	1	☼	6010	Total/NA
Chromium	7.10		0.662	0.265	mg/Kg	1	☼	6010	Total/NA
Nickel	7.47		1.32	0.304	mg/Kg	1	☼	6010	Total/NA
Vanadium	11.6		0.662	0.146	mg/Kg	1	☼	6010	Total/NA
Zinc	278		3.31	0.847	mg/Kg	1	☼	6010	Total/NA
Lead	4.21		0.662	0.318	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0320	J	0.125	0.0102	mg/Kg	1	☼	7471A	Total/NA
Chemical Oxygen Demand	228		200	200	mg/Kg	1		410.4	ASTM Leach
Total Organic Carbon - Quad	108		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	105		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	108		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	109		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	110		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
Biochemical Oxygen Demand	56.4	*	40.0	20.0	mg/Kg	1		SM 5210B	ASTM Leach

Client Sample ID: WC-ESM-5 (10-12.5) — Lab Sample ID: 480-84571-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	31.9		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	26.9		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	37.0		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	25.6		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	38.2		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
Biochemical Oxygen Demand	38.2	J *	40.0	20.0	mg/Kg	1		SM 5210B	ASTM Leach

Client Sample ID: WC-ESM-5 (12.5-15) — Lab Sample ID: 480-84571-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	41.8		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	33.7		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	49.5		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	35.7		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	48.3		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
Biochemical Oxygen Demand	41.8	*	40.0	20.0	mg/Kg	1		SM 5210B	ASTM Leach

Client Sample ID: WC-ESM-7 (10-12.5) — Lab Sample ID: 480-84571-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chemical Oxygen Demand	825		200	200	mg/Kg	1		410.4	ASTM Leach
Total Organic Carbon - Quad	162		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	142		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	183		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	144		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	180		20.0	7.20	mg/Kg	1		9060A	ASTM Leach

Client Sample ID: WC-ESM-7 (12.5-15) — Lab Sample ID: 480-84571-6

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample ID: WC-ESM-7 (12.5-15) (Continued) — Lab Sample ID: 480-84571-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.82		1.30	0.520	mg/Kg	1	☼	6010	Total/NA
Barium	18.2		0.650	0.143	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.321		0.260	0.0364	mg/Kg	1	☼	6010	Total/NA
Chromium	13.6		0.650	0.260	mg/Kg	1	☼	6010	Total/NA
Nickel	4.03		1.30	0.299	mg/Kg	1	☼	6010	Total/NA
Vanadium	26.3		0.650	0.143	mg/Kg	1	☼	6010	Total/NA
Zinc	17.5		3.25	0.832	mg/Kg	1	☼	6010	Total/NA
Lead	3.84		0.650	0.312	mg/Kg	1	☼	6010	Total/NA
Selenium	0.732		0.650	0.520	mg/Kg	1	☼	6010	Total/NA
Antimony	0.744	B	0.650	0.520	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0146	J	0.137	0.0111	mg/Kg	1	☼	7471A	Total/NA
Chemical Oxygen Demand	287		200	200	mg/Kg	1		410.4	ASTM Leach
Total Organic Carbon - Quad	60.6		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	53.9		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	67.5		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	53.5		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	67.3		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
Biochemical Oxygen Demand	34.2	J *	40.0	20.0	mg/Kg	1		SM 5210B	ASTM Leach

Client Sample ID: WC-ESM-7 (15-17.5) — Lab Sample ID: 480-84571-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	329		140	50.4	mg/Kg	7		9060A	ASTM Leach
TOC Result 1	278		140	50.4	mg/Kg	7		9060A	ASTM Leach
TOC Result 2	381		140	50.4	mg/Kg	7		9060A	ASTM Leach
TOC Result 3	287		140	50.4	mg/Kg	7		9060A	ASTM Leach
TOC Result 4	369		140	50.4	mg/Kg	7		9060A	ASTM Leach

Client Sample ID: WC-ESM-3 (9-11) — Lab Sample ID: 480-84571-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chemical Oxygen Demand	533		200	200	mg/Kg	1		410.4	ASTM Leach
Total Organic Carbon - Quad	106		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	89.0		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	120		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	89.5		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	123		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
Biochemical Oxygen Demand	268	*	40.0	20.0	mg/Kg	1		SM 5210B	ASTM Leach

Client Sample ID: WC-ESM-3 (11-14) — Lab Sample ID: 480-84571-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chemical Oxygen Demand	209		200	200	mg/Kg	1		410.4	ASTM Leach
Total Organic Carbon - Quad	31.6		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	26.1		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	36.7		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	26.5		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	37.1		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
Biochemical Oxygen Demand	70.0	*	40.0	20.0	mg/Kg	1		SM 5210B	ASTM Leach

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Client Sample ID: WC-ESM-3 (14-15)

Lab Sample ID: 480-84571-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	31.4		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	26.2		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	36.2		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	26.0		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	37.1		20.0	7.20	mg/Kg	1		9060A	ASTM Leach

This Detection Summary does not include radiochemical test results.

Client Sample ID: WC-ESM-5 (5-10)

Lab Sample ID: 480-84571-1
Date Collected: 07/23/15 11:24
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	228		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	108		20.0	7.20	mg/Kg			08/01/15 20:34	1
TOC Result 1	105		20.0	7.20	mg/Kg			08/01/15 20:34	1
TOC Result 2	108		20.0	7.20	mg/Kg			08/01/15 20:34	1
TOC Result 3	109		20.0	7.20	mg/Kg			08/01/15 20:34	1
TOC Result 4	110		20.0	7.20	mg/Kg			08/01/15 20:34	1
Biochemical Oxygen Demand	56.4	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-5 (5-10)

Lab Sample ID: 480-84571-1
Date Collected: 07/23/15 11:24
Matrix: Solid
Date Received: 07/25/15 02:30
Percent Solids: 79.2

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.662		0.662	0.265	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Arsenic	0.942	J	1.32	0.529	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Barium	24.0		0.662	0.146	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Beryllium	0.238	J	0.265	0.0371	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Cadmium	16.5		0.265	0.0397	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Chromium	7.10		0.662	0.265	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Nickel	7.47		1.32	0.304	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Thallium	<1.32		1.32	0.397	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Vanadium	11.6		0.662	0.146	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Zinc	278		3.31	0.847	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Lead	4.21		0.662	0.318	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Selenium	<0.662		0.662	0.529	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Antimony	<0.662		0.662	0.529	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0320	J	0.125	0.0102	mg/Kg	☼	07/28/15 15:10	07/28/15 19:28	1

Client Sample ID: WC-ESM-5 (10-12.5)

Lab Sample ID: 480-84571-2
Date Collected: 07/23/15 11:29
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<200		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	31.9		20.0	7.20	mg/Kg			08/01/15 22:54	1
TOC Result 1	26.9		20.0	7.20	mg/Kg			08/01/15 22:54	1
TOC Result 2	37.0		20.0	7.20	mg/Kg			08/01/15 22:54	1
TOC Result 3	25.6		20.0	7.20	mg/Kg			08/01/15 22:54	1
TOC Result 4	38.2		20.0	7.20	mg/Kg			08/01/15 22:54	1
Biochemical Oxygen Demand	38.2	J *	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-5 (12.5-15)

Lab Sample ID: 480-84571-3
Date Collected: 07/23/15 11:30
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<200		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	**41.8**		20.0	7.19	mg/Kg			08/01/15 23:23	1
TOC Result 1	**33.7**		20.0	7.19	mg/Kg			08/01/15 23:23	1
TOC Result 2	**49.5**		20.0	7.19	mg/Kg			08/01/15 23:23	1
TOC Result 3	**35.7**		20.0	7.19	mg/Kg			08/01/15 23:23	1
TOC Result 4	**48.3**		20.0	7.19	mg/Kg			08/01/15 23:23	1
Biochemical Oxygen Demand	**41.8**	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-7 (10-12.5)

Lab Sample ID: 480-84571-5
Date Collected: 07/23/15 14:10
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**825**		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	**162**		20.0	7.20	mg/Kg			08/01/15 23:52	1
TOC Result 1	**142**		20.0	7.20	mg/Kg			08/01/15 23:52	1
TOC Result 2	**183**		20.0	7.20	mg/Kg			08/01/15 23:52	1
TOC Result 3	**144**		20.0	7.20	mg/Kg			08/01/15 23:52	1
TOC Result 4	**180**		20.0	7.20	mg/Kg			08/01/15 23:52	1
Biochemical Oxygen Demand	<40.0	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-7 (12.5-15)

Lab Sample ID: 480-84571-6
Date Collected: 07/23/15 14:11
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**287**		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	**60.6**		20.0	7.19	mg/Kg			08/02/15 00:21	1
TOC Result 1	**53.9**		20.0	7.19	mg/Kg			08/02/15 00:21	1
TOC Result 2	**67.5**		20.0	7.19	mg/Kg			08/02/15 00:21	1
TOC Result 3	**53.5**		20.0	7.19	mg/Kg			08/02/15 00:21	1
TOC Result 4	**67.3**		20.0	7.19	mg/Kg			08/02/15 00:21	1
Biochemical Oxygen Demand	**34.2**	J *	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-7 (12.5-15)

Lab Sample ID: 480-84571-6
Date Collected: 07/23/15 14:11
Matrix: Solid
Date Received: 07/25/15 02:30
Percent Solids: 74.8

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.650		0.650	0.260	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Arsenic	**1.82**		1.30	0.520	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Barium	**18.2**		0.650	0.143	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Beryllium	**0.321**		0.260	0.0364	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Cadmium	<0.260		0.260	0.0390	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Chromium	**13.6**		0.650	0.260	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Nickel	**4.03**		1.30	0.299	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Thallium	<1.30		1.30	0.390	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1

Client Sample ID: WC-ESM-7 (12.5-15)

Lab Sample ID: 480-84571-6
Date Collected: 07/23/15 14:11
Matrix: Solid
Date Received: 07/25/15 02:30
Percent Solids: 74.8

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	26.3		0.650	0.143	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Zinc	17.5		3.25	0.832	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Lead	3.84		0.650	0.312	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Selenium	0.732		0.650	0.520	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Antimony	0.744	B	0.650	0.520	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0146	J	0.137	0.0111	mg/Kg	☼	07/28/15 15:10	07/28/15 19:29	1

Client Sample ID: WC-ESM-7 (15-17.5)

Lab Sample ID: 480-84571-7
Date Collected: 07/23/15 14:30
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<200	F1	200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	329		140	50.4	mg/Kg			08/02/15 05:37	7
TOC Result 1	278		140	50.4	mg/Kg			08/02/15 05:37	7
TOC Result 2	381		140	50.4	mg/Kg			08/02/15 05:37	7
TOC Result 3	287		140	50.4	mg/Kg			08/02/15 05:37	7
TOC Result 4	369		140	50.4	mg/Kg			08/02/15 05:37	7
Biochemical Oxygen Demand	<40.0	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-3 (9-11)

Lab Sample ID: 480-84571-8
Date Collected: 07/23/15 15:20
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	533		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	106		20.0	7.20	mg/Kg			08/02/15 06:06	1
TOC Result 1	89.0		20.0	7.20	mg/Kg			08/02/15 06:06	1
TOC Result 2	120		20.0	7.20	mg/Kg			08/02/15 06:06	1
TOC Result 3	89.5		20.0	7.20	mg/Kg			08/02/15 06:06	1
TOC Result 4	123		20.0	7.20	mg/Kg			08/02/15 06:06	1
Biochemical Oxygen Demand	268	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-3 (11-14)

Lab Sample ID: 480-84571-9
Date Collected: 07/23/15 15:30
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	209		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	31.6		20.0	7.20	mg/Kg			08/02/15 06:35	1
TOC Result 1	26.1		20.0	7.20	mg/Kg			08/02/15 06:35	1
TOC Result 2	36.7		20.0	7.20	mg/Kg			08/02/15 06:35	1
TOC Result 3	26.5		20.0	7.20	mg/Kg			08/02/15 06:35	1
TOC Result 4	37.1		20.0	7.20	mg/Kg			08/02/15 06:35	1

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Client Sample ID: WC-ESM-3 (11-14)

Lab Sample ID: 480-84571-9
Matrix: Solid
Date Collected: 07/23/15 15:30
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	**70.0**	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-3 (14-15)

Lab Sample ID: 480-84571-10
Matrix: Solid
Date Collected: 07/23/15 15:31
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<200		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	**31.4**		20.0	7.20	mg/Kg			08/02/15 07:03	1
TOC Result 1	**26.2**		20.0	7.20	mg/Kg			08/02/15 07:03	1
TOC Result 2	**36.2**		20.0	7.20	mg/Kg			08/02/15 07:03	1
TOC Result 3	**26.0**		20.0	7.20	mg/Kg			08/02/15 07:03	1
TOC Result 4	**37.1**		20.0	7.20	mg/Kg			08/02/15 07:03	1
Biochemical Oxygen Demand	<40.0	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-255797/1-A
Matrix: Solid
Analysis Batch: 256247

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.492		0.492	0.197	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Arsenic	<0.983		0.983	0.393	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Barium	<0.492		0.492	0.108	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Beryllium	<0.197		0.197	0.0275	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Cadmium	<0.197		0.197	0.0295	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Chromium	<0.492		0.492	0.197	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Nickel	<0.983		0.983	0.226	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Thallium	<0.983		0.983	0.295	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Vanadium	<0.492		0.492	0.108	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Zinc	<2.46		2.46	0.629	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Lead	<0.492		0.492	0.236	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Selenium	<0.492		0.492	0.393	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Antimony	0.4189	J	0.492	0.393	mg/Kg		07/29/15 08:28	07/30/15 11:46	1

Lab Sample ID: LCDSRM 480-255797/3-A
Matrix: Solid
Analysis Batch: 256247

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 255797

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver			52.6	44.87		mg/Kg		85.3	66.7 - 133.5	2	30
Arsenic			113	103.0		mg/Kg		91.2	69.7 - 142.5	0	30
Barium			155	141.1		mg/Kg		91.1	81.9 - 117.4	4	30
Beryllium			109	98.36		mg/Kg		90.2	82.8 - 117.4	1	30
Cadmium			67.5	60.38		mg/Kg		89.5	82.2 - 117.8	3	30
Chromium			164	144.9		mg/Kg		88.4	79.3 - 120.7	2	30
Nickel			89.3	91.38		mg/Kg		102.3	82.3 - 117.6	3	30
Thallium			116	120.4		mg/Kg		103.8	78.6 - 120.7	1	30
Vanadium			73.0	69.19		mg/Kg		94.8	76.7 - 123.3	2	30
Zinc			168	142.7		mg/Kg		84.9	82.1 - 118.5	0	30
Lead			90.1	91.51		mg/Kg		101.6	81.7 - 118.8	0	30
Selenium			156	143.8		mg/Kg		92.2	77.6 - 121.8	1	30
Antimony			94.0	81.46		mg/Kg		86.7	0.5 - 213.8	1	30

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-255797/2-A
Matrix: Solid
Analysis Batch: 256247

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255797

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	52.6	45.89		mg/Kg		87.2	66.7 - 133.5
Arsenic	113	103.2		mg/Kg		91.3	69.7 - 142.5
Barium	155	147.4		mg/Kg		95.1	81.9 - 117.4
Beryllium	109	99.74		mg/Kg		91.5	82.8 - 117.4
Cadmium	67.5	61.99		mg/Kg		91.8	82.2 - 117.8
Chromium	164	148.1		mg/Kg		90.3	79.3 - 120.7
Nickel	89.3	93.72		mg/Kg		105.0	82.3 - 117.6
Thallium	116	121.4		mg/Kg		104.7	78.6 - 120.7
Vanadium	73.0	70.28		mg/Kg		96.3	76.7 - 123.3
Zinc	168	142.2		mg/Kg		84.7	82.1 - 118.5
Lead	90.1	91.24		mg/Kg		101.3	81.7 - 118.8
Selenium	156	144.5		mg/Kg		92.6	77.6 - 121.8
Antimony	94.0	82.29		mg/Kg		87.5	0.5 - 213.8

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-255719/1-A
Matrix: Solid
Analysis Batch: 255935

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255719

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0999		0.0999	0.00809	mg/Kg		07/28/15 15:10	07/28/15 18:46	1

Lab Sample ID: LCDSRM 480-255719/3-A
Matrix: Solid
Analysis Batch: 255935

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 255719

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	8.37	10.60		mg/Kg		126.6	51.3 - 148.1	9	

Lab Sample ID: LCSSRM 480-255719/2-A
Matrix: Solid
Analysis Batch: 255935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255719

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	8.37	9.719		mg/Kg		116.1	51.3 - 148.1

Method: 410.4 - COD

Lab Sample ID: MB 480-256322/28-A
Matrix: Solid
Analysis Batch: 257176

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<200		200	200	mg/Kg			08/05/15 11:50	1

Lab Sample ID: 480-84571-1 MS
Matrix: Solid
Analysis Batch: 257176

Client Sample ID: WC-ESM-5 (5-10)
Prep Type: ASTM Leach

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	228		1000	1331		mg/Kg		110	75 - 125

Lab Sample ID: 480-84571-1 MSD
Matrix: Solid
Analysis Batch: 257176

Client Sample ID: WC-ESM-5 (5-10)
Prep Type: ASTM Leach

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	228		1000	1376		mg/Kg		115	75 - 125	3	20

Lab Sample ID: 480-84571-7 MS
Matrix: Solid
Analysis Batch: 257176

Client Sample ID: WC-ESM-7 (15-17.5)
Prep Type: ASTM Leach

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	<200	F1	999	1324	F1	mg/Kg		133	75 - 125

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-256322/28-A
Matrix: Solid
Analysis Batch: 256654

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	<20.0		20.0	7.20	mg/Kg			08/01/15 20:06	1
TOC Result 1	<20.0		20.0	7.20	mg/Kg			08/01/15 20:06	1
TOC Result 2	<20.0		20.0	7.20	mg/Kg			08/01/15 20:06	1
TOC Result 3	<20.0		20.0	7.20	mg/Kg			08/01/15 20:06	1
TOC Result 4	<20.0		20.0	7.20	mg/Kg			08/01/15 20:06	1

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-256502/1
Matrix: Solid
Analysis Batch: 256502

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<2.00		2.00	1.00	mg/Kg			07/31/15 10:53	1

Method: SM 5210B - BOD, 5-Day (Continued)

Lab Sample ID: LCS 480-256502/2
Matrix: Solid
Analysis Batch: 256502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	198	150.7	*	mg/Kg		76	85 - 115

Lab Sample ID: MB 480-256322/28-A
Matrix: Solid
Analysis Batch: 256502

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<40.0		40.0	20.0	mg/Kg			07/31/15 10:53	1

Metals

Prep Batch: 255719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	Total/NA	Solid	7471A	
480-84571-6	WC-ESM-7 (12.5-15)	Total/NA	Solid	7471A	
LCDSRM 480-255719/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-255719/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-255719/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 255797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	Total/NA	Solid	3050B	
480-84571-6	WC-ESM-7 (12.5-15)	Total/NA	Solid	3050B	
LCDSRM 480-255797/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-255797/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-255797/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 255935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	Total/NA	Solid	7471A	255719
480-84571-6	WC-ESM-7 (12.5-15)	Total/NA	Solid	7471A	255719
LCDSRM 480-255719/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	255719
LCSSRM 480-255719/2-A	Lab Control Sample	Total/NA	Solid	7471A	255719
MB 480-255719/1-A	Method Blank	Total/NA	Solid	7471A	255719

Analysis Batch: 256247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	Total/NA	Solid	6010	255797
480-84571-6	WC-ESM-7 (12.5-15)	Total/NA	Solid	6010	255797
LCDSRM 480-255797/3-A	Lab Control Sample Dup	Total/NA	Solid	6010	255797
LCSSRM 480-255797/2-A	Lab Control Sample	Total/NA	Solid	6010	255797
MB 480-255797/1-A	Method Blank	Total/NA	Solid	6010	255797

General Chemistry

Analysis Batch: 255404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	Total/NA	Solid	Moisture	
480-84571-2	WC-ESM-5 (10-12.5)	Total/NA	Solid	Moisture	
480-84571-3	WC-ESM-5 (12.5-15)	Total/NA	Solid	Moisture	
480-84571-5	WC-ESM-7 (10-12.5)	Total/NA	Solid	Moisture	
480-84571-6	WC-ESM-7 (12.5-15)	Total/NA	Solid	Moisture	
480-84571-7	WC-ESM-7 (15-17.5)	Total/NA	Solid	Moisture	
480-84571-8	WC-ESM-3 (9-11)	Total/NA	Solid	Moisture	
480-84571-9	WC-ESM-3 (11-14)	Total/NA	Solid	Moisture	
480-84571-10	WC-ESM-3 (14-15)	Total/NA	Solid	Moisture	

Leach Batch: 256322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	ASTM Leach	Solid	D3987-85	
480-84571-1	WC-ESM-5 (5-10)	ASTM Leach	Solid	D3987-85	
480-84571-1	WC-ESM-5 (5-10)	ASTM Leach	Solid	D3987-85	
480-84571-1 MS	WC-ESM-5 (5-10)	ASTM Leach	Solid	D3987-85	

General Chemistry (Continued)

Leach Batch: 256322 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1 MSD	WC-ESM-5 (5-10)	ASTM Leach	Solid	D3987-85	
480-84571-2	WC-ESM-5 (10-12.5)	ASTM Leach	Solid	D3987-85	
480-84571-2	WC-ESM-5 (10-12.5)	ASTM Leach	Solid	D3987-85	
480-84571-2	WC-ESM-5 (10-12.5)	ASTM Leach	Solid	D3987-85	
480-84571-3	WC-ESM-5 (12.5-15)	ASTM Leach	Solid	D3987-85	
480-84571-3	WC-ESM-5 (12.5-15)	ASTM Leach	Solid	D3987-85	
480-84571-3	WC-ESM-5 (12.5-15)	ASTM Leach	Solid	D3987-85	
480-84571-5	WC-ESM-7 (10-12.5)	ASTM Leach	Solid	D3987-85	
480-84571-5	WC-ESM-7 (10-12.5)	ASTM Leach	Solid	D3987-85	
480-84571-5	WC-ESM-7 (10-12.5)	ASTM Leach	Solid	D3987-85	
480-84571-6	WC-ESM-7 (12.5-15)	ASTM Leach	Solid	D3987-85	
480-84571-6	WC-ESM-7 (12.5-15)	ASTM Leach	Solid	D3987-85	
480-84571-6	WC-ESM-7 (12.5-15)	ASTM Leach	Solid	D3987-85	
480-84571-7	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	D3987-85	
480-84571-7	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	D3987-85	
480-84571-7	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	D3987-85	
480-84571-7 MS	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	D3987-85	
480-84571-8	WC-ESM-3 (9-11)	ASTM Leach	Solid	D3987-85	
480-84571-8	WC-ESM-3 (9-11)	ASTM Leach	Solid	D3987-85	
480-84571-8	WC-ESM-3 (9-11)	ASTM Leach	Solid	D3987-85	
480-84571-9	WC-ESM-3 (11-14)	ASTM Leach	Solid	D3987-85	
480-84571-9	WC-ESM-3 (11-14)	ASTM Leach	Solid	D3987-85	
480-84571-9	WC-ESM-3 (11-14)	ASTM Leach	Solid	D3987-85	
480-84571-10	WC-ESM-3 (14-15)	ASTM Leach	Solid	D3987-85	
480-84571-10	WC-ESM-3 (14-15)	ASTM Leach	Solid	D3987-85	
480-84571-10	WC-ESM-3 (14-15)	ASTM Leach	Solid	D3987-85	
MB 480-256322/28-A	Method Blank	ASTM Leach	Solid	D3987-85	

Analysis Batch: 256502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	ASTM Leach	Solid	SM 5210B	256322
480-84571-2	WC-ESM-5 (10-12.5)	ASTM Leach	Solid	SM 5210B	256322
480-84571-3	WC-ESM-5 (12.5-15)	ASTM Leach	Solid	SM 5210B	256322
480-84571-5	WC-ESM-7 (10-12.5)	ASTM Leach	Solid	SM 5210B	256322
480-84571-6	WC-ESM-7 (12.5-15)	ASTM Leach	Solid	SM 5210B	256322
480-84571-7	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	SM 5210B	256322
480-84571-8	WC-ESM-3 (9-11)	ASTM Leach	Solid	SM 5210B	256322
480-84571-9	WC-ESM-3 (11-14)	ASTM Leach	Solid	SM 5210B	256322
480-84571-10	WC-ESM-3 (14-15)	ASTM Leach	Solid	SM 5210B	256322
LCS 480-256502/2	Lab Control Sample	Total/NA	Solid	SM 5210B	
MB 480-256322/28-A	Method Blank	ASTM Leach	Solid	SM 5210B	256322
USB 480-256502/1	Method Blank	Total/NA	Solid	SM 5210B	

Analysis Batch: 256654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	ASTM Leach	Solid	9060A	256322
480-84571-2	WC-ESM-5 (10-12.5)	ASTM Leach	Solid	9060A	256322
480-84571-3	WC-ESM-5 (12.5-15)	ASTM Leach	Solid	9060A	256322
480-84571-5	WC-ESM-7 (10-12.5)	ASTM Leach	Solid	9060A	256322
480-84571-6	WC-ESM-7 (12.5-15)	ASTM Leach	Solid	9060A	256322
480-84571-7	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	9060A	256322

General Chemistry (Continued)

Analysis Batch: 256654 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-8	WC-ESM-3 (9-11)	ASTM Leach	Solid	9060A	256322
480-84571-9	WC-ESM-3 (11-14)	ASTM Leach	Solid	9060A	256322
480-84571-10	WC-ESM-3 (14-15)	ASTM Leach	Solid	9060A	256322
MB 480-256322/28-A	Method Blank	ASTM Leach	Solid	9060A	256322

Analysis Batch: 257176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	ASTM Leach	Solid	410.4	256322
480-84571-1 MS	WC-ESM-5 (5-10)	ASTM Leach	Solid	410.4	256322
480-84571-1 MSD	WC-ESM-5 (5-10)	ASTM Leach	Solid	410.4	256322
480-84571-2	WC-ESM-5 (10-12.5)	ASTM Leach	Solid	410.4	256322
480-84571-3	WC-ESM-5 (12.5-15)	ASTM Leach	Solid	410.4	256322
480-84571-5	WC-ESM-7 (10-12.5)	ASTM Leach	Solid	410.4	256322
480-84571-6	WC-ESM-7 (12.5-15)	ASTM Leach	Solid	410.4	256322
480-84571-7	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	410.4	256322
480-84571-7 MS	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	410.4	256322
480-84571-8	WC-ESM-3 (9-11)	ASTM Leach	Solid	410.4	256322
480-84571-9	WC-ESM-3 (11-14)	ASTM Leach	Solid	410.4	256322
480-84571-10	WC-ESM-3 (14-15)	ASTM Leach	Solid	410.4	256322
MB 480-256322/28-A	Method Blank	ASTM Leach	Solid	410.4	256322

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Client Sample ID: WC-ESM-5 (5-10)

Lab Sample ID: 480-84571-1
Matrix: Solid
Date Collected: 07/23/15 11:24
Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/01/15 20:34	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-5 (5-10)

Lab Sample ID: 480-84571-1
Matrix: Solid
Percent Solids: 79.2
Date Collected: 07/23/15 11:24
Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			255797	07/29/15 08:28	CMM	TAL BUF
Total/NA	Analysis	6010		1	256247	07/30/15 12:09	SLB	TAL BUF
Total/NA	Prep	7471A			255719	07/28/15 15:10	TAS	TAL BUF
Total/NA	Analysis	7471A		1	255935	07/28/15 19:28	TAS	TAL BUF

Client Sample ID: WC-ESM-5 (10-12.5)

Lab Sample ID: 480-84571-2
Matrix: Solid
Date Collected: 07/23/15 11:29
Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/01/15 22:54	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-5 (12.5-15)

Lab Sample ID: 480-84571-3
Matrix: Solid
Date Collected: 07/23/15 11:30
Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/01/15 23:23	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-7 (10-12.5)

Lab Sample ID: 480-84571-5

Date Collected: 07/23/15 14:10

Matrix: Solid

Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/01/15 23:52	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-7 (12.5-15)

Lab Sample ID: 480-84571-6

Date Collected: 07/23/15 14:11

Matrix: Solid

Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/02/15 00:21	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-7 (12.5-15)

Lab Sample ID: 480-84571-6

Date Collected: 07/23/15 14:11

Matrix: Solid

Date Received: 07/25/15 02:30

Percent Solids: 74.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			255797	07/29/15 08:28	CMM	TAL BUF
Total/NA	Analysis	6010		1	256247	07/30/15 11:55	SLB	TAL BUF
Total/NA	Prep	7471A			255719	07/28/15 15:10	TAS	TAL BUF
Total/NA	Analysis	7471A		1	255935	07/28/15 19:29	TAS	TAL BUF

Client Sample ID: WC-ESM-7 (15-17.5)

Lab Sample ID: 480-84571-7

Date Collected: 07/23/15 14:30

Matrix: Solid

Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		7	256654	08/02/15 05:37	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Client Sample ID: WC-ESM-3 (9-11)

Lab Sample ID: 480-84571-8

Date Collected: 07/23/15 15:20

Matrix: Solid

Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/02/15 06:06	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-3 (11-14)

Lab Sample ID: 480-84571-9

Date Collected: 07/23/15 15:30

Matrix: Solid

Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/02/15 06:35	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-3 (14-15)

Lab Sample ID: 480-84571-10

Date Collected: 07/23/15 15:31

Matrix: Solid

Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/02/15 07:03	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	1169CA	09-30-15 *
Connecticut	State Program	1	PH-0568	09-30-16
Florida	NELAP	4	E87672	06-30-16
Georgia	State Program	4	N/A	03-31-16
Georgia	State Program	4	956	03-31-16
Illinois	NELAP	5	200003	09-30-15 *
Iowa	State Program	7	374	03-01-17
Kansas	NELAP	7	E-10187	09-30-15 *
Kentucky (DW)	State Program	4	90029	12-31-15
Kentucky (UST)	State Program	4	30	03-31-16
Kentucky (WW)	State Program	4	90029	12-31-15
Louisiana	NELAP	6	02031	06-30-16
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-16
Massachusetts	State Program	1	M-NY044	06-30-16
Michigan	State Program	5	9937	03-31-16
Minnesota	NELAP	5	036-999-337	12-31-15
New Hampshire	NELAP	1	2337	11-17-15
New Jersey	NELAP	2	NY455	09-30-15 *
New York	NELAP	2	10026	03-31-16
North Dakota	State Program	8	R-176	03-31-16
Oklahoma	State Program	6	9421	08-31-15 *
Oregon	NELAP	10	NY200003	06-09-16
Pennsylvania	NELAP	3	68-00281	07-31-16
Rhode Island	State Program	1	LAO00328	12-30-15
Tennessee	State Program	4	TN02970	03-31-16
Texas	NELAP	6	T104704412-11-2	07-31-16
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-15 *
Washington	State Program	10	C784	02-10-16
West Virginia DEP	State Program	3	252	09-30-15 *
Wisconsin	State Program	5	998310390	08-31-15 *

* Certification renewal pending - certification considered valid.

Method Summary

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Method	Method Description	Protocol	Laboratory
6010	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
410.4	COD	MCAWW	TAL BUF
9060A	Organic Carbon, Total (TOC)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-84571-1	WC-ESM-5 (5-10)	Solid	07/23/15 11:24	07/25/15 02:30
480-84571-2	WC-ESM-5 (10-12.5)	Solid	07/23/15 11:29	07/25/15 02:30
480-84571-3	WC-ESM-5 (12.5-15)	Solid	07/23/15 11:30	07/25/15 02:30
480-84571-5	WC-ESM-7 (10-12.5)	Solid	07/23/15 14:10	07/25/15 02:30
480-84571-6	WC-ESM-7 (12.5-15)	Solid	07/23/15 14:11	07/25/15 02:30
480-84571-7	WC-ESM-7 (15-17.5)	Solid	07/23/15 14:30	07/25/15 02:30
480-84571-8	WC-ESM-3 (9-11)	Solid	07/23/15 15:20	07/25/15 02:30
480-84571-9	WC-ESM-3 (11-14)	Solid	07/23/15 15:30	07/25/15 02:30
480-84571-10	WC-ESM-3 (14-15)	Solid	07/23/15 15:31	07/25/15 02:30

Login Sample Receipt Checklist

Client: Woodard & Curran, Inc.

Job Number: 480-84571-1

Login Number: 84571
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	W AND C
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road – Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:

Client Contact: JARROD YODER
Company: WOODARD + CURRAN
Address: 40 SHATTUCK RD.
City: ANDOVER MA 01810
State and Zip:
Client's Phone: 978-557-8150
Client's Contact Email: JYODER@WOODARDCURRAN.COM
Client's Project Name/Number: BOSTON DND - LEWIS CHEMICAL
Sample Collection Site Name & Location: 229286.01

Sample Collector's Name (Please Print Neatly): KERI STEVENS
Sample Collector's Phone: 603-731-9936
Due Date Requested:
Turnaround Time (TAT) Requested (business days): 5-DAY WTC GISKEY EDD
Quote # or Project #:
PO #:
WO #:
PWS ID #:

Lab PM: BECKY MASON
E-Mail:
Lab COC Barcode Label

480-84571 Chain of Custody

COC No: 33000
Page: 1 of 1
Job #:

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP [X] GW1/S1 [ ]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [X]
eDEP Filing [ ] NPDES [ ]

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit Test-America to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	TOC	COD	BOD	MCP 14 Metals (Total)	Total Number of Containers (enter total)
			Preservation Code:		Z	C	Z	A	↓
WC-ESM-5 (5-10)	7-23-15	11:24	G	Soil	X	X	X	X	2
WC-ESM-5 (10-12.5)	7-23-15	11:29	G	Soil	X	X	X		1
WC-ESM-5 (12.5-15)	7-23-15	11:30	G	Soil	X	X	X		1
WC-ESM-5 angled (10-12)	7-23-15	13:05	G	Soil	X	X	X		1
WC-ESM-7 (10-12.5)	7-23-15	14:10	G	Soil	X	X	X		1
WC-ESM-7 (12.5-15)	7-23-15	14:11	G	Soil	X	X	X	X	2
WC-ESM-7 (15-17.5)	7-23-15	14:30	G	Soil	X	X	X		1
WC-ESM-3 (9-11)	7-23-15	15:20	G	Soil	X	X	X		1
WC-ESM-3 (11-14)	7-23-15	15:30	G	Soil	X	X	X		1
WC-ESM-3 (14-15)	7-23-15	15:31	G	Soil	X	X	X		1

Special Instructions & Notes:

Possible Hazard Identification (please check off each that may apply):
[ ] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [X] Unknown [ ] Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month):
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

** **Matrix Types:** A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◄

	Date/Time:	Company		Date/Time:	Company
Relinquished by: Kristy Lauer	7-24-15 1400	WTC	Received by:	7-24-15 1700	TA
Relinquished by:	7-24-15 1700	T	Received by:	25July15 0230	TMB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.4

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

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8/5/2015

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Jarrod Yoder
Woodard & Curran
40 Shattuck Road
Suite 110
Andover, MA 01810

PO Number: None
Job ID: 33757
Date Received: 7/24/15

Project: Lewis Chemical

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

JSylvester (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 8/11/2015
Total number of pages: 36

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Lewis Chemical
Lab ID: 33757

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
ESM-5 (5-10)	Solid	7/23/2015 11:24	33757-001	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-5 (10-12.5)	Solid	7/23/2015 11:29	33757-002	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-5 (12.5-15)	Solid	7/23/2015 11:30	33757-003	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-7 (10-12.5)	Solid	7/23/2015 14:10	33757-004	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-7 (12.5-15)	Solid	7/23/2015 14:11	33757-005	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-7 (15-17.5)	Solid	7/23/2015 14:13	33757-006	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-3 (9-11)	Solid	7/23/2015 15:20	33757-007	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-3 (11-14)	Solid	7/23/2015 15:30	33757-008	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-3 (14-15)	Solid	7/23/2015 15:31	33757-009	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
Trip Blank	Solid	7/23/2015 0:00	33757-010	
				VOCs in solids by 8260
ESM-5 ANGLED (10-12)	Solid	7/23/2015 13:05	33757-011	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-001
Sample ID: ESM-5 (5-10)
Matrix: Solid Percent Dry: 81% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.61 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 11:24

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
diethyl ether	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1-dichloroethane	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
cis-1,2-dichloroethene	**5.2**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1,1-trichloroethane	**2.8**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
trichloroethene	**1.0**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
toluene	**0.6**	0.5	ug/g	5	LMM		8060	8/4/15	20:45	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C

Absolute Resource associates

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-001
Sample ID: ESM-5 (5-10)
Matrix: Solid Percent Dry: 81% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.61 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 11:24

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**26**	0.5	ug/g	5	LMM		8060	8/4/15	20:45	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
chlorobenzene	**0.4**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
ethylbenzene	**2.3**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
m&p-xylenes	**7.7**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
o-xylene	**2.2**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
isopropylbenzene	**0.2**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
n-propylbenzene	**0.3**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,3,5-trimethylbenzene	**0.8**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2,4-trimethylbenzene	**2.5**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
sec-butylbenzene	**0.3**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,3-dichlorobenzene	**0.3**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
4-isopropyltoluene	**0.5**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,4-dichlorobenzene	**0.3**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2-dichlorobenzene	**8.3**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2,4-trichlorobenzene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
naphthalene	**0.4**	0.2	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**6.4**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**90**	78-114	%	1	LMM		8060	8/4/15	1:12	SW5035A8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM		8060	8/4/15	1:12	SW5035A8260C
4-bromofluorobenzene SUR	**98**	86-115	%	1	LMM		8060	8/4/15	1:12	SW5035A8260C
a,a,a-trifluorotoluene SUR	**95**	70-130	%	1	LMM		8060	8/4/15	1:12	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-002
Sample ID: ESM-5 (10-12.5)
Matrix: Solid Percent Dry: 90.1% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.73 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 11:29

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
diethyl ether	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1-dichloroethane	**0.2**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
cis-1,2-dichloroethene	**8.7**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1,1-trichloroethane	**24**	4.6	ug/g	50	LMM		8060	8/6/15	11:14	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
trichloroethene	**26**	4.6	ug/g	50	LMM		8060	8/6/15	11:14	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
toluene	**18**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-002
Sample ID: ESM-5 (10-12.5)
Matrix: Solid Percent Dry: 90.1% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.73 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 11:29

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**240**	4.6	ug/g	50	LMM		8060	8/6/15	11:14	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
chlorobenzene	**4.4**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
ethylbenzene	**7.4**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
m&p-xylenes	**20**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
o-xylene	**6.1**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
n-propylbenzene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,3,5-trimethylbenzene	**0.2**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2,4-trimethylbenzene	**0.7**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
sec-butylbenzene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
4-isopropyltoluene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,4-dichlorobenzene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2-dichlorobenzene	**2.7**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**28**	4.6	ug/g	50	LMM		8060	8/6/15	11:14	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**90**	78-114	%	1	LMM		8060	8/4/15	16:10	SW5035A8260C
toluene-D8 SUR	**104**	88-110	%	1	LMM		8060	8/4/15	16:10	SW5035A8260C
4-bromofluorobenzene SUR	**101**	86-115	%	1	LMM		8060	8/4/15	16:10	SW5035A8260C
a,a,a-trifluorotoluene SUR	**93**	70-130	%	1	LMM		8060	8/4/15	16:10	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-003
Sample ID: ESM-5 (12.5-15)
Matrix: Solid Percent Dry: 89.8% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.64 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
diethyl ether	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
2-butanone (MEK)	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
cis-1,2-dichloroethene	**0.3**	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
tetrahydrofuran (THF)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1,1-trichloroethane	**0.2**	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
2-hexanone	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-003
Sample ID: ESM-5 (12.5-15)
Matrix: Solid Percent Dry: 89.8% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.64 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**84**	78-114	%	1	LMM		8060	8/4/15	21:15	SW5035A8260C
toluene-D8 SUR	**100**	88-110	%	1	LMM		8060	8/4/15	21:15	SW5035A8260C
4-bromofluorobenzene SUR	**98**	86-115	%	1	LMM		8060	8/4/15	21:15	SW5035A8260C
a,a,a-trifluorotoluene SUR	**91**	70-130	%	1	LMM		8060	8/4/15	21:15	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-004
Sample ID: ESM-7 (10-12.5)
Matrix: Solid Percent Dry: 83.8% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.67 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
diethyl ether	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
cis-1,2-dichloroethene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
trichloroethene	**0.3**	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-004
Sample ID: ESM-7 (10-12.5)
Matrix: Solid Percent Dry: 83.8% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.67 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**0.4**	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**84**	78-114	%	1	LMM		8060	8/4/15	21:45	SW5035A8260C
toluene-D8 SUR	**99**	88-110	%	1	LMM		8060	8/4/15	21:45	SW5035A8260C
4-bromofluorobenzene SUR	**102**	86-115	%	1	LMM		8060	8/4/15	21:45	SW5035A8260C
a,a,a-trifluorotoluene SUR	**98**	70-130	%	1	LMM		8060	8/4/15	21:45	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-005
Sample ID: ESM-7 (12.5-15)
Matrix: Solid Percent Dry: 79.9% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.67 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 14:11

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
diethyl ether	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
methylene chloride	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-005
Sample ID: ESM-7 (12.5-15)
Matrix: Solid Percent Dry: 79.9% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.67 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 14:11

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
naphthalene	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**88**	78-114	%	1	LMM		8060	8/4/15	22:17	SW5035A8260C
toluene-D8 SUR	**99**	88-110	%	1	LMM		8060	8/4/15	22:17	SW5035A8260C
4-bromofluorobenzene SUR	**101**	86-115	%	1	LMM		8060	8/4/15	22:17	SW5035A8260C
a,a,a-trifluorotoluene SUR	**100**	70-130	%	1	LMM		8060	8/4/15	22:17	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-006
Sample ID: ESM-7 (15-17.5)
Matrix: Solid Percent Dry: 91.8% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.66 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 14:13

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
diethyl ether	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
2-butanone (MEK)	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
cis-1,2-dichloroethene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
tetrahydrofuran (THF)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
trichloroethene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
2-hexanone	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-006
Sample ID: ESM-7 (15-17.5)
Matrix: Solid Percent Dry: 91.8% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.66 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 14:13

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**0.2**	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**85**	78-114	%	1	LMM		8060	8/4/15	22:47	SW5035A8260C
toluene-D8 SUR	**102**	88-110	%	1	LMM		8060	8/4/15	22:47	SW5035A8260C
4-bromofluorobenzene SUR	**104**	86-115	%	1	LMM		8060	8/4/15	22:47	SW5035A8260C
a,a,a-trifluorotoluene SUR	**100**	70-130	%	1	LMM		8060	8/4/15	22:47	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-007
Sample ID: ESM-3 (9-11)
Matrix: Solid Percent Dry: 49.8% Results expressed on a dry weight basis.
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 15:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
chloromethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
vinyl chloride	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
bromomethane	< 14	14	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
chloroethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
trichlorofluoromethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
diethyl ether	< 28.5	28.5	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
acetone	< 140	140	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1-dichloroethene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
methylene chloride	< 14	14	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
carbon disulfide	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
methyl t-butyl ether (MTBE)	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
trans-1,2-dichloroethene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
isopropyl ether (DIPE)	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1-dichloroethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
t-butanol (TBA)	< 140	140	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
2-butanone (MEK)	< 17.1	17.1	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
2,2-dichloropropane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
cis-1,2-dichloroethene	**110**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
chloroform	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
bromochloromethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
tetrahydrofuran (THF)	< 28.5	28.5	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1,1-trichloroethane	**81**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1-dichloropropene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
t-amyl-methyl ether (TAME)	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
carbon tetrachloride	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2-dichloroethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
benzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
trichloroethene	**33**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2-dichloropropane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
bromodichloromethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,4-dioxane	< 140	140	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
dibromomethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 25.6	25.6	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
cis-1,3-dichloropropene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
toluene	**580**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
trans-1,3-dichloropropene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
2-hexanone	< 28.5	28.5	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1,2-trichloroethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,3-dichloropropane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-007
Sample ID: ESM-3 (9-11)
Matrix: Solid Percent Dry: 49.8% Results expressed on a dry weight basis.
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 15:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**42**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
dibromochloromethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2-dibromoethane (EDB)	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
chlorobenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1,1,2-tetrachloroethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
ethylbenzene	**69**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
m&p-xylenes	**250**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
o-xylene	**72**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
styrene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
bromoform	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
isopropylbenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1,2,2-tetrachloroethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2,3-trichloropropane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
n-propylbenzene	**6.6**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
bromobenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,3,5-trimethylbenzene	**12**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
2-chlorotoluene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
4-chlorotoluene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
tert-butylbenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2,4-trimethylbenzene	**43**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
sec-butylbenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,3-dichlorobenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
4-isopropyltoluene	**11**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,4-dichlorobenzene	**13**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2-dichlorobenzene	**140**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
n-butylbenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2,4-trichlorobenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
hexachlorobutadiene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
naphthalene	< 14	14	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2,3-trichlorobenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**66**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	20	LMM		8060	8/6/15	11:45	SW5035A8260C
toluene-D8 SUR	**103**	88-110	%	20	LMM		8060	8/6/15	11:45	SW5035A8260C
4-bromofluorobenzene SUR	**98**	86-115	%	20	LMM		8060	8/6/15	11:45	SW5035A8260C
a,a,a-trifluorotoluene SUR	**99**	70-130	%	20	LMM		8060	8/6/15	11:45	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-008
Sample ID: ESM-3 (11-14)
Matrix: Solid Percent Dry: 91.2% Results expressed on a dry weight basis.
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 15:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
diethyl ether	< 0.5	0.5	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
cis-1,2-dichloroethene	**0.2**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1,1-trichloroethane	**0.9**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
trichloroethene	**0.1**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
toluene	**4.2**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-008
Sample ID: ESM-3 (11-14)
Matrix: Solid Percent Dry: 91.2% Results expressed on a dry weight basis.
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 15:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**0.5**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
ethylbenzene	**0.6**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
m&p-xylenes	**2.2**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
o-xylene	**0.6**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
n-propylbenzene	**0.2**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,3,5-trimethylbenzene	**0.3**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2,4-trimethylbenzene	**0.8**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
sec-butylbenzene	**0.1**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
4-isopropyltoluene	**1.4**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,4-dichlorobenzene	**0.1**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2-dichlorobenzene	**0.9**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**1.6**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**92**	78-114	%	1	LMM		8060	8/6/15	13:25	SW5035A8260C
toluene-D8 SUR	**111** *	88-110	%	1	LMM		8060	8/6/15	13:25	SW5035A8260C
4-bromofluorobenzene SUR	**111**	86-115	%	1	LMM		8060	8/6/15	13:25	SW5035A8260C
a,a,a-trifluorotoluene SUR	**95**	70-130	%	1	LMM		8060	8/6/15	13:25	SW5035A8260C

**** The surrogate showed recovery outside the acceptance limits as a result of hydrocarbons present in the sample.***

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-009
Sample ID: ESM-3 (14-15)
Matrix: Solid Percent Dry: 94.6% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.57 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 15:31

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
diethyl ether	< 0.3	0.3	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
2-butanone (MEK)	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
tetrahydrofuran (THF)	< 0.3	0.3	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.3	0.3	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
2-hexanone	< 0.3	0.3	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-009
Sample ID: ESM-3 (14-15)
Matrix: Solid Percent Dry: 94.6% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.57 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 15:31

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**86**	78-114	%	1	LMM		8060	8/6/15	12:54	SW5035A8260C
toluene-D8 SUR	**100**	88-110	%	1	LMM		8060	8/6/15	12:54	SW5035A8260C
4-bromofluorobenzene SUR	**100**	86-115	%	1	LMM		8060	8/6/15	12:54	SW5035A8260C
a,a,a-trifluorotoluene SUR	**96**	70-130	%	1	LMM		8060	8/6/15	12:54	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-010
Sample ID: Trip Blank
Matrix: Solid
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
diethyl ether	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-010
Sample ID: Trip Blank
Matrix: Solid
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**93**	78-114	%	1	LMM		8060	8/4/15	15:38	SW5035A8260C
toluene-D8 SUR	**103**	88-110	%	1	LMM		8060	8/4/15	15:38	SW5035A8260C
4-bromofluorobenzene SUR	**109**	86-115	%	1	LMM		8060	8/4/15	15:38	SW5035A8260C
a,a,a-trifluorotoluene SUR	**94**	70-130	%	1	LMM		8060	8/4/15	15:38	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-011
Sample ID: ESM-5 ANGLED (10-12)
Matrix: Solid Percent Dry: 95.3% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.65 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 13:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
diethyl ether	< 0.4	0.4	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
2-butanone (MEK)	< 0.2	0.2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
cis-1,2-dichloroethene	**0.2**	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
tetrahydrofuran (THF)	< 0.4	0.4	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1,1-trichloroethane	**0.1**	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.3	0.3	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
toluene	**0.3**	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
2-hexanone	< 0.4	0.4	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-011
Sample ID: ESM-5 ANGLED (10-12)
Matrix: Solid Percent Dry: 95.3% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.65 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 13:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
m&p-xylenes	**0.1**	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**0.1**	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**90**	78-114	%	1	LMM		8060	8/5/15	6:26	SW5035A8260C
toluene-D8 SUR	**99**	88-110	%	1	LMM		8060	8/5/15	6:26	SW5035A8260C
4-bromofluorobenzene SUR	**99**	86-115	%	1	LMM		8060	8/5/15	6:26	SW5035A8260C
a,a,a-trifluorotoluene SUR	**97**	70-130	%	1	LMM		8060	8/5/15	6:26	SW5035A8260C

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #:

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **33757**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☑	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

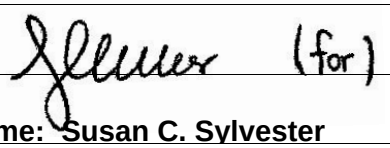
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☐ No*☑

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☑ No*☐

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:  **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 8/11/15**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 33757

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 1 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.
As noted on the result page, several VOC samples did not meet the 1:1 +/-25% methanol to soil ratio.

Calibration

See the included table for a list of compounds quantitated by quadratic equation.

Method Blank

No exceptions noted.

Surrogate Recoveries

VOC: The surrogate, toluene-D8, for sample 33757-008 showed recovery outside the acceptance limits as a result of co-eluting hydrocarbons.

Laboratory Control Sample Results

VOC: The MLCS/D8060 did not meet the acceptance criteria for dichlorodifluoromethane, chloromethane, vinyl chloride, bromomethane, carbon disulfide, and 1,2,3-trichlorobenzene. It is suspected that the standard that contains the first five compounds was degraded, leading to the failures. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required. The MLCSD8060 did not meet the acceptance criteria naphthalene. This compound showed high recovery. Any samples with detectable concentrations of this analyte have been qualified accordingly.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

VOC: The compound, hexachloroethane, was evaluated in the VOC analysis as a tentatively identified compound (TIC), as requested by the customer.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question G: The CAM protocol reporting limits were not achieved for this project due to dilutions necessary for sample analysis. Box G is "No."
Question H: See surrogate section above. Box H is "No."

Quantitation by Quadratic Equation
Lab # 33757

Quantitation of the following compounds was based on a quadratic equation

dichlorodifluoromethane
Bromomethane
Acetone
Carbon disulfide
tetrahydrofuran (THF)
Carbon tetrachloride
1,2-Dichloroethane
Bromodichloromethane
2-Hexanone
cis-1,3-dichloropropene
trans-1,3-Dichloropropene
Dibromochloromethane
1,1,1,2-Tetrachloroethane
Bromoform
bromobenzene
1,2-dibromo-3-chloropropane (DBCP)
hexachlorobutadiene

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MB8060	dichlorodifluoromethane		<	0.1	ug/g					
		chloromethane		<	0.1	ug/g					
		vinyl chloride		<	0.1	ug/g					
		bromomethane		<	0.2	ug/g					
		chloroethane		<	0.1	ug/g					
		trichlorofluoromethane		<	0.1	ug/g					
		diethyl ether		<	0.5	ug/g					
		acetone		<	2.5	ug/g					
		1,1-dichloroethene		<	0.1	ug/g					
		methylene chloride		<	0.2	ug/g					
		carbon disulfide		<	0.1	ug/g					
		methyl t-butyl ether (MTBE)		<	0.1	ug/g					
		trans-1,2-dichloroethene		<	0.1	ug/g					
		isopropyl ether (DIPE)		<	0.1	ug/g					
		ethyl t-butyl ether (ETBE)		<	0.1	ug/g					
		1,1-dichloroethane		<	0.1	ug/g					
		t-butanol (TBA)		<	2.5	ug/g					
		2-butanone (MEK)		<	0.5	ug/g					
		2,2-dichloropropane		<	0.1	ug/g					
		cis-1,2-dichloroethene		<	0.1	ug/g					
		chloroform		<	0.1	ug/g					
		bromochloromethane		<	0.1	ug/g					
		tetrahydrofuran (THF)		<	0.5	ug/g					
		1,1,1-trichloroethane		<	0.1	ug/g					
		1,1-dichloropropene		<	0.1	ug/g					
		t-amyl-methyl ether (TAME)		<	0.1	ug/g					
		carbon tetrachloride		<	0.1	ug/g					
		1,2-dichloroethane		<	0.1	ug/g					
		benzene		<	0.1	ug/g					
		trichloroethene		<	0.1	ug/g					
		1,2-dichloropropane		<	0.1	ug/g					
		bromodichloromethane		<	0.1	ug/g					
		1,4-dioxane		<	2.5	ug/g					
		dibromomethane		<	0.1	ug/g					
		4-methyl-2-pentanone (MIBK)		<	0.5	ug/g					
		cis-1,3-dichloropropene		<	0.1	ug/g					
		toluene		<	0.1	ug/g					
		trans-1,3-dichloropropene		<	0.1	ug/g					
		2-hexanone		<	0.5	ug/g					
		1,1,2-trichloroethane		<	0.1	ug/g					
		1,3-dichloropropane		<	0.1	ug/g					
		tetrachloroethene		<	0.1	ug/g					
		dibromochloromethane		<	0.1	ug/g					
		1,2-dibromoethane (EDB)		<	0.1	ug/g					
		chlorobenzene		<	0.1	ug/g					
		1,1,1,2-tetrachloroethane		<	0.1	ug/g					
		ethylbenzene		<	0.1	ug/g					
		m&p-xylenes		<	0.1	ug/g					
		o-xylene		<	0.1	ug/g					
		styrene		<	0.1	ug/g					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MB8060	bromoform		<	0.1	ug/g						
		isopropylbenzene		<	0.1	ug/g						
		1,1,2,2-tetrachloroethane		<	0.1	ug/g						
		1,2,3-trichloropropane		<	0.1	ug/g						
		n-propylbenzene		<	0.1	ug/g						
		bromobenzene		<	0.1	ug/g						
		1,3,5-trimethylbenzene		<	0.1	ug/g						
		2-chlorotoluene		<	0.1	ug/g						
		4-chlorotoluene		<	0.1	ug/g						
		tert-butylbenzene		<	0.1	ug/g						
		1,2,4-trimethylbenzene		<	0.1	ug/g						
		sec-butylbenzene		<	0.1	ug/g						
		1,3-dichlorobenzene		<	0.1	ug/g						
		4-isopropyltoluene		<	0.1	ug/g						
		1,4-dichlorobenzene		<	0.1	ug/g						
		1,2-dichlorobenzene		<	0.1	ug/g						
		n-butylbenzene		<	0.1	ug/g						
		1,2-dibromo-3-chloropropane (DBCP)		<	0.1	ug/g						
		1,2,4-trichlorobenzene		<	0.1	ug/g						
		hexachlorobutadiene		<	0.1	ug/g						
		naphthalene		<	0.2	ug/g						
		1,2,3-trichlorobenzene		<	0.1	ug/g						
		dibromofluoromethane SUR			87	%			78	114		
		toluene-D8 SUR			99	%			88	110		
		4-bromofluorobenzene SUR			97	%			86	115		
		a,a,a-trifluorotoluene SUR			84	%			70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		<	0.1	ug/g						

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCS8060	dichlorodifluoromethane			0.6	ug/g	1	55	*	70	130		
		chloromethane			0.5	ug/g	1	45	*	70	130		
		vinyl chloride			0.7	ug/g	1	68	*	70	130		
		bromomethane			0.5	ug/g	1	50	*	70	130		
		chloroethane			0.9	ug/g	1	93		70	130		
		trichlorofluoromethane			0.9	ug/g	1	85		70	130		
		diethyl ether			0.8	ug/g	1	76		70	130		
		acetone		<	2.5	ug/g	1	116					
		1,1-dichloroethene			0.7	ug/g	1	71		70	130		
		methylene chloride			0.8	ug/g	1	80		70	130		
		carbon disulfide			0.6	ug/g	1	58	*	70	130		
		methyl t-butyl ether (MTBE)			0.9	ug/g	1	89		70	130		
		trans-1,2-dichloroethene			0.7	ug/g	1	74		70	130		
		isopropyl ether (DIPE)			0.9	ug/g	1	88		70	130		
		ethyl t-butyl ether (ETBE)			0.9	ug/g	1	87		70	130		
		1,1-dichloroethane			0.7	ug/g	1	74		70	130		
		t-butanol (TBA)			4.4	ug/g	5	88		70	130		
		2-butanone (MEK)			1.0	ug/g	1	98		70	130		
		2,2-dichloropropane			0.7	ug/g	1	72		70	130		
		cis-1,2-dichloroethene			0.8	ug/g	1	79		70	130		
		chloroform			0.8	ug/g	1	80		70	130		
		bromochloromethane			0.7	ug/g	1	72		70	130		
		tetrahydrofuran (THF)			0.9	ug/g	1	89		70	130		
		1,1,1-trichloroethane			0.8	ug/g	1	84		70	130		
		1,1-dichloropropene			0.7	ug/g	1	70		70	130		
		t-amyl-methyl ether (TAME)			0.8	ug/g	1	83		70	130		
		carbon tetrachloride			0.7	ug/g	1	71		70	130		
		1,2-dichloroethane			0.9	ug/g	1	90		70	130		
		benzene			0.9	ug/g	1	86		70	130		
		trichloroethene			1.0	ug/g	1	97		70	130		
		1,2-dichloropropane			0.8	ug/g	1	82		70	130		
		bromodichloromethane			0.8	ug/g	1	82		70	130		
		1,4-dioxane		<	2.5	ug/g	2	89		70	130		
		dibromomethane			0.8	ug/g	1	81		70	130		
		4-methyl-2-pentanone (MIBK)			0.9	ug/g	1	93		70	130		
		cis-1,3-dichloropropene			0.8	ug/g	1	80		70	130		
		toluene			0.8	ug/g	1	81		70	130		
		trans-1,3-dichloropropene			0.8	ug/g	1	82		70	130		
		2-hexanone			1.0	ug/g	1	100		70	130		
		1,1,2-trichloroethane			0.9	ug/g	1	87		70	130		
		1,3-dichloropropane			0.9	ug/g	1	92		70	130		
		tetrachloroethene			0.9	ug/g	1	93		70	130		
		dibromochloromethane			0.8	ug/g	1	76		70	130		
		1,2-dibromoethane (EDB)			0.9	ug/g	1	86		70	130		
		chlorobenzene			0.9	ug/g	1	87		70	130		
		1,1,1,2-tetrachloroethane			0.9	ug/g	1	89		70	130		
		ethylbenzene			0.9	ug/g	1	94		70	130		
		m&p-xylenes			1.9	ug/g	2	94		70	130		
		o-xylene			1.0	ug/g	1	100		70	130		
		styrene			1.0	ug/g	1	104		70	130		
		bromoform			0.8	ug/g	1	83		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCS8060	isopropylbenzene		1.0	ug/g	1	99		70	130		
		1,1,2,2-tetrachloroethane		0.9	ug/g	1	92		70	130		
		1,2,3-trichloropropane		1.0	ug/g	1	103		70	130		
		n-propylbenzene		0.9	ug/g	1	90		70	130		
		bromobenzene		0.9	ug/g	1	95		70	130		
		1,3,5-trimethylbenzene		1.0	ug/g	1	99		70	130		
		2-chlorotoluene		0.9	ug/g	1	91		70	130		
		4-chlorotoluene		0.9	ug/g	1	92		70	130		
		tert-butylbenzene		0.9	ug/g	1	95		70	130		
		1,2,4-trimethylbenzene		1.0	ug/g	1	98		70	130		
		sec-butylbenzene		0.9	ug/g	1	93		70	130		
		1,3-dichlorobenzene		1.1	ug/g	1	107		70	130		
		4-isopropyltoluene		0.9	ug/g	1	89		70	130		
		1,4-dichlorobenzene		1.0	ug/g	1	99		70	130		
		1,2-dichlorobenzene		1.0	ug/g	1	102		70	130		
		n-butylbenzene		0.9	ug/g	1	94		70	130		
		1,2-dibromo-3-chloropropane (DBCP)		0.9	ug/g	1	91		70	130		
		1,2,4-trichlorobenzene		1.2	ug/g	1	123		70	130		
		hexachlorobutadiene		1.1	ug/g	1	114		70	130		
		naphthalene		1.2	ug/g	1	125		70	130		
		1,2,3-trichlorobenzene		1.3	ug/g	1	131	*	70	130		
		dibromofluoromethane SUR		96	%				78	114		
		toluene-D8 SUR		99	%				88	110		
		4-bromofluorobenzene SUR		105	%				86	115		
		a,a,a-trifluorotoluene SUR		90	%				70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		0.8	ug/g	1	75		70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCSD8060	dichlorodifluoromethane			0.5	ug/g	1	54	*	70	130	1	30
		chloromethane			0.4	ug/g	1	45	*	70	130	1	30
		vinyl chloride			0.7	ug/g	1	67	*	70	130	3	30
		bromomethane			0.6	ug/g	1	63	*	70	130	23	30
		chloroethane			1.2	ug/g	1	123		70	130	28	30
		trichlorofluoromethane			0.8	ug/g	1	84		70	130	2	30
		diethyl ether			0.9	ug/g	1	86		70	130	13	30
		acetone		<	2.5	ug/g	1	125				7	30
		1,1-dichloroethene			0.7	ug/g	1	68	*	70	130	5	30
		methylene chloride			0.8	ug/g	1	80		70	130	0	30
		carbon disulfide			0.5	ug/g	1	55	*	70	130	5	30
		methyl t-butyl ether (MTBE)			0.9	ug/g	1	90		70	130	1	30
		trans-1,2-dichloroethene			0.7	ug/g	1	73		70	130	1	30
		isopropyl ether (DIPE)			0.9	ug/g	1	88		70	130	0	30
		ethyl t-butyl ether (ETBE)			0.9	ug/g	1	87		70	130	0	30
		1,1-dichloroethane			0.7	ug/g	1	73		70	130	2	30
		t-butanol (TBA)			5.0	ug/g	5	100		70	130	13	30
		2-butanone (MEK)			1.1	ug/g	1	106		70	130	7	30
		2,2-dichloropropane			0.7	ug/g	1	71		70	130	2	30
		cis-1,2-dichloroethene			0.8	ug/g	1	78		70	130	1	30
		chloroform			0.8	ug/g	1	79		70	130	1	30
		bromochloromethane			0.7	ug/g	1	70		70	130	3	30
		tetrahydrofuran (THF)			1.0	ug/g	1	96		70	130	8	30
		1,1,1-trichloroethane			0.8	ug/g	1	81		70	130	3	30
		1,1-dichloropropene			0.7	ug/g	1	70		70	130	0	30
		t-amyl-methyl ether (TAME)			0.8	ug/g	1	83		70	130	0	30
		carbon tetrachloride			0.7	ug/g	1	72		70	130	1	30
		1,2-dichloroethane			0.9	ug/g	1	88		70	130	2	30
		benzene			0.8	ug/g	1	85		70	130	2	30
		trichloroethene			0.9	ug/g	1	94		70	130	3	30
		1,2-dichloropropane			0.8	ug/g	1	83		70	130	1	30
		bromodichloromethane			0.8	ug/g	1	80		70	130	4	30
		1,4-dioxane		<	2.5	ug/g	2	99		70	130	11	30
		dibromomethane			0.8	ug/g	1	83		70	130	2	30
		4-methyl-2-pentanone (MIBK)			1.0	ug/g	1	104		70	130	11	30
		cis-1,3-dichloropropene			0.8	ug/g	1	78		70	130	2	30
		toluene			0.8	ug/g	1	80		70	130	2	30
		trans-1,3-dichloropropene			0.8	ug/g	1	81		70	130	2	30
		2-hexanone			1.0	ug/g	1	104		70	130	4	30
		1,1,2-trichloroethane			0.9	ug/g	1	86		70	130	1	30
		1,3-dichloropropane			0.9	ug/g	1	87		70	130	5	30
		tetrachloroethene			0.9	ug/g	1	89		70	130	5	30
		dibromochloromethane			0.7	ug/g	1	73		70	130	4	30
		1,2-dibromoethane (EDB)			0.9	ug/g	1	85		70	130	1	30
		chlorobenzene			0.9	ug/g	1	86		70	130	2	30
		1,1,1,2-tetrachloroethane			0.8	ug/g	1	84		70	130	5	30
		ethylbenzene			0.9	ug/g	1	89		70	130	5	30
		m&p-xylenes			1.8	ug/g	2	91		70	130	4	30
		o-xylene			1.0	ug/g	1	96		70	130	4	30
		styrene			1.0	ug/g	1	100		70	130	3	30
		bromoform			0.8	ug/g	1	81		70	130	3	30

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCSD8060	isopropylbenzene		1.0	ug/g	1	96		70	130	4	30
		1,1,2,2-tetrachloroethane		0.9	ug/g	1	93		70	130	1	30
		1,2,3-trichloropropane		1.0	ug/g	1	103		70	130	0	30
		n-propylbenzene		0.9	ug/g	1	90		70	130	1	30
		bromobenzene		0.9	ug/g	1	93		70	130	2	30
		1,3,5-trimethylbenzene		1.0	ug/g	1	99		70	130	0	30
		2-chlorotoluene		0.9	ug/g	1	91		70	130	0	30
		4-chlorotoluene		0.9	ug/g	1	92		70	130	0	30
		tert-butylbenzene		0.9	ug/g	1	94		70	130	0	30
		1,2,4-trimethylbenzene		1.0	ug/g	1	98		70	130	0	30
		sec-butylbenzene		0.9	ug/g	1	91		70	130	1	30
		1,3-dichlorobenzene		1.1	ug/g	1	106		70	130	1	30
		4-isopropyltoluene		0.9	ug/g	1	89		70	130	0	30
		1,4-dichlorobenzene		1.0	ug/g	1	97		70	130	3	30
		1,2-dichlorobenzene		1.0	ug/g	1	97		70	130	5	30
		n-butylbenzene		0.9	ug/g	1	93		70	130	1	30
		1,2-dibromo-3-chloropropane (DBCP)		1.0	ug/g	1	102		70	130	11	30
		1,2,4-trichlorobenzene		1.2	ug/g	1	123		70	130	1	30
		hexachlorobutadiene		1.1	ug/g	1	109		70	130	4	30
		naphthalene		1.3	ug/g	1	132	*	70	130	5	30
		1,2,3-trichlorobenzene		1.4	ug/g	1	135	*	70	130	3	30
		dibromofluoromethane SUR		98	%				78	114		
		toluene-D8 SUR		99	%				88	110		
		4-bromofluorobenzene SUR		102	%				86	115		
		a,a,a-trifluorotoluene SUR		89	%				70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		0.8	ug/g	1	77		70	130	2	30

SDG # 2

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33757

Company Name: Woodard + Curran

Company Address: 40 Shattuck Rd #110, Andover, MA

Report To: Jarrod Yoder

Phone #: 978-557-8150

Invoice to Email: JYoder@woodardcurran.com

☐ Hard Copy Invoice Required

Project Name: Lewis Chemical

Project #:

Project Location: NH (MA) ME VT NY Other

Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER

Reporting Limits: QAPP GW-1 S-1 EPA DW Other

Quote # ☐ NH Reimbursement Pricing

PO #

ANALYSIS REQUEST

☐ VOC 8260 NHDES ☐ VOC 8260 MADEP ☐ VOC 8260 ☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT ☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane ☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List: ☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint ☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB ☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB ☐ O&G 1664 ☐ Mineral O&G SM5520F ☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness ☐ Total Metals-list: ☐ Dissolved Metals-list: ☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN ☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride ☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP ☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	☒ VOC 8260	Grab (G) or Composite (C)
33757-01 WC	ESM-5 (5-10)	1		X	X					X	7-23-15	1124	KS	X	
02 WC	ESM-5 (10-12.5)	1		X						X	7/23/15	1129	KS	X	
03 WC	ESM-5 (12.5-15)	1		X						X	7/23/15	1130	KS	X	
04 WC	ESM-7 (10-12.5)	1		X						X	7/23/15	1410	KS	X	
05 WC	ESM-7 (12.5-15)	1		X						X	7/23/15	1411	KS	X	
06 WC	ESM-7 (15-17.5)	1		X						X	7/23/15	1413	KS	X	
07 WC	ESM-3 (9-11)	1		X						X	7/23/15	1520	KS	X	
08 WC	ESM-3 (11-14)	1		X						X	7/23/15	1530	KS	X	
09 WC	ESM-3 (14-15)	1		X						X	7/23/15	1531	KS	X	
10	Trip Blank	1	X							X	LAB	—		X	
11 WC	ESM-5 ANGLED (10-12)	1		X						X	7/23/15	1305	KS	X	

TAT REQUESTED

Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS
Please report w/ WTC GIS Key EDD

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) see above, KStevens@woodardcurran.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☑ YES ☐ NO
TEMPERATURE °C

CUSTODY RECORD
QSD-01 Revision 01/09/15

	Relinquished by Sampler:	Date	Time	Received by:	Date	Time
1	Kevin B. Lauer	7-24-15	11:00			
2					7/24/15	1100
3		Date	Time	Received by:	Date	Time
		7/24/15	1330			
4	Relinquished by:	Date	Time	Received by Laboratory:	Date	Time
					7/24/15	13:30

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APPENDIX H: ISCO TREATABILITY SUMMARY REPORT

Klozur® Persulfate Demand Test and Base Buffering Capacity Test

Client: Woodard & Curran

Performing Lab: PeroxyChem Environmental Solutions USA
Tonawanda, New York

Date September 29, 2015

I. Background

Klozur® activated persulfate is a strong oxidant capable of mineralizing a wide range of contaminants, including chlorinated solvents, petroleum hydrocarbons, polyaromatic hydrocarbons, gasoline additives, pesticides, and many others. Activation of the persulfate anion generates the sulfate radical, the primary species that drives the rapid destruction of the contaminants of concern. Activation can be accomplished by several methods[1]: heat, transition metals, addition of hydrogen peroxide, or utilizing high pH. Choice of the activation method will depend on the contaminant of concern and site characteristics.

A chemical oxidant is not specific as to what it will oxidize. As a result, activated persulfate will not only mineralize the contaminant of concern, but a portion of the oxidant will be used in oxidizing soil organics, reduced metals, and organic species that are not of concern. In addition, activated persulfate will undergo auto-decomposition, which will be a function of temperature, concentration and activation method. The demand upon the activated persulfate from all of these components is captured in a coarse screening test termed, "Klozur Demand Test". It is dependent upon the site characteristics, such as the organic content of the soil, the mineral loading, and soil type and collectively must be considered for estimating the magnitude of oxidant dosing during field application.

The Klozur® Persulfate KDT test measures the loss of persulfate in the presence of soil, groundwater and activator over a period of 48 and 168 hours. The resulting KDT values can then be used as a guide to develop appropriate persulfate dosing for subsequent treatability testing and field applications.

When high pH is chosen as a means of activation, a Base Buffering Capacity (BBC) test is recommended. The goal of a BBC test is to determine the

[1] PeroxyChem is the owner of licensee under various patents relating to the use of activation chemistries

amount of sodium hydroxide (NaOH) needed to raise the pH of a soil to pH 10.5, which is necessary for Klozur persulfate activation. This report contains the results and observations from both a KDT and BBC test.

II. Sample Handling

Client Sample Identification

Soil ID: ESM - 7
GW ID: ESM - 7

Handling Procedures

- The samples were received on July 27, 2015. On September 16, soil was transferred into a plastic bag and mixed well. The homogenized soil was composed of three subsamples: ESM-7 10-12.5', ESM-7 12.5-15', and ESM-7 15-17.5'. Two of the subsamples were very dense clay, and one of the subsamples was sand / coarse gravel. Overall, the homogenized soil was dark brown / gray. ESM-7 groundwater came in a Coleman water cube. Groundwater was dark orange / brown with sediment.
- On September 16, 2015, the tubes were prepared according to the PeroxyChem Tonawanda KDT protocol using the provided soil and groundwater. Additional tubes were prepared according to the PeroxyChem Tonawanda BBC protocol using the provided soil and groundwater.
- The remaining soil was left in the plastic bag used for homogenization and stored in a clean plastic bucket in a 4°C cooler.
- The experimental samples were stored at room temperature and each sample was inverted several times once per day.
- The unused soil will be disposed of responsibly after about one month.

III. Results

Sample ID	Trial Activator	Soil Wt. (g)	Water Vol. (mL)	Klozur Dosage (g/Kg Soil) t=0 hrs.	Slurry pH	Klozur Consumption (g persulfate/kg soil)	
						t=48hr	t=168 hr
Soil: ESM-7 GW: ESM-7	High pH 25% NaOH	10	30	15	8.34 – 10.73	2.1	2.2

Sample ID	pH	Initial Dosing	168 Hours	Total mass of 25% NaOH added over 7 days (g)	BBC (g 25% NaOH / kg dry soil)
Soil: ESM-7 GW: ESM-7	**Initial pH**	5.45	10.39	0.134	6.2
	Final pH	10.58	--		

IV. Conclusions

The Klozur® Persulfate demand with high pH activation for the ESM-7 soil and groundwater sample ranges from approximately 2.1 – 2.2 g persulfate / kg soil, which is considered moderate as compared to persulfate SOD for most soils. Based on these values, a **SOD value of 2.2 g/kg** is recommended as an area SOD for further refinement of the Klozur persulfate total demand.

Base buffering capacity was determined by mixing 30g of soil with 30g of site groundwater in 50mL plastic centrifuge tubes. NaOH was added until a pH of 10.5 – 12 was maintained. The **BBC of the soil and groundwater provided was 6.2 g 25% NaOH / kg soil.** The BBC is also considered moderate or slightly above average when compared to other sites.

A third centrifuge tube was also prepared with only 30g of site groundwater. This tube received the same amount of NaOH as the two soil and groundwater tubes. Immediately after NaOH was added to the groundwater-only tube, orange-brown particulate settled out, as shown in photo 3.

V. Appendix

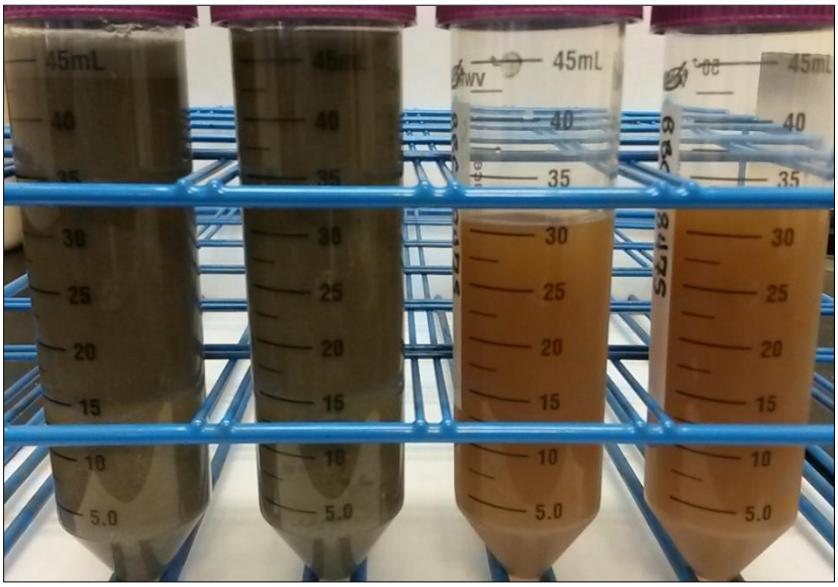

Photo 1: Day 0, before initial dosing. From left to right: Tube #1, #2, #3 and #4.

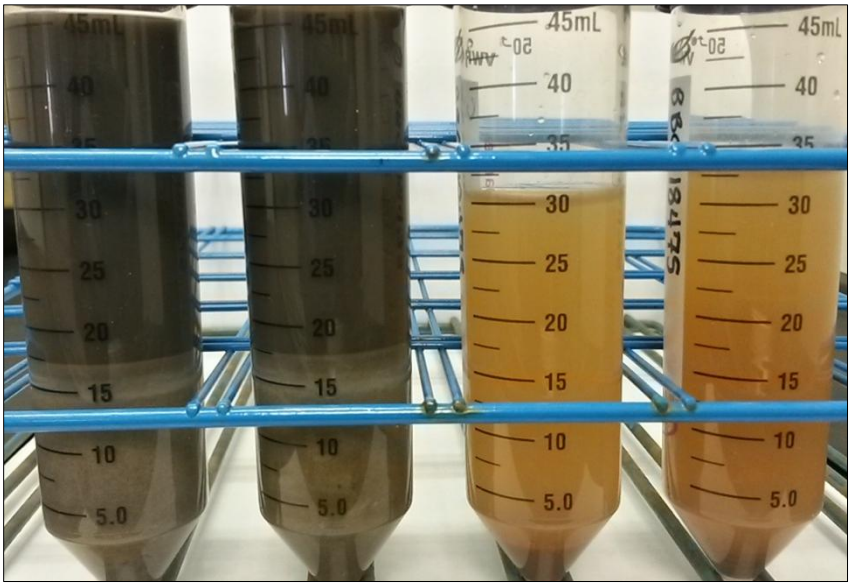

Photo 2: Day 7. From left to right: Tube #1, #2, #3, and #4.

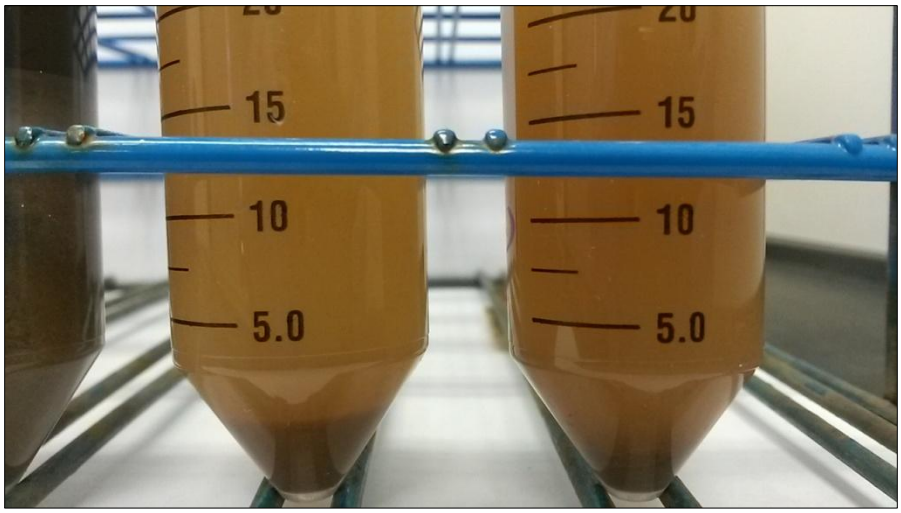

Photo 3: Day 7, close up of tubes #3 (left) and #4 (right). Tube #3 contained 30g of groundwater and was dosed with the same amount of NaOH as the soil and groundwater tubes. Tube #4 contained only 30g of groundwater and never received NaOH.

VI. Authorizing Signatures

This report contains the results as determined by PeroxyChem laboratory protocol and are accurately represented herein.

Jessica Powell
Soil and Groundwater Laboratory Technician

Note: 1. PeroxyChem recommends performing suitable treatability testing and field pilot demonstration to determine the effectiveness of Klozur® activated persulfate on the contaminants of concern. KDT testing provides only an indication of the minimum amount of oxidant required to overcome the demands of soil, groundwater and other secondary species that contribute to the usage of the oxidant. The KDT results do not imply a guarantee of efficacy of the activated persulfate in actual field situations. 2. ANY SUCH QUANTITY OR WARRANTY IS EXPRESSLY DISCLAIMED.

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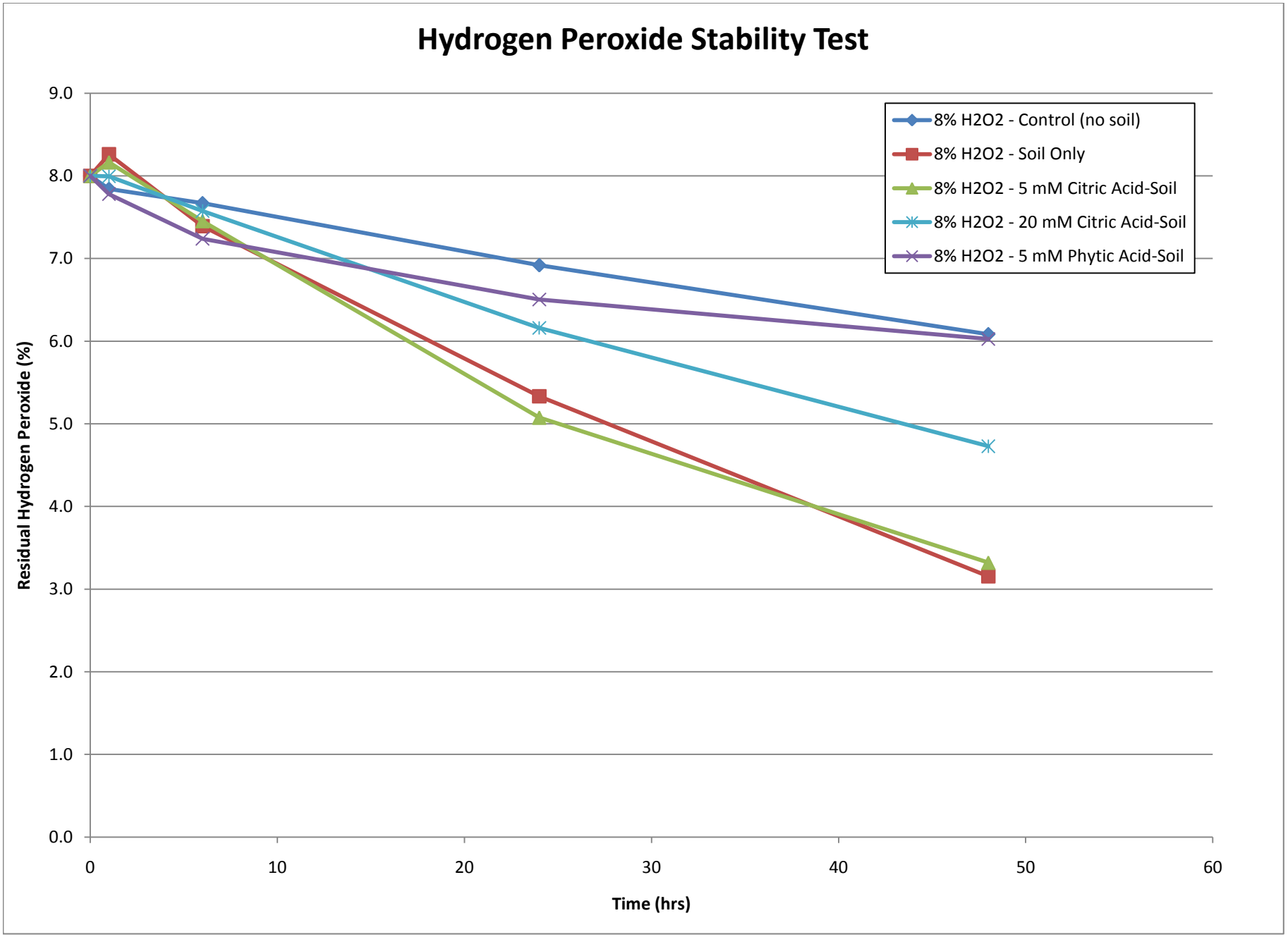
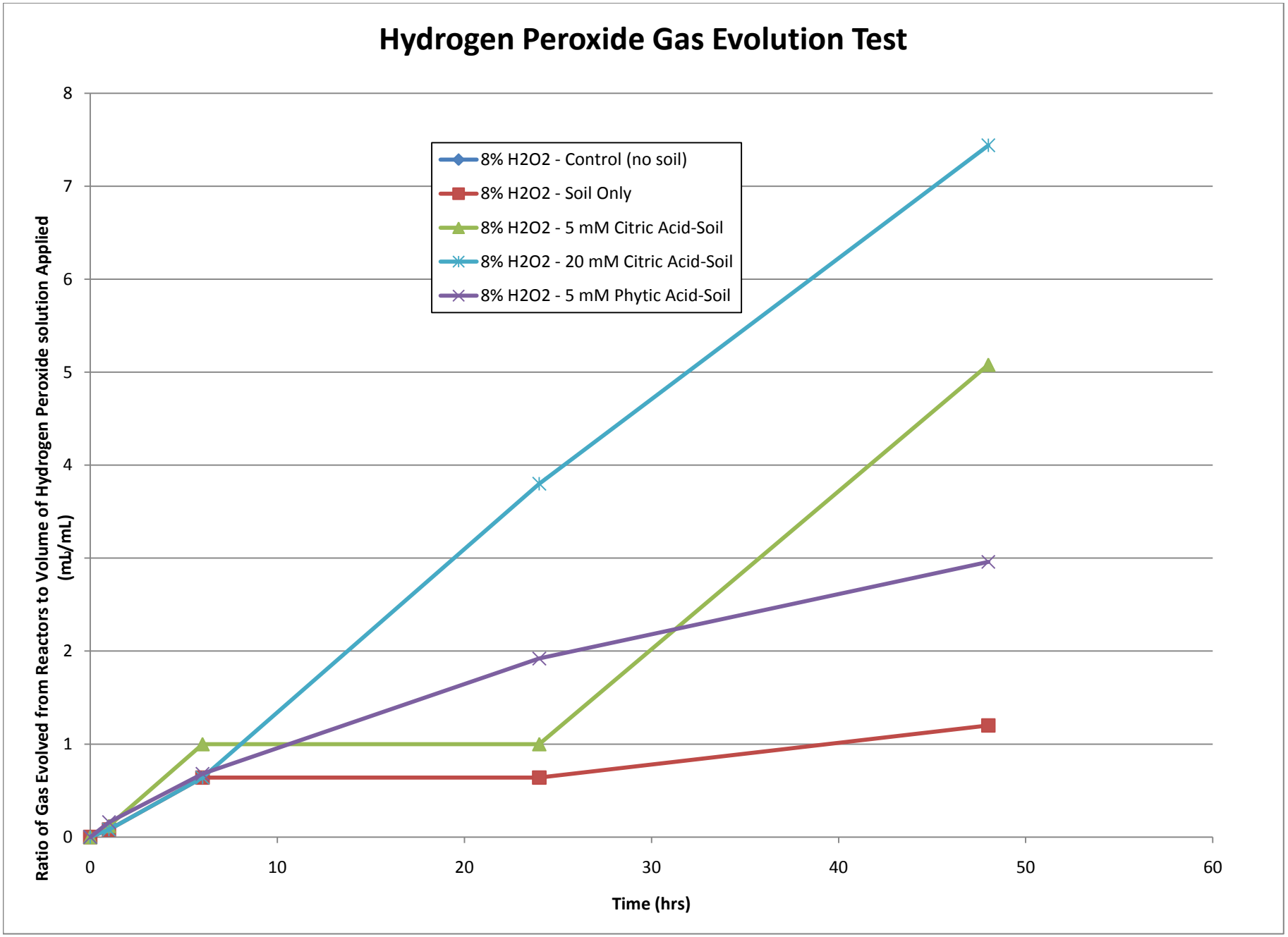

Hydrogen Peroxide Stability Test
Residual Hydrogen Peroxide (%)
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
0
10
20
30
40
50
60
Time (hrs)
8% H2O2 - Control (no soil)
8% H2O2 - Soil Only
8% H2O2 - 5 mM Citric Acid-Soil
8% H2O2 - 20 mM Citric Acid-Soil
8% H2O2 - 5 mM Phytic Acid-Soil


Hydrogen Peroxide Gas Evolution Test
Ratio of Gas Evolved from Reactors to Volume of Hydrogen Peroxide solution Applied (mL/mL)
Time (hrs)
8% H2O2 - Control (no soil)
8% H2O2 - Soil Only
8% H2O2 - 5 mM Citric Acid-Soil
8% H2O2 - 20 mM Citric Acid-Soil
8% H2O2 - 5 mM Phytic Acid-Soil
0
1
2
4
5
6
7
8
0
10
20
30
40
50
60

APPENDIX I: LABORATORY ANALYTICAL RESULTS – ECOLOGICAL SAMPLING

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-86189-1
TestAmerica Sample Delivery Group: #1
Client Project/Site: Lewis Chemical Project
Revision: 1

For:
Woodard & Curran, Inc.
40 Shattuck Road
Suite 110
Andover, Massachusetts 01810

Attn: Mr. Jarrod Yoder

Authorized for release by:
9/15/2015 2:24:25 PM

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

Links

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-86189-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-86189-1

Revised report: Adding surrogates from both columns for water PCB samples. Removed B flag from Copper data from sample 480-86189-3. Reidentified PCB hit on sample 480-86256-5.

Receipt
The samples were received on 8/26/2015 2:00 AM and 8/27/2015 1:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.5º C and 0.7º C.

Due to the dilutions required, per question G on the MassDEP Analytical Protocol Certification Form, the CAM reporting limits specified in this CAM protocol could not be achieved for some or all samples/analytes.

GC/MS VOA
Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method 8260C: The continuing calibration verification (CCV) for 1,4-Dioxane, 2-Butanone (MEK) and Acetone associated with batch 480-260445 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples are impacted: TB-01 (480-86189-1), SW-10 (480-86189-2) and PW-10 (480-86189-3).

Method 8260C: The continuing calibration verification (CCV) for 2-Butanone (MEK), 2-Hexanone, 1,4-Dioxane, Acetone and Dichlorodifluoromethane associated with batch 480-260681 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Poor performing compounds are allowed to be outside the 40% difference but not over 60% difference. The following samples are impacted: TB-02 (480-86256-1), SW-11 (480-86256-2), SW-12 (480-86256-3), SW-12 (DUP) (480-86256-4), PW-12 (480-86256-5), PW-12 (DUP) (480-86256-6), SW-13 (480-86256-7), SW-14 (480-86256-9), SW-15 (480-86256-11), PW-15 (480-86256-12) and SW-16 (480-86256-13).

Method 8260C: The continuing calibration verification (CCV) for associated with batch 480-260899 recovered outside the MCP control limits 1,4-Dioxane, Acetone and Dichlorodifluoromethane. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples are impacted: PW-13 (480-86256-8), PW-14 (480-86256-10) and PW-16 (480-86256-14).

Method 8260C: The continuing calibration verification (CCV) for 2-Butanone associated with batch 480-260941 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following sample is impacted: SED-10 (480-86189-4).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-260445 exceeded control limits for the following analytes: 2-Butanone and Tetrahydrofuran. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate and Methacrylonitrile in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the compounds can be distinguished from one another if present in a client sample. The following samples are impacted: TB-01 (480-86189-1), SW-10 (480-86189-2) and PW-10 (480-86189-3).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-260681 exceeded control limits for the following analyte: 2-Butanone and Tetrahydrofuran. Unlike the calibration standards, this is due to the co-elution with Ethyl Acetate and Methyl Methacrylate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples are impacted: TB-02 (480-86256-1), SW-11 (480-86256-2), SW-12 (480-86256-3), SW-12 (DUP) (480-86256-4), PW-12 (480-86256-5), PW-12 (DUP) (480-86256-6), SW-13 (480-86256-7), SW-14 (480-86256-9), SW-15 (480-86256-11), PW-15 (480-86256-12) and SW-16 (480-86256-13).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch preparation batch

Job ID: 480-86189-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

480-260778 and analytical batch 480-260731 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the co-elution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following sample is impacted: TB-01 (480-86189-5).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-260899 exceeded control limits for the following analyte: 2-Butanone and Tetrahydrofuran. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate and Methyl methacrylate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples are impacted: PW-13 (480-86256-8), PW-14 (480-86256-10) and PW-16 (480-86256-14).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-260899 exceeded control limits for the following analyte: Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples are impacted: PW-13 (480-86256-8), PW-14 (480-86256-10) and PW-16 (480-86256-14).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-260980 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the co-elution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following sample is impacted: SED-10 (480-86189-4).

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: PW-12 (480-86256-5), PW-12 (DUP) (480-86256-6) and PW-15 (480-86256-12). Elevated reporting limits (RLs) are provided.

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: PW-14 (480-86256-10) and PW-16 (480-86256-14). Elevated reporting limits (RLs) are provided.

Method 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 480-260980 recovered outside control limits for the following analytes: 2-Hexanone, 4-Methyl-2-pentanone, Hexachlorobutadiene, and Naphthalene. The following sample is impacted: SED-10 (480-86189-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 8082: Per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits after moisture correction do not achieve the CAM reporting limits specified in this CAM protocol; however they do achieve method 1 S1 standards.

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SED-10 (480-86189-4).2154308, 1848564, 1931921

Method 8082: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 480-260937 recovered outside control limits for the following analytes: PCB-1016 and PCB-1260. Actual spike recoveries were within acceptance limits. The following samples are being reported because there is no additional volume available for re-extraction: SW-11 (480-86256-2), SW-12 (480-86256-3), SW-12 (DUP) (480-86256-4), PW-12 (480-86256-5), PW-12 (DUP) (480-86256-6), SW-13 (480-86256-7), PW-13 (480-86256-8), SW-14 (480-86256-9), PW-14 (480-86256-10), SW-15 (480-86256-11), PW-15 (480-86256-12), SW-16 (480-86256-13), PW-16 (480-86256-14) and PW-15 filtered (480-86256-15).

Method 8082: The following samples were diluted to bring the concentration of target analytes within the calibration range: PW-13 (480-86256-8), PW-14 (480-86256-10), PW-15 (480-86256-12) and PW-16 (480-86256-14). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 480-86189-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Metals

Method 6010: The low level continuing calibration verification (CCVL 480-260906/24) for analytical batch 480-260906 contained Dissolved Zinc above the upper quality control limit. All reported samples associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of sample (480-86189-D-2-C MS), (480-86189-D-2-D MSD), (480-86189-D-2-B PDS) and (480-86189-D-2-B SD ^) was not performed.

Method 6010: The ICSA (ICSA 480-260906/9) exhibited results outside the project established control limits for Dissolved Antimony. However, the results were within TestAmerica's standard quality control limits, therefore no corrective action was necessary. SW-10 (480-86189-2), PW-10 (480-86189-3), (LCS 480-260530/2-A), (LCSD 480-260530/3-A), (MB 480-260530/1-A), (480-86189-D-2-C MS), (480-86189-D-2-D MSD), (480-86189-D-2-B PDS) and (480-86189-D-2-B SD ^)

Method 6010: The ICSA (ICSA 480-261549/9) exhibited a result outside the project established control limits for Dissolved Antimony. However, the result was within the laboratory's standard quality control limits, therefore no corrective action was necessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Geotechnical

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3540C: Due to the matrix, the following sample could not be concentrated to the final method required volume: SED-10 (480-86189-4). The reporting limits (RLs) are elevated proportionately.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 480-260937.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 480-261294.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-86189-1**

Project Location: RTN:

This form provides certifications for the data set for the following Laboratory Sample ID Number(s):

480-86189-1[1-5], 480-86256-1[1-15]

Matrices: [X] Groundwater/Surface Water [X] Soil/Sediment [ ] Drinking Water [ ] Air [ ] Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A [X]	7470/7471 Hg CAM III B [X]	Mass DEP VPH CAM IV A [ ]	8081 Pesticides CAM V B [ ]	7196 Hex Cr CAM VI B [ ]	Mass DEP APH CAM IX A [ ]
8270 SVOC CAM II B [ ]	7010 Metals CAM III C [ ]	Mass DEP EPH CAM IV B [ ]	8151 Herbicides CAM V C [ ]	8330 Explosives CAM VIII A [ ]	TO-15 VOC CAM IX B [ ]
6010 Metals CAM III A [X]	6020 Metals CAM III D [ ]	8082 PCB CAM V A [X]	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A [ ]	6860 Perchlorate CAM VIII B [ ]	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	[X] Yes [ ] No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	[X] Yes [ ] No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	[X] Yes [ ] No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	[X] Yes [ ] No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	[ ] Yes [ ] No [ ] Yes [ ] No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	[X] Yes [ ] No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	[ ] Yes [X] No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350**

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	[ ] Yes [X] No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	[X] Yes [ ] No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Becky Mason Position: Project Manager

Printed Name: Becky Mason Date: 9/4/15 9:00

This form has been electronically signed and approved

Detection Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: TB-01 — Lab Sample ID: 480-86189-1

No Detections.

Client Sample ID: SW-10 — Lab Sample ID: 480-86189-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	65.2		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	16.3	J	50.0	1.50	ug/L	1		6010	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.16		1.00	1.00	ug/L	1		8260C	Total/NA
Hardness as calcium carbonate	80000		4000	4000	ug/L	1		SM 2340C	Total/NA

Client Sample ID: PW-10 — Lab Sample ID: 480-86189-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	247		10.0	0.700	ug/L	1		6010	Dissolved
Chromium	1.07	J	5.00	1.00	ug/L	1		6010	Dissolved
Nickel	2.63	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	26.6	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	1.72	J	10.0	1.60	ug/L	1		6010	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.03		1.00	1.00	ug/L	1		8260C	Total/NA
Freon 113	11.1		1.00	1.00	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	10.8		1.00	1.00	ug/L	1		8260C	Total/NA
1,2-Dichlorobenzene	1.17		1.00	1.00	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	20.7		1.00	1.00	ug/L	1		8260C	Total/NA
Tetrachloroethene	19.7		1.00	1.00	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.98		1.00	1.00	ug/L	1		8260C	Total/NA
Trichloroethene	18.3		1.00	1.00	ug/L	1		8260C	Total/NA
Vinyl chloride	22.6		1.00	1.00	ug/L	1		8260C	Total/NA
PCB-1242	2.93		0.233	0.233	ug/L	1		8082	Total/NA
PCB-1254	0.373		0.233	0.233	ug/L	1		8082	Total/NA
Hardness as calcium carbonate	372000		4000	4000	ug/L	1		SM 2340C	Total/NA

Client Sample ID: SED-10 — Lab Sample ID: 480-86189-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	17.4				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.51	J	4.08	1.63	mg/Kg	1	☼	6010	Total/NA
Barium	55.3		2.04	0.449	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.180	J	0.817	0.114	mg/Kg	1	☼	6010	Total/NA
Cadmium	1.11		0.817	0.123	mg/Kg	1	☼	6010	Total/NA
Chromium	25.6		2.04	0.817	mg/Kg	1	☼	6010	Total/NA
Nickel	6.72		4.08	0.939	mg/Kg	1	☼	6010	Total/NA
Vanadium	17.8		2.04	0.449	mg/Kg	1	☼	6010	Total/NA
Zinc	146		10.2	2.61	mg/Kg	1	☼	6010	Total/NA
Lead	83.9		2.04	0.980	mg/Kg	1	☼	6010	Total/NA
Antimony	1.79	J	2.04	1.63	mg/Kg	1	☼	6010	Total/NA
Copper	58.2		4.08	0.858	mg/Kg	1	☼	6010	Total/NA
Mercury	0.368	J	0.412	0.0334	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SED-10 (Continued) — Lab Sample ID: 480-86189-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Freon 113	0.0771		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
1,1-Dichloroethane	0.0451		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
1,2-Dichlorobenzene	0.140		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.178		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.231		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
Trichloroethene	0.107		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
Vinyl chloride	0.0457		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
Aroclor-1242	5.42		1.57	1.57	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: TB-01 — Lab Sample ID: 480-86189-5

No Detections.

Client Sample ID: TB-02 — Lab Sample ID: 480-86256-1

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.07		1.00	1.00	ug/L	1		8260C	Total/NA

Client Sample ID: SW-11 — Lab Sample ID: 480-86256-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	59.7		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	4.68	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	76000		4000	1050	ug/L	1		SM 2340C	Total/NA

Client Sample ID: SW-12 — Lab Sample ID: 480-86256-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	70.2		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	7.77	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	88000		4000	1050	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.24		1.00	1.00	ug/L	1		8260C	Total/NA
Freon 113	1.00		1.00	1.00	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	1.40		1.00	1.00	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.59		1.00	1.00	ug/L	1		8260C	Total/NA
Vinyl chloride	1.89		1.00	1.00	ug/L	1		8260C	Total/NA

Client Sample ID: SW-12 (DUP) — Lab Sample ID: 480-86256-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	67.4		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	8.33	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.71	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	104000		4000	1050	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.03		1.00	1.00	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	1.51		1.00	1.00	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.64		1.00	1.00	ug/L	1		8260C	Total/NA
Vinyl chloride	1.93		1.00	1.00	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: PW-12 — Lab Sample ID: 480-86256-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	438		10.0	0.700	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	476000		4000	1050	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	498		20.0	20.0	ug/L	20		8260C	Total/NA
Freon 113	184		20.0	20.0	ug/L	20		8260C	Total/NA
1,1-Dichloroethane	447		20.0	20.0	ug/L	20		8260C	Total/NA
1,2-Dichlorobenzene	36.7		20.0	20.0	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	356		20.0	20.0	ug/L	20		8260C	Total/NA
Dichlorodifluoromethane	122		20.0	20.0	ug/L	20		8260C	Total/NA
Methylene Chloride	49.2		20.0	20.0	ug/L	20		8260C	Total/NA
Toluene	29.2		20.0	20.0	ug/L	20		8260C	Total/NA
Trichloroethene	21.4		20.0	20.0	ug/L	20		8260C	Total/NA
Vinyl chloride	826		20.0	20.0	ug/L	20		8260C	Total/NA
PCB-1232	10.6		0.230	0.230	ug/L	1		8082	Total/NA

Client Sample ID: PW-12 (DUP) — Lab Sample ID: 480-86256-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	454		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	1.85	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	484000		4000	1050	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	446		20.0	20.0	ug/L	20		8260C	Total/NA
Freon 113	158		20.0	20.0	ug/L	20		8260C	Total/NA
1,1-Dichloroethane	412		20.0	20.0	ug/L	20		8260C	Total/NA
1,2-Dichlorobenzene	32.7		20.0	20.0	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	316		20.0	20.0	ug/L	20		8260C	Total/NA
Dichlorodifluoromethane	113		20.0	20.0	ug/L	20		8260C	Total/NA
Methylene Chloride	61.9		20.0	20.0	ug/L	20		8260C	Total/NA
Toluene	23.4		20.0	20.0	ug/L	20		8260C	Total/NA
Vinyl chloride	726		20.0	20.0	ug/L	20		8260C	Total/NA
PCB-1232	6.68		0.237	0.237	ug/L	1		8082	Total/NA

Client Sample ID: SW-13 — Lab Sample ID: 480-86256-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	79.7		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	9.32	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	1.78	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	100000		4000	1050	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	1.26		0.233	0.233	ug/L	1		8082	Total/NA

Client Sample ID: PW-13 — Lab Sample ID: 480-86256-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	508		10.0	0.700	ug/L	1		6010	Dissolved
Chromium	1.98	J	5.00	1.00	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	532000		4000	1050	ug/L	1		SM 2340C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PW-13 (Continued) — Lab Sample ID: 480-86256-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.28		1.00	1.00	ug/L	1		8260C	Total/NA
1,2-Dichlorobenzene	5.16		1.00	1.00	ug/L	1		8260C	Total/NA
Benzene	1.08		1.00	1.00	ug/L	1		8260C	Total/NA
Chlorobenzene	3.60		1.00	1.00	ug/L	1		8260C	Total/NA
Chloroethane	5.32		2.00	2.00	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.62		1.00	1.00	ug/L	1		8260C	Total/NA
Vinyl chloride	1.93		1.00	1.00	ug/L	1		8260C	Total/NA
PCB-1254	0.344		0.240	0.240	ug/L	1		8082	Total/NA
PCB-1232 - DL	71.5		2.40	2.40	ug/L	10		8082	Total/NA

Client Sample ID: SW-14 — Lab Sample ID: 480-86256-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	63.6		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	9.21	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.05	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	88000		4000	1050	ug/L	1		SM 2340C	Total/NA

Client Sample ID: PW-14 — Lab Sample ID: 480-86256-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	269		10.0	0.700	ug/L	1		6010	Dissolved
Chromium	6.35		5.00	1.00	ug/L	1		6010	Dissolved
Nickel	3.22	J	10.0	1.26	ug/L	1		6010	Dissolved
Vanadium	2.72	J	10.0	1.50	ug/L	1		6010	Dissolved
Zinc	1.66	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	410000		10000	2630	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	12.1		8.00	8.00	ug/L	4		8260C	Total/NA
Methylene Chloride	7.67		4.00	4.00	ug/L	4		8260C	Total/NA
PCB-1254	0.242		0.240	0.240	ug/L	1		8082	Total/NA
PCB-1232 - DL	26.7		1.20	1.20	ug/L	5		8082	Total/NA

Client Sample ID: SW-15 — Lab Sample ID: 480-86256-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	66.3		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	5.66	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	92000		4000	1050	ug/L	1		SM 2340C	Total/NA

Client Sample ID: PW-15 — Lab Sample ID: 480-86256-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	232		10.0	0.700	ug/L	1		6010	Dissolved
Chromium	5.17		5.00	1.00	ug/L	1		6010	Dissolved
Nickel	6.74	J	10.0	1.26	ug/L	1		6010	Dissolved
Vanadium	4.29	J	10.0	1.50	ug/L	1		6010	Dissolved
Zinc	2.12	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	390000		10000	2630	ug/L	1		SM 2340C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PW-15 (Continued) — Lab Sample ID: 480-86256-12

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	1800		40.0	40.0	ug/L	20		8260C	Total/NA
Methylene Chloride	76.8		20.0	20.0	ug/L	20		8260C	Total/NA
PCB-1254	0.480		0.234	0.234	ug/L	1		8082	Total/NA
PCB-1232 - DL	116		4.68	4.68	ug/L	20		8082	Total/NA

Client Sample ID: SW-16 — Lab Sample ID: 480-86256-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	64.8		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	3.56	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.30	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	84000		4000	1050	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	0.469		0.230	0.230	ug/L	1		8082	Total/NA

Client Sample ID: PW-16 — Lab Sample ID: 480-86256-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	169		10.0	0.700	ug/L	1		6010	Dissolved
Chromium	3.55	J	5.00	1.00	ug/L	1		6010	Dissolved
Nickel	2.71	J	10.0	1.26	ug/L	1		6010	Dissolved
Vanadium	2.41	J	10.0	1.50	ug/L	1		6010	Dissolved
Zinc	3.15	J	50.0	1.50	ug/L	1		6010	Dissolved
Mercury	0.147	J	0.200	0.120	ug/L	1		7470A	Dissolved
Hardness as calcium carbonate	540000		10000	2630	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	12.2		8.00	8.00	ug/L	4		8260C	Total/NA
Methyl tert-butyl ether	4.71		4.00	4.00	ug/L	4		8260C	Total/NA
Methylene Chloride	9.25		4.00	4.00	ug/L	4		8260C	Total/NA
PCB-1254	0.745		0.277	0.277	ug/L	1		8082	Total/NA
PCB-1232 - DL	43.0		2.77	2.77	ug/L	10		8082	Total/NA

Client Sample ID: PW-15 filtered — Lab Sample ID: 480-86256-15

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	0.742		0.248	0.248	ug/L	1		8082	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-01
Date Collected: 08/25/15 00:00
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/26/15 14:28	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Freon 113	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/26/15 14:28	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/26/15 14:28	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/26/15 14:28	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/26/15 14:28	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/26/15 14:28	1
Acetone	<50.0		50.0	50.0	ug/L			08/26/15 14:28	1
Benzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Bromoform	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/26/15 14:28	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/26/15 14:28	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/26/15 14:28	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/26/15 14:28	1
Chloroform	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/26/15 14:28	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 14:28	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/26/15 14:28	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/26/15 14:28	1

Client Sample ID: TB-01

Lab Sample ID: 480-86189-1

Date Collected: 08/25/15 00:00
Matrix: Water
Date Received: 08/26/15 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/26/15 14:28	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/26/15 14:28	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/26/15 14:28	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Styrene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/26/15 14:28	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/26/15 14:28	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/26/15 14:28	1
Toluene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 14:28	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/26/15 14:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/26/15 14:28*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/26/15 14:28*	*1*

Client Sample ID: SW-10

Lab Sample ID: 480-86189-2

Date Collected: 08/25/15 12:15
Matrix: Water
Date Received: 08/26/15 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/26/15 17:38	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Freon 113	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/26/15 17:38	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1

Client Sample ID: SW-10
Date Collected: 08/25/15 12:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/26/15 17:38	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/26/15 17:38	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/26/15 17:38	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/26/15 17:38	1
Acetone	<50.0		50.0	50.0	ug/L			08/26/15 17:38	1
Benzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Bromoform	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/26/15 17:38	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/26/15 17:38	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/26/15 17:38	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/26/15 17:38	1
Chloroform	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/26/15 17:38	1
cis-1,2-Dichloroethene	**1.16**		1.00	1.00	ug/L			08/26/15 17:38	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 17:38	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/26/15 17:38	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/26/15 17:38	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/26/15 17:38	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/26/15 17:38	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/26/15 17:38	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Styrene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/26/15 17:38	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/26/15 17:38	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1

Client Sample ID: SW-10

Date Collected: 08/25/15 12:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/26/15 17:38	1
Toluene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 17:38	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/26/15 17:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/26/15 17:38*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/26/15 17:38*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1221	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1232	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1242	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1248	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1254	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1260	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1262	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1268	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/31/15 14:58*	*09/01/15 14:54*	*1*
Tetrachloro-m-xylene	*97*		*30 - 150*	*08/31/15 14:58*	*09/01/15 14:54*	*1*
DCB Decachlorobiphenyl	*60*		*30 - 150*	*08/31/15 14:58*	*09/01/15 14:54*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/31/15 14:58*	*09/01/15 14:54*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/27/15 07:10	08/27/15 17:34	1
Arsenic	<5.55		10.0	5.55	ug/L		08/27/15 07:10	08/27/15 17:34	1
Barium	**65.2**		10.0	0.700	ug/L		08/27/15 07:10	08/27/15 17:34	1
Beryllium	<0.300		1.00	0.300	ug/L		08/27/15 07:10	08/27/15 17:34	1
Cadmium	<0.500		1.00	0.500	ug/L		08/27/15 07:10	08/27/15 17:34	1
Chromium	<1.00		5.00	1.00	ug/L		08/27/15 07:10	08/27/15 17:34	1
Nickel	<1.26		10.0	1.26	ug/L		08/27/15 07:10	08/27/15 17:34	1
Thallium	<10.2		20.0	10.2	ug/L		08/27/15 07:10	08/27/15 17:34	1
Vanadium	<1.50		10.0	1.50	ug/L		08/27/15 07:10	08/27/15 17:34	1
Zinc	**16.3**	**J**	50.0	1.50	ug/L		08/27/15 07:10	08/28/15 11:15	1
Lead	<3.00		5.00	3.00	ug/L		08/27/15 07:10	08/27/15 17:34	1
Selenium	<8.70		10.0	8.70	ug/L		08/27/15 07:10	08/27/15 17:34	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/27/15 07:10	08/27/15 17:34	1
Copper	<1.60		10.0	1.60	ug/L		08/27/15 07:10	08/28/15 11:15	1

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: SW-10

Lab Sample ID: 480-86189-2
Matrix: Water
Date Collected: 08/25/15 12:15
Date Received: 08/26/15 02:00

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/26/15 10:20	08/26/15 14:52	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**80000**		4000	4000	ug/L			09/03/15 13:51	1

Client Sample ID: PW-10

Lab Sample ID: 480-86189-3
Matrix: Water
Date Collected: 08/25/15 12:45
Date Received: 08/26/15 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,1,1-Trichloroethane	**2.03**		1.00	1.00	ug/L			08/26/15 18:02	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/26/15 18:02	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Freon 113	**11.1**		1.00	1.00	ug/L			08/26/15 18:02	1
1,1-Dichloroethane	**10.8**		1.00	1.00	ug/L			08/26/15 18:02	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/26/15 18:02	1
1,2-Dichlorobenzene	**1.17**		1.00	1.00	ug/L			08/26/15 18:02	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/26/15 18:02	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/26/15 18:02	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/26/15 18:02	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/26/15 18:02	1
Acetone	<50.0		50.0	50.0	ug/L			08/26/15 18:02	1
Benzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Bromoform	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/26/15 18:02	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/26/15 18:02	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/26/15 18:02	1

Client Sample ID: PW-10
Date Collected: 08/25/15 12:45
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<2.00		2.00	2.00	ug/L			08/26/15 18:02	1
Chloroform	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/26/15 18:02	1
cis-1,2-Dichloroethene	**20.7**		1.00	1.00	ug/L			08/26/15 18:02	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 18:02	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/26/15 18:02	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/26/15 18:02	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/26/15 18:02	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/26/15 18:02	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/26/15 18:02	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Styrene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/26/15 18:02	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/26/15 18:02	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Tetrachloroethene	**19.7**		1.00	1.00	ug/L			08/26/15 18:02	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/26/15 18:02	1
Toluene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
trans-1,2-Dichloroethene	**1.98**		1.00	1.00	ug/L			08/26/15 18:02	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 18:02	1
Trichloroethene	**18.3**		1.00	1.00	ug/L			08/26/15 18:02	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Vinyl chloride	**22.6**		1.00	1.00	ug/L			08/26/15 18:02	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/26/15 18:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/26/15 18:02*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/26/15 18:02*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1221	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1232	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1242	**2.93**		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1248	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1254	**0.373**		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1260	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1262	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1

Client Sample ID: PW-10

Date Collected: 08/25/15 12:45
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-3

Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*30 - 150*	*08/31/15 14:58*	*09/01/15 15:10*	*1*
Tetrachloro-m-xylene	*101*		*30 - 150*	*08/31/15 14:58*	*09/01/15 15:10*	*1*
DCB Decachlorobiphenyl	*54*		*30 - 150*	*08/31/15 14:58*	*09/01/15 15:10*	*1*
DCB Decachlorobiphenyl	*61*		*30 - 150*	*08/31/15 14:58*	*09/01/15 15:10*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/27/15 07:10	08/27/15 17:56	1
Arsenic	<5.55		10.0	5.55	ug/L		08/27/15 07:10	08/27/15 17:56	1
Barium	**247**		10.0	0.700	ug/L		08/27/15 07:10	08/27/15 17:56	1
Beryllium	<0.300		1.00	0.300	ug/L		08/27/15 07:10	08/27/15 17:56	1
Cadmium	<0.500		1.00	0.500	ug/L		08/27/15 07:10	08/27/15 17:56	1
Chromium	**1.07**	**J**	5.00	1.00	ug/L		08/27/15 07:10	08/27/15 17:56	1
Nickel	**2.63**	**J**	10.0	1.26	ug/L		08/27/15 07:10	08/27/15 17:56	1
Thallium	<10.2		20.0	10.2	ug/L		08/27/15 07:10	08/27/15 17:56	1
Vanadium	<1.50		10.0	1.50	ug/L		08/27/15 07:10	08/27/15 17:56	1
Zinc	**26.6**	**J**	50.0	1.50	ug/L		08/27/15 07:10	08/28/15 11:18	1
Lead	<3.00		5.00	3.00	ug/L		08/27/15 07:10	08/27/15 17:56	1
Selenium	<8.70		10.0	8.70	ug/L		08/27/15 07:10	08/27/15 17:56	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/27/15 07:10	08/27/15 17:56	1
Copper	**1.72**	**J**	10.0	1.60	ug/L		08/27/15 07:10	08/27/15 17:56	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/26/15 10:20	08/26/15 14:54	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**372000**		4000	4000	ug/L			09/01/15 09:10	1

Client Sample ID: SED-10

Date Collected: 08/25/15 13:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-4

Matrix: Solid
Percent Solids: 23.1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,1,1-Trichloroethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,1,2,2-Tetrachloroethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,1,2-Trichloroethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Freon 113	**0.0771**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,1-Dichloroethane	**0.0451**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,1-Dichloroethene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,1-Dichloropropene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2,3-Trichlorobenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2,3-Trichloropropane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2,4-Trichlorobenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2,4-Trimethylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1

Client Sample ID: SED-10
Date Collected: 08/25/15 13:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-4
Matrix: Solid
Percent Solids: 23.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.131		0.131	0.131	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2-Dichlorobenzene	**0.140**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2-Dichloroethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2-Dichloropropane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,3,5-Trimethylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,3-Dichlorobenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,3-Dichloropropane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,4-Dichlorobenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,4-Dioxane	<1.31		1.31	1.31	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
2,2-Dichloropropane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
2-Butanone (MEK)	<0.131	*	0.131	0.131	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
2-Chlorotoluene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
2-Hexanone	<0.131	*	0.131	0.131	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
4-Chlorotoluene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
4-Isopropyltoluene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
4-Methyl-2-pentanone (MIBK)	<0.131	*	0.131	0.131	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Acetone	<1.31		1.31	1.31	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Benzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Bromobenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Bromoform	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Bromomethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Carbon disulfide	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Carbon tetrachloride	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Chlorobenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Chlorobromomethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Chlorodibromomethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Chloroethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Chloroform	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Chloromethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
cis-1,2-Dichloroethene	**0.178**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
cis-1,3-Dichloropropene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Dichlorobromomethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Dichlorodifluoromethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Ethyl ether	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Ethylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Ethylene Dibromide	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Hexachlorobutadiene	<0.0263	*	0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Isopropyl ether	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Isopropylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Methyl tert-butyl ether	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Methylene Chloride	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
m-Xylene & p-Xylene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Naphthalene	<0.131	*	0.131	0.131	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
n-Butylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
N-Propylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
o-Xylene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
sec-Butylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Styrene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Tert-amyl methyl ether	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1

Client Sample ID: SED-10
Date Collected: 08/25/15 13:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-4
Matrix: Solid
Percent Solids: 23.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-butyl ethyl ether	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
tert-Butylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Tetrachloroethene	**0.231**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Tetrahydrofuran	<0.263		0.263	0.263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Toluene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
trans-1,2-Dichloroethene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
trans-1,3-Dichloropropene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Trichloroethene	**0.107**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Trichlorofluoromethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Vinyl chloride	**0.0457**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Dibromomethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/26/15 05:43*	*08/28/15 19:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*	*08/26/15 05:43*	*08/28/15 19:40*	*1*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*08/26/15 05:43*	*08/28/15 19:40*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1221	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1232	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1242	**5.42**		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1248	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1254	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1260	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1262	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1268	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*47*		*30 - 150*	*08/28/15 07:16*	*09/02/15 03:47*	*10*
Tetrachloro-m-xylene	*50*		*30 - 150*	*08/28/15 07:16*	*09/02/15 03:47*	*10*
DCB Decachlorobiphenyl	*19*	*p X*	*30 - 150*	*08/28/15 07:16*	*09/02/15 03:47*	*10*
DCB Decachlorobiphenyl	*35*		*30 - 150*	*08/28/15 07:16*	*09/02/15 03:47*	*10*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.817		2.04	0.817	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Arsenic	**2.51**	**J**	4.08	1.63	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Barium	**55.3**		2.04	0.449	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Beryllium	**0.180**	**J**	0.817	0.114	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Cadmium	**1.11**		0.817	0.123	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Chromium	**25.6**		2.04	0.817	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Nickel	**6.72**		4.08	0.939	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Thallium	<1.23		4.08	1.23	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Vanadium	**17.8**		2.04	0.449	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Zinc	**146**		10.2	2.61	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Lead	**83.9**		2.04	0.980	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Selenium	<1.63		2.04	1.63	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Antimony	**1.79**	**J**	2.04	1.63	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1

Client Sample ID: SED-10

Date Collected: 08/25/15 13:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-4

Matrix: Solid
Percent Solids: 23.1

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	58.2		4.08	0.858	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.368	J	0.412	0.0334	mg/Kg	☼	08/28/15 10:00	08/28/15 13:43	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	17.4				%			08/27/15 13:03	1

Client Sample ID: TB-01

Date Collected: 08/25/15 00:00
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-5

Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,1,1-Trichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,1,2,2-Tetrachloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,1,2-Trichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Freon 113	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,1-Dichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,1-Dichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,1-Dichloropropene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2,3-Trichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2,3-Trichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2,4-Trichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2,4-Trimethylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2-Dibromo-3-Chloropropane	<0.0250		0.0250	0.0250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2-Dichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2-Dichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2-Dichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,3,5-Trimethylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,3-Dichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,3-Dichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,4-Dichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,4-Dioxane	<0.250		0.250	0.250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
2,2-Dichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
2-Butanone (MEK)	<0.0250	*	0.0250	0.0250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
2-Chlorotoluene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
2-Hexanone	<0.0250		0.0250	0.0250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
4-Chlorotoluene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
4-Isopropyltoluene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
4-Methyl-2-pentanone (MIBK)	<0.0250		0.0250	0.0250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Acetone	<0.250		0.250	0.250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Benzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Bromobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Bromoform	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Bromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Carbon disulfide	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1

Client Sample ID: TB-01
Date Collected: 08/25/15 00:00
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-5
Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Chlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Chlorobromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Chlorodibromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Chloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Chloroform	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Chloromethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
cis-1,2-Dichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
cis-1,3-Dichloropropene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Dichlorobromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Dichlorodifluoromethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Ethyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Ethylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Ethylene Dibromide	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Hexachlorobutadiene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Isopropyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Isopropylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Methyl tert-butyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Methylene Chloride	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
m-Xylene & p-Xylene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Naphthalene	<0.0250		0.0250	0.0250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
n-Butylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
N-Propylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
o-Xylene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
sec-Butylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Styrene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Tert-amyl methyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Tert-butyl ethyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
tert-Butylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Tetrachloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Tetrahydrofuran	<0.0500		0.0500	0.0500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Toluene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
trans-1,2-Dichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
trans-1,3-Dichloropropene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Trichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Trichlorofluoromethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Vinyl chloride	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Dibromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*	*08/26/15 05:43*	*08/27/15 16:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*	*08/26/15 05:43*	*08/27/15 16:18*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*08/26/15 05:43*	*08/27/15 16:18*	*1*

Client Sample ID: TB-02
Date Collected: 08/25/15 00:00
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 13:46	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 13:46	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 13:46	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 13:46	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 13:46	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 13:46	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 13:46	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 13:46	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 13:46	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 13:46	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 13:46	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 13:46	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 13:46	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 13:46	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 13:46	1

Client Sample ID: TB-02

Date Collected: 08/25/15 00:00
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 13:46	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Methylene Chloride	**1.07**		1.00	1.00	ug/L			08/27/15 13:46	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 13:46	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 13:46	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 13:46	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 13:46	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 13:46	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 13:46	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/27/15 13:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/27/15 13:46*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/27/15 13:46*	*1*

Client Sample ID: SW-11

Date Collected: 08/25/15 15:06
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 14:10	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 14:10	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1

Client Sample ID: SW-11
Date Collected: 08/25/15 15:06
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 14:10	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 14:10	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 14:10	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 14:10	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 14:10	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 14:10	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 14:10	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 14:10	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 14:10	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 14:10	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 14:10	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 14:10	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 14:10	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 14:10	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 14:10	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 14:10	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 14:10	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 14:10	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1

Client Sample ID: SW-11

Date Collected: 08/25/15 15:06
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 14:10	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 14:10	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/15 14:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/27/15 14:10*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/27/15 14:10*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.229	*	0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1221	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1232	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1242	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1248	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1254	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1260	<0.229	*	0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1262	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1268	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:11*	*1*
Tetrachloro-m-xylene	*95*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:11*	*1*
DCB Decachlorobiphenyl	*92*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:11*	*1*
DCB Decachlorobiphenyl	*102*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:11*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:13	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:13	1
Barium	**59.7**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:13	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:13	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:13	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:13	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:13	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:13	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:13	1
Zinc	**4.68**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:13	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:13	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:13	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:13	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:13	1

Client Sample ID: SW-11

Date Collected: 08/25/15 15:06
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-2
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**76000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: SW-12

Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,1,1-Trichloroethane	**1.24**		1.00	1.00	ug/L			08/27/15 14:33	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 14:33	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Freon 113	**1.00**		1.00	1.00	ug/L			08/27/15 14:33	1
1,1-Dichloroethane	**1.40**		1.00	1.00	ug/L			08/27/15 14:33	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 14:33	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 14:33	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 14:33	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 14:33	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 14:33	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 14:33	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 14:33	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 14:33	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 14:33	1

Client Sample ID: SW-12
Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 14:33	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 14:33	1
cis-1,2-Dichloroethene	**1.59**		1.00	1.00	ug/L			08/27/15 14:33	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 14:33	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 14:33	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 14:33	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 14:33	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 14:33	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 14:33	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 14:33	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 14:33	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 14:33	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 14:33	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Vinyl chloride	**1.89**		1.00	1.00	ug/L			08/27/15 14:33	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/27/15 14:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/27/15 14:33*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/27/15 14:33*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.233	*	0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1221	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1232	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1242	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1248	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1254	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1260	<0.233	*	0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1262	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1

Client Sample ID: SW-12

Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-3
Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:27*	*1*
Tetrachloro-m-xylene	*97*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:27*	*1*
DCB Decachlorobiphenyl	*96*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:27*	*1*
DCB Decachlorobiphenyl	*106*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:27*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:16	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:16	1
Barium	**70.2**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:16	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:16	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:16	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:16	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:16	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:16	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:16	1
Zinc	**7.77**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:16	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:16	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:16	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:16	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:16	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**88000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: SW-12 (DUP)

Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,1,1-Trichloroethane	**1.03**		1.00	1.00	ug/L			08/27/15 18:33	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 18:33	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,1-Dichloroethane	**1.51**		1.00	1.00	ug/L			08/27/15 18:33	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: SW-12 (DUP)
Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 18:33	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 18:33	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 18:33	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 18:33	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 18:33	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 18:33	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 18:33	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 18:33	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 18:33	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 18:33	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 18:33	1
cis-1,2-Dichloroethene	**1.64**		1.00	1.00	ug/L			08/27/15 18:33	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 18:33	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 18:33	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 18:33	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 18:33	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 18:33	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 18:33	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 18:33	1

Client Sample ID: SW-12 (DUP)

Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 18:33	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 18:33	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 18:33	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Vinyl chloride	**1.93**		1.00	1.00	ug/L			08/27/15 18:33	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/15 18:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/27/15 18:33*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/27/15 18:33*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.235	*	0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1221	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1232	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1242	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1248	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1254	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1260	<0.235	*	0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1262	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1268	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:43*	*1*
Tetrachloro-m-xylene	*98*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:43*	*1*
DCB Decachlorobiphenyl	*99*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:43*	*1*
DCB Decachlorobiphenyl	*110*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:43*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:39	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:39	1
Barium	**67.4**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:39	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:39	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:39	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:39	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:39	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:39	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:39	1
Zinc	**8.33**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:39	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:39	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:39	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:39	1

Client Sample ID: SW-12 (DUP)

Lab Sample ID: 480-86256-4
Date Collected: 08/26/15 08:50
Matrix: Water
Date Received: 08/27/15 01:45

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	**2.71**	**J**	10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:39	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**104000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: PW-12

Lab Sample ID: 480-86256-5
Date Collected: 08/26/15 09:20
Matrix: Water
Date Received: 08/27/15 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,1,1-Trichloroethane	**498**		20.0	20.0	ug/L			08/27/15 14:57	20
1,1,2,2-Tetrachloroethane	<10.0		10.0	10.0	ug/L			08/27/15 14:57	20
1,1,2-Trichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Freon 113	**184**		20.0	20.0	ug/L			08/27/15 14:57	20
1,1-Dichloroethane	**447**		20.0	20.0	ug/L			08/27/15 14:57	20
1,1-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,1-Dichloropropene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,2,3-Trichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,2,3-Trichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,2,4-Trichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,2,4-Trimethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,2-Dibromo-3-Chloropropane	<100		100	100	ug/L			08/27/15 14:57	20
1,2-Dichlorobenzene	**36.7**		20.0	20.0	ug/L			08/27/15 14:57	20
1,2-Dichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,2-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,3,5-Trimethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,3-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,3-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,4-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,4-Dioxane	<1000		1000	1000	ug/L			08/27/15 14:57	20
2,2-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
2-Butanone (MEK)	<200	*	200	200	ug/L			08/27/15 14:57	20
2-Chlorotoluene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
2-Hexanone	<200		200	200	ug/L			08/27/15 14:57	20
4-Chlorotoluene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
4-Isopropyltoluene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
4-Methyl-2-pentanone (MIBK)	<200		200	200	ug/L			08/27/15 14:57	20
Acetone	<1000		1000	1000	ug/L			08/27/15 14:57	20
Benzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Bromobenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Bromoform	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Bromomethane	<40.0		40.0	40.0	ug/L			08/27/15 14:57	20
Carbon disulfide	<200		200	200	ug/L			08/27/15 14:57	20

Client Sample ID: PW-12

Date Collected: 08/26/15 09:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Chlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Chlorobromomethane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Chlorodibromomethane	<10.0		10.0	10.0	ug/L			08/27/15 14:57	20
Chloroethane	<40.0		40.0	40.0	ug/L			08/27/15 14:57	20
Chloroform	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Chloromethane	<40.0		40.0	40.0	ug/L			08/27/15 14:57	20
cis-1,2-Dichloroethene	**356**		20.0	20.0	ug/L			08/27/15 14:57	20
cis-1,3-Dichloropropene	<8.00		8.00	8.00	ug/L			08/27/15 14:57	20
Dichlorobromomethane	<10.0		10.0	10.0	ug/L			08/27/15 14:57	20
Dichlorodifluoromethane	**122**		20.0	20.0	ug/L			08/27/15 14:57	20
Ethyl ether	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Ethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Ethylene Dibromide	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Hexachlorobutadiene	<8.00		8.00	8.00	ug/L			08/27/15 14:57	20
Isopropyl ether	<200		200	200	ug/L			08/27/15 14:57	20
Isopropylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Methyl tert-butyl ether	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Methylene Chloride	**49.2**		20.0	20.0	ug/L			08/27/15 14:57	20
m-Xylene & p-Xylene	<40.0		40.0	40.0	ug/L			08/27/15 14:57	20
Naphthalene	<100		100	100	ug/L			08/27/15 14:57	20
n-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
N-Propylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
o-Xylene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
sec-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Styrene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Tert-amyl methyl ether	<100		100	100	ug/L			08/27/15 14:57	20
Tert-butyl ethyl ether	<100		100	100	ug/L			08/27/15 14:57	20
tert-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Tetrachloroethene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Tetrahydrofuran	<200	*	200	200	ug/L			08/27/15 14:57	20
Toluene	**29.2**		20.0	20.0	ug/L			08/27/15 14:57	20
trans-1,2-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
trans-1,3-Dichloropropene	<8.00		8.00	8.00	ug/L			08/27/15 14:57	20
Trichloroethene	**21.4**		20.0	20.0	ug/L			08/27/15 14:57	20
Trichlorofluoromethane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Vinyl chloride	**826**		20.0	20.0	ug/L			08/27/15 14:57	20
Dibromomethane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/15 14:57*	*20*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/27/15 14:57*	*20*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/27/15 14:57*	*20*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.230	*	0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1221	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1232	**10.6**		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1242	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1

Client Sample ID: PW-12

Date Collected: 08/26/15 09:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-5

Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1254	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1260	<0.230	*	0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1262	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1268	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:58*	*1*
Tetrachloro-m-xylene	*86*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:58*	*1*
DCB Decachlorobiphenyl	*90*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:58*	*1*
DCB Decachlorobiphenyl	*99*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:58*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:41	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:41	1
Barium	**438**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:41	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:41	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:41	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:41	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:41	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:41	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:41	1
Zinc	<1.50		50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:41	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:41	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:41	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:41	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:41	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**476000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: PW-12 (DUP)

Date Collected: 08/26/15 09:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,1,1-Trichloroethane	**446**		20.0	20.0	ug/L			08/27/15 18:56	20
1,1,2,2-Tetrachloroethane	<10.0		10.0	10.0	ug/L			08/27/15 18:56	20
1,1,2-Trichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Freon 113	**158**		20.0	20.0	ug/L			08/27/15 18:56	20
1,1-Dichloroethane	**412**		20.0	20.0	ug/L			08/27/15 18:56	20
1,1-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,1-Dichloropropene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20

Client Sample ID: PW-12 (DUP)
Date Collected: 08/26/15 09:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,2,3-Trichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,2,4-Trichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,2,4-Trimethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,2-Dibromo-3-Chloropropane	<100		100	100	ug/L			08/27/15 18:56	20
1,2-Dichlorobenzene	**32.7**		20.0	20.0	ug/L			08/27/15 18:56	20
1,2-Dichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,2-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,3,5-Trimethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,3-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,3-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,4-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,4-Dioxane	<1000		1000	1000	ug/L			08/27/15 18:56	20
2,2-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
2-Butanone (MEK)	<200	*	200	200	ug/L			08/27/15 18:56	20
2-Chlorotoluene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
2-Hexanone	<200		200	200	ug/L			08/27/15 18:56	20
4-Chlorotoluene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
4-Isopropyltoluene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
4-Methyl-2-pentanone (MIBK)	<200		200	200	ug/L			08/27/15 18:56	20
Acetone	<1000		1000	1000	ug/L			08/27/15 18:56	20
Benzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Bromobenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Bromoform	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Bromomethane	<40.0		40.0	40.0	ug/L			08/27/15 18:56	20
Carbon disulfide	<200		200	200	ug/L			08/27/15 18:56	20
Carbon tetrachloride	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Chlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Chlorobromomethane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Chlorodibromomethane	<10.0		10.0	10.0	ug/L			08/27/15 18:56	20
Chloroethane	<40.0		40.0	40.0	ug/L			08/27/15 18:56	20
Chloroform	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Chloromethane	<40.0		40.0	40.0	ug/L			08/27/15 18:56	20
cis-1,2-Dichloroethene	**316**		20.0	20.0	ug/L			08/27/15 18:56	20
cis-1,3-Dichloropropene	<8.00		8.00	8.00	ug/L			08/27/15 18:56	20
Dichlorobromomethane	<10.0		10.0	10.0	ug/L			08/27/15 18:56	20
Dichlorodifluoromethane	**113**		20.0	20.0	ug/L			08/27/15 18:56	20
Ethyl ether	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Ethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Ethylene Dibromide	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Hexachlorobutadiene	<8.00		8.00	8.00	ug/L			08/27/15 18:56	20
Isopropyl ether	<200		200	200	ug/L			08/27/15 18:56	20
Isopropylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Methyl tert-butyl ether	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Methylene Chloride	**61.9**		20.0	20.0	ug/L			08/27/15 18:56	20
m-Xylene & p-Xylene	<40.0		40.0	40.0	ug/L			08/27/15 18:56	20
Naphthalene	<100		100	100	ug/L			08/27/15 18:56	20
n-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
N-Propylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20

Client Sample ID: PW-12 (DUP)

Date Collected: 08/26/15 09:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
sec-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Styrene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Tert-amyl methyl ether	<100		100	100	ug/L			08/27/15 18:56	20
Tert-butyl ethyl ether	<100		100	100	ug/L			08/27/15 18:56	20
tert-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Tetrachloroethene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Tetrahydrofuran	<200	*	200	200	ug/L			08/27/15 18:56	20
Toluene	**23.4**		20.0	20.0	ug/L			08/27/15 18:56	20
trans-1,2-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
trans-1,3-Dichloropropene	<8.00		8.00	8.00	ug/L			08/27/15 18:56	20
Trichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Trichlorofluoromethane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Vinyl chloride	**726**		20.0	20.0	ug/L			08/27/15 18:56	20
Dibromomethane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/27/15 18:56*	*20*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/27/15 18:56*	*20*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/27/15 18:56*	*20*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.237	*	0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1221	<0.237		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1232	**6.68**		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1242	<0.237		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1248	<0.237		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1254	<0.237		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1260	<0.237	*	0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1262	<0.237		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1268	<0.237		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:14*	*1*
Tetrachloro-m-xylene	*77*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:14*	*1*
DCB Decachlorobiphenyl	*78*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:14*	*1*
DCB Decachlorobiphenyl	*84*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:14*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:44	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:44	1
Barium	**454**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:44	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:44	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:44	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:44	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:44	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:44	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:44	1

Client Sample ID: PW-12 (DUP)

Lab Sample ID: 480-86256-6

Date Collected: 08/26/15 09:20
Matrix: Water
Date Received: 08/27/15 01:45

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	**1.85**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:44	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:44	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:44	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:44	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:44	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**484000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: SW-13

Lab Sample ID: 480-86256-7

Date Collected: 08/26/15 10:00
Matrix: Water
Date Received: 08/27/15 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 15:21	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 15:21	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 15:21	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 15:21	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 15:21	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 15:21	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 15:21	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1

Client Sample ID: SW-13
Date Collected: 08/26/15 10:00
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 15:21	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 15:21	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 15:21	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 15:21	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 15:21	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 15:21	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 15:21	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 15:21	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 15:21	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 15:21	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 15:21	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 15:21	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 15:21	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 15:21	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 15:21	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/15 15:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/27/15 15:21*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/27/15 15:21*	*1*

Client Sample ID: SW-13

Date Collected: 08/26/15 10:00
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-7
Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.233	*	0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1221	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1232	**1.26**		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1242	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1248	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1254	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1260	<0.233	*	0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1262	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1268	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:30*	*1*
Tetrachloro-m-xylene	*87*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:30*	*1*
DCB Decachlorobiphenyl	*92*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:30*	*1*
DCB Decachlorobiphenyl	*101*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:30*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:48	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:48	1
Barium	**79.7**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:48	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:48	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:48	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:48	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:48	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:48	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:48	1
Zinc	**9.32**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:48	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:48	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:48	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:48	1
Copper	**1.78**	**J**	10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**100000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: PW-13

Date Collected: 08/26/15 10:25
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/28/15 11:31	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1

Client Sample ID: PW-13
Date Collected: 08/26/15 10:25
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,1-Dichloroethane	**3.28**		1.00	1.00	ug/L			08/28/15 11:31	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/28/15 11:31	1
1,2-Dichlorobenzene	**5.16**		1.00	1.00	ug/L			08/28/15 11:31	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/28/15 11:31	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/28/15 11:31	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/28/15 11:31	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/28/15 11:31	1
Acetone	<50.0		50.0	50.0	ug/L			08/28/15 11:31	1
Benzene	**1.08**		1.00	1.00	ug/L			08/28/15 11:31	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Bromoform	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/28/15 11:31	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/28/15 11:31	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Chlorobenzene	**3.60**		1.00	1.00	ug/L			08/28/15 11:31	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/28/15 11:31	1
Chloroethane	**5.32**		2.00	2.00	ug/L			08/28/15 11:31	1
Chloroform	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/28/15 11:31	1
cis-1,2-Dichloroethene	**1.62**		1.00	1.00	ug/L			08/28/15 11:31	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/28/15 11:31	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/28/15 11:31	1
Dichlorodifluoromethane	<1.00	*	1.00	1.00	ug/L			08/28/15 11:31	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/28/15 11:31	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/28/15 11:31	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1

Client Sample ID: PW-13

Date Collected: 08/26/15 10:25
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/28/15 11:31	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/28/15 11:31	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Styrene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/28/15 11:31	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/28/15 11:31	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/28/15 11:31	1
Toluene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/28/15 11:31	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Vinyl chloride	**1.93**		1.00	1.00	ug/L			08/28/15 11:31	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/28/15 11:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/28/15 11:31*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/28/15 11:31*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.240	*	0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1221	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1242	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1248	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1254	**0.344**		0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1260	<0.240	*	0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1262	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1268	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:34*	*1*
Tetrachloro-m-xylene	*90*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:34*	*1*
DCB Decachlorobiphenyl	*95*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:34*	*1*
DCB Decachlorobiphenyl	*104*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:34*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	**71.5**		2.40	2.40	ug/L		08/28/15 09:22	08/28/15 22:46	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:46*	*10*
Tetrachloro-m-xylene	*105*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:46*	*10*
DCB Decachlorobiphenyl	*118*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:46*	*10*
DCB Decachlorobiphenyl	*118*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:46*	*10*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:50	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:50	1
Barium	**508**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:50	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:50	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:50	1
Chromium	**1.98**	**J**	5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:50	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:50	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:50	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:50	1
Zinc	<1.50		50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:50	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:50	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:50	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:50	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:50	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**532000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: SW-14

Lab Sample ID: 480-86256-9

Date Collected: 08/26/15 11:10

Matrix: Water

Date Received: 08/27/15 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 16:09	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 16:09	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 16:09	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 16:09	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 16:09	1

Client Sample ID: SW-14
Date Collected: 08/26/15 11:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 16:09	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 16:09	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 16:09	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 16:09	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 16:09	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 16:09	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 16:09	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 16:09	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 16:09	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 16:09	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 16:09	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 16:09	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 16:09	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 16:09	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 16:09	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 16:09	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 16:09	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/27/15 16:09*	*1*

Client Sample ID: SW-14
Date Collected: 08/26/15 11:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/27/15 16:09*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/27/15 16:09*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.233	*	0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1221	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1232	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1242	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1248	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1254	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1260	<0.233	*	0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1262	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1268	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*87*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:50*	*1*
Tetrachloro-m-xylene	*97*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:50*	*1*
DCB Decachlorobiphenyl	*59*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:50*	*1*
DCB Decachlorobiphenyl	*64*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:50*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:54	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:54	1
Barium	**63.6**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:54	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:54	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:54	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:54	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:54	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:54	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:54	1
Zinc	**9.21**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:54	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:54	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:54	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:54	1
Copper	**2.05**	**J**	10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**88000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: PW-14
Date Collected: 08/26/15 11:40
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,1,1-Trichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,1,2,2-Tetrachloroethane	<2.00		2.00	2.00	ug/L			08/28/15 11:55	4
1,1,2-Trichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Freon 113	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,1-Dichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,1-Dichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,1-Dichloropropene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2,3-Trichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2,3-Trichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2,4-Trichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2,4-Trimethylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2-Dibromo-3-Chloropropane	<20.0		20.0	20.0	ug/L			08/28/15 11:55	4
1,2-Dichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2-Dichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2-Dichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,3,5-Trimethylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,3-Dichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,3-Dichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,4-Dichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,4-Dioxane	<200		200	200	ug/L			08/28/15 11:55	4
2,2-Dichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
2-Butanone (MEK)	<40.0	*	40.0	40.0	ug/L			08/28/15 11:55	4
2-Chlorotoluene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
2-Hexanone	<40.0		40.0	40.0	ug/L			08/28/15 11:55	4
4-Chlorotoluene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
4-Isopropyltoluene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
4-Methyl-2-pentanone (MIBK)	<40.0		40.0	40.0	ug/L			08/28/15 11:55	4
Acetone	<200		200	200	ug/L			08/28/15 11:55	4
Benzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Bromobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Bromoform	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Bromomethane	<8.00		8.00	8.00	ug/L			08/28/15 11:55	4
Carbon disulfide	<40.0		40.0	40.0	ug/L			08/28/15 11:55	4
Carbon tetrachloride	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Chlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Chlorobromomethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Chlorodibromomethane	<2.00		2.00	2.00	ug/L			08/28/15 11:55	4
Chloroethane	**12.1**		8.00	8.00	ug/L			08/28/15 11:55	4
Chloroform	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Chloromethane	<8.00		8.00	8.00	ug/L			08/28/15 11:55	4
cis-1,2-Dichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
cis-1,3-Dichloropropene	<1.60		1.60	1.60	ug/L			08/28/15 11:55	4
Dichlorobromomethane	<2.00		2.00	2.00	ug/L			08/28/15 11:55	4
Dichlorodifluoromethane	<4.00	*	4.00	4.00	ug/L			08/28/15 11:55	4
Ethyl ether	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Ethylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Ethylene Dibromide	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Hexachlorobutadiene	<1.60		1.60	1.60	ug/L			08/28/15 11:55	4

Client Sample ID: PW-14
Date Collected: 08/26/15 11:40
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<40.0		40.0	40.0	ug/L			08/28/15 11:55	4
Isopropylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Methyl tert-butyl ether	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Methylene Chloride	**7.67**		4.00	4.00	ug/L			08/28/15 11:55	4
m-Xylene & p-Xylene	<8.00		8.00	8.00	ug/L			08/28/15 11:55	4
Naphthalene	<20.0		20.0	20.0	ug/L			08/28/15 11:55	4
n-Butylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
N-Propylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
o-Xylene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
sec-Butylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Styrene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Tert-amyl methyl ether	<20.0		20.0	20.0	ug/L			08/28/15 11:55	4
Tert-butyl ethyl ether	<20.0		20.0	20.0	ug/L			08/28/15 11:55	4
tert-Butylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Tetrachloroethene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Tetrahydrofuran	<40.0	*	40.0	40.0	ug/L			08/28/15 11:55	4
Toluene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
trans-1,2-Dichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
trans-1,3-Dichloropropene	<1.60		1.60	1.60	ug/L			08/28/15 11:55	4
Trichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Trichlorofluoromethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Vinyl chloride	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Dibromomethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/28/15 11:55*	*4*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/28/15 11:55*	*4*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/28/15 11:55*	*4*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.240	*	0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1221	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1242	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1248	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1254	**0.242**		0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1260	<0.240	*	0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1262	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1268	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:06*	*1*
Tetrachloro-m-xylene	*90*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:06*	*1*
DCB Decachlorobiphenyl	*44*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:06*	*1*
DCB Decachlorobiphenyl	*51*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:06*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	**26.7**		1.20	1.20	ug/L		08/28/15 09:22	08/29/15 00:21	5

Client Sample ID: PW-14

Date Collected: 08/26/15 11:40
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-10

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:21*	*5*
Tetrachloro-m-xylene	*92*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:21*	*5*
DCB Decachlorobiphenyl	*53*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:21*	*5*
DCB Decachlorobiphenyl	*52*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:21*	*5*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:56	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:56	1
Barium	**269**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:56	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:56	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:56	1
Chromium	**6.35**		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:56	1
Nickel	**3.22**	**J**	10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:56	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:56	1
Vanadium	**2.72**	**J**	10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:56	1
Zinc	**1.66**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:56	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:56	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:56	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:56	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:56	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**410000**		10000	2630	ug/L			08/28/15 12:15	1

Client Sample ID: SW-15

Date Collected: 08/26/15 12:40
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 16:57	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 16:57	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1

Client Sample ID: SW-15
Date Collected: 08/26/15 12:40
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 16:57	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 16:57	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 16:57	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 16:57	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 16:57	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 16:57	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 16:57	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 16:57	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 16:57	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 16:57	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 16:57	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 16:57	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 16:57	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 16:57	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 16:57	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 16:57	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 16:57	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 16:57	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1

Client Sample ID: SW-15

Date Collected: 08/26/15 12:40
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 16:57	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 16:57	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/27/15 16:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/27/15 16:57*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/27/15 16:57*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.232	*	0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1221	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1232	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1242	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1248	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1254	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1260	<0.232	*	0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1262	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1268	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*87*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:37*	*1*
Tetrachloro-m-xylene	*99*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:37*	*1*
DCB Decachlorobiphenyl	*61*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:37*	*1*
DCB Decachlorobiphenyl	*66*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:37*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:59	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:59	1
Barium	**66.3**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:59	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:59	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:59	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:59	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:59	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:59	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:59	1
Zinc	**5.66**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:59	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:59	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:59	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:59	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:59	1

Client Sample ID: SW-15

Lab Sample ID: 480-86256-11

Date Collected: 08/26/15 12:40

Matrix: Water

Date Received: 08/27/15 01:45

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	92000		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: PW-15

Lab Sample ID: 480-86256-12

Date Collected: 08/26/15 13:10

Matrix: Water

Date Received: 08/27/15 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,1,1-Trichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,1,2,2-Tetrachloroethane	<10.0		10.0	10.0	ug/L			08/27/15 17:21	20
1,1,2-Trichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Freon 113	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,1-Dichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,1-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,1-Dichloropropene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2,3-Trichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2,3-Trichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2,4-Trichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2,4-Trimethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2-Dibromo-3-Chloropropane	<100		100	100	ug/L			08/27/15 17:21	20
1,2-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2-Dichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,3,5-Trimethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,3-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,3-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,4-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,4-Dioxane	<1000		1000	1000	ug/L			08/27/15 17:21	20
2,2-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
2-Butanone (MEK)	<200	*	200	200	ug/L			08/27/15 17:21	20
2-Chlorotoluene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
2-Hexanone	<200		200	200	ug/L			08/27/15 17:21	20
4-Chlorotoluene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
4-Isopropyltoluene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
4-Methyl-2-pentanone (MIBK)	<200		200	200	ug/L			08/27/15 17:21	20
Acetone	<1000		1000	1000	ug/L			08/27/15 17:21	20
Benzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Bromobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Bromoform	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Bromomethane	<40.0		40.0	40.0	ug/L			08/27/15 17:21	20
Carbon disulfide	<200		200	200	ug/L			08/27/15 17:21	20
Carbon tetrachloride	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Chlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Chlorobromomethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Chlorodibromomethane	<10.0		10.0	10.0	ug/L			08/27/15 17:21	20

Client Sample ID: PW-15
Date Collected: 08/26/15 13:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	**1800**		40.0	40.0	ug/L			08/27/15 17:21	20
Chloroform	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Chloromethane	<40.0		40.0	40.0	ug/L			08/27/15 17:21	20
cis-1,2-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
cis-1,3-Dichloropropene	<8.00		8.00	8.00	ug/L			08/27/15 17:21	20
Dichlorobromomethane	<10.0		10.0	10.0	ug/L			08/27/15 17:21	20
Dichlorodifluoromethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Ethyl ether	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Ethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Ethylene Dibromide	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Hexachlorobutadiene	<8.00		8.00	8.00	ug/L			08/27/15 17:21	20
Isopropyl ether	<200		200	200	ug/L			08/27/15 17:21	20
Isopropylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Methyl tert-butyl ether	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Methylene Chloride	**76.8**		20.0	20.0	ug/L			08/27/15 17:21	20
m-Xylene & p-Xylene	<40.0		40.0	40.0	ug/L			08/27/15 17:21	20
Naphthalene	<100		100	100	ug/L			08/27/15 17:21	20
n-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
N-Propylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
o-Xylene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
sec-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Styrene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Tert-amyl methyl ether	<100		100	100	ug/L			08/27/15 17:21	20
Tert-butyl ethyl ether	<100		100	100	ug/L			08/27/15 17:21	20
tert-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Tetrachloroethene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Tetrahydrofuran	<200	*	200	200	ug/L			08/27/15 17:21	20
Toluene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
trans-1,2-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
trans-1,3-Dichloropropene	<8.00		8.00	8.00	ug/L			08/27/15 17:21	20
Trichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Trichlorofluoromethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Vinyl chloride	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Dibromomethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/15 17:21*	*20*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/27/15 17:21*	*20*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/27/15 17:21*	*20*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.234	*	0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1221	<0.234		0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1242	<0.234		0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1248	<0.234		0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1254	**0.480**		0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1260	<0.234	*	0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1262	<0.234		0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1268	<0.234		0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1

Client Sample ID: PW-15

Date Collected: 08/26/15 13:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-12
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:53*	*1*
Tetrachloro-m-xylene	*91*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:53*	*1*
DCB Decachlorobiphenyl	*38*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:53*	*1*
DCB Decachlorobiphenyl	*41*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:53*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	**116**		4.68	4.68	ug/L		08/28/15 09:22	08/31/15 11:20	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*117*		*30 - 150*	*08/28/15 09:22*	*08/31/15 11:20*	*20*
Tetrachloro-m-xylene	*139*		*30 - 150*	*08/28/15 09:22*	*08/31/15 11:20*	*20*
DCB Decachlorobiphenyl	*63*		*30 - 150*	*08/28/15 09:22*	*08/31/15 11:20*	*20*
DCB Decachlorobiphenyl	*63*		*30 - 150*	*08/28/15 09:22*	*08/31/15 11:20*	*20*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 20:02	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 20:02	1
Barium	**232**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 20:02	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 20:02	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 20:02	1
Chromium	**5.17**		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 20:02	1
Nickel	**6.74**	**J**	10.0	1.26	ug/L		08/28/15 07:30	08/28/15 20:02	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 20:02	1
Vanadium	**4.29**	**J**	10.0	1.50	ug/L		08/28/15 07:30	08/28/15 20:02	1
Zinc	**2.12**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 20:02	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 20:02	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 20:02	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 20:02	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 20:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**390000**		10000	2630	ug/L			08/28/15 12:15	1

Client Sample ID: SW-16

Date Collected: 08/26/15 13:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-13
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 17:45	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1

Client Sample ID: SW-16
Date Collected: 08/26/15 13:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-13
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 17:45	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 17:45	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 17:45	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 17:45	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 17:45	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 17:45	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 17:45	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 17:45	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 17:45	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 17:45	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 17:45	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 17:45	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 17:45	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 17:45	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 17:45	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 17:45	1

Client Sample ID: SW-16

Date Collected: 08/26/15 13:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-13

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 17:45	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 17:45	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 17:45	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 17:45	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 17:45	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/27/15 17:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/27/15 17:45*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/27/15 17:45*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.230	*	0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1221	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1232	**0.469**		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1242	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1248	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1254	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1260	<0.230	*	0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1262	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1268	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:25*	*1*
Tetrachloro-m-xylene	*87*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:25*	*1*
DCB Decachlorobiphenyl	*51*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:25*	*1*
DCB Decachlorobiphenyl	*55*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:25*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 19:11	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 19:11	1
Barium	**64.8**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 19:11	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 19:11	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 19:11	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 19:11	1

Client Sample ID: SW-16

Lab Sample ID: 480-86256-13

Date Collected: 08/26/15 13:50

Matrix: Water

Date Received: 08/27/15 01:45

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 19:11	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 19:11	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 19:11	1
Zinc	**3.56**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 19:11	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 19:11	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 19:11	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 19:11	1
Copper	**2.30**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 19:11	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 18:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**84000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: PW-16

Lab Sample ID: 480-86256-14

Date Collected: 08/26/15 14:20

Matrix: Water

Date Received: 08/27/15 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,1,1-Trichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,1,2,2-Tetrachloroethane	<2.00		2.00	2.00	ug/L			08/28/15 12:19	4
1,1,2-Trichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Freon 113	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,1-Dichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,1-Dichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,1-Dichloropropene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2,3-Trichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2,3-Trichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2,4-Trichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2,4-Trimethylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2-Dibromo-3-Chloropropane	<20.0		20.0	20.0	ug/L			08/28/15 12:19	4
1,2-Dichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2-Dichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2-Dichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,3,5-Trimethylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,3-Dichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,3-Dichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,4-Dichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,4-Dioxane	<200		200	200	ug/L			08/28/15 12:19	4
2,2-Dichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
2-Butanone (MEK)	<40.0	*	40.0	40.0	ug/L			08/28/15 12:19	4
2-Chlorotoluene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
2-Hexanone	<40.0		40.0	40.0	ug/L			08/28/15 12:19	4
4-Chlorotoluene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
4-Isopropyltoluene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4

Client Sample ID: PW-16
Date Collected: 08/26/15 14:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-14
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	<40.0		40.0	40.0	ug/L			08/28/15 12:19	4
Acetone	<200		200	200	ug/L			08/28/15 12:19	4
Benzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Bromobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Bromoform	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Bromomethane	<8.00		8.00	8.00	ug/L			08/28/15 12:19	4
Carbon disulfide	<40.0		40.0	40.0	ug/L			08/28/15 12:19	4
Carbon tetrachloride	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Chlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Chlorobromomethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Chlorodibromomethane	<2.00		2.00	2.00	ug/L			08/28/15 12:19	4
Chloroethane	**12.2**		8.00	8.00	ug/L			08/28/15 12:19	4
Chloroform	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Chloromethane	<8.00		8.00	8.00	ug/L			08/28/15 12:19	4
cis-1,2-Dichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
cis-1,3-Dichloropropene	<1.60		1.60	1.60	ug/L			08/28/15 12:19	4
Dichlorobromomethane	<2.00		2.00	2.00	ug/L			08/28/15 12:19	4
Dichlorodifluoromethane	<4.00	*	4.00	4.00	ug/L			08/28/15 12:19	4
Ethyl ether	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Ethylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Ethylene Dibromide	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Hexachlorobutadiene	<1.60		1.60	1.60	ug/L			08/28/15 12:19	4
Isopropyl ether	<40.0		40.0	40.0	ug/L			08/28/15 12:19	4
Isopropylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Methyl tert-butyl ether	**4.71**		4.00	4.00	ug/L			08/28/15 12:19	4
Methylene Chloride	**9.25**		4.00	4.00	ug/L			08/28/15 12:19	4
m-Xylene & p-Xylene	<8.00		8.00	8.00	ug/L			08/28/15 12:19	4
Naphthalene	<20.0		20.0	20.0	ug/L			08/28/15 12:19	4
n-Butylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
N-Propylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
o-Xylene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
sec-Butylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Styrene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Tert-amyl methyl ether	<20.0		20.0	20.0	ug/L			08/28/15 12:19	4
Tert-butyl ethyl ether	<20.0		20.0	20.0	ug/L			08/28/15 12:19	4
tert-Butylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Tetrachloroethene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Tetrahydrofuran	<40.0	*	40.0	40.0	ug/L			08/28/15 12:19	4
Toluene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
trans-1,2-Dichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
trans-1,3-Dichloropropene	<1.60		1.60	1.60	ug/L			08/28/15 12:19	4
Trichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Trichlorofluoromethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Vinyl chloride	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Dibromomethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/28/15 12:19*	*4*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/28/15 12:19*	*4*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/28/15 12:19*	*4*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.277	*	0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1221	<0.277		0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1242	<0.277		0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1248	<0.277		0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1254	**0.745**		0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1260	<0.277	*	0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1262	<0.277		0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1268	<0.277		0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:41*	*1*
Tetrachloro-m-xylene	*86*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:41*	*1*
DCB Decachlorobiphenyl	*57*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:41*	*1*
DCB Decachlorobiphenyl	*67*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:41*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	**43.0**		2.77	2.77	ug/L		08/28/15 09:22	08/29/15 01:57	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:57*	*10*
Tetrachloro-m-xylene	*93*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:57*	*10*
DCB Decachlorobiphenyl	*71*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:57*	*10*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:57*	*10*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 20:14	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 20:14	1
Barium	**169**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 20:14	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 20:14	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 20:14	1
Chromium	**3.55**	**J**	5.00	1.00	ug/L		08/28/15 07:30	08/28/15 20:14	1
Nickel	**2.71**	**J**	10.0	1.26	ug/L		08/28/15 07:30	08/28/15 20:14	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 20:14	1
Vanadium	**2.41**	**J**	10.0	1.50	ug/L		08/28/15 07:30	08/28/15 20:14	1
Zinc	**3.15**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 20:14	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 20:14	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 20:14	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 20:14	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 20:14	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.147**	**J**	0.200	0.120	ug/L		08/27/15 09:50	08/27/15 18:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**540000**		10000	2630	ug/L			08/28/15 12:15	1

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: PW-15 filtered
Date Collected: 08/26/15 13:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-15
Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.248	*	0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1221	<0.248		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1232	**0.742**		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1242	<0.248		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1248	<0.248		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1254	<0.248		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1260	<0.248	*	0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1262	<0.248		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1268	<0.248		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*30 - 150*	*08/28/15 09:22*	*08/29/15 02:44*	*1*
Tetrachloro-m-xylene	*92*		*30 - 150*	*08/28/15 09:22*	*08/29/15 02:44*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/28/15 09:22*	*08/29/15 02:44*	*1*
DCB Decachlorobiphenyl	*73*		*30 - 150*	*08/28/15 09:22*	*08/29/15 02:44*	*1*

Surrogate Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TOL	12DCE	BFB	12DCE	BFB	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)	(70-130)	(70-130)
480-86189-4	SED-10	106	94	73	94	73	73
480-86189-5	TB-01	97	107	97	107	97	97
LCS 480-260778/1-A	Lab Control Sample	99	113	103	113	103	103
LCS 480-260980/1-A	Lab Control Sample	102	110	103	110	103	103
LCSD 480-260778/2-A	Lab Control Sample Dup	98	112	101	112	101	101
LCSD 480-260980/14-A	Lab Control Sample Dup	102	110	102	110	102	102
MB 480-260778/3-A	Method Blank	99	104	99	104	99	99
MB 480-260980/15-A	Method Blank	101	101	98	101	98	98

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
480-86189-1	TB-01	96	101	93
480-86189-2	SW-10	97	103	94
480-86189-3	PW-10	97	101	95
480-86256-1	TB-02	95	104	93
480-86256-2	SW-11	97	101	94
480-86256-3	SW-12	96	102	96
480-86256-4	SW-12 (DUP)	97	100	96
480-86256-5	PW-12	97	102	96
480-86256-6	PW-12 (DUP)	95	100	94
480-86256-7	SW-13	97	104	97
480-86256-8	PW-13	95	99	95
480-86256-9	SW-14	95	100	95
480-86256-10	PW-14	95	96	95
480-86256-11	SW-15	94	101	93
480-86256-12	PW-15	97	99	94
480-86256-13	SW-16	94	101	93
480-86256-14	PW-16	96	98	95
LCS 480-260445/4	Lab Control Sample	95	100	96
LCS 480-260681/5	Lab Control Sample	96	97	97
LCS 480-260899/5	Lab Control Sample	96	92	95
LCSD 480-260445/5	Lab Control Sample Dup	96	95	97
LCSD 480-260681/6	Lab Control Sample Dup	96	97	98
LCSD 480-260899/6	Lab Control Sample Dup	96	94	98
MB 480-260445/7	Method Blank	98	101	94
MB 480-260681/8	Method Blank	95	98	95
MB 480-260899/8	Method Blank	97	94	95

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
480-86189-4	SED-10	47	50	19 p X	35
LCS 240-195244/23-A	Lab Control Sample	77	71	88	84
LCSD 240-195244/24-A	Lab Control Sample Dup	82	78	88	86
MB 240-195244/22-A	Method Blank	83	80	89	89

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
480-86189-2	SW-10	83	97	60	68
480-86189-3	PW-10	84	101	54	61
480-86256-2	SW-11	83	95	92	102
480-86256-3	SW-12	84	97	96	106
480-86256-4	SW-12 (DUP)	86	98	99	110
480-86256-5	PW-12	76	86	90	99
480-86256-6	PW-12 (DUP)	68	77	78	84
480-86256-7	SW-13	82	87	92	101
480-86256-8 - DL	PW-13	82	105	118	118
480-86256-8	PW-13	61	90	95	104
480-86256-9	SW-14	87	97	59	64
480-86256-10	PW-14	71	90	44	51
480-86256-10 - DL	PW-14	78	92	53	52
480-86256-11	SW-15	87	99	61	66
480-86256-12	PW-15	78	91	38	41
480-86256-12 - DL	PW-15	117	139	63	63
480-86256-13	SW-16	79	87	51	55
480-86256-14	PW-16	66	86	57	67
480-86256-14 - DL	PW-16	78	93	71	77
480-86256-15	PW-15 filtered	90	92	68	73
LCS 480-260937/2-A	Lab Control Sample	85	95	84	91
LCS 480-261294/2-A	Lab Control Sample	89	99	50	57
LCSD 480-260937/3-A	Lab Control Sample Dup	69	78	66	72
LCSD 480-261294/3-A	Lab Control Sample Dup	89	102	50	57
MB 480-260937/1-A	Method Blank	83	97	89	98
MB 480-261294/1-A	Method Blank	83	100	60	70

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-260445/7
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/26/15 10:45	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Freon 113	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/26/15 10:45	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/26/15 10:45	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
2-Butanone (MEK)	<10.0		10.0	10.0	ug/L			08/26/15 10:45	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/26/15 10:45	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/26/15 10:45	1
Acetone	<50.0		50.0	50.0	ug/L			08/26/15 10:45	1
Benzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Bromoform	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/26/15 10:45	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/26/15 10:45	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/26/15 10:45	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/26/15 10:45	1
Chloroform	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/26/15 10:45	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 10:45	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/26/15 10:45	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260445/7
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/26/15 10:45	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/26/15 10:45	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/26/15 10:45	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/26/15 10:45	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Styrene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/26/15 10:45	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/26/15 10:45	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/26/15 10:45	1
Toluene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 10:45	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/26/15 10:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/26/15 10:45*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/26/15 10:45*	*1*

Lab Sample ID: LCS 480-260445/4
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.10		ug/L		100	70 - 130
1,1,1-Trichloroethane	25.0	25.78		ug/L		103	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.15		ug/L		105	70 - 130
1,1,2-Trichloroethane	25.0	25.29		ug/L		101	70 - 130
Freon 113	25.0	26.61		ug/L		106	70 - 130
1,1-Dichloroethane	25.0	27.79		ug/L		111	70 - 130
1,1-Dichloroethene	25.0	26.16		ug/L		105	70 - 130
1,1-Dichloropropene	25.0	27.00		ug/L		108	70 - 130
1,2,3-Trichlorobenzene	25.0	25.17		ug/L		101	70 - 130
1,2,3-Trichloropropane	25.0	26.17		ug/L		105	70 - 130
1,2,4-Trichlorobenzene	25.0	25.47		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	25.0	26.50		ug/L		106	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	24.73		ug/L		99	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260445/4
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	25.0	26.06		ug/L		104	70 - 130
1,2-Dichloroethane	25.0	25.98		ug/L		104	70 - 130
1,2-Dichloropropane	25.0	27.26		ug/L		109	70 - 130
1,3,5-Trimethylbenzene	25.0	26.67		ug/L		107	70 - 130
1,3-Dichlorobenzene	25.0	26.50		ug/L		106	70 - 130
1,3-Dichloropropane	25.0	26.17		ug/L		105	70 - 130
1,4-Dichlorobenzene	25.0	26.17		ug/L		105	70 - 130
1,4-Dioxane	500	538.7		ug/L		108	70 - 130
2,2-Dichloropropane	25.0	25.74		ug/L		103	70 - 130
2-Butanone (MEK)	125	260.4	*	ug/L		208	70 - 130
2-Chlorotoluene	25.0	26.44		ug/L		106	70 - 130
2-Hexanone	125	135.3		ug/L		108	70 - 130
4-Chlorotoluene	25.0	26.89		ug/L		108	70 - 130
4-Isopropyltoluene	25.0	27.06		ug/L		108	70 - 130
4-Methyl-2-pentanone (MIBK)	125	135.4		ug/L		108	70 - 130
Acetone	125	145.8		ug/L		117	70 - 130
Benzene	25.0	26.40		ug/L		106	70 - 130
Bromobenzene	25.0	26.44		ug/L		106	70 - 130
Bromoform	25.0	23.55		ug/L		94	70 - 130
Bromomethane	25.0	23.78		ug/L		95	70 - 130
Carbon disulfide	25.0	26.96		ug/L		108	70 - 130
Carbon tetrachloride	25.0	25.70		ug/L		103	70 - 130
Chlorobenzene	25.0	26.30		ug/L		105	70 - 130
Chlorobromomethane	25.0	25.22		ug/L		101	70 - 130
Chlorodibromomethane	25.0	25.20		ug/L		101	70 - 130
Chloroethane	25.0	25.71		ug/L		103	70 - 130
Chloroform	25.0	25.80		ug/L		103	70 - 130
Chloromethane	25.0	28.09		ug/L		112	70 - 130
cis-1,2-Dichloroethene	25.0	25.96		ug/L		104	70 - 130
cis-1,3-Dichloropropene	25.0	25.97		ug/L		104	70 - 130
Dichlorobromomethane	25.0	25.46		ug/L		102	70 - 130
Dichlorodifluoromethane	25.0	25.56		ug/L		102	70 - 130
Ethyl ether	25.0	26.68		ug/L		107	70 - 130
Ethylbenzene	25.0	26.64		ug/L		107	70 - 130
Ethylene Dibromide	25.0	25.67		ug/L		103	70 - 130
Hexachlorobutadiene	25.0	26.69		ug/L		107	70 - 130
Isopropyl ether	25.0	26.10		ug/L		104	70 - 130
Isopropylbenzene	25.0	26.47		ug/L		106	70 - 130
Methyl tert-butyl ether	25.0	25.23		ug/L		101	70 - 130
Methylene Chloride	25.0	25.67		ug/L		103	70 - 130
m-Xylene & p-Xylene	25.0	25.27		ug/L		101	70 - 130
Naphthalene	25.0	25.47		ug/L		102	70 - 130
n-Butylbenzene	25.0	27.37		ug/L		109	70 - 130
N-Propylbenzene	25.0	26.80		ug/L		107	70 - 130
o-Xylene	25.0	25.13		ug/L		101	70 - 130
sec-Butylbenzene	25.0	27.02		ug/L		108	70 - 130
Styrene	25.0	26.02		ug/L		104	70 - 130
Tert-amyl methyl ether	25.0	23.96		ug/L		96	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260445/4
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tert-butyl ethyl ether	25.0	24.52		ug/L		98	70 - 130
tert-Butylbenzene	25.0	26.60		ug/L		106	70 - 130
Tetrachloroethene	25.0	26.35		ug/L		105	70 - 130
Tetrahydrofuran	50.0	73.26	*	ug/L		147	70 - 130
Toluene	25.0	26.25		ug/L		105	70 - 130
trans-1,2-Dichloroethene	25.0	26.60		ug/L		106	70 - 130
trans-1,3-Dichloropropene	25.0	24.77		ug/L		99	70 - 130
Trichloroethene	25.0	26.74		ug/L		107	70 - 130
Trichlorofluoromethane	25.0	25.64		ug/L		103	70 - 130
Vinyl chloride	25.0	26.57		ug/L		106	70 - 130
Dibromomethane	25.0	25.83		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 480-260445/5
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.93		ug/L		100	70 - 130	1	20
1,1,1-Trichloroethane	25.0	24.08		ug/L		96	70 - 130	7	20
1,1,2,2-Tetrachloroethane	25.0	25.36		ug/L		101	70 - 130	3	20
1,1,2-Trichloroethane	25.0	26.20		ug/L		105	70 - 130	4	20
Freon 113	25.0	24.93		ug/L		100	70 - 130	7	20
1,1-Dichloroethane	25.0	26.39		ug/L		106	70 - 130	5	20
1,1-Dichloroethene	25.0	24.67		ug/L		99	70 - 130	6	20
1,1-Dichloropropene	25.0	25.68		ug/L		103	70 - 130	5	20
1,2,3-Trichlorobenzene	25.0	24.90		ug/L		100	70 - 130	1	20
1,2,3-Trichloropropane	25.0	25.07		ug/L		100	70 - 130	4	20
1,2,4-Trichlorobenzene	25.0	24.85		ug/L		99	70 - 130	2	20
1,2,4-Trimethylbenzene	25.0	25.21		ug/L		101	70 - 130	5	20
1,2-Dibromo-3-Chloropropane	25.0	25.71		ug/L		103	70 - 130	4	20
1,2-Dichlorobenzene	25.0	25.11		ug/L		100	70 - 130	4	20
1,2-Dichloroethane	25.0	25.25		ug/L		101	70 - 130	3	20
1,2-Dichloropropane	25.0	26.24		ug/L		105	70 - 130	4	20
1,3,5-Trimethylbenzene	25.0	25.38		ug/L		102	70 - 130	5	20
1,3-Dichlorobenzene	25.0	25.00		ug/L		100	70 - 130	6	20
1,3-Dichloropropane	25.0	25.89		ug/L		104	70 - 130	1	20
1,4-Dichlorobenzene	25.0	24.74		ug/L		99	70 - 130	6	20
1,4-Dioxane	500	574.6		ug/L		115	70 - 130	6	20
2,2-Dichloropropane	25.0	24.22		ug/L		97	70 - 130	6	20
2-Butanone (MEK)	125	247.2	*	ug/L		198	70 - 130	5	20
2-Chlorotoluene	25.0	25.14		ug/L		101	70 - 130	5	20
2-Hexanone	125	138.5		ug/L		111	70 - 130	2	20
4-Chlorotoluene	25.0	25.58		ug/L		102	70 - 130	5	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260445/5
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Isopropyltoluene	25.0	25.28		ug/L		101	70 - 130	7	20
4-Methyl-2-pentanone (MIBK)	125	137.1		ug/L		110	70 - 130	1	20
Acetone	125	142.1		ug/L		114	70 - 130	3	20
Benzene	25.0	24.90		ug/L		100	70 - 130	6	20
Bromobenzene	25.0	25.44		ug/L		102	70 - 130	4	20
Bromoform	25.0	24.11		ug/L		96	70 - 130	2	20
Bromomethane	25.0	22.23		ug/L		89	70 - 130	7	20
Carbon disulfide	25.0	25.17		ug/L		101	70 - 130	7	20
Carbon tetrachloride	25.0	24.04		ug/L		96	70 - 130	7	20
Chlorobenzene	25.0	25.62		ug/L		102	70 - 130	3	20
Chlorobromomethane	25.0	24.63		ug/L		99	70 - 130	2	20
Chlorodibromomethane	25.0	25.19		ug/L		101	70 - 130	0	20
Chloroethane	25.0	23.52		ug/L		94	70 - 130	9	20
Chloroform	25.0	25.00		ug/L		100	70 - 130	3	20
Chloromethane	25.0	26.15		ug/L		105	70 - 130	7	20
cis-1,2-Dichloroethene	25.0	24.58		ug/L		98	70 - 130	5	20
cis-1,3-Dichloropropene	25.0	25.41		ug/L		102	70 - 130	2	20
Dichlorobromomethane	25.0	24.65		ug/L		99	70 - 130	3	20
Dichlorodifluoromethane	25.0	23.68		ug/L		95	70 - 130	8	20
Ethyl ether	25.0	25.64		ug/L		103	70 - 130	4	20
Ethylbenzene	25.0	25.68		ug/L		103	70 - 130	4	20
Ethylene Dibromide	25.0	26.15		ug/L		105	70 - 130	2	20
Hexachlorobutadiene	25.0	25.18		ug/L		101	70 - 130	6	20
Isopropyl ether	25.0	24.98		ug/L		100	70 - 130	4	20
Isopropylbenzene	25.0	24.93		ug/L		100	70 - 130	6	20
Methyl tert-butyl ether	25.0	24.41		ug/L		98	70 - 130	3	20
Methylene Chloride	25.0	25.07		ug/L		100	70 - 130	2	20
m-Xylene & p-Xylene	25.0	25.18		ug/L		101	70 - 130	0	20
Naphthalene	25.0	24.94		ug/L		100	70 - 130	2	20
n-Butylbenzene	25.0	25.95		ug/L		104	70 - 130	5	20
N-Propylbenzene	25.0	25.23		ug/L		101	70 - 130	6	20
o-Xylene	25.0	24.92		ug/L		100	70 - 130	1	20
sec-Butylbenzene	25.0	25.58		ug/L		102	70 - 130	5	20
Styrene	25.0	25.98		ug/L		104	70 - 130	0	20
Tert-amyl methyl ether	25.0	23.54		ug/L		94	70 - 130	2	20
Tert-butyl ethyl ether	25.0	23.49		ug/L		94	70 - 130	4	20
tert-Butylbenzene	25.0	25.59		ug/L		102	70 - 130	4	20
Tetrachloroethene	25.0	26.17		ug/L		105	70 - 130	1	20
Tetrahydrofuran	50.0	72.88	*	ug/L		146	70 - 130	1	20
Toluene	25.0	25.48		ug/L		102	70 - 130	3	20
trans-1,2-Dichloroethene	25.0	24.85		ug/L		99	70 - 130	7	20
trans-1,3-Dichloropropene	25.0	25.57		ug/L		102	70 - 130	3	20
Trichloroethene	25.0	24.84		ug/L		99	70 - 130	7	20
Trichlorofluoromethane	25.0	23.62		ug/L		94	70 - 130	8	20
Vinyl chloride	25.0	24.49		ug/L		98	70 - 130	8	20
Dibromomethane	25.0	24.56		ug/L		98	70 - 130	5	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260445/5
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: MB 480-260681/8
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 11:18	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 11:18	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 11:18	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
2-Butanone (MEK)	<10.0		10.0	10.0	ug/L			08/27/15 11:18	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 11:18	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 11:18	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 11:18	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 11:18	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 11:18	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 11:18	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 11:18	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260681/8
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 11:18	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 11:18	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 11:18	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 11:18	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 11:18	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 11:18	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 11:18	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 11:18	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 11:18	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/27/15 11:18	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 11:18	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/27/15 11:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/27/15 11:18*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/27/15 11:18*	*1*

Lab Sample ID: LCS 480-260681/5
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.40		ug/L		102	70 - 130
1,1,1-Trichloroethane	25.0	25.39		ug/L		102	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.08		ug/L		104	70 - 130
1,1,2-Trichloroethane	25.0	26.16		ug/L		105	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260681/5
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Freon 113	25.0	26.56		ug/L		106	70 - 130
1,1-Dichloroethane	25.0	27.26		ug/L		109	70 - 130
1,1-Dichloroethene	25.0	25.13		ug/L		101	70 - 130
1,1-Dichloropropene	25.0	26.79		ug/L		107	70 - 130
1,2,3-Trichlorobenzene	25.0	25.42		ug/L		102	70 - 130
1,2,3-Trichloropropane	25.0	26.15		ug/L		105	70 - 130
1,2,4-Trichlorobenzene	25.0	25.68		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	25.0	27.18		ug/L		109	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	25.86		ug/L		103	70 - 130
1,2-Dichlorobenzene	25.0	26.57		ug/L		106	70 - 130
1,2-Dichloroethane	25.0	25.62		ug/L		102	70 - 130
1,2-Dichloropropane	25.0	27.49		ug/L		110	70 - 130
1,3,5-Trimethylbenzene	25.0	27.20		ug/L		109	70 - 130
1,3-Dichlorobenzene	25.0	26.81		ug/L		107	70 - 130
1,3-Dichloropropane	25.0	25.95		ug/L		104	70 - 130
1,4-Dichlorobenzene	25.0	26.36		ug/L		105	70 - 130
1,4-Dioxane	500	554.6		ug/L		111	70 - 130
2,2-Dichloropropane	25.0	25.58		ug/L		102	70 - 130
2-Butanone (MEK)	125	263.2	*	ug/L		211	70 - 130
2-Chlorotoluene	25.0	26.54		ug/L		106	70 - 130
2-Hexanone	125	141.2		ug/L		113	70 - 130
4-Chlorotoluene	25.0	27.51		ug/L		110	70 - 130
4-Isopropyltoluene	25.0	27.47		ug/L		110	70 - 130
4-Methyl-2-pentanone (MIBK)	125	138.7		ug/L		111	70 - 130
Acetone	125	158.6		ug/L		127	70 - 130
Benzene	25.0	26.02		ug/L		104	70 - 130
Bromobenzene	25.0	26.47		ug/L		106	70 - 130
Bromoform	25.0	23.07		ug/L		92	70 - 130
Bromomethane	25.0	22.08		ug/L		88	70 - 130
Carbon disulfide	25.0	26.77		ug/L		107	70 - 130
Carbon tetrachloride	25.0	24.99		ug/L		100	70 - 130
Chlorobenzene	25.0	26.41		ug/L		106	70 - 130
Chlorobromomethane	25.0	25.03		ug/L		100	70 - 130
Chlorodibromomethane	25.0	25.42		ug/L		102	70 - 130
Chloroethane	25.0	23.85		ug/L		95	70 - 130
Chloroform	25.0	25.68		ug/L		103	70 - 130
Chloromethane	25.0	23.99		ug/L		96	70 - 130
cis-1,2-Dichloroethene	25.0	25.39		ug/L		102	70 - 130
cis-1,3-Dichloropropene	25.0	24.91		ug/L		100	70 - 130
Dichlorobromomethane	25.0	25.47		ug/L		102	70 - 130
Dichlorodifluoromethane	25.0	19.19		ug/L		77	70 - 130
Ethyl ether	25.0	26.13		ug/L		105	70 - 130
Ethylbenzene	25.0	26.54		ug/L		106	70 - 130
Ethylene Dibromide	25.0	26.19		ug/L		105	70 - 130
Hexachlorobutadiene	25.0	26.53		ug/L		106	70 - 130
Isopropyl ether	25.0	26.16		ug/L		105	70 - 130
Isopropylbenzene	25.0	27.14		ug/L		109	70 - 130
Methyl tert-butyl ether	25.0	24.64		ug/L		99	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260681/5
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	25.38		ug/L		102	70 - 130
m-Xylene & p-Xylene	25.0	25.75		ug/L		103	70 - 130
Naphthalene	25.0	25.48		ug/L		102	70 - 130
n-Butylbenzene	25.0	28.03		ug/L		112	70 - 130
N-Propylbenzene	25.0	27.17		ug/L		109	70 - 130
o-Xylene	25.0	25.31		ug/L		101	70 - 130
sec-Butylbenzene	25.0	27.22		ug/L		109	70 - 130
Styrene	25.0	27.19		ug/L		109	70 - 130
Tert-amyl methyl ether	25.0	23.92		ug/L		96	70 - 130
Tert-butyl ethyl ether	25.0	24.43		ug/L		98	70 - 130
tert-Butylbenzene	25.0	26.86		ug/L		107	70 - 130
Tetrachloroethene	25.0	27.20		ug/L		109	70 - 130
Tetrahydrofuran	50.0	73.65	*	ug/L		147	70 - 130
Toluene	25.0	26.67		ug/L		107	70 - 130
trans-1,2-Dichloroethene	25.0	26.27		ug/L		105	70 - 130
trans-1,3-Dichloropropene	25.0	24.15		ug/L		97	70 - 130
Trichloroethene	25.0	26.85		ug/L		107	70 - 130
Trichlorofluoromethane	25.0	23.95		ug/L		96	70 - 130
Vinyl chloride	25.0	23.91		ug/L		96	70 - 130
Dibromomethane	25.0	25.25		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 480-260681/6
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	25.58		ug/L		102	70 - 130	1	20
1,1,1-Trichloroethane	25.0	24.83		ug/L		99	70 - 130	2	20
1,1,2,2-Tetrachloroethane	25.0	26.85		ug/L		107	70 - 130	3	20
1,1,2-Trichloroethane	25.0	26.29		ug/L		105	70 - 130	1	20
Freon 113	25.0	25.32		ug/L		101	70 - 130	5	20
1,1-Dichloroethane	25.0	26.76		ug/L		107	70 - 130	2	20
1,1-Dichloroethene	25.0	24.50		ug/L		98	70 - 130	3	20
1,1-Dichloropropene	25.0	26.12		ug/L		104	70 - 130	3	20
1,2,3-Trichlorobenzene	25.0	25.46		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	25.0	25.29		ug/L		101	70 - 130	3	20
1,2,4-Trichlorobenzene	25.0	25.58		ug/L		102	70 - 130	0	20
1,2,4-Trimethylbenzene	25.0	26.58		ug/L		106	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	25.0	25.69		ug/L		103	70 - 130	1	20
1,2-Dichlorobenzene	25.0	26.15		ug/L		105	70 - 130	2	20
1,2-Dichloroethane	25.0	25.45		ug/L		102	70 - 130	1	20
1,2-Dichloropropane	25.0	26.09		ug/L		104	70 - 130	5	20
1,3,5-Trimethylbenzene	25.0	26.78		ug/L		107	70 - 130	2	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260681/6
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	25.0	26.35		ug/L		105	70 - 130	2	20
1,3-Dichloropropane	25.0	25.64		ug/L		103	70 - 130	1	20
1,4-Dichlorobenzene	25.0	26.10		ug/L		104	70 - 130	1	20
1,4-Dioxane	500	641.2		ug/L		128	70 - 130	14	20
2,2-Dichloropropane	25.0	24.55		ug/L		98	70 - 130	4	20
2-Butanone (MEK)	125	268.1	*	ug/L		214	70 - 130	2	20
2-Chlorotoluene	25.0	26.38		ug/L		106	70 - 130	1	20
2-Hexanone	125	142.8		ug/L		114	70 - 130	1	20
4-Chlorotoluene	25.0	26.66		ug/L		107	70 - 130	3	20
4-Isopropyltoluene	25.0	26.97		ug/L		108	70 - 130	2	20
4-Methyl-2-pentanone (MIBK)	125	138.7		ug/L		111	70 - 130	0	20
Acetone	125	159.8		ug/L		128	70 - 130	1	20
Benzene	25.0	26.00		ug/L		104	70 - 130	0	20
Bromobenzene	25.0	26.19		ug/L		105	70 - 130	1	20
Bromoform	25.0	23.24		ug/L		93	70 - 130	1	20
Bromomethane	25.0	20.87		ug/L		83	70 - 130	6	20
Carbon disulfide	25.0	25.99		ug/L		104	70 - 130	3	20
Carbon tetrachloride	25.0	24.04		ug/L		96	70 - 130	4	20
Chlorobenzene	25.0	26.09		ug/L		104	70 - 130	1	20
Chlorobromomethane	25.0	25.07		ug/L		100	70 - 130	0	20
Chlorodibromomethane	25.0	24.94		ug/L		100	70 - 130	2	20
Chloroethane	25.0	22.21		ug/L		89	70 - 130	7	20
Chloroform	25.0	25.10		ug/L		100	70 - 130	2	20
Chloromethane	25.0	23.95		ug/L		96	70 - 130	0	20
cis-1,2-Dichloroethene	25.0	25.59		ug/L		102	70 - 130	1	20
cis-1,3-Dichloropropene	25.0	25.65		ug/L		103	70 - 130	3	20
Dichlorobromomethane	25.0	25.09		ug/L		100	70 - 130	2	20
Dichlorodifluoromethane	25.0	18.22		ug/L		73	70 - 130	5	20
Ethyl ether	25.0	25.89		ug/L		104	70 - 130	1	20
Ethylbenzene	25.0	25.88		ug/L		104	70 - 130	3	20
Ethylene Dibromide	25.0	26.08		ug/L		104	70 - 130	0	20
Hexachlorobutadiene	25.0	26.07		ug/L		104	70 - 130	2	20
Isopropyl ether	25.0	26.04		ug/L		104	70 - 130	0	20
Isopropylbenzene	25.0	26.22		ug/L		105	70 - 130	3	20
Methyl tert-butyl ether	25.0	24.96		ug/L		100	70 - 130	1	20
Methylene Chloride	25.0	24.99		ug/L		100	70 - 130	2	20
m-Xylene & p-Xylene	25.0	25.08		ug/L		100	70 - 130	3	20
Naphthalene	25.0	25.54		ug/L		102	70 - 130	0	20
n-Butylbenzene	25.0	26.67		ug/L		107	70 - 130	5	20
N-Propylbenzene	25.0	26.39		ug/L		106	70 - 130	3	20
o-Xylene	25.0	25.05		ug/L		100	70 - 130	1	20
sec-Butylbenzene	25.0	26.42		ug/L		106	70 - 130	3	20
Styrene	25.0	26.22		ug/L		105	70 - 130	4	20
Tert-amyl methyl ether	25.0	24.65		ug/L		99	70 - 130	3	20
Tert-butyl ethyl ether	25.0	24.07		ug/L		96	70 - 130	2	20
tert-Butylbenzene	25.0	26.00		ug/L		104	70 - 130	3	20
Tetrachloroethene	25.0	26.17		ug/L		105	70 - 130	4	20
Tetrahydrofuran	50.0	73.59	*	ug/L		147	70 - 130	0	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260681/6
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			25.0	25.87		ug/L		103	70 - 130	3	20
trans-1,2-Dichloroethene			25.0	25.43		ug/L		102	70 - 130	3	20
trans-1,3-Dichloropropene			25.0	24.13		ug/L		97	70 - 130	0	20
Trichloroethene			25.0	25.45		ug/L		102	70 - 130	5	20
Trichlorofluoromethane			25.0	22.97		ug/L		92	70 - 130	4	20
Vinyl chloride			25.0	23.25		ug/L		93	70 - 130	3	20
Dibromomethane			25.0	25.73		ug/L		103	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 480-260778/3-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260778

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,1,2-Tetrachloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,1-Trichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,1-Trichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,2,2-Tetrachloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,2,2-Tetrachloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,2-Trichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,2-Trichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Freon 113	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Freon 113	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1-Dichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1-Dichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1-Dichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1-Dichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1-Dichloropropene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1-Dichloropropene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,3-Trichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,3-Trichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,3-Trichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,3-Trichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,4-Trichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,4-Trichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,4-Trimethylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,4-Trimethylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dibromo-3-Chloropropane	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dibromo-3-Chloropropane	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260778/3-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260778

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,3,5-Trimethylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,3,5-Trimethylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,3-Dichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,3-Dichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,3-Dichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,3-Dichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,4-Dichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,4-Dichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,4-Dioxane	<0.242		0.242	0.242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,4-Dioxane	<0.242		0.242	0.242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2,2-Dichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2,2-Dichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2-Butanone (MEK)	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2-Butanone (MEK)	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2-Chlorotoluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2-Chlorotoluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2-Hexanone	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2-Hexanone	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
4-Chlorotoluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
4-Chlorotoluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
4-Isopropyltoluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
4-Isopropyltoluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
4-Methyl-2-pentanone (MIBK)	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
4-Methyl-2-pentanone (MIBK)	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Acetone	<0.242		0.242	0.242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Acetone	<0.242		0.242	0.242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Benzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Benzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Bromobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Bromobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Bromoform	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Bromoform	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Bromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Bromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Carbon disulfide	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Carbon disulfide	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Carbon tetrachloride	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Carbon tetrachloride	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chlorobromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chlorobromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chlorodibromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chlorodibromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260778/3-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260778

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chloroform	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chloromethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chloromethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
cis-1,2-Dichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
cis-1,2-Dichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
cis-1,3-Dichloropropene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
cis-1,3-Dichloropropene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Dichlorobromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Dichlorobromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Dichlorodifluoromethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Dichlorodifluoromethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Ethyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Ethyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Ethylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Ethylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Ethylene Dibromide	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Ethylene Dibromide	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Hexachlorobutadiene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Hexachlorobutadiene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Isopropyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Isopropyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Isopropylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Isopropylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Methyl tert-butyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Methyl tert-butyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Methylene Chloride	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Methylene Chloride	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
m-Xylene & p-Xylene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
m-Xylene & p-Xylene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Naphthalene	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Naphthalene	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
n-Butylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
n-Butylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
N-Propylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
N-Propylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
o-Xylene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
o-Xylene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
sec-Butylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
sec-Butylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Styrene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Styrene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tert-amyl methyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tert-amyl methyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tert-butyl ethyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tert-butyl ethyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
tert-Butylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
tert-Butylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260778/3-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260778

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tetrachloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tetrahydrofuran	<0.0484		0.0484	0.0484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tetrahydrofuran	<0.0484		0.0484	0.0484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Toluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Toluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
trans-1,2-Dichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
trans-1,2-Dichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
trans-1,3-Dichloropropene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
trans-1,3-Dichloropropene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Trichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Trichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Trichlorofluoromethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Trichlorofluoromethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Vinyl chloride	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Vinyl chloride	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Dibromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Dibromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/27/15 12:29*	*08/27/15 14:26*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/27/15 12:29*	*08/27/15 14:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*08/27/15 12:29*	*08/27/15 14:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*08/27/15 12:29*	*08/27/15 14:26*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/27/15 12:29*	*08/27/15 14:26*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/27/15 12:29*	*08/27/15 14:26*	*1*

Lab Sample ID: LCS 480-260778/1-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260778

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0496	0.05129		mg/Kg		103	70 - 130
1,1,1,2-Tetrachloroethane	0.0496	0.05129		mg/Kg		103	70 - 130
1,1,1-Trichloroethane	0.0496	0.04806		mg/Kg		97	70 - 130
1,1,1-Trichloroethane	0.0496	0.04806		mg/Kg		97	70 - 130
1,1,2,2-Tetrachloroethane	0.0496	0.04990		mg/Kg		101	70 - 130
1,1,2,2-Tetrachloroethane	0.0496	0.04990		mg/Kg		101	70 - 130
1,1,2-Trichloroethane	0.0496	0.04798		mg/Kg		97	70 - 130
1,1,2-Trichloroethane	0.0496	0.04798		mg/Kg		97	70 - 130
Freon 113	0.0496	0.04537		mg/Kg		91	70 - 130
Freon 113	0.0496	0.04537		mg/Kg		91	70 - 130
1,1-Dichloroethane	0.0496	0.04895		mg/Kg		99	70 - 130
1,1-Dichloroethane	0.0496	0.04895		mg/Kg		99	70 - 130
1,1-Dichloroethene	0.0496	0.04674		mg/Kg		94	70 - 130
1,1-Dichloroethene	0.0496	0.04674		mg/Kg		94	70 - 130
1,1-Dichloropropene	0.0496	0.04731		mg/Kg		95	70 - 130
1,1-Dichloropropene	0.0496	0.04731		mg/Kg		95	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260778/1-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260778

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichlorobenzene	0.0496	0.04951		mg/Kg		100	70 - 130
1,2,3-Trichlorobenzene	0.0496	0.04951		mg/Kg		100	70 - 130
1,2,3-Trichloropropane	0.0496	0.04862		mg/Kg		98	70 - 130
1,2,3-Trichloropropane	0.0496	0.04862		mg/Kg		98	70 - 130
1,2,4-Trichlorobenzene	0.0496	0.05040		mg/Kg		102	70 - 130
1,2,4-Trichlorobenzene	0.0496	0.05040		mg/Kg		102	70 - 130
1,2,4-Trimethylbenzene	0.0496	0.04976		mg/Kg		100	70 - 130
1,2,4-Trimethylbenzene	0.0496	0.04976		mg/Kg		100	70 - 130
1,2-Dibromo-3-Chloropropane	0.0496	0.05345		mg/Kg		108	70 - 130
1,2-Dibromo-3-Chloropropane	0.0496	0.05345		mg/Kg		108	70 - 130
1,2-Dichlorobenzene	0.0496	0.04901		mg/Kg		99	70 - 130
1,2-Dichlorobenzene	0.0496	0.04901		mg/Kg		99	70 - 130
1,2-Dichloroethane	0.0496	0.04806		mg/Kg		97	70 - 130
1,2-Dichloroethane	0.0496	0.04806		mg/Kg		97	70 - 130
1,2-Dichloropropane	0.0496	0.04889		mg/Kg		99	70 - 130
1,2-Dichloropropane	0.0496	0.04889		mg/Kg		99	70 - 130
1,3,5-Trimethylbenzene	0.0496	0.04929		mg/Kg		99	70 - 130
1,3,5-Trimethylbenzene	0.0496	0.04929		mg/Kg		99	70 - 130
1,3-Dichlorobenzene	0.0496	0.04844		mg/Kg		98	70 - 130
1,3-Dichlorobenzene	0.0496	0.04844		mg/Kg		98	70 - 130
1,3-Dichloropropane	0.0496	0.04836		mg/Kg		97	70 - 130
1,3-Dichloropropane	0.0496	0.04836		mg/Kg		97	70 - 130
1,4-Dichlorobenzene	0.0496	0.04828		mg/Kg		97	70 - 130
1,4-Dichlorobenzene	0.0496	0.04828		mg/Kg		97	70 - 130
1,4-Dioxane	0.992	0.9343		mg/Kg		94	70 - 130
1,4-Dioxane	0.992	0.9343		mg/Kg		94	70 - 130
2,2-Dichloropropane	0.0496	0.05009		mg/Kg		101	70 - 130
2,2-Dichloropropane	0.0496	0.05009		mg/Kg		101	70 - 130
2-Butanone (MEK)	0.248	0.4808	*	mg/Kg		194	70 - 130
2-Butanone (MEK)	0.248	0.4808	*	mg/Kg		194	70 - 130
2-Chlorotoluene	0.0496	0.04948		mg/Kg		100	70 - 130
2-Chlorotoluene	0.0496	0.04948		mg/Kg		100	70 - 130
2-Hexanone	0.248	0.2600		mg/Kg		105	70 - 130
2-Hexanone	0.248	0.2600		mg/Kg		105	70 - 130
4-Chlorotoluene	0.0496	0.04868		mg/Kg		98	70 - 130
4-Chlorotoluene	0.0496	0.04868		mg/Kg		98	70 - 130
4-Isopropyltoluene	0.0496	0.05035		mg/Kg		101	70 - 130
4-Isopropyltoluene	0.0496	0.05035		mg/Kg		101	70 - 130
4-Methyl-2-pentanone (MIBK)	0.248	0.2554		mg/Kg		103	70 - 130
4-Methyl-2-pentanone (MIBK)	0.248	0.2554		mg/Kg		103	70 - 130
Acetone	0.248	0.2556		mg/Kg		103	70 - 130
Acetone	0.248	0.2556		mg/Kg		103	70 - 130
Benzene	0.0496	0.04805		mg/Kg		97	70 - 130
Benzene	0.0496	0.04805		mg/Kg		97	70 - 130
Bromobenzene	0.0496	0.04794		mg/Kg		97	70 - 130
Bromobenzene	0.0496	0.04794		mg/Kg		97	70 - 130
Bromoform	0.0496	0.04542		mg/Kg		92	70 - 130
Bromoform	0.0496	0.04542		mg/Kg		92	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260778/1-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260778

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	0.0496	0.04633		mg/Kg		93	70 - 130
Bromomethane	0.0496	0.04633		mg/Kg		93	70 - 130
Carbon disulfide	0.0496	0.04922		mg/Kg		99	70 - 130
Carbon disulfide	0.0496	0.04922		mg/Kg		99	70 - 130
Carbon tetrachloride	0.0496	0.04870		mg/Kg		98	70 - 130
Carbon tetrachloride	0.0496	0.04870		mg/Kg		98	70 - 130
Chlorobenzene	0.0496	0.04789		mg/Kg		97	70 - 130
Chlorobenzene	0.0496	0.04789		mg/Kg		97	70 - 130
Chlorobromomethane	0.0496	0.04964		mg/Kg		100	70 - 130
Chlorobromomethane	0.0496	0.04964		mg/Kg		100	70 - 130
Chlorodibromomethane	0.0496	0.05278		mg/Kg		106	70 - 130
Chlorodibromomethane	0.0496	0.05278		mg/Kg		106	70 - 130
Chloroethane	0.0496	0.04569		mg/Kg		92	70 - 130
Chloroethane	0.0496	0.04569		mg/Kg		92	70 - 130
Chloroform	0.0496	0.04779		mg/Kg		96	70 - 130
Chloroform	0.0496	0.04779		mg/Kg		96	70 - 130
Chloromethane	0.0496	0.04731		mg/Kg		95	70 - 130
Chloromethane	0.0496	0.04731		mg/Kg		95	70 - 130
cis-1,2-Dichloroethene	0.0496	0.04869		mg/Kg		98	70 - 130
cis-1,2-Dichloroethene	0.0496	0.04869		mg/Kg		98	70 - 130
cis-1,3-Dichloropropene	0.0496	0.05381		mg/Kg		108	70 - 130
cis-1,3-Dichloropropene	0.0496	0.05381		mg/Kg		108	70 - 130
Dichlorobromomethane	0.0496	0.05200		mg/Kg		105	70 - 130
Dichlorobromomethane	0.0496	0.05200		mg/Kg		105	70 - 130
Dichlorodifluoromethane	0.0496	0.04566		mg/Kg		92	70 - 130
Dichlorodifluoromethane	0.0496	0.04566		mg/Kg		92	70 - 130
Ethyl ether	0.0496	0.05051		mg/Kg		102	70 - 130
Ethyl ether	0.0496	0.05051		mg/Kg		102	70 - 130
Ethylbenzene	0.0496	0.04878		mg/Kg		98	70 - 130
Ethylbenzene	0.0496	0.04878		mg/Kg		98	70 - 130
Ethylene Dibromide	0.0496	0.04944		mg/Kg		100	70 - 130
Ethylene Dibromide	0.0496	0.04944		mg/Kg		100	70 - 130
Hexachlorobutadiene	0.0496	0.04664		mg/Kg		94	70 - 130
Hexachlorobutadiene	0.0496	0.04664		mg/Kg		94	70 - 130
Isopropyl ether	0.0496	0.05087		mg/Kg		103	70 - 130
Isopropyl ether	0.0496	0.05087		mg/Kg		103	70 - 130
Isopropylbenzene	0.0496	0.04882		mg/Kg		98	70 - 130
Isopropylbenzene	0.0496	0.04882		mg/Kg		98	70 - 130
Methyl tert-butyl ether	0.0496	0.04999		mg/Kg		101	70 - 130
Methyl tert-butyl ether	0.0496	0.04999		mg/Kg		101	70 - 130
Methylene Chloride	0.0496	0.04942		mg/Kg		100	70 - 130
Methylene Chloride	0.0496	0.04942		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	0.0496	0.04930		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.0496	0.04930		mg/Kg		99	70 - 130
Naphthalene	0.0496	0.05006		mg/Kg		101	70 - 130
Naphthalene	0.0496	0.05006		mg/Kg		101	70 - 130
n-Butylbenzene	0.0496	0.05058		mg/Kg		102	70 - 130
n-Butylbenzene	0.0496	0.05058		mg/Kg		102	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260778/1-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260778

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Propylbenzene	0.0496	0.04893		mg/Kg		99	70 - 130
N-Propylbenzene	0.0496	0.04893		mg/Kg		99	70 - 130
o-Xylene	0.0496	0.04952		mg/Kg		100	70 - 130
o-Xylene	0.0496	0.04952		mg/Kg		100	70 - 130
sec-Butylbenzene	0.0496	0.04860		mg/Kg		98	70 - 130
sec-Butylbenzene	0.0496	0.04860		mg/Kg		98	70 - 130
Styrene	0.0496	0.05062		mg/Kg		102	70 - 130
Styrene	0.0496	0.05062		mg/Kg		102	70 - 130
Tert-amyl methyl ether	0.0496	0.05203		mg/Kg		105	70 - 130
Tert-amyl methyl ether	0.0496	0.05203		mg/Kg		105	70 - 130
Tert-butyl ethyl ether	0.0496	0.05055		mg/Kg		102	70 - 130
Tert-butyl ethyl ether	0.0496	0.05055		mg/Kg		102	70 - 130
tert-Butylbenzene	0.0496	0.04916		mg/Kg		99	70 - 130
tert-Butylbenzene	0.0496	0.04916		mg/Kg		99	70 - 130
Tetrachloroethene	0.0496	0.04869		mg/Kg		98	70 - 130
Tetrachloroethene	0.0496	0.04869		mg/Kg		98	70 - 130
Tetrahydrofuran	0.0992	0.1073		mg/Kg		108	70 - 130
Tetrahydrofuran	0.0992	0.1073		mg/Kg		108	70 - 130
Toluene	0.0496	0.04753		mg/Kg		96	70 - 130
Toluene	0.0496	0.04753		mg/Kg		96	70 - 130
trans-1,2-Dichloroethene	0.0496	0.04828		mg/Kg		97	70 - 130
trans-1,2-Dichloroethene	0.0496	0.04828		mg/Kg		97	70 - 130
trans-1,3-Dichloropropene	0.0496	0.05224		mg/Kg		105	70 - 130
trans-1,3-Dichloropropene	0.0496	0.05224		mg/Kg		105	70 - 130
Trichloroethene	0.0496	0.04871		mg/Kg		98	70 - 130
Trichloroethene	0.0496	0.04871		mg/Kg		98	70 - 130
Trichlorofluoromethane	0.0496	0.04424		mg/Kg		89	70 - 130
Trichlorofluoromethane	0.0496	0.04424		mg/Kg		89	70 - 130
Vinyl chloride	0.0496	0.04680		mg/Kg		94	70 - 130
Vinyl chloride	0.0496	0.04680		mg/Kg		94	70 - 130
Dibromomethane	0.0496	0.04981		mg/Kg		100	70 - 130
Dibromomethane	0.0496	0.04981		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 480-260778/2-A
Matrix: Solid
Analysis Batch: 260731

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260778

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0499	0.05084		mg/Kg		102	70 - 130	1	20
1,1,1-Trichloroethane	0.0499	0.04692		mg/Kg		94	70 - 130	2	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260778/2-A
Matrix: Solid
Analysis Batch: 260731

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260778

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	0.0499	0.05135		mg/Kg		103	70 - 130	3	20
1,1,2-Trichloroethane	0.0499	0.04940		mg/Kg		99	70 - 130	3	20
Freon 113	0.0499	0.04277		mg/Kg		86	70 - 130	6	20
1,1-Dichloroethane	0.0499	0.04838		mg/Kg		97	70 - 130	1	20
1,1-Dichloroethene	0.0499	0.04552		mg/Kg		91	70 - 130	3	20
1,1-Dichloropropene	0.0499	0.04728		mg/Kg		95	70 - 130	0	20
1,2,3-Trichlorobenzene	0.0499	0.04831		mg/Kg		97	70 - 130	2	20
1,2,3-Trichloropropane	0.0499	0.05068		mg/Kg		102	70 - 130	4	20
1,2,4-Trichlorobenzene	0.0499	0.04904		mg/Kg		98	70 - 130	3	20
1,2,4-Trimethylbenzene	0.0499	0.04868		mg/Kg		98	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	0.0499	0.05669		mg/Kg		114	70 - 130	6	20
1,2-Dichlorobenzene	0.0499	0.04857		mg/Kg		97	70 - 130	1	20
1,2-Dichloroethane	0.0499	0.04893		mg/Kg		98	70 - 130	2	20
1,2-Dichloropropane	0.0499	0.04987		mg/Kg		100	70 - 130	2	20
1,3,5-Trimethylbenzene	0.0499	0.04828		mg/Kg		97	70 - 130	2	20
1,3-Dichlorobenzene	0.0499	0.04790		mg/Kg		96	70 - 130	1	20
1,3-Dichloropropane	0.0499	0.04950		mg/Kg		99	70 - 130	2	20
1,4-Dichlorobenzene	0.0499	0.04723		mg/Kg		95	70 - 130	2	20
1,4-Dioxane	0.998	0.9795		mg/Kg		98	70 - 130	5	20
2,2-Dichloropropane	0.0499	0.04880		mg/Kg		98	70 - 130	3	20
2-Butanone (MEK)	0.250	0.5102	*	mg/Kg		205	70 - 130	6	20
2-Chlorotoluene	0.0499	0.04883		mg/Kg		98	70 - 130	1	20
2-Hexanone	0.250	0.2775		mg/Kg		111	70 - 130	7	20
4-Chlorotoluene	0.0499	0.05274		mg/Kg		106	70 - 130	8	20
4-Isopropyltoluene	0.0499	0.04891		mg/Kg		98	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	0.250	0.2660		mg/Kg		107	70 - 130	4	20
Acetone	0.250	0.2667		mg/Kg		107	70 - 130	4	20
Benzene	0.0499	0.04765		mg/Kg		95	70 - 130	1	20
Bromobenzene	0.0499	0.04831		mg/Kg		97	70 - 130	1	20
Bromoform	0.0499	0.04713		mg/Kg		94	70 - 130	4	20
Bromomethane	0.0499	0.04232		mg/Kg		85	70 - 130	9	20
Carbon disulfide	0.0499	0.04859		mg/Kg		97	70 - 130	1	20
Carbon tetrachloride	0.0499	0.04761		mg/Kg		95	70 - 130	2	20
Chlorobenzene	0.0499	0.04788		mg/Kg		96	70 - 130	0	20
Chlorobromomethane	0.0499	0.04977		mg/Kg		100	70 - 130	0	20
Chlorodibromomethane	0.0499	0.05422		mg/Kg		109	70 - 130	3	20
Chloroethane	0.0499	0.04323		mg/Kg		87	70 - 130	6	20
Chloroform	0.0499	0.04749		mg/Kg		95	70 - 130	1	20
Chloromethane	0.0499	0.04486		mg/Kg		90	70 - 130	5	20
cis-1,2-Dichloroethene	0.0499	0.04815		mg/Kg		96	70 - 130	1	20
cis-1,3-Dichloropropene	0.0499	0.05492		mg/Kg		110	70 - 130	2	20
Dichlorobromomethane	0.0499	0.05258		mg/Kg		105	70 - 130	1	20
Dichlorodifluoromethane	0.0499	0.04200		mg/Kg		84	70 - 130	8	20
Ethyl ether	0.0499	0.05353		mg/Kg		107	70 - 130	6	20
Ethylbenzene	0.0499	0.04790		mg/Kg		96	70 - 130	2	20
Ethylene Dibromide	0.0499	0.05076		mg/Kg		102	70 - 130	3	20
Hexachlorobutadiene	0.0499	0.04459		mg/Kg		89	70 - 130	5	20
Isopropyl ether	0.0499	0.05077		mg/Kg		102	70 - 130	0	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260778/2-A
Matrix: Solid
Analysis Batch: 260731

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260778

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Isopropylbenzene			0.0499	0.04780		mg/Kg		96	70 - 130	2	20
Methyl tert-butyl ether			0.0499	0.05097		mg/Kg		102	70 - 130	2	20
Methylene Chloride			0.0499	0.04887		mg/Kg		98	70 - 130	1	20
m-Xylene & p-Xylene			0.0499	0.04814		mg/Kg		96	70 - 130	2	20
Naphthalene			0.0499	0.05090		mg/Kg		102	70 - 130	2	20
n-Butylbenzene			0.0499	0.04859		mg/Kg		97	70 - 130	4	20
N-Propylbenzene			0.0499	0.04777		mg/Kg		96	70 - 130	2	20
o-Xylene			0.0499	0.04866		mg/Kg		98	70 - 130	2	20
sec-Butylbenzene			0.0499	0.04733		mg/Kg		95	70 - 130	3	20
Styrene			0.0499	0.05037		mg/Kg		101	70 - 130	1	20
Tert-amyl methyl ether			0.0499	0.05378		mg/Kg		108	70 - 130	3	20
Tert-butyl ethyl ether			0.0499	0.05078		mg/Kg		102	70 - 130	0	20
tert-Butylbenzene			0.0499	0.04737		mg/Kg		95	70 - 130	4	20
Tetrachloroethene			0.0499	0.04784		mg/Kg		96	70 - 130	2	20
Tetrahydrofuran			0.0998	0.1099		mg/Kg		110	70 - 130	2	20
Toluene			0.0499	0.04700		mg/Kg		94	70 - 130	1	20
trans-1,2-Dichloroethene			0.0499	0.04703		mg/Kg		94	70 - 130	3	20
trans-1,3-Dichloropropene			0.0499	0.05350		mg/Kg		107	70 - 130	2	20
Trichloroethene			0.0499	0.04844		mg/Kg		97	70 - 130	1	20
Trichlorofluoromethane			0.0499	0.04235		mg/Kg		85	70 - 130	4	20
Vinyl chloride			0.0499	0.04334		mg/Kg		87	70 - 130	8	20
Dibromomethane			0.0499	0.05076		mg/Kg		102	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 480-260899/8
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/28/15 10:52	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Freon 113	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/28/15 10:52	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260899/8
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/28/15 10:52	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
2-Butanone (MEK)	<10.0		10.0	10.0	ug/L			08/28/15 10:52	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/28/15 10:52	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/28/15 10:52	1
Acetone	<50.0		50.0	50.0	ug/L			08/28/15 10:52	1
Benzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Bromoform	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/28/15 10:52	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/28/15 10:52	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/28/15 10:52	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/28/15 10:52	1
Chloroform	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/28/15 10:52	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/28/15 10:52	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/28/15 10:52	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/28/15 10:52	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/28/15 10:52	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/28/15 10:52	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/28/15 10:52	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Styrene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/28/15 10:52	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/28/15 10:52	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260899/8
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/28/15 10:52	1
Toluene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/28/15 10:52	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/28/15 10:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*08/28/15 10:52*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/28/15 10:52*	*1*

Lab Sample ID: LCS 480-260899/5
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.85		ug/L		99	70 - 130
1,1,1-Trichloroethane	25.0	24.54		ug/L		98	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.76		ug/L		103	70 - 130
1,1,2-Trichloroethane	25.0	25.88		ug/L		104	70 - 130
Freon 113	25.0	26.02		ug/L		104	70 - 130
1,1-Dichloroethane	25.0	27.37		ug/L		109	70 - 130
1,1-Dichloroethene	25.0	25.09		ug/L		100	70 - 130
1,1-Dichloropropene	25.0	27.23		ug/L		109	70 - 130
1,2,3-Trichlorobenzene	25.0	24.88		ug/L		100	70 - 130
1,2,3-Trichloropropane	25.0	24.91		ug/L		100	70 - 130
1,2,4-Trichlorobenzene	25.0	25.57		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	25.0	26.94		ug/L		108	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	22.60		ug/L		90	70 - 130
1,2-Dichlorobenzene	25.0	25.97		ug/L		104	70 - 130
1,2-Dichloroethane	25.0	24.64		ug/L		99	70 - 130
1,2-Dichloropropane	25.0	26.68		ug/L		107	70 - 130
1,3,5-Trimethylbenzene	25.0	27.13		ug/L		109	70 - 130
1,3-Dichlorobenzene	25.0	26.76		ug/L		107	70 - 130
1,3-Dichloropropane	25.0	25.53		ug/L		102	70 - 130
1,4-Dichlorobenzene	25.0	26.32		ug/L		105	70 - 130
1,4-Dioxane	500	458.5		ug/L		92	70 - 130
2,2-Dichloropropane	25.0	25.26		ug/L		101	70 - 130
2-Butanone (MEK)	125	248.2	*	ug/L		199	70 - 130
2-Chlorotoluene	25.0	27.43		ug/L		110	70 - 130
2-Hexanone	125	133.3		ug/L		107	70 - 130
4-Chlorotoluene	25.0	27.15		ug/L		109	70 - 130
4-Isopropyltoluene	25.0	27.89		ug/L		112	70 - 130
4-Methyl-2-pentanone (MIBK)	125	131.9		ug/L		105	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260899/5
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	125	149.1		ug/L		119	70 - 130
Benzene	25.0	26.60		ug/L		106	70 - 130
Bromobenzene	25.0	26.59		ug/L		106	70 - 130
Bromoform	25.0	21.13		ug/L		85	70 - 130
Bromomethane	25.0	21.82		ug/L		87	70 - 130
Carbon disulfide	25.0	26.01		ug/L		104	70 - 130
Carbon tetrachloride	25.0	23.78		ug/L		95	70 - 130
Chlorobenzene	25.0	26.42		ug/L		106	70 - 130
Chlorobromomethane	25.0	24.46		ug/L		98	70 - 130
Chlorodibromomethane	25.0	23.28		ug/L		93	70 - 130
Chloroethane	25.0	23.53		ug/L		94	70 - 130
Chloroform	25.0	25.07		ug/L		100	70 - 130
Chloromethane	25.0	23.74		ug/L		95	70 - 130
cis-1,2-Dichloroethene	25.0	25.51		ug/L		102	70 - 130
cis-1,3-Dichloropropene	25.0	24.57		ug/L		98	70 - 130
Dichlorobromomethane	25.0	23.95		ug/L		96	70 - 130
Dichlorodifluoromethane	25.0	17.47		ug/L		70	70 - 130
Ethyl ether	25.0	25.01		ug/L		100	70 - 130
Ethylbenzene	25.0	26.88		ug/L		108	70 - 130
Ethylene Dibromide	25.0	24.93		ug/L		100	70 - 130
Hexachlorobutadiene	25.0	27.38		ug/L		110	70 - 130
Isopropyl ether	25.0	26.16		ug/L		105	70 - 130
Isopropylbenzene	25.0	27.06		ug/L		108	70 - 130
Methyl tert-butyl ether	25.0	24.23		ug/L		97	70 - 130
Methylene Chloride	25.0	25.38		ug/L		102	70 - 130
m-Xylene & p-Xylene	25.0	26.08		ug/L		104	70 - 130
Naphthalene	25.0	24.29		ug/L		97	70 - 130
n-Butylbenzene	25.0	27.64		ug/L		111	70 - 130
N-Propylbenzene	25.0	27.71		ug/L		111	70 - 130
o-Xylene	25.0	25.80		ug/L		103	70 - 130
sec-Butylbenzene	25.0	27.50		ug/L		110	70 - 130
Styrene	25.0	26.75		ug/L		107	70 - 130
Tert-amyl methyl ether	25.0	23.30		ug/L		93	70 - 130
Tert-butyl ethyl ether	25.0	23.94		ug/L		96	70 - 130
tert-Butylbenzene	25.0	26.76		ug/L		107	70 - 130
Tetrachloroethene	25.0	26.35		ug/L		105	70 - 130
Tetrahydrofuran	50.0	67.01	*	ug/L		134	70 - 130
Toluene	25.0	26.99		ug/L		108	70 - 130
trans-1,2-Dichloroethene	25.0	26.12		ug/L		104	70 - 130
trans-1,3-Dichloropropene	25.0	23.75		ug/L		95	70 - 130
Trichloroethene	25.0	26.37		ug/L		105	70 - 130
Trichlorofluoromethane	25.0	23.52		ug/L		94	70 - 130
Vinyl chloride	25.0	23.76		ug/L		95	70 - 130
Dibromomethane	25.0	24.39		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260899/5
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 480-260899/6
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	24.50		ug/L		98	70 - 130	1	20
1,1,1-Trichloroethane			25.0	23.65		ug/L		95	70 - 130	4	20
1,1,2,2-Tetrachloroethane			25.0	25.52		ug/L		102	70 - 130	1	20
1,1,2-Trichloroethane			25.0	25.72		ug/L		103	70 - 130	1	20
Freon 113			25.0	25.01		ug/L		100	70 - 130	4	20
1,1-Dichloroethane			25.0	26.48		ug/L		106	70 - 130	3	20
1,1-Dichloroethene			25.0	24.31		ug/L		97	70 - 130	3	20
1,1-Dichloropropene			25.0	25.74		ug/L		103	70 - 130	6	20
1,2,3-Trichlorobenzene			25.0	24.47		ug/L		98	70 - 130	2	20
1,2,3-Trichloropropane			25.0	24.89		ug/L		100	70 - 130	0	20
1,2,4-Trichlorobenzene			25.0	25.05		ug/L		100	70 - 130	2	20
1,2,4-Trimethylbenzene			25.0	26.08		ug/L		104	70 - 130	3	20
1,2-Dibromo-3-Chloropropane			25.0	22.46		ug/L		90	70 - 130	1	20
1,2-Dichlorobenzene			25.0	25.75		ug/L		103	70 - 130	1	20
1,2-Dichloroethane			25.0	24.22		ug/L		97	70 - 130	2	20
1,2-Dichloropropane			25.0	25.65		ug/L		103	70 - 130	4	20
1,3,5-Trimethylbenzene			25.0	26.42		ug/L		106	70 - 130	3	20
1,3-Dichlorobenzene			25.0	25.65		ug/L		103	70 - 130	4	20
1,3-Dichloropropane			25.0	25.47		ug/L		102	70 - 130	0	20
1,4-Dichlorobenzene			25.0	25.69		ug/L		103	70 - 130	2	20
1,4-Dioxane			500	544.9		ug/L		109	70 - 130	17	20
2,2-Dichloropropane			25.0	23.91		ug/L		96	70 - 130	6	20
2-Butanone (MEK)			125	243.5	*	ug/L		195	70 - 130	2	20
2-Chlorotoluene			25.0	26.15		ug/L		105	70 - 130	5	20
2-Hexanone			125	133.3		ug/L		107	70 - 130	0	20
4-Chlorotoluene			25.0	26.56		ug/L		106	70 - 130	2	20
4-Isopropyltoluene			25.0	26.08		ug/L		104	70 - 130	7	20
4-Methyl-2-pentanone (MIBK)			125	132.4		ug/L		106	70 - 130	0	20
Acetone			125	143.4		ug/L		115	70 - 130	4	20
Benzene			25.0	25.14		ug/L		101	70 - 130	6	20
Bromobenzene			25.0	26.00		ug/L		104	70 - 130	2	20
Bromoform			25.0	21.40		ug/L		86	70 - 130	1	20
Bromomethane			25.0	20.74		ug/L		83	70 - 130	5	20
Carbon disulfide			25.0	24.84		ug/L		99	70 - 130	5	20
Carbon tetrachloride			25.0	22.97		ug/L		92	70 - 130	3	20
Chlorobenzene			25.0	25.85		ug/L		103	70 - 130	2	20
Chlorobromomethane			25.0	23.93		ug/L		96	70 - 130	2	20
Chlorodibromomethane			25.0	23.67		ug/L		95	70 - 130	2	20
Chloroethane			25.0	21.81		ug/L		87	70 - 130	8	20
Chloroform			25.0	24.22		ug/L		97	70 - 130	3	20
Chloromethane			25.0	21.84		ug/L		87	70 - 130	8	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260899/6
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	25.0	24.71		ug/L		99	70 - 130	3	20
cis-1,3-Dichloropropene	25.0	24.08		ug/L		96	70 - 130	2	20
Dichlorobromomethane	25.0	23.85		ug/L		95	70 - 130	0	20
Dichlorodifluoromethane	25.0	16.44	*	ug/L		66	70 - 130	6	20
Ethyl ether	25.0	23.92		ug/L		96	70 - 130	4	20
Ethylbenzene	25.0	26.19		ug/L		105	70 - 130	3	20
Ethylene Dibromide	25.0	25.25		ug/L		101	70 - 130	1	20
Hexachlorobutadiene	25.0	25.32		ug/L		101	70 - 130	8	20
Isopropyl ether	25.0	25.23		ug/L		101	70 - 130	4	20
Isopropylbenzene	25.0	25.97		ug/L		104	70 - 130	4	20
Methyl tert-butyl ether	25.0	24.03		ug/L		96	70 - 130	1	20
Methylene Chloride	25.0	24.55		ug/L		98	70 - 130	3	20
m-Xylene & p-Xylene	25.0	25.26		ug/L		101	70 - 130	3	20
Naphthalene	25.0	23.99		ug/L		96	70 - 130	1	20
n-Butylbenzene	25.0	26.80		ug/L		107	70 - 130	3	20
N-Propylbenzene	25.0	26.37		ug/L		105	70 - 130	5	20
o-Xylene	25.0	25.10		ug/L		100	70 - 130	3	20
sec-Butylbenzene	25.0	26.48		ug/L		106	70 - 130	4	20
Styrene	25.0	26.46		ug/L		106	70 - 130	1	20
Tert-amyl methyl ether	25.0	23.12		ug/L		92	70 - 130	1	20
Tert-butyl ethyl ether	25.0	23.68		ug/L		95	70 - 130	1	20
tert-Butylbenzene	25.0	25.86		ug/L		103	70 - 130	3	20
Tetrachloroethene	25.0	26.03		ug/L		104	70 - 130	1	20
Tetrahydrofuran	50.0	66.47	*	ug/L		133	70 - 130	1	20
Toluene	25.0	25.66		ug/L		103	70 - 130	5	20
trans-1,2-Dichloroethene	25.0	25.15		ug/L		101	70 - 130	4	20
trans-1,3-Dichloropropene	25.0	24.13		ug/L		97	70 - 130	2	20
Trichloroethene	25.0	25.69		ug/L		103	70 - 130	3	20
Trichlorofluoromethane	25.0	22.33		ug/L		89	70 - 130	5	20
Vinyl chloride	25.0	21.59		ug/L		86	70 - 130	10	20
Dibromomethane	25.0	23.87		ug/L		95	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 480-260980/15-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260980

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,1,1-Trichloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,1,2,2-Tetrachloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,1,2-Trichloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Freon 113	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,1-Dichloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260980/15-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260980

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,1-Dichloropropene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2,3-Trichlorobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2,3-Trichloropropane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2,4-Trichlorobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2,4-Trimethylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2-Dibromo-3-Chloropropane	<0.0248		0.0248	0.0248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2-Dichlorobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2-Dichloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2-Dichloropropane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,3,5-Trimethylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,3-Dichlorobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,3-Dichloropropane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,4-Dichlorobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,4-Dioxane	<0.248		0.248	0.248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
2,2-Dichloropropane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
2-Butanone (MEK)	<0.0248		0.0248	0.0248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
2-Chlorotoluene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
2-Hexanone	<0.0248		0.0248	0.0248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
4-Chlorotoluene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
4-Isopropyltoluene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
4-Methyl-2-pentanone (MIBK)	<0.0248		0.0248	0.0248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Acetone	<0.248		0.248	0.248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Benzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Bromobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Bromoform	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Bromomethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Carbon disulfide	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Carbon tetrachloride	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Chlorobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Chlorobromomethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Chlorodibromomethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Chloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Chloroform	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Chloromethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
cis-1,2-Dichloroethene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
cis-1,3-Dichloropropene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Dichlorobromomethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Dichlorodifluoromethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Ethyl ether	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Ethylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Ethylene Dibromide	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Hexachlorobutadiene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Isopropyl ether	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Isopropylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Methyl tert-butyl ether	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Methylene Chloride	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
m-Xylene & p-Xylene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260980/15-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260980

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<0.0248		0.0248	0.0248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
n-Butylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
N-Propylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
o-Xylene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
sec-Butylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Styrene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Tert-amyl methyl ether	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Tert-butyl ethyl ether	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
tert-Butylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Tetrachloroethene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Tetrahydrofuran	<0.0495		0.0495	0.0495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Toluene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
trans-1,2-Dichloroethene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
trans-1,3-Dichloropropene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Trichloroethene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Trichlorofluoromethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Vinyl chloride	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Dibromomethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/28/15 16:54*	*08/28/15 19:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*	*08/28/15 16:54*	*08/28/15 19:14*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/28/15 16:54*	*08/28/15 19:14*	*1*

Lab Sample ID: LCS 480-260980/1-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0499	0.05091		mg/Kg		102	70 - 130
1,1,1-Trichloroethane	0.0499	0.04500		mg/Kg		90	70 - 130
1,1,2,2-Tetrachloroethane	0.0499	0.05339		mg/Kg		107	70 - 130
1,1,2-Trichloroethane	0.0499	0.04956		mg/Kg		99	70 - 130
Freon 113	0.0499	0.04269		mg/Kg		86	70 - 130
1,1-Dichloroethane	0.0499	0.04622		mg/Kg		93	70 - 130
1,1-Dichloroethene	0.0499	0.04337		mg/Kg		87	70 - 130
1,1-Dichloropropene	0.0499	0.04463		mg/Kg		89	70 - 130
1,2,3-Trichlorobenzene	0.0499	0.05072		mg/Kg		102	70 - 130
1,2,3-Trichloropropane	0.0499	0.05273		mg/Kg		106	70 - 130
1,2,4-Trichlorobenzene	0.0499	0.05163		mg/Kg		103	70 - 130
1,2,4-Trimethylbenzene	0.0499	0.05061		mg/Kg		101	70 - 130
1,2-Dibromo-3-Chloropropane	0.0499	0.05901		mg/Kg		118	70 - 130
1,2-Dichlorobenzene	0.0499	0.05014		mg/Kg		100	70 - 130
1,2-Dichloroethane	0.0499	0.04643		mg/Kg		93	70 - 130
1,2-Dichloropropane	0.0499	0.04699		mg/Kg		94	70 - 130
1,3,5-Trimethylbenzene	0.0499	0.05012		mg/Kg		100	70 - 130
1,3-Dichlorobenzene	0.0499	0.04924		mg/Kg		99	70 - 130
1,3-Dichloropropane	0.0499	0.04975		mg/Kg		100	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260980/1-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0499	0.04898		mg/Kg		98	70 - 130
1,4-Dioxane	0.998	1.055		mg/Kg		106	70 - 130
2,2-Dichloropropane	0.0499	0.04721		mg/Kg		95	70 - 130
2-Butanone (MEK)	0.250	0.4899	*	mg/Kg		196	70 - 130
2-Chlorotoluene	0.0499	0.05008		mg/Kg		100	70 - 130
2-Hexanone	0.250	0.2846		mg/Kg		114	70 - 130
4-Chlorotoluene	0.0499	0.05334		mg/Kg		107	70 - 130
4-Isopropyltoluene	0.0499	0.05063		mg/Kg		101	70 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2766		mg/Kg		111	70 - 130
Acetone	0.250	<0.250		mg/Kg		99	70 - 130
Benzene	0.0499	0.04519		mg/Kg		91	70 - 130
Bromobenzene	0.0499	0.04912		mg/Kg		98	70 - 130
Bromoform	0.0499	0.04750		mg/Kg		95	70 - 130
Bromomethane	0.0499	0.04481		mg/Kg		90	70 - 130
Carbon disulfide	0.0499	0.04466		mg/Kg		89	70 - 130
Carbon tetrachloride	0.0499	0.04564		mg/Kg		91	70 - 130
Chlorobenzene	0.0499	0.04798		mg/Kg		96	70 - 130
Chlorobromomethane	0.0499	0.04730		mg/Kg		95	70 - 130
Chlorodibromomethane	0.0499	0.05378		mg/Kg		108	70 - 130
Chloroethane	0.0499	0.04489		mg/Kg		90	70 - 130
Chloroform	0.0499	0.04533		mg/Kg		91	70 - 130
Chloromethane	0.0499	0.04448		mg/Kg		89	70 - 130
cis-1,2-Dichloroethene	0.0499	0.04583		mg/Kg		92	70 - 130
cis-1,3-Dichloropropene	0.0499	0.05160		mg/Kg		103	70 - 130
Dichlorobromomethane	0.0499	0.04993		mg/Kg		100	70 - 130
Dichlorodifluoromethane	0.0499	0.04011		mg/Kg		80	70 - 130
Ethyl ether	0.0499	0.04631		mg/Kg		93	70 - 130
Ethylbenzene	0.0499	0.04803		mg/Kg		96	70 - 130
Ethylene Dibromide	0.0499	0.05058		mg/Kg		101	70 - 130
Hexachlorobutadiene	0.0499	0.04790		mg/Kg		96	70 - 130
Isopropyl ether	0.0499	0.04868		mg/Kg		98	70 - 130
Isopropylbenzene	0.0499	0.04919		mg/Kg		99	70 - 130
Methyl tert-butyl ether	0.0499	0.04878		mg/Kg		98	70 - 130
Methylene Chloride	0.0499	0.05461		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	0.0499	0.04792		mg/Kg		96	70 - 130
Naphthalene	0.0499	0.05433		mg/Kg		109	70 - 130
n-Butylbenzene	0.0499	0.05040		mg/Kg		101	70 - 130
N-Propylbenzene	0.0499	0.04915		mg/Kg		98	70 - 130
o-Xylene	0.0499	0.04866		mg/Kg		98	70 - 130
sec-Butylbenzene	0.0499	0.04898		mg/Kg		98	70 - 130
Styrene	0.0499	0.05042		mg/Kg		101	70 - 130
Tert-amyl methyl ether	0.0499	0.05097		mg/Kg		102	70 - 130
Tert-butyl ethyl ether	0.0499	0.04866		mg/Kg		98	70 - 130
tert-Butylbenzene	0.0499	0.04911		mg/Kg		98	70 - 130
Tetrachloroethene	0.0499	0.04822		mg/Kg		97	70 - 130
Tetrahydrofuran	0.0998	0.1121		mg/Kg		112	70 - 130
Toluene	0.0499	0.04729		mg/Kg		95	70 - 130
trans-1,2-Dichloroethene	0.0499	0.04479		mg/Kg		90	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260980/1-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	0.0499	0.05398		mg/Kg		108	70 - 130
Trichloroethene	0.0499	0.04585		mg/Kg		92	70 - 130
Trichlorofluoromethane	0.0499	0.04187		mg/Kg		84	70 - 130
Vinyl chloride	0.0499	0.04428		mg/Kg		89	70 - 130
Dibromomethane	0.0499	0.04841		mg/Kg		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 480-260980/14-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260980

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0498	0.04392		mg/Kg		88	70 - 130	15	20
1,1,1-Trichloroethane	0.0498	0.04047		mg/Kg		81	70 - 130	11	20
1,1,2,2-Tetrachloroethane	0.0498	0.04556		mg/Kg		91	70 - 130	16	20
1,1,2-Trichloroethane	0.0498	0.04357		mg/Kg		87	70 - 130	13	20
Freon 113	0.0498	0.03716		mg/Kg		75	70 - 130	14	20
1,1-Dichloroethane	0.0498	0.04169		mg/Kg		84	70 - 130	10	20
1,1-Dichloroethene	0.0498	0.03895		mg/Kg		78	70 - 130	11	20
1,1-Dichloropropene	0.0498	0.03991		mg/Kg		80	70 - 130	11	20
1,2,3-Trichlorobenzene	0.0498	0.04145		mg/Kg		83	70 - 130	20	20
1,2,3-Trichloropropane	0.0498	0.04511		mg/Kg		91	70 - 130	16	20
1,2,4-Trichlorobenzene	0.0498	0.04261		mg/Kg		86	70 - 130	19	20
1,2,4-Trimethylbenzene	0.0498	0.04380		mg/Kg		88	70 - 130	14	20
1,2-Dibromo-3-Chloropropane	0.0498	0.04837		mg/Kg		97	70 - 130	20	20
1,2-Dichlorobenzene	0.0498	0.04296		mg/Kg		86	70 - 130	15	20
1,2-Dichloroethane	0.0498	0.04214		mg/Kg		85	70 - 130	10	20
1,2-Dichloropropane	0.0498	0.04208		mg/Kg		84	70 - 130	11	20
1,3,5-Trimethylbenzene	0.0498	0.04325		mg/Kg		87	70 - 130	15	20
1,3-Dichlorobenzene	0.0498	0.04240		mg/Kg		85	70 - 130	15	20
1,3-Dichloropropane	0.0498	0.04349		mg/Kg		87	70 - 130	13	20
1,4-Dichlorobenzene	0.0498	0.04221		mg/Kg		85	70 - 130	15	20
1,4-Dioxane	0.996	0.9052		mg/Kg		91	70 - 130	15	20
2,2-Dichloropropane	0.0498	0.04151		mg/Kg		83	70 - 130	13	20
2-Butanone (MEK)	0.249	0.4230	*	mg/Kg		170	70 - 130	15	20
2-Chlorotoluene	0.0498	0.04346		mg/Kg		87	70 - 130	14	20
2-Hexanone	0.249	0.2248	*	mg/Kg		90	70 - 130	23	20
4-Chlorotoluene	0.0498	0.04637		mg/Kg		93	70 - 130	14	20
4-Isopropyltoluene	0.0498	0.04342		mg/Kg		87	70 - 130	15	20
4-Methyl-2-pentanone (MIBK)	0.249	0.2251	*	mg/Kg		90	70 - 130	21	20
Acetone	0.249	<0.249		mg/Kg		86	70 - 130	14	20
Benzene	0.0498	0.04067		mg/Kg		82	70 - 130	11	20
Bromobenzene	0.0498	0.04238		mg/Kg		85	70 - 130	15	20
Bromoform	0.0498	0.03983		mg/Kg		80	70 - 130	18	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260980/14-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260980

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane			0.0498	0.04199		mg/Kg		84	70 - 130	7	20
Carbon disulfide			0.0498	0.04071		mg/Kg		82	70 - 130	9	20
Carbon tetrachloride			0.0498	0.04018		mg/Kg		81	70 - 130	13	20
Chlorobenzene			0.0498	0.04209		mg/Kg		85	70 - 130	13	20
Chlorobromomethane			0.0498	0.04223		mg/Kg		85	70 - 130	11	20
Chlorodibromomethane			0.0498	0.04623		mg/Kg		93	70 - 130	15	20
Chloroethane			0.0498	0.04134		mg/Kg		83	70 - 130	8	20
Chloroform			0.0498	0.04094		mg/Kg		82	70 - 130	10	20
Chloromethane			0.0498	0.04040		mg/Kg		81	70 - 130	10	20
cis-1,2-Dichloroethene			0.0498	0.04114		mg/Kg		83	70 - 130	11	20
cis-1,3-Dichloropropene			0.0498	0.04600		mg/Kg		92	70 - 130	11	20
Dichlorobromomethane			0.0498	0.04359		mg/Kg		88	70 - 130	14	20
Dichlorodifluoromethane			0.0498	0.03612		mg/Kg		73	70 - 130	10	20
Ethyl ether			0.0498	0.04421		mg/Kg		89	70 - 130	5	20
Ethylbenzene			0.0498	0.04214		mg/Kg		85	70 - 130	13	20
Ethylene Dibromide			0.0498	0.04398		mg/Kg		88	70 - 130	14	20
Hexachlorobutadiene			0.0498	0.03851	*	mg/Kg		77	70 - 130	22	20
Isopropyl ether			0.0498	0.04191		mg/Kg		84	70 - 130	15	20
Isopropylbenzene			0.0498	0.04261		mg/Kg		86	70 - 130	14	20
Methyl tert-butyl ether			0.0498	0.04248		mg/Kg		85	70 - 130	14	20
Methylene Chloride			0.0498	0.05091		mg/Kg		102	70 - 130	7	20
m-Xylene & p-Xylene			0.0498	0.04180		mg/Kg		84	70 - 130	14	20
Naphthalene			0.0498	0.04353	*	mg/Kg		87	70 - 130	22	20
n-Butylbenzene			0.0498	0.04322		mg/Kg		87	70 - 130	15	20
N-Propylbenzene			0.0498	0.04278		mg/Kg		86	70 - 130	14	20
o-Xylene			0.0498	0.04265		mg/Kg		86	70 - 130	13	20
sec-Butylbenzene			0.0498	0.04202		mg/Kg		84	70 - 130	15	20
Styrene			0.0498	0.04386		mg/Kg		88	70 - 130	14	20
Tert-amyl methyl ether			0.0498	0.04395		mg/Kg		88	70 - 130	15	20
Tert-butyl ethyl ether			0.0498	0.04187		mg/Kg		84	70 - 130	15	20
tert-Butylbenzene			0.0498	0.04192		mg/Kg		84	70 - 130	16	20
Tetrachloroethene			0.0498	0.04199		mg/Kg		84	70 - 130	14	20
Tetrahydrofuran			0.0996	0.09137		mg/Kg		92	70 - 130	20	20
Toluene			0.0498	0.04124		mg/Kg		83	70 - 130	14	20
trans-1,2-Dichloroethene			0.0498	0.04021		mg/Kg		81	70 - 130	11	20
trans-1,3-Dichloropropene			0.0498	0.04615		mg/Kg		93	70 - 130	16	20
Trichloroethene			0.0498	0.04101		mg/Kg		82	70 - 130	11	20
Trichlorofluoromethane			0.0498	0.03717		mg/Kg		75	70 - 130	12	20
Vinyl chloride			0.0498	0.03935		mg/Kg		79	70 - 130	12	20
Dibromomethane			0.0498	0.04317		mg/Kg		87	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Lab Sample ID: MB 240-195244/22-A
Matrix: Solid
Analysis Batch: 195799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 195244

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1221	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1232	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1242	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1248	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1254	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1260	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1262	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1268	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/28/15 07:16*	*09/01/15 23:58*	*1*
Tetrachloro-m-xylene	*80*		*30 - 150*	*08/28/15 07:16*	*09/01/15 23:58*	*1*
DCB Decachlorobiphenyl	*89*		*30 - 150*	*08/28/15 07:16*	*09/01/15 23:58*	*1*
DCB Decachlorobiphenyl	*89*		*30 - 150*	*08/28/15 07:16*	*09/01/15 23:58*	*1*

Lab Sample ID: LCS 240-195244/23-A
Matrix: Solid
Analysis Batch: 195799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 195244

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			0.333	0.2694		mg/Kg		81	40 - 140		
Aroclor-1260			0.333	0.2656		mg/Kg		80	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*77*		*30 - 150*
Tetrachloro-m-xylene	*71*		*30 - 150*
DCB Decachlorobiphenyl	*88*		*30 - 150*
DCB Decachlorobiphenyl	*84*		*30 - 150*

Lab Sample ID: LCSD 240-195244/24-A
Matrix: Solid
Analysis Batch: 195799

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 195244

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016			0.333	0.2904		mg/Kg		87	40 - 140	8	30
Aroclor-1260			0.333	0.3008		mg/Kg		90	40 - 140	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*82*		*30 - 150*
Tetrachloro-m-xylene	*78*		*30 - 150*
DCB Decachlorobiphenyl	*88*		*30 - 150*
DCB Decachlorobiphenyl	*86*		*30 - 150*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: MB 480-260937/1-A
Matrix: Water
Analysis Batch: 261050

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260937

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1221	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1232	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1242	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1248	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1254	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1260	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1262	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1268	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/28/15 09:22*	*08/28/15 20:23*	*1*
Tetrachloro-m-xylene	*97*		*30 - 150*	*08/28/15 09:22*	*08/28/15 20:23*	*1*
DCB Decachlorobiphenyl	*89*		*30 - 150*	*08/28/15 09:22*	*08/28/15 20:23*	*1*
DCB Decachlorobiphenyl	*98*		*30 - 150*	*08/28/15 09:22*	*08/28/15 20:23*	*1*

Lab Sample ID: LCS 480-260937/2-A
Matrix: Water
Analysis Batch: 261050

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260937

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	3.454		ug/L		86	40 - 140		
PCB-1260			4.00	3.265		ug/L		82	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*85*		*30 - 150*
Tetrachloro-m-xylene	*95*		*30 - 150*
DCB Decachlorobiphenyl	*84*		*30 - 150*
DCB Decachlorobiphenyl	*91*		*30 - 150*

Lab Sample ID: LCSD 480-260937/3-A
Matrix: Water
Analysis Batch: 261050

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260937

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			4.00	2.753	*	ug/L		69	40 - 140	23	20
PCB-1260			4.00	2.398	*	ug/L		60	40 - 140	31	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*69*		*30 - 150*
Tetrachloro-m-xylene	*78*		*30 - 150*
DCB Decachlorobiphenyl	*66*		*30 - 150*
DCB Decachlorobiphenyl	*72*		*30 - 150*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: MB 480-261294/1-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261294

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1221	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1232	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1242	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1248	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1254	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1260	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1262	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1268	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*
Tetrachloro-m-xylene	*100*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*
DCB Decachlorobiphenyl	*60*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*
DCB Decachlorobiphenyl	*70*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*

Lab Sample ID: LCS 480-261294/2-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261294

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	3.703		ug/L		93	40 - 140		
PCB-1260			4.00	3.634		ug/L		91	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*30 - 150*
Tetrachloro-m-xylene	*99*		*30 - 150*
DCB Decachlorobiphenyl	*50*		*30 - 150*
DCB Decachlorobiphenyl	*57*		*30 - 150*

Lab Sample ID: LCSD 480-261294/3-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261294

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			4.00	3.692		ug/L		92	40 - 140	0	20
PCB-1260			4.00	3.594		ug/L		90	40 - 140	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*30 - 150*
Tetrachloro-m-xylene	*102*		*30 - 150*
DCB Decachlorobiphenyl	*50*		*30 - 150*
DCB Decachlorobiphenyl	*57*		*30 - 150*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-260774/1-A
Matrix: Solid
Analysis Batch: 261173

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260774

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.201		0.502	0.201	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Arsenic	<0.401		1.00	0.401	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Barium	<0.110		0.502	0.110	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Beryllium	<0.0281		0.201	0.0281	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Cadmium	<0.0301		0.201	0.0301	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Chromium	<0.201		0.502	0.201	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Nickel	<0.231		1.00	0.231	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Thallium	<0.301		1.00	0.301	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Vanadium	<0.110		0.502	0.110	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Zinc	<0.642		2.51	0.642	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Lead	<0.241		0.502	0.241	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Selenium	<0.401		0.502	0.401	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Antimony	<0.401		0.502	0.401	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Copper	<0.211		1.00	0.211	mg/Kg		08/28/15 12:35	08/28/15 13:42	1

Lab Sample ID: LCDSRM 480-260774/3-A
Matrix: Solid
Analysis Batch: 261173

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260774

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver			52.6	44.59		mg/Kg		84.8	66.7 - 133.5	0	30
Arsenic			113	98.13		mg/Kg		86.8	69.7 - 142.5	1	30
Barium			155	141.4		mg/Kg		91.2	72.9 - 127.1	4	30
Beryllium			109	94.88		mg/Kg		87.0	74.7 - 124.8	2	30
Cadmium			67.5	59.37		mg/Kg		88.0	73.2 - 126.8	3	30
Chromium			164	146.4		mg/Kg		89.3	70.7 - 129.9	3	30
Nickel			89.3	91.68		mg/Kg		102.7	72.0 - 127.7	3	30
Thallium			116	115.0		mg/Kg		99.1	67.4 - 131.9	1	30
Vanadium			73.0	70.07		mg/Kg		96.0	59.7 - 139.7	2	30
Zinc			168	146.4		mg/Kg		87.1	69.0 - 131.5	3	30
Lead			90.1	89.37		mg/Kg		99.2	70.1 - 129.9	2	30
Selenium			156	135.2		mg/Kg		86.7	67.3 - 132.1	3	30
Antimony			94.0	77.64		mg/Kg		82.6	22.8 - 257.4	5	30
Copper			100	113.7		mg/Kg		113.7	96.2 - 161.0	3	30

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-260774/2-A
Matrix: Solid
Analysis Batch: 261173

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260774

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	52.6	44.48		mg/Kg		84.6	66.7 - 133.5
Arsenic	113	97.29		mg/Kg		86.1	69.7 - 142.5
Barium	155	135.4		mg/Kg		87.3	72.9 - 127.1
Beryllium	109	93.32		mg/Kg		85.6	74.7 - 124.8
Cadmium	67.5	57.90		mg/Kg		85.8	73.2 - 126.8
Chromium	164	142.2		mg/Kg		86.7	70.7 - 129.9
Nickel	89.3	88.53		mg/Kg		99.1	72.0 - 127.7
Thallium	116	113.4		mg/Kg		97.8	67.4 - 131.9
Vanadium	73.0	68.87		mg/Kg		94.3	59.7 - 139.7
Zinc	168	142.7		mg/Kg		84.9	69.0 - 131.5
Lead	90.1	87.93		mg/Kg		97.6	70.1 - 129.9
Selenium	156	131.3		mg/Kg		84.2	67.3 - 132.1
Antimony	94.0	74.12		mg/Kg		78.9	22.8 - 257.4
Copper	100	110.1		mg/Kg		110.1	96.2 - 161.0

Lab Sample ID: MB 480-260530/1-A
Matrix: Water
Analysis Batch: 260906

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 260530

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/27/15 07:10	08/27/15 17:22	1
Arsenic	<5.55		10.0	5.55	ug/L		08/27/15 07:10	08/27/15 17:22	1
Barium	<0.700		10.0	0.700	ug/L		08/27/15 07:10	08/27/15 17:22	1
Beryllium	<0.300		1.00	0.300	ug/L		08/27/15 07:10	08/27/15 17:22	1
Cadmium	<0.500		1.00	0.500	ug/L		08/27/15 07:10	08/27/15 17:22	1
Chromium	<1.00		5.00	1.00	ug/L		08/27/15 07:10	08/27/15 17:22	1
Nickel	<1.26		10.0	1.26	ug/L		08/27/15 07:10	08/27/15 17:22	1
Thallium	<10.2		20.0	10.2	ug/L		08/27/15 07:10	08/27/15 17:22	1
Vanadium	<1.50		10.0	1.50	ug/L		08/27/15 07:10	08/27/15 17:22	1
Lead	<3.00		5.00	3.00	ug/L		08/27/15 07:10	08/27/15 17:22	1
Selenium	<8.70		10.0	8.70	ug/L		08/27/15 07:10	08/27/15 17:22	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/27/15 07:10	08/27/15 17:22	1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: MB 480-260530/1-A
Matrix: Water
Analysis Batch: 261171

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 260530

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	<1.50		50.0	1.50	ug/L		08/27/15 07:10	08/28/15 11:07	1
Copper	<1.60		10.0	1.60	ug/L		08/27/15 07:10	08/28/15 11:07	1

Lab Sample ID: LCS 480-260530/2-A
Matrix: Water
Analysis Batch: 260906

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 260530

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	50.0	48.15		ug/L		96	80 - 120
Arsenic	200	190.7		ug/L		95	80 - 120
Barium	200	204.9		ug/L		102	80 - 120
Beryllium	200	196.4		ug/L		98	80 - 120
Cadmium	200	196.9		ug/L		98	80 - 120
Chromium	200	203.4		ug/L		102	80 - 120
Nickel	200	189.6		ug/L		95	80 - 120
Thallium	200	194.1		ug/L		97	80 - 120
Vanadium	200	198.8		ug/L		99	80 - 120
Lead	200	198.4		ug/L		99	80 - 120
Selenium	200	193.7		ug/L		97	80 - 120
Antimony	200	190.6	^	ug/L		95	80 - 120

Lab Sample ID: LCS 480-260530/2-A
Matrix: Water
Analysis Batch: 261171

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 260530

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	200	194.2		ug/L		97	80 - 120
Copper	200	195.6		ug/L		98	80 - 120

Lab Sample ID: LCSD 480-260530/3-A
Matrix: Water
Analysis Batch: 260906

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 260530

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	50.0	47.87		ug/L		96	80 - 120	1	20
Arsenic	200	193.6		ug/L		97	80 - 120	1	20
Barium	200	202.4		ug/L		101	80 - 120	1	20
Beryllium	200	196.0		ug/L		98	80 - 120	0	20
Cadmium	200	196.6		ug/L		98	80 - 120	0	20
Chromium	200	202.1		ug/L		101	80 - 120	1	20
Nickel	200	189.6		ug/L		95	80 - 120	0	20
Thallium	200	194.7		ug/L		97	80 - 120	0	20
Vanadium	200	196.4		ug/L		98	80 - 120	1	20
Lead	200	198.6		ug/L		99	80 - 120	0	20
Selenium	200	194.5		ug/L		97	80 - 120	0	20
Antimony	200	191.4	^	ug/L		96	80 - 120	0	20

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSD 480-260530/3-A
Matrix: Water
Analysis Batch: 261171

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 260530

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	200	193.8		ug/L		97	80 - 120	0	20
Copper	200	196.0		ug/L		98	80 - 120	0	20

Lab Sample ID: MB 480-260740/1-A
Matrix: Water
Analysis Batch: 261177

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 260740

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:05	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:05	1
Barium	<0.700		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:05	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:05	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:05	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:05	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:05	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:05	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:05	1
Zinc	<1.50		50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:05	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:05	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:05	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:05	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:05	1

Lab Sample ID: LCS 480-260740/2-A
Matrix: Water
Analysis Batch: 261177

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 260740

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	50.0	48.72		ug/L		97	80 - 120
Arsenic	200	190.1		ug/L		95	80 - 120
Barium	200	202.5		ug/L		101	80 - 120
Beryllium	200	193.4		ug/L		97	80 - 120
Cadmium	200	194.1		ug/L		97	80 - 120
Chromium	200	199.3		ug/L		100	80 - 120
Nickel	200	186.7		ug/L		93	80 - 120
Thallium	200	190.8		ug/L		95	80 - 120
Vanadium	200	196.5		ug/L		98	80 - 120
Zinc	200	190.4		ug/L		95	80 - 120
Lead	200	197.7		ug/L		99	80 - 120
Selenium	200	188.1		ug/L		94	80 - 120
Antimony	200	188.9		ug/L		94	80 - 120
Copper	200	191.1		ug/L		96	80 - 120

Lab Sample ID: LCSD 480-260740/3-A
Matrix: Water
Analysis Batch: 261177

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 260740

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	50.0	48.32		ug/L		97	80 - 120	1	20

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSD 480-260740/3-A
Matrix: Water
Analysis Batch: 261177

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 260740

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	190.7		ug/L		95	80 - 120	0	20
Barium	200	200.7		ug/L		100	80 - 120	1	20
Beryllium	200	192.3		ug/L		96	80 - 120	1	20
Cadmium	200	193.4		ug/L		97	80 - 120	0	20
Chromium	200	198.2		ug/L		99	80 - 120	1	20
Nickel	200	186.0		ug/L		93	80 - 120	0	20
Thallium	200	190.7		ug/L		95	80 - 120	0	20
Vanadium	200	194.8		ug/L		97	80 - 120	1	20
Zinc	200	189.1		ug/L		95	80 - 120	1	20
Lead	200	194.1		ug/L		97	80 - 120	2	20
Selenium	200	189.3		ug/L		95	80 - 120	1	20
Antimony	200	188.7		ug/L		94	80 - 120	0	20
Copper	200	190.0		ug/L		95	80 - 120	1	20

Lab Sample ID: MB 480-261254/1-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 17:40	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 17:40	1
Barium	<0.700		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 17:40	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 17:40	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 17:40	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 17:40	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 17:40	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 17:40	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 17:40	1
Zinc	<1.50		50.0	1.50	ug/L		08/31/15 11:31	09/01/15 17:40	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 17:40	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 17:40	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 17:40	1
Copper	<1.60		10.0	1.60	ug/L		08/31/15 11:31	09/01/15 17:40	1

Lab Sample ID: LCS 480-261254/2-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	50.0	46.66		ug/L		93	80 - 120
Arsenic	200	193.2		ug/L		97	80 - 120
Barium	200	198.4		ug/L		99	80 - 120
Beryllium	200	200.2		ug/L		100	80 - 120
Cadmium	200	200.0		ug/L		100	80 - 120
Chromium	200	203.9		ug/L		102	80 - 120
Nickel	200	190.9		ug/L		95	80 - 120
Thallium	200	195.7		ug/L		98	80 - 120
Vanadium	200	198.2		ug/L		99	80 - 120
Zinc	200	194.5		ug/L		97	80 - 120

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-261254/2-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	200	203.8		ug/L		102	80 - 120
Selenium	200	193.9		ug/L		97	80 - 120
Antimony	200	194.6	^	ug/L		97	80 - 120
Copper	200	194.6		ug/L		97	80 - 120

Lab Sample ID: LCSD 480-261254/3-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	50.0	47.10		ug/L		94	80 - 120	1	20
Arsenic	200	190.7		ug/L		95	80 - 120	1	20
Barium	200	193.9		ug/L		97	80 - 120	2	20
Beryllium	200	196.6		ug/L		98	80 - 120	2	20
Cadmium	200	196.6		ug/L		98	80 - 120	2	20
Chromium	200	198.7		ug/L		99	80 - 120	3	20
Nickel	200	186.5		ug/L		93	80 - 120	2	20
Thallium	200	192.2		ug/L		96	80 - 120	2	20
Vanadium	200	192.6		ug/L		96	80 - 120	3	20
Zinc	200	192.1		ug/L		96	80 - 120	1	20
Lead	200	199.5		ug/L		100	80 - 120	2	20
Selenium	200	187.6		ug/L		94	80 - 120	3	20
Antimony	200	192.3	^	ug/L		96	80 - 120	1	20
Copper	200	191.8		ug/L		96	80 - 120	1	20

Lab Sample ID: 480-86189-2 MS
Matrix: Water
Analysis Batch: 260906

Client Sample ID: SW-10
Prep Type: Dissolved
Prep Batch: 260530

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<1.70		50.0	48.29		ug/L		97	75 - 125
Arsenic	<5.55		200	197.5		ug/L		99	75 - 125
Barium	65.2		200	263.1		ug/L		99	75 - 125
Beryllium	<0.300		200	197.8		ug/L		99	75 - 125
Cadmium	<0.500		200	198.7		ug/L		99	75 - 125
Chromium	<1.00		200	203.7		ug/L		102	75 - 125
Nickel	<1.26		200	195.2		ug/L		98	75 - 125
Thallium	<10.2		200	193.3		ug/L		97	75 - 125
Vanadium	<1.50		200	199.7		ug/L		100	75 - 125
Zinc	11.3	J	200	208.3		ug/L		99	75 - 125
Lead	<3.00		200	202.2		ug/L		101	75 - 125
Selenium	<8.70		200	197.9		ug/L		99	75 - 125
Antimony	<6.79	^	200	193.4	^	ug/L		97	75 - 125
Copper	2.05	J B ^	200	199.0		ug/L		98	75 - 125

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: 480-86189-2 MSD
Matrix: Water
Analysis Batch: 260906

Client Sample ID: SW-10
Prep Type: Dissolved
Prep Batch: 260530

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<1.70		50.0	47.76		ug/L		96	75 - 125	1	20
Arsenic	<5.55		200	192.6		ug/L		96	75 - 125	3	20
Barium	65.2		200	261.9		ug/L		98	75 - 125	0	20
Beryllium	<0.300		200	195.7		ug/L		98	75 - 125	1	20
Cadmium	<0.500		200	196.0		ug/L		98	75 - 125	1	20
Chromium	<1.00		200	202.4		ug/L		101	75 - 125	1	20
Nickel	<1.26		200	192.7		ug/L		96	75 - 125	1	20
Thallium	<10.2		200	191.4		ug/L		96	75 - 125	1	20
Vanadium	<1.50		200	199.4		ug/L		100	75 - 125	0	20
Zinc	11.3	J	200	205.5		ug/L		97	75 - 125	1	20
Lead	<3.00		200	200.2		ug/L		100	75 - 125	1	20
Selenium	<8.70		200	196.4		ug/L		98	75 - 125	1	20
Antimony	<6.79	^	200	190.9	^	ug/L		95	75 - 125	1	20
Copper	2.05	J B ^	200	194.9		ug/L		96	75 - 125	2	20

Lab Sample ID: 480-86256-3 MS
Matrix: Water
Analysis Batch: 261177

Client Sample ID: SW-12
Prep Type: Dissolved
Prep Batch: 260740

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<1.70		50.0	47.97		ug/L		96	75 - 125
Arsenic	<5.55		200	196.9		ug/L		98	75 - 125
Barium	70.2		200	269.2		ug/L		100	75 - 125
Beryllium	<0.300		200	197.2		ug/L		99	75 - 125
Cadmium	<0.500		200	198.9		ug/L		99	75 - 125
Chromium	<1.00		200	201.8		ug/L		101	75 - 125
Nickel	<1.26		200	194.4		ug/L		97	75 - 125
Thallium	<10.2		200	194.0		ug/L		97	75 - 125
Vanadium	<1.50		200	199.5		ug/L		100	75 - 125
Zinc	7.77	J	200	201.8		ug/L		97	75 - 125
Lead	<3.00		200	202.5		ug/L		101	75 - 125
Selenium	<8.70		200	197.1		ug/L		99	75 - 125
Antimony	<6.79		200	194.7		ug/L		97	75 - 125
Copper	<1.60		200	197.4		ug/L		99	75 - 125

Lab Sample ID: 480-86256-3 MSD
Matrix: Water
Analysis Batch: 261177

Client Sample ID: SW-12
Prep Type: Dissolved
Prep Batch: 260740

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<1.70		50.0	47.60		ug/L		95	75 - 125	1	20
Arsenic	<5.55		200	190.8		ug/L		95	75 - 125	3	20
Barium	70.2		200	261.1		ug/L		95	75 - 125	3	20
Beryllium	<0.300		200	191.7		ug/L		96	75 - 125	3	20
Cadmium	<0.500		200	192.7		ug/L		96	75 - 125	3	20
Chromium	<1.00		200	195.2		ug/L		98	75 - 125	3	20
Nickel	<1.26		200	189.0		ug/L		94	75 - 125	3	20
Thallium	<10.2		200	188.3		ug/L		94	75 - 125	3	20

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: 480-86256-3 MSD
Matrix: Water
Analysis Batch: 261177

Client Sample ID: SW-12
Prep Type: Dissolved
Prep Batch: 260740

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	<1.50		200	192.9		ug/L		96	75 - 125	3	20
Zinc	7.77	J	200	196.5		ug/L		94	75 - 125	3	20
Lead	<3.00		200	197.1		ug/L		99	75 - 125	3	20
Selenium	<8.70		200	188.0		ug/L		94	75 - 125	5	20
Antimony	<6.79		200	188.3		ug/L		94	75 - 125	3	20
Copper	<1.60		200	190.5		ug/L		95	75 - 125	4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-260657/1-A
Matrix: Water
Analysis Batch: 260939

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:28	1

Lab Sample ID: LCS 480-260657/2-A
Matrix: Water
Analysis Batch: 260939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	6.67	6.483		ug/L		97	80 - 120

Lab Sample ID: LCSD 480-260657/3-A
Matrix: Water
Analysis Batch: 260939

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260657

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	6.67	6.717		ug/L		101	80 - 120	4	20

Lab Sample ID: MB 480-260078/1-D
Matrix: Water
Analysis Batch: 260662

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 260475

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/26/15 10:20	08/26/15 14:18	1

Lab Sample ID: LCS 480-260078/2-D
Matrix: Water
Analysis Batch: 260662

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 260475

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	6.67	6.567		ug/L		98	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 480-260078/3-B
Matrix: Water
Analysis Batch: 260662

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved
Prep Batch: 260475

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			6.67	6.600		ug/L		99	80 - 120	1	20

Lab Sample ID: 480-86256-2 MS
Matrix: Water
Analysis Batch: 260939

Client Sample ID: SW-11
Prep Type: Dissolved
Prep Batch: 260657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	<0.120		6.67	6.683		ug/L		100	75 - 125		

Lab Sample ID: 480-86256-2 MSD
Matrix: Water
Analysis Batch: 260939

Client Sample ID: SW-11
Prep Type: Dissolved
Prep Batch: 260657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.120		6.67	6.600		ug/L		99	75 - 125	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-260886/1-A
Matrix: Solid
Analysis Batch: 261013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260886

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00812		0.100	0.00812	mg/Kg		08/28/15 10:00	08/28/15 13:20	1

Lab Sample ID: LCDSRM 480-260886/3-A
Matrix: Solid
Analysis Batch: 261013

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260886

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			8.37	9.703		mg/Kg		115.9	51.3 - 148.1	10	

Lab Sample ID: LCSSRM 480-260886/2-A
Matrix: Solid
Analysis Batch: 261013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260886

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			8.37	8.792		mg/Kg		105.0	51.3 - 148.1		

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 480-261027/27
Matrix: Water
Analysis Batch: 261027

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<525		2000	525	ug/L			08/28/15 12:15	1

Method: SM 2340C - Hardness, Total (mg/l as CaC03) (Continued)

Lab Sample ID: MB 480-261027/3
Matrix: Water
Analysis Batch: 261027

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<525		2000	525	ug/L			08/28/15 12:15	1

Lab Sample ID: LCS 480-261027/28
Matrix: Water
Analysis Batch: 261027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362000	352000		ug/L		97	90 - 110

Lab Sample ID: LCS 480-261027/4
Matrix: Water
Analysis Batch: 261027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362000	348000		ug/L		96	90 - 110

Lab Sample ID: 480-86256-9 MS
Matrix: Water
Analysis Batch: 261027

Client Sample ID: SW-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	88000		200000	284000		ug/L		98	74 - 130

Lab Sample ID: 480-86256-9 MSD
Matrix: Water
Analysis Batch: 261027

Client Sample ID: SW-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hardness as calcium carbonate	88000		200000	284000		ug/L		98	74 - 130	0	15

Lab Sample ID: MB 480-261500/27
Matrix: Water
Analysis Batch: 261500

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<2000		2000	2000	ug/L			09/01/15 09:10	1

Lab Sample ID: MB 480-261500/51
Matrix: Water
Analysis Batch: 261500

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<2000		2000	2000	ug/L			09/01/15 09:10	1

Lab Sample ID: MB 480-261500/75
Matrix: Water
Analysis Batch: 261500

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<2000		2000	2000	ug/L			09/01/15 09:10	1

Lab Sample ID: LCS 480-261500/28
Matrix: Water
Analysis Batch: 261500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362000	352000		ug/L		97	90 - 110

Lab Sample ID: LCS 480-261500/52
Matrix: Water
Analysis Batch: 261500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362000	352000		ug/L		97	90 - 110

Lab Sample ID: LCS 480-261500/76
Matrix: Water
Analysis Batch: 261500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362000	352000		ug/L		97	90 - 110

Lab Sample ID: MB 480-261950/3
Matrix: Water
Analysis Batch: 261950

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<2000		2000	2000	ug/L			09/03/15 13:51	1

Lab Sample ID: LCS 480-261950/4
Matrix: Water
Analysis Batch: 261950

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362000	356000		ug/L		98	90 - 110

Lab Sample ID: 480-86189-2 MS
Matrix: Water
Analysis Batch: 261950

Client Sample ID: SW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	80000		200000	284000		ug/L		102	74 - 130

Lab Sample ID: 480-86189-2 DU
Matrix: Water
Analysis Batch: 261950

Client Sample ID: SW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hardness as calcium carbonate	80000		84000		ug/L		5	15

GC/MS VOA

Analysis Batch: 260445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-1	TB-01	Total/NA	Water	8260C	
480-86189-2	SW-10	Total/NA	Water	8260C	
480-86189-3	PW-10	Total/NA	Water	8260C	
LCS 480-260445/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-260445/5	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-260445/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 260681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-1	TB-02	Total/NA	Water	8260C	
480-86256-2	SW-11	Total/NA	Water	8260C	
480-86256-3	SW-12	Total/NA	Water	8260C	
480-86256-4	SW-12 (DUP)	Total/NA	Water	8260C	
480-86256-5	PW-12	Total/NA	Water	8260C	
480-86256-6	PW-12 (DUP)	Total/NA	Water	8260C	
480-86256-7	SW-13	Total/NA	Water	8260C	
480-86256-9	SW-14	Total/NA	Water	8260C	
480-86256-11	SW-15	Total/NA	Water	8260C	
480-86256-12	PW-15	Total/NA	Water	8260C	
480-86256-13	SW-16	Total/NA	Water	8260C	
LCS 480-260681/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-260681/6	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-260681/8	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 260730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-260778/1-A	Lab Control Sample	Total/NA	Solid	8260C	260778
MB 480-260778/3-A	Method Blank	Total/NA	Solid	8260C	260778

Analysis Batch: 260731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-5	TB-01	Total/NA	Solid	8260C	260778
LCS 480-260778/1-A	Lab Control Sample	Total/NA	Solid	8260C	260778
LCSD 480-260778/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	260778
MB 480-260778/3-A	Method Blank	Total/NA	Solid	8260C	260778

Prep Batch: 260778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-5	TB-01	Total/NA	Solid	5035A	
LCS 480-260778/1-A	Lab Control Sample	Total/NA	Solid	5035A	
LCSD 480-260778/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A	
MB 480-260778/3-A	Method Blank	Total/NA	Solid	5035A	

Analysis Batch: 260899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-8	PW-13	Total/NA	Water	8260C	
480-86256-10	PW-14	Total/NA	Water	8260C	
480-86256-14	PW-16	Total/NA	Water	8260C	
LCS 480-260899/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-260899/6	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-260899/8	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 260941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	8260C	260980
LCS 480-260980/1-A	Lab Control Sample	Total/NA	Solid	8260C	260980
LCSD 480-260980/14-A	Lab Control Sample Dup	Total/NA	Solid	8260C	260980
MB 480-260980/15-A	Method Blank	Total/NA	Solid	8260C	260980

Prep Batch: 260980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	5035A	
LCS 480-260980/1-A	Lab Control Sample	Total/NA	Solid	5035A	
LCSD 480-260980/14-A	Lab Control Sample Dup	Total/NA	Solid	5035A	
MB 480-260980/15-A	Method Blank	Total/NA	Solid	5035A	

GC Semi VOA

Prep Batch: 195244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	3540C	
LCS 240-195244/23-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-195244/24-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-195244/22-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 195799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	8082	195244
LCS 240-195244/23-A	Lab Control Sample	Total/NA	Solid	8082	195244
LCSD 240-195244/24-A	Lab Control Sample Dup	Total/NA	Solid	8082	195244
MB 240-195244/22-A	Method Blank	Total/NA	Solid	8082	195244

Prep Batch: 260937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Total/NA	Water	3510C	
480-86256-3	SW-12	Total/NA	Water	3510C	
480-86256-4	SW-12 (DUP)	Total/NA	Water	3510C	
480-86256-5	PW-12	Total/NA	Water	3510C	
480-86256-6	PW-12 (DUP)	Total/NA	Water	3510C	
480-86256-7	SW-13	Total/NA	Water	3510C	
480-86256-8	PW-13	Total/NA	Water	3510C	
480-86256-8 - DL	PW-13	Total/NA	Water	3510C	
480-86256-9	SW-14	Total/NA	Water	3510C	
480-86256-10 - DL	PW-14	Total/NA	Water	3510C	
480-86256-10	PW-14	Total/NA	Water	3510C	
480-86256-11	SW-15	Total/NA	Water	3510C	
480-86256-12	PW-15	Total/NA	Water	3510C	
480-86256-12 - DL	PW-15	Total/NA	Water	3510C	
480-86256-13	SW-16	Total/NA	Water	3510C	
480-86256-14	PW-16	Total/NA	Water	3510C	
480-86256-14 - DL	PW-16	Total/NA	Water	3510C	
480-86256-15	PW-15 filtered	Total/NA	Water	3510C	
LCS 480-260937/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-260937/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-260937/1-A	Method Blank	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Analysis Batch: 261050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Total/NA	Water	8082	260937
480-86256-3	SW-12	Total/NA	Water	8082	260937
480-86256-4	SW-12 (DUP)	Total/NA	Water	8082	260937
480-86256-5	PW-12	Total/NA	Water	8082	260937
480-86256-6	PW-12 (DUP)	Total/NA	Water	8082	260937
480-86256-7	SW-13	Total/NA	Water	8082	260937
480-86256-8 - DL	PW-13	Total/NA	Water	8082	260937
480-86256-8	PW-13	Total/NA	Water	8082	260937
480-86256-9	SW-14	Total/NA	Water	8082	260937
480-86256-10	PW-14	Total/NA	Water	8082	260937
480-86256-10 - DL	PW-14	Total/NA	Water	8082	260937
480-86256-11	SW-15	Total/NA	Water	8082	260937
480-86256-12	PW-15	Total/NA	Water	8082	260937
480-86256-13	SW-16	Total/NA	Water	8082	260937
480-86256-14	PW-16	Total/NA	Water	8082	260937
480-86256-14 - DL	PW-16	Total/NA	Water	8082	260937
480-86256-15	PW-15 filtered	Total/NA	Water	8082	260937
LCS 480-260937/2-A	Lab Control Sample	Total/NA	Water	8082	260937
LCSD 480-260937/3-A	Lab Control Sample Dup	Total/NA	Water	8082	260937
MB 480-260937/1-A	Method Blank	Total/NA	Water	8082	260937

Analysis Batch: 261230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-12 - DL	PW-15	Total/NA	Water	8082	260937

Prep Batch: 261294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Total/NA	Water	3510C	
480-86189-3	PW-10	Total/NA	Water	3510C	
LCS 480-261294/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-261294/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-261294/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 261409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Total/NA	Water	8082	261294
480-86189-3	PW-10	Total/NA	Water	8082	261294
LCS 480-261294/2-A	Lab Control Sample	Total/NA	Water	8082	261294
LCSD 480-261294/3-A	Lab Control Sample Dup	Total/NA	Water	8082	261294
MB 480-261294/1-A	Method Blank	Total/NA	Water	8082	261294

Metals

Filtration Batch: 260078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-260078/2-D	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 480-260078/3-B	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
MB 480-260078/1-D	Method Blank	Dissolved	Water	FILTRATION	

Metals (Continued)

Prep Batch: 260475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Dissolved	Water	7470A	
480-86189-3	PW-10	Dissolved	Water	7470A	
LCS 480-260078/2-D	Lab Control Sample	Dissolved	Water	7470A	260078
LCSD 480-260078/3-B	Lab Control Sample Dup	Dissolved	Water	7470A	260078
MB 480-260078/1-D	Method Blank	Dissolved	Water	7470A	260078

Prep Batch: 260530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Dissolved	Water	3005A	
480-86189-2 MS	SW-10	Dissolved	Water	3005A	
480-86189-2 MSD	SW-10	Dissolved	Water	3005A	
480-86189-3	PW-10	Dissolved	Water	3005A	
LCS 480-260530/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 480-260530/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 480-260530/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 260657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Dissolved	Water	7470A	
480-86256-2 MS	SW-11	Dissolved	Water	7470A	
480-86256-2 MSD	SW-11	Dissolved	Water	7470A	
480-86256-3	SW-12	Dissolved	Water	7470A	
480-86256-4	SW-12 (DUP)	Dissolved	Water	7470A	
480-86256-5	PW-12	Dissolved	Water	7470A	
480-86256-6	PW-12 (DUP)	Dissolved	Water	7470A	
480-86256-7	SW-13	Dissolved	Water	7470A	
480-86256-8	PW-13	Dissolved	Water	7470A	
480-86256-9	SW-14	Dissolved	Water	7470A	
480-86256-10	PW-14	Dissolved	Water	7470A	
480-86256-11	SW-15	Dissolved	Water	7470A	
480-86256-12	PW-15	Dissolved	Water	7470A	
480-86256-13	SW-16	Dissolved	Water	7470A	
480-86256-14	PW-16	Dissolved	Water	7470A	
LCS 480-260657/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 480-260657/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 480-260657/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 260662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Dissolved	Water	7470A	260475
480-86189-3	PW-10	Dissolved	Water	7470A	260475
LCS 480-260078/2-D	Lab Control Sample	Dissolved	Water	7470A	260475
LCSD 480-260078/3-B	Lab Control Sample Dup	Dissolved	Water	7470A	260475
MB 480-260078/1-D	Method Blank	Dissolved	Water	7470A	260475

Prep Batch: 260740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Dissolved	Water	3005A	
480-86256-3	SW-12	Dissolved	Water	3005A	
480-86256-3 MS	SW-12	Dissolved	Water	3005A	
480-86256-3 MSD	SW-12	Dissolved	Water	3005A	

Metals (Continued)

Prep Batch: 260740 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-4	SW-12 (DUP)	Dissolved	Water	3005A	
480-86256-5	PW-12	Dissolved	Water	3005A	
480-86256-6	PW-12 (DUP)	Dissolved	Water	3005A	
480-86256-7	SW-13	Dissolved	Water	3005A	
480-86256-8	PW-13	Dissolved	Water	3005A	
480-86256-9	SW-14	Dissolved	Water	3005A	
480-86256-10	PW-14	Dissolved	Water	3005A	
480-86256-11	SW-15	Dissolved	Water	3005A	
480-86256-12	PW-15	Dissolved	Water	3005A	
480-86256-14	PW-16	Dissolved	Water	3005A	
LCS 480-260740/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 480-260740/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 480-260740/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 260774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	3050B	
LCDSRM 480-260774/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-260774/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-260774/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 260886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	7471A	
LCDSRM 480-260886/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-260886/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-260886/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 260906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Dissolved	Water	6010	260530
480-86189-2 MS	SW-10	Dissolved	Water	6010	260530
480-86189-2 MSD	SW-10	Dissolved	Water	6010	260530
480-86189-3	PW-10	Dissolved	Water	6010	260530
LCS 480-260530/2-A	Lab Control Sample	Total Recoverable	Water	6010	260530
LCSD 480-260530/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010	260530
MB 480-260530/1-A	Method Blank	Total Recoverable	Water	6010	260530

Analysis Batch: 260939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Dissolved	Water	7470A	260657
480-86256-2 MS	SW-11	Dissolved	Water	7470A	260657
480-86256-2 MSD	SW-11	Dissolved	Water	7470A	260657
480-86256-3	SW-12	Dissolved	Water	7470A	260657
480-86256-4	SW-12 (DUP)	Dissolved	Water	7470A	260657
480-86256-5	PW-12	Dissolved	Water	7470A	260657
480-86256-6	PW-12 (DUP)	Dissolved	Water	7470A	260657
480-86256-7	SW-13	Dissolved	Water	7470A	260657
480-86256-8	PW-13	Dissolved	Water	7470A	260657
480-86256-9	SW-14	Dissolved	Water	7470A	260657
480-86256-10	PW-14	Dissolved	Water	7470A	260657

Metals (Continued)

Analysis Batch: 260939 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-11	SW-15	Dissolved	Water	7470A	260657
480-86256-12	PW-15	Dissolved	Water	7470A	260657
480-86256-13	SW-16	Dissolved	Water	7470A	260657
480-86256-14	PW-16	Dissolved	Water	7470A	260657
LCS 480-260657/2-A	Lab Control Sample	Total/NA	Water	7470A	260657
LCSD 480-260657/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	260657
MB 480-260657/1-A	Method Blank	Total/NA	Water	7470A	260657

Analysis Batch: 261013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	7471A	260886
LCDSRM 480-260886/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	260886
LCSSRM 480-260886/2-A	Lab Control Sample	Total/NA	Solid	7471A	260886
MB 480-260886/1-A	Method Blank	Total/NA	Solid	7471A	260886

Analysis Batch: 261171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Dissolved	Water	6010	260530
480-86189-3	PW-10	Dissolved	Water	6010	260530
LCS 480-260530/2-A	Lab Control Sample	Total Recoverable	Water	6010	260530
LCSD 480-260530/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010	260530
MB 480-260530/1-A	Method Blank	Total Recoverable	Water	6010	260530

Analysis Batch: 261173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	6010	260774
LCDSRM 480-260774/3-A	Lab Control Sample Dup	Total/NA	Solid	6010	260774
LCSSRM 480-260774/2-A	Lab Control Sample	Total/NA	Solid	6010	260774
MB 480-260774/1-A	Method Blank	Total/NA	Solid	6010	260774

Analysis Batch: 261177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Dissolved	Water	6010	260740
480-86256-3	SW-12	Dissolved	Water	6010	260740
480-86256-3 MS	SW-12	Dissolved	Water	6010	260740
480-86256-3 MSD	SW-12	Dissolved	Water	6010	260740
480-86256-4	SW-12 (DUP)	Dissolved	Water	6010	260740
480-86256-5	PW-12	Dissolved	Water	6010	260740
480-86256-6	PW-12 (DUP)	Dissolved	Water	6010	260740
480-86256-7	SW-13	Dissolved	Water	6010	260740
480-86256-8	PW-13	Dissolved	Water	6010	260740
480-86256-9	SW-14	Dissolved	Water	6010	260740
480-86256-10	PW-14	Dissolved	Water	6010	260740
480-86256-11	SW-15	Dissolved	Water	6010	260740
480-86256-12	PW-15	Dissolved	Water	6010	260740
480-86256-14	PW-16	Dissolved	Water	6010	260740
LCS 480-260740/2-A	Lab Control Sample	Total Recoverable	Water	6010	260740
LCSD 480-260740/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010	260740
MB 480-260740/1-A	Method Blank	Total Recoverable	Water	6010	260740

Metals (Continued)

Prep Batch: 261254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-13	SW-16	Dissolved	Water	3005A	
LCS 480-261254/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 480-261254/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 480-261254/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 261549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-13	SW-16	Dissolved	Water	6010	261254
LCS 480-261254/2-A	Lab Control Sample	Total Recoverable	Water	6010	261254
LCSD 480-261254/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010	261254
MB 480-261254/1-A	Method Blank	Total Recoverable	Water	6010	261254

General Chemistry

Analysis Batch: 260635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	Moisture	

Analysis Batch: 261027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Total/NA	Water	SM 2340C	
480-86256-3	SW-12	Total/NA	Water	SM 2340C	
480-86256-4	SW-12 (DUP)	Total/NA	Water	SM 2340C	
480-86256-5	PW-12	Total/NA	Water	SM 2340C	
480-86256-6	PW-12 (DUP)	Total/NA	Water	SM 2340C	
480-86256-7	SW-13	Total/NA	Water	SM 2340C	
480-86256-8	PW-13	Total/NA	Water	SM 2340C	
480-86256-9	SW-14	Total/NA	Water	SM 2340C	
480-86256-9 MS	SW-14	Total/NA	Water	SM 2340C	
480-86256-9 MSD	SW-14	Total/NA	Water	SM 2340C	
480-86256-10	PW-14	Total/NA	Water	SM 2340C	
480-86256-11	SW-15	Total/NA	Water	SM 2340C	
480-86256-12	PW-15	Total/NA	Water	SM 2340C	
480-86256-13	SW-16	Total/NA	Water	SM 2340C	
480-86256-14	PW-16	Total/NA	Water	SM 2340C	
LCS 480-261027/28	Lab Control Sample	Total/NA	Water	SM 2340C	
LCS 480-261027/4	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 480-261027/27	Method Blank	Total/NA	Water	SM 2340C	
MB 480-261027/3	Method Blank	Total/NA	Water	SM 2340C	

Analysis Batch: 261500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-3	PW-10	Total/NA	Water	SM 2340C	
LCS 480-261500/28	Lab Control Sample	Total/NA	Water	SM 2340C	
LCS 480-261500/52	Lab Control Sample	Total/NA	Water	SM 2340C	
LCS 480-261500/76	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 480-261500/27	Method Blank	Total/NA	Water	SM 2340C	
MB 480-261500/51	Method Blank	Total/NA	Water	SM 2340C	
MB 480-261500/75	Method Blank	Total/NA	Water	SM 2340C	

General Chemistry (Continued)

Analysis Batch: 261950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Total/NA	Water	SM 2340C	
480-86189-2 DU	SW-10	Total/NA	Water	SM 2340C	
480-86189-2 MS	SW-10	Total/NA	Water	SM 2340C	
LCS 480-261950/4	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 480-261950/3	Method Blank	Total/NA	Water	SM 2340C	

Geotechnical

Analysis Batch: 93262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	D2974	

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: TB-01
Date Collected: 08/25/15 00:00
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260445	08/26/15 14:28	SWO	TAL BUF

Client Sample ID: SW-10
Date Collected: 08/25/15 12:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260445	08/26/15 17:38	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:58	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 14:54	KS	TAL BUF
Dissolved	Prep	3005A			260530	08/27/15 07:10	CMM	TAL BUF
Dissolved	Analysis	6010		1	260906	08/27/15 17:34	AMH	TAL BUF
Dissolved	Prep	3005A			260530	08/27/15 07:10	CMM	TAL BUF
Dissolved	Analysis	6010		1	261171	08/28/15 11:15	AMH	TAL BUF
Dissolved	Prep	7470A			260475	08/26/15 10:20	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260662	08/26/15 14:52	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261950	09/03/15 13:51	KMF	TAL BUF

Client Sample ID: PW-10
Date Collected: 08/25/15 12:45
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260445	08/26/15 18:02	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:58	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 15:10	KS	TAL BUF
Dissolved	Prep	3005A			260530	08/27/15 07:10	CMM	TAL BUF
Dissolved	Analysis	6010		1	260906	08/27/15 17:56	AMH	TAL BUF
Dissolved	Prep	3005A			260530	08/27/15 07:10	CMM	TAL BUF
Dissolved	Analysis	6010		1	261171	08/28/15 11:18	AMH	TAL BUF
Dissolved	Prep	7470A			260475	08/26/15 10:20	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260662	08/26/15 14:54	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261500	09/01/15 09:10	MDL	TAL BUF

Client Sample ID: SED-10
Date Collected: 08/25/15 13:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	260635	08/26/15 23:03	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93262	08/27/15 13:03	SML	TAL BUR

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: SED-10

Date Collected: 08/25/15 13:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-4
Matrix: Solid
Percent Solids: 23.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			260980	08/26/15 05:43	NQN	TAL BUF
Total/NA	Analysis	8260C		1	260941	08/28/15 19:40	NQN	TAL BUF
Total/NA	Prep	3540C			195244	08/28/15 07:16	NAK	TAL CAN
Total/NA	Analysis	8082		10	195799	09/02/15 03:47	LSH	TAL CAN
Total/NA	Prep	3050B			260774	08/28/15 12:35	CMM	TAL BUF
Total/NA	Analysis	6010		1	261173	08/28/15 13:59	SLB	TAL BUF
Total/NA	Prep	7471A			260886	08/28/15 10:00	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261013	08/28/15 13:43	TAS	TAL BUF

Client Sample ID: TB-01

Date Collected: 08/25/15 00:00
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			260778	08/26/15 05:43	NQN	TAL BUF
Total/NA	Analysis	8260C		1	260731	08/27/15 16:18	NQN	TAL BUF

Client Sample ID: TB-02

Date Collected: 08/25/15 00:00
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 13:46	SWO	TAL BUF

Client Sample ID: SW-11

Date Collected: 08/25/15 15:06
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 14:10	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 21:11	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:13	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:33	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: SW-12

Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 14:33	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 21:27	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:16	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:43	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: SW-12 (DUP)

Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 18:33	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 21:43	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:39	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:45	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: PW-12

Date Collected: 08/26/15 09:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	260681	08/27/15 14:57	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 21:58	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:41	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:47	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: PW-12 (DUP)

Lab Sample ID: 480-86256-6

Date Collected: 08/26/15 09:20
Matrix: Water
Date Received: 08/27/15 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	260681	08/27/15 18:56	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 22:14	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:44	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:48	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: SW-13

Lab Sample ID: 480-86256-7

Date Collected: 08/26/15 10:00
Matrix: Water
Date Received: 08/27/15 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 15:21	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 22:30	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:48	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:50	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: PW-13

Lab Sample ID: 480-86256-8

Date Collected: 08/26/15 10:25
Matrix: Water
Date Received: 08/27/15 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260899	08/28/15 11:31	SWO	TAL BUF
Total/NA	Prep	3510C	DL		260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082	DL	10	261050	08/28/15 22:46	KS	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 23:34	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:50	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:52	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: SW-14

Lab Sample ID: 480-86256-9

Date Collected: 08/26/15 11:10

Matrix: Water

Date Received: 08/27/15 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 16:09	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 23:50	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:54	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:53	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: PW-14

Lab Sample ID: 480-86256-10

Date Collected: 08/26/15 11:40

Matrix: Water

Date Received: 08/27/15 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	260899	08/28/15 11:55	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/29/15 00:06	KS	TAL BUF
Total/NA	Prep	3510C	DL		260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082	DL	5	261050	08/29/15 00:21	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:56	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:55	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: SW-15

Lab Sample ID: 480-86256-11

Date Collected: 08/26/15 12:40

Matrix: Water

Date Received: 08/27/15 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 16:57	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/29/15 00:37	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:59	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:57	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: PW-15

Date Collected: 08/26/15 13:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	260681	08/27/15 17:21	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/29/15 00:53	KS	TAL BUF
Total/NA	Prep	3510C	DL		260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082	DL	20	261230	08/31/15 11:20	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 20:02	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:59	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: SW-16

Date Collected: 08/26/15 13:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 17:45	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/29/15 01:25	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 19:11	LMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 18:04	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: PW-16

Date Collected: 08/26/15 14:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	260899	08/28/15 12:19	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/29/15 01:41	KS	TAL BUF
Total/NA	Prep	3510C	DL		260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082	DL	10	261050	08/29/15 01:57	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 20:14	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 18:06	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: PW-15 filtered

Date Collected: 08/26/15 13:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/29/15 02:44	KS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010	3005A	Water	Antimony
6010	3005A	Water	Arsenic
6010	3005A	Water	Barium
6010	3005A	Water	Beryllium
6010	3005A	Water	Cadmium
6010	3005A	Water	Chromium
6010	3005A	Water	Copper
6010	3005A	Water	Lead
6010	3005A	Water	Nickel
6010	3005A	Water	Selenium
6010	3005A	Water	Silver
6010	3005A	Water	Thallium
6010	3005A	Water	Vanadium
6010	3005A	Water	Zinc
6010	3050B	Solid	Antimony
6010	3050B	Solid	Arsenic
6010	3050B	Solid	Barium
6010	3050B	Solid	Beryllium
6010	3050B	Solid	Cadmium
6010	3050B	Solid	Chromium
6010	3050B	Solid	Copper
6010	3050B	Solid	Lead
6010	3050B	Solid	Nickel
6010	3050B	Solid	Selenium
6010	3050B	Solid	Silver
6010	3050B	Solid	Thallium
6010	3050B	Solid	Vanadium
6010	3050B	Solid	Zinc
7470A	7470A	Water	Mercury
7471A	7471A	Solid	Mercury
8082	3510C	Water	PCB-1016
8082	3510C	Water	PCB-1221
8082	3510C	Water	PCB-1232
8082	3510C	Water	PCB-1242
8082	3510C	Water	PCB-1248
8082	3510C	Water	PCB-1254
8082	3510C	Water	PCB-1260
8082	3510C	Water	PCB-1262
8082	3510C	Water	PCB-1268
8260C		Water	1,1,1,2-Tetrachloroethane
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,1-Dichloropropene

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trichlorobenzene
8260C		Water	1,2,3-Trichloropropane
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2,4-Trimethylbenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dichlorobenzene
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloropropane
8260C		Water	1,3,5-Trimethylbenzene
8260C		Water	1,3-Dichlorobenzene
8260C		Water	1,3-Dichloropropane
8260C		Water	1,4-Dichlorobenzene
8260C		Water	1,4-Dioxane
8260C		Water	2,2-Dichloropropane
8260C		Water	2-Butanone (MEK)
8260C		Water	2-Chlorotoluene
8260C		Water	2-Hexanone
8260C		Water	4-Chlorotoluene
8260C		Water	4-Isopropyltoluene
8260C		Water	4-Methyl-2-pentanone (MIBK)
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromobenzene
8260C		Water	Bromoform
8260C		Water	Bromomethane
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorobromomethane
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Dibromomethane
8260C		Water	Dichlorobromomethane
8260C		Water	Dichlorodifluoromethane
8260C		Water	Ethyl ether
8260C		Water	Ethylbenzene
8260C		Water	Ethylene Dibromide
8260C		Water	Freon 113
8260C		Water	Hexachlorobutadiene
8260C		Water	Isopropyl ether
8260C		Water	Isopropylbenzene
8260C		Water	Methyl tert-butyl ether

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Methylene Chloride
8260C		Water	m-Xylene & p-Xylene
8260C		Water	Naphthalene
8260C		Water	n-Butylbenzene
8260C		Water	N-Propylbenzene
8260C		Water	o-Xylene
8260C		Water	sec-Butylbenzene
8260C		Water	Styrene
8260C		Water	Tert-amyl methyl ether
8260C		Water	Tert-butyl ethyl ether
8260C		Water	tert-Butylbenzene
8260C		Water	Tetrachloroethene
8260C		Water	Tetrahydrofuran
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Trichlorofluoromethane
8260C		Water	Vinyl chloride
8260C	5035A	Solid	1,1,1,2-Tetrachloroethane
8260C	5035A	Solid	1,1,1-Trichloroethane
8260C	5035A	Solid	1,1,2,2-Tetrachloroethane
8260C	5035A	Solid	1,1,2-Trichloroethane
8260C	5035A	Solid	1,1-Dichloroethane
8260C	5035A	Solid	1,1-Dichloroethene
8260C	5035A	Solid	1,1-Dichloropropene
8260C	5035A	Solid	1,2,3-Trichlorobenzene
8260C	5035A	Solid	1,2,3-Trichloropropane
8260C	5035A	Solid	1,2,4-Trichlorobenzene
8260C	5035A	Solid	1,2,4-Trimethylbenzene
8260C	5035A	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035A	Solid	1,2-Dichlorobenzene
8260C	5035A	Solid	1,2-Dichloroethane
8260C	5035A	Solid	1,2-Dichloropropane
8260C	5035A	Solid	1,3,5-Trimethylbenzene
8260C	5035A	Solid	1,3-Dichlorobenzene
8260C	5035A	Solid	1,3-Dichloropropane
8260C	5035A	Solid	1,4-Dichlorobenzene
8260C	5035A	Solid	1,4-Dioxane
8260C	5035A	Solid	2,2-Dichloropropane
8260C	5035A	Solid	2-Butanone (MEK)
8260C	5035A	Solid	2-Chlorotoluene
8260C	5035A	Solid	2-Hexanone
8260C	5035A	Solid	4-Chlorotoluene
8260C	5035A	Solid	4-Isopropyltoluene
8260C	5035A	Solid	4-Methyl-2-pentanone (MIBK)

Certification Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C	5035A	Solid	Acetone
8260C	5035A	Solid	Benzene
8260C	5035A	Solid	Bromobenzene
8260C	5035A	Solid	Bromoform
8260C	5035A	Solid	Bromomethane
8260C	5035A	Solid	Carbon disulfide
8260C	5035A	Solid	Carbon tetrachloride
8260C	5035A	Solid	Chlorobenzene
8260C	5035A	Solid	Chlorobromomethane
8260C	5035A	Solid	Chlorodibromomethane
8260C	5035A	Solid	Chloroethane
8260C	5035A	Solid	Chloroform
8260C	5035A	Solid	Chloromethane
8260C	5035A	Solid	cis-1,2-Dichloroethene
8260C	5035A	Solid	cis-1,3-Dichloropropene
8260C	5035A	Solid	Dibromomethane
8260C	5035A	Solid	Dichlorobromomethane
8260C	5035A	Solid	Dichlorodifluoromethane
8260C	5035A	Solid	Ethyl ether
8260C	5035A	Solid	Ethylbenzene
8260C	5035A	Solid	Ethylene Dibromide
8260C	5035A	Solid	Freon 113
8260C	5035A	Solid	Hexachlorobutadiene
8260C	5035A	Solid	Isopropyl ether
8260C	5035A	Solid	Isopropylbenzene
8260C	5035A	Solid	Methyl tert-butyl ether
8260C	5035A	Solid	Methylene Chloride
8260C	5035A	Solid	m-Xylene & p-Xylene
8260C	5035A	Solid	Naphthalene
8260C	5035A	Solid	n-Butylbenzene
8260C	5035A	Solid	N-Propylbenzene
8260C	5035A	Solid	o-Xylene
8260C	5035A	Solid	sec-Butylbenzene
8260C	5035A	Solid	Styrene
8260C	5035A	Solid	Tert-amyl methyl ether
8260C	5035A	Solid	Tert-butyl ethyl ether
8260C	5035A	Solid	tert-Butylbenzene
8260C	5035A	Solid	Tetrachloroethene
8260C	5035A	Solid	Tetrahydrofuran
8260C	5035A	Solid	Toluene
8260C	5035A	Solid	trans-1,2-Dichloroethene
8260C	5035A	Solid	trans-1,3-Dichloropropene
8260C	5035A	Solid	Trichloroethene
8260C	5035A	Solid	Trichlorofluoromethane
8260C	5035A	Solid	Vinyl chloride
Moisture		Solid	Percent Moisture

Certification Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-15
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-13-16
Florida	NELAP	4	E87467	06-30-16
L-A-B	DoD ELAP		L2336	02-26-17
Maine	State Program	1	VT00008	04-17-17
Minnesota	NELAP	5	050-999-436	12-31-15
New Hampshire	NELAP	1	2006	12-18-15
New Jersey	NELAP	2	VT972	09-30-15
New York	NELAP	2	10391	03-31-16
Pennsylvania	NELAP	3	68-00489	04-30-16
Rhode Island	State Program	1	LAO00298	12-30-15
US Fish & Wildlife	Federal		LE-058448-0	02-28-16
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-15
Virginia	NELAP	3	460209	12-14-15

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	09-30-15 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	10-31-15 *
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL CAN
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	TAL BUF
D2974	Moisture, Ash and Organic Matter	ASTM	TAL BUR

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
MA DEP = Massachusetts Department Of Environmental Protection
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-86189-1	TB-01	Water	08/25/15 00:00	08/26/15 02:00
480-86189-2	SW-10	Water	08/25/15 12:15	08/26/15 02:00
480-86189-3	PW-10	Water	08/25/15 12:45	08/26/15 02:00
480-86189-4	SED-10	Solid	08/25/15 13:15	08/26/15 02:00
480-86189-5	TB-01	Solid	08/25/15 00:00	08/26/15 02:00
480-86256-1	TB-02	Water	08/25/15 00:00	08/27/15 01:45
480-86256-2	SW-11	Water	08/25/15 15:06	08/27/15 01:45
480-86256-3	SW-12	Water	08/26/15 08:50	08/27/15 01:45
480-86256-4	SW-12 (DUP)	Water	08/26/15 08:50	08/27/15 01:45
480-86256-5	PW-12	Water	08/26/15 09:20	08/27/15 01:45
480-86256-6	PW-12 (DUP)	Water	08/26/15 09:20	08/27/15 01:45
480-86256-7	SW-13	Water	08/26/15 10:00	08/27/15 01:45
480-86256-8	PW-13	Water	08/26/15 10:25	08/27/15 01:45
480-86256-9	SW-14	Water	08/26/15 11:10	08/27/15 01:45
480-86256-10	PW-14	Water	08/26/15 11:40	08/27/15 01:45
480-86256-11	SW-15	Water	08/26/15 12:40	08/27/15 01:45
480-86256-12	PW-15	Water	08/26/15 13:10	08/27/15 01:45
480-86256-13	SW-16	Water	08/26/15 13:50	08/27/15 01:45
480-86256-14	PW-16	Water	08/26/15 14:20	08/27/15 01:45
480-86256-15	PW-15 filtered	Water	08/26/15 13:10	08/27/15 01:45

Login Sample Receipt Checklist

Client: Woodard & Curran, Inc.

Job Number: 480-86189-1
SDG Number: #1

Login Number: 86189
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	26AUG2015 0543
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	W AND C
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Woodard & Curran, Inc.

Job Number: 480-86189-1
SDG Number: #1

Login Number: 86189
List Number: 2
Creator: Nye, Elizabeth A

List Source: TestAmerica Burlington
List Creation: 08/27/15 12:46 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	651696
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8 ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Woodard & Curran, Inc.

Job Number: 480-86189-1
SDG Number: #1

Login Number: 86256
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	W AND C
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

★SDG #1★

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Ben Gregory	Lab PM:	Lab COC Barcode Label	COC No: 33395
Client Contact: Keri Stevens	Sample Collector's Phone: 781-801-2476	E-Mail:		Page: 1 of 1
Company: Woodard + Curran				Job #:
Address: 40 Shattuck Rd Suite 110	Due Date Requested:	Analysis Requested		Preservation Codes: A - Hydrochloric Acid; B - Sodium Hydroxide; C - Zinc Acetate; D - Nitric Acid; E - Sodium Bisulfite; F - Methanol; H - Ascorbic Acid; J - Deionized Water; M - Hexane; N - No Preservative; P - Sodium Sulfate; Q - Sodium Sulfite; R - Sodium Thiosulfate; S - Sulfuric Acid; Z - other (specify)
City: Andover, MA 01810	Turnaround Time (TAT) Requested (business days): 5 day per MSA			
State and Zip:				
Client's Phone: 978-557-8150	Quote # or Project #:			
Client's Contact Email: ksteverse@woodardcurran.com	PO #:			
Client's Project Name/Number: Lewis Chem	WO #:			
Sample Collection Site Name & Location:	PWS ID #:			

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	VOCs - 8260	Total Metals MCP14+Cu+Fe	Diss. Metals MCP14+Cu+Fe	Hardness	Total PCBs 8082	Total PCBs 8082 w sox	FOC	% solids	VOCs - 8260	Total Number of Containers (enter total for each line)	Special Instructions & Notes:
Preservation Codes →					A	N	D	D	N	N	N	N	F	↓	
TB-01	8/25/15				X								X	5	
SW-10	8/25/15	1215	G	W	X		X	X	X					7	Dissolved metals and hardness on field filtered
PW-10	8/25/15	1245	G	W	X		X	X	X					7	
SED-10	8/25/15	1315	G	S		X			X	X	X	X		7	

480-86189 Chain of Custody

Regulatory Programs: MCP [X] GW1/S1 [ ] RCP [ ] CT RSR [ ] DEP Form [ ] EDD Required [ ] eDEP Filing [ ] NPDES [ ]

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit TestAmerica to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Possible Hazard Identification (please check off each that may apply): [ ] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [X] Unknown [ ] Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month) : [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

** **Matrix Types**: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◄

Relinquished by:	Date/Time: 8/25/15 1440	Company: W+C	Received by:	Date/Time: 8/26/15 1500	Company: TA
Relinquished by:	Date/Time: 8/25/15 16:00	Company: TA	Received by:	Date/Time: 26 Aug 15 0200	Company: DAS
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.7 #1

☆SDG 1 continued☆ (17)

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Ben Gregory	Lab PM: Becky Mason	Lab COC Barcode Label
Client Contact: Keri Stevens	Sample Collector's Phone: 781 801 2476	E-Mail:	
Company: Woodard + Curran			
Address: 40 Shattuck Rd Suite 110	Due Date Requested:		
City: Andover	Turnaround Time (TAT) Requested (business days): 5day per MSA		
State and Zip: MA 01810			
Client's Phone: 978-557-8150	Quote # or Project #:		
Client's Contact Email: Kstevens @	PO #:		
Client's Project Name/Number: Lewis Chemical	WO #:		
Sample Collection Site Name & Location: Boston DND, Boston, MA	PWS ID #:		

COC No: 33400
Page: 1 of 2
Job #:

Analysis Requested

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	VOCs-8260	VOCs-8260	Total Metals MCP14+Cu	Diss Metals MCP14+Cu	Hardness	Total PCBs 8082	Total PCBs w/ soxlhet	FOC	% Solids	Total Number of Containers (enter total for each line)	Special Instructions & Notes:
			Preservation Codes →		A	F	D	D	D	N	N	N	N		
TB-02	8/25/15													~~5~~ 2	Dissolved
SW-11	8/25/15	1506	G	W	X			X	X	X				5	Metals and
SW-12	8/26/15	850	G	W	X			X	X	X				5	hardness are
SW-12 (DUP)	8/26/15	850	G	W	X			X	X	X				5	field filtered
PW-12	8/26/15	920	G	W	X			X	X	X				5	
PW-12 (DUP)	8/26/15	920	G	W	X			X	X	X				5	
SW-13	8/26/15	1000	G	W	X			X	X	X				5	
PW-13	8/26/15	1025	G	W	X			X	X	X				5	
SW-14	8/26/15	1110	G	W	X			X	X	X				5	
PW-14	8/26/15	1140	G	W	X			X	X	X				5	

480-86256 Chain of Custody

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP ☒ GW1/S1 ☐
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐
eDEP Filing ☐ NPDES ☐

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit TestAmerica to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Possible Hazard Identification (please check off each that may apply):
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month):
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

** Matrix Types: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◄

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8/26/15 1450	W+C	[signature]	[illegible] 1550	[illegible]
[signature]	8/26/15 15:45	TA	[signature]	27 Aug 15 0145	TAB

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.5 #1

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road - Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

★SDG #1 cont★ (9)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:
Client Contact: Keri Stevens
Company: Weston + Sampson
Address: 40 Shattuck Rd Suite 110
City: Andover
State and Zip: MA 01810
Client's Phone: 978-557-8150
Client's Contact Email: ksteviens@
Client's Project Name/Number: Lewis Chemical
Sample Collection Site Name & Location: Boston DND, Boston, MA

Sample Collector's Name (Please Print Neatly): Ben Gregory
Sample Collector's Phone: 781-801-2476
Lab PM: Becky Mason
E-Mail:
Lab COC Barcode Label

COC No: 33402
Page: 2 of 2
Job #: 229286

Due Date Requested:
Turnaround Time (TAT) Requested (business days): 5-day per MSA
Quote # or Project #:
PO #:
WO #:
PWS ID #:

Analysis Requested

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	VOCs - 8260	VOCs - 8260	Total Metals MCP14 + Cu	Diss Metals MCP14 + Cu	Hardness	Total PCBs 8082	Total PCBs w/ sox/hot	FOC	% Solid	Dissolved PCBs 8082	Total Number of Containers (enter total for each line)
			Preservation Codes →		A	F	D	D	D	N	N	N	N	N	↓
SW-15	8/26/15	1240	G	W	X			X	X	X					5
PW-15	8/26/15	1310	G	W	X			X	X	X				X	6
SW-16	8/26/15	1350	G	W	X			X	X	X					5
PW-16	8/26/15	1420	G	W	X			X	X	X					4

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP [X] GW1/S1 [ ]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [ ]
eDEP Filing [ ] NPDES [ ]

SUBCONTRACT POLICY: Unless you provide in-structions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit Test-America to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Special Instructions & Notes:
Dissolved metals and hardness are field filtered.

Possible Hazard Identification (please check off each that may apply):
[ ] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [X] Unknown [ ] Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month) :
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

** **Matrix Types**: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◄

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	8/26/15 1450	WSC		8/26/15 1515	TA
Relinquished by:	8/26/15 1545	TA		27Aug15 0145	VNO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.5 ★1

WI-QA-010 rev 8
Revised 10/29/2014
TAL-8245-360R

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-86375-1
TestAmerica Sample Delivery Group: #2
Client Project/Site: Lewis Chemical Project
Revision: 2

For:
Woodard & Curran, Inc.
40 Shattuck Road
Suite 110
Andover, Massachusetts 01810

Attn: Mr. Jarrod Yoder

Authorized for release by:
9/16/2015 9:36:09 AM

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

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Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-86375-1

Laboratory: TestAmerica Buffalo

Narrative

Revised report 2: corrected ID for SED-12 (DUP) (480-86375-3).

Revised report: Adding surrogates from both columns for water PCB sample. On original report reported two results for hits of PCB, this report corrects that by only reporting one. Removed MS/MSD comment for PCB, this was on a prep batch that was not used. Clarified NCM about 8260 on sample 480-86375-4.

Comments

Due to the dilutions required, per question G on the MassDEP Analytical Protocol Certification Form, the CAM reporting limits specified in this CAM protocol could not be achieved for some or all samples/analytes.

Receipt

The samples were received on 8/29/2015 at 2:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.4º C and 1.3º C.

GC/MS VOA

Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method 8260C: With the exception of diluted samples and adjustments made for % solids or insufficient sample mass, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-Dibromo-3-Chloropropane, Bromomethane, Chloroethane, Chloromethane, Dichlorodifluoromethane, m&p-Xylene, Naphthalene, Tetrahydrofuran, and Trichlorofluoromethane.

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-261184 exceeded control limits for 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were impacted: TB-03 (480-86375-1), SW-17 (480-86375-5), REF-SW-01 (480-86375-7), REF-PW-01 (480-86375-8), REF-SW-02 (480-86375-10), REF-PW-02 (480-86375-11), TB-04 (480-86375-12), REF-SW-03 (480-86375-14), REF-PW-03 (480-86375-15), REF-SW-04 (480-86375-17) and SW-18 (480-86375-22).

Method 8260C: The laboratory control sample duplicate (LCSD) for batch 480-261184 exceeded control limits 1,4-Dioxane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were impacted: TB-03 (480-86375-1), SW-17 (480-86375-5), REF-SW-01 (480-86375-7), REF-PW-01 (480-86375-8), REF-SW-02 (480-86375-10), REF-PW-02 (480-86375-11), TB-04 (480-86375-12), REF-SW-03 (480-86375-14), REF-PW-03 (480-86375-15), REF-SW-04 (480-86375-17) and SW-18 (480-86375-22).

Method 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for batch 480-261184 recovered outside control limits for 1,4-Dioxane. The following samples were impacted: TB-03 (480-86375-1), SW-17 (480-86375-5), REF-SW-01 (480-86375-7), REF-PW-01 (480-86375-8), REF-SW-02 (480-86375-10), REF-PW-02 (480-86375-11), TB-04 (480-86375-12), REF-SW-03 (480-86375-14), REF-PW-03 (480-86375-15), REF-SW-04 (480-86375-17) and SW-18 (480-86375-22)

Method 8260C: The continuing calibration verification (CCV) for 2-Butanone (MEK) and Tetrahydrofuran associated with batch 480-261208 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples were impacted: SED-12 (480-86375-2), SED 12 (DUP) (480-86375-3), SED-15 (480-86375-4), SED-17 (480-86375-6), REF-SED-01 (480-86375-9), REF-SED-02 (480-86375-13), REF-SED-03 (480-86375-16), REF-SED-04 (480-86375-18), SED-13 (480-86375-19), SED-14 (480-86375-20), SED-16 (480-86375-21), TB-03 (480-86375-23) and TB-04 (480-86375-24).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-261236 exceeded control limits for 2-Butanone and Tetrahydrofuran. Unlike the calibration standards, this is due to the co-elution with Ethyl Acetate and Methacrylonitrile, respectively, in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were impacted: SED-12

Job ID: 480-86375-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

(480-86375-2), SED 12 (DUP) (480-86375-3), SED-15 (480-86375-4), SED-17 (480-86375-6), REF-SED-01 (480-86375-9), REF-SED-02 (480-86375-13), REF-SED-03 (480-86375-16), REF-SED-04 (480-86375-18), SED-13 (480-86375-19), SED-14 (480-86375-20), SED-16 (480-86375-21), TB-03 (480-86375-23) and TB-04 (480-86375-24).

Method 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 480-261236 recovered outside control limits for Ethyl Ether and Bromomethane.

Method 8260C: The following samples were received and frozen outside of the 48 hour preparation holding time : SED-12 (480-86375-2), SED 12 (DUP) (480-86375-3) and TB-03 (480-86375-23).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-261576 exceeded control limits for 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were impacted: SED-12 (480-86375-2), SED 12 (DUP) (480-86375-3) and SED-15 (480-86375-4).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-261576 exceeded control limits for Chloroethane and Dichlorodifluoromethane . MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were impacted: SED-12 (480-86375-2), SED 12 (DUP) (480-86375-3) and SED-15 (480-86375-4).

Method 8260C: The following sample was diluted to medium level analysis to bring the concentration of target analytes within the calibration range: SED-15 (480-86375-4) for Chloroethane only, all other compounds reported from low level vial. Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) for Acetone and Dichlorodifluoromethane associated with batch 480-261728 recovered outside the MCP control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples were impacted: SED-12 (480-86375-2) and SED 12 (DUP) (480-86375-3).

Method 8260C: The following samples were received with low level vials that were outside of preparation holding time: SED-12 (480-86375-2) and SED 12 (DUP) (480-86375-3). These samples were analyzed in preparation batch 480-261608 and analytical batch 480-261728 within holding time using medium level analysis and have elevated reporting limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SED 12 (DUP) (480-86375-3), REF-SED-01 (480-86375-9), REF-SED-02 (480-86375-13), REF-SED-04 (480-86375-18), SED-13 (480-86375-19) and SED-16 (480-86375-21).

Method 8082: Per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits after moisture correction do not achieve the CAM reporting limits specified in this CAM protocol; however they do achieve method 1 S1 standards.

Method 8082: The following samples appear to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: SED-12 (480-86375-2), SED 12 (DUP) (480-86375-3), REF-SED-02 (480-86375-13) and SED-16 (480-86375-21). The samples have been quantified and reported as Aroclor 1232. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

Method 8082: The following samples were diluted due to the nature of the sample matrix: SED-17 (480-86375-6), REF-SED-04 (480-86375-18), SED-13 (480-86375-19) and SED-14 (480-86375-20). Elevated reporting limits (RLs) are provided.

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by

Job ID: 480-86375-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

sulfur: SED-15 (480-86375-4).

Method 8082: The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: SED-15 (480-86375-4). The sample has been quantified and reported as Aroclor 1232. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010: The ICSA (ICSA 480-261549/9) exhibited a result outside the project established control limits for Dissolved Antimony. However, the result was within the laboratory's standard quality control limits, therefore no corrective action was necessary.

Method 6010: The following sample was diluted due to the nature of the sample matrix: REF-SED-04 (480-86375-18). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Geotechnical
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3540C: Due to the matrix, the following samples could not be concentrated to the final method required volume: SED-12 (480-86375-2), SED-17 (480-86375-6), REF-SED-01 (480-86375-9), REF-SED-02 (480-86375-13), REF-SED-04 (480-86375-18), SED-16 (480-86375-21). The reporting limits (RLs) are elevated proportionately.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 480-261294.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-86375-1**

Project Location: **Lewis Chemical Project** RTN:

This form provides certifications for the data set for the following Laboratory Sample ID Number(s):

480-86375-1 [1-24]

Matrices: ■ Groundwater/Surface Water ■ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	7470/7471 Hg CAM III B ■	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ■	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350**

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	■ Yes ☐ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Position: Technical Director, TestAmerica Westfield

Printed Name: Richard Emerich Date: 9/9/15 16:21

This form has been electronically signed and approved.

Detection Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: TB-03 — Lab Sample ID: 480-86375-1

No Detections.

Client Sample ID: SED-12 — Lab Sample ID: 480-86375-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	9.1				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.129	J	1.55	0.113	mg/Kg	1	☼	8260C	Total/NA
1,2,4-Trichlorobenzene	0.101	J	1.55	0.0942	mg/Kg	1	☼	8260C	Total/NA
1,2-Dichlorobenzene	0.381	J	1.55	0.121	mg/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.469	J	1.55	0.198	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.191	J	1.55	0.117	mg/Kg	1	☼	8260C	Total/NA
Silver	1.14	J	1.52	0.610	mg/Kg	1	☼	6010	Total/NA
Arsenic	11.1		3.05	1.22	mg/Kg	1	☼	6010	Total/NA
Barium	246		1.52	0.335	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.896		0.610	0.0853	mg/Kg	1	☼	6010	Total/NA
Cadmium	4.57		0.610	0.0914	mg/Kg	1	☼	6010	Total/NA
Chromium	167		1.52	0.610	mg/Kg	1	☼	6010	Total/NA
Nickel	28.3		3.05	0.701	mg/Kg	1	☼	6010	Total/NA
Vanadium	68.4		1.52	0.335	mg/Kg	1	☼	6010	Total/NA
Zinc	474		7.62	1.95	mg/Kg	1	☼	6010	Total/NA
Lead	544		1.52	0.732	mg/Kg	1	☼	6010	Total/NA
Antimony	2.34		1.52	1.22	mg/Kg	1	☼	6010	Total/NA
Copper	164		3.05	0.640	mg/Kg	1	☼	6010	Total/NA
Mercury	2.01		0.298	0.0241	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0635	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
Freon 113	0.0903	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
1,1-Dichloroethane	0.0725	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
1,2-Dichlorobenzene	0.156	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
Chloroethane	0.130	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.0272	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.0311	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.0498	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.0790	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.0195	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
Aroclor-1232	768		151	151	mg/Kg	50	☼	8082	Total/NA

Client Sample ID: SED-12 (DUP) — Lab Sample ID: 480-86375-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	9.2				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0952	J	1.28	0.0928	mg/Kg	1	☼	8260C	Total/NA
1,2-Dichlorobenzene	0.320	J	1.28	0.100	mg/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.398	J	1.28	0.164	mg/Kg	1	☼	8260C	Total/NA
Silver	0.721	J	1.52	0.609	mg/Kg	1	☼	6010	Total/NA
Arsenic	8.87		3.04	1.22	mg/Kg	1	☼	6010	Total/NA
Barium	164		1.52	0.335	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.606	J	0.609	0.0852	mg/Kg	1	☼	6010	Total/NA
Cadmium	3.18		0.609	0.0913	mg/Kg	1	☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SED-12 (DUP) (Continued) — Lab Sample ID: 480-86375-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	112		1.52	0.609	mg/Kg	1	☼	6010	Total/NA
Nickel	19.3		3.04	0.700	mg/Kg	1	☼	6010	Total/NA
Vanadium	47.7		1.52	0.335	mg/Kg	1	☼	6010	Total/NA
Zinc	323		7.61	1.95	mg/Kg	1	☼	6010	Total/NA
Lead	366		1.52	0.731	mg/Kg	1	☼	6010	Total/NA
Antimony	2.27		1.52	1.22	mg/Kg	1	☼	6010	Total/NA
Copper	153		3.04	0.639	mg/Kg	1	☼	6010	Total/NA
Mercury	1.76		0.311	0.0252	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0705	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
Freon 113	0.132	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
1,1-Dichloroethane	0.0845	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
1,2-Dichlorobenzene	0.0890	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
Chloroethane	0.0651	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.0310	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.0234	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.0251	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
Trichloroethene	0.0228	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
Vinyl chloride	0.0171	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
Aroclor-1232	963		129	129	mg/Kg	50	☼	8082	Total/NA

Client Sample ID: SED-15 — Lab Sample ID: 480-86375-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	2.6				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	1.18	J *	1.44	0.325	mg/Kg	1	☼	8260C	Total/NA
Arsenic	7.99		3.12	1.25	mg/Kg	1	☼	6010	Total/NA
Barium	123	F1	1.56	0.343	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.517	J	0.623	0.0873	mg/Kg	1	☼	6010	Total/NA
Cadmium	2.57		0.623	0.0935	mg/Kg	1	☼	6010	Total/NA
Chromium	91.4		1.56	0.623	mg/Kg	1	☼	6010	Total/NA
Nickel	22.9		3.12	0.717	mg/Kg	1	☼	6010	Total/NA
Vanadium	35.8		1.56	0.343	mg/Kg	1	☼	6010	Total/NA
Zinc	398	F1	7.79	1.99	mg/Kg	1	☼	6010	Total/NA
Lead	427	F1	1.56	0.748	mg/Kg	1	☼	6010	Total/NA
Antimony	2.44		1.56	1.25	mg/Kg	1	☼	6010	Total/NA
Copper	146		3.12	0.654	mg/Kg	1	☼	6010	Total/NA
Mercury	1.16	F1	0.589	0.0477	mg/Kg	2	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.312	*	0.0924	0.0924	mg/Kg	1	☼	8260C	Total/NA
Acetone	1.07		0.924	0.924	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.0202		0.0185	0.0185	mg/Kg	1	☼	8260C	Total/NA
Aroclor-1232	218		28.8	28.8	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: SW-17 — Lab Sample ID: 480-86375-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	64.4		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	5.57	J	50.0	1.50	ug/L	1		6010	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: SW-17 (Continued) — Lab Sample ID: 480-86375-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	2.44	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	90.0		10.0	2.63	mg/L	1		SM 2340C	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	0.292		0.231	0.231	ug/L	1		8082	Total/NA

Client Sample ID: SED-17 — Lab Sample ID: 480-86375-6

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	10.8				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.00		3.33	1.33	mg/Kg	1	☼	6010	Total/NA
Barium	127		1.66	0.366	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.475	J	0.665	0.0931	mg/Kg	1	☼	6010	Total/NA
Cadmium	1.87		0.665	0.0998	mg/Kg	1	☼	6010	Total/NA
Chromium	46.0		1.66	0.665	mg/Kg	1	☼	6010	Total/NA
Nickel	13.9		3.33	0.765	mg/Kg	1	☼	6010	Total/NA
Vanadium	25.5		1.66	0.366	mg/Kg	1	☼	6010	Total/NA
Zinc	342		8.31	2.13	mg/Kg	1	☼	6010	Total/NA
Lead	131		1.66	0.798	mg/Kg	1	☼	6010	Total/NA
Selenium	1.63	J	1.66	1.33	mg/Kg	1	☼	6010	Total/NA
Antimony	1.61	J	1.66	1.33	mg/Kg	1	☼	6010	Total/NA
Copper	69.0		3.33	0.698	mg/Kg	1	☼	6010	Total/NA
Mercury	0.495		0.360	0.0292	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: REF-SW-01 — Lab Sample ID: 480-86375-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	60.1		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	1.27	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	9.17	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.74	J	10.0	1.60	ug/L	1		6010	Dissolved
Mercury	0.142	J	0.200	0.120	ug/L	1		7470A	Dissolved
Hardness as calcium carbonate	88.0		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	1.25		0.239	0.239	ug/L	1		8082	Total/NA

Client Sample ID: REF-PW-01 — Lab Sample ID: 480-86375-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	234		10.0	0.700	ug/L	1		6010	Dissolved
Cadmium	0.630	J	1.00	0.500	ug/L	1		6010	Dissolved
Nickel	15.4		10.0	1.26	ug/L	1		6010	Dissolved
Zinc	440		50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	348		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	9.57		1.00	1.00	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	9.87		1.00	1.00	ug/L	1		8260C	Total/NA
Trichloroethene	4.38		1.00	1.00	ug/L	1		8260C	Total/NA
Vinyl chloride	3.55		1.00	1.00	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: REF-PW-01 (Continued) — Lab Sample ID: 480-86375-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	9.11		0.238	0.238	ug/L	1		8082	Total/NA

Client Sample ID: REF-SED-01 — Lab Sample ID: 480-86375-9

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	5.3				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.29		1.61	0.643	mg/Kg	1	☼	6010	Total/NA
Barium	40.1		0.804	0.177	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.230	J	0.322	0.0450	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.500		0.322	0.0483	mg/Kg	1	☼	6010	Total/NA
Chromium	25.1		0.804	0.322	mg/Kg	1	☼	6010	Total/NA
Nickel	11.5		1.61	0.370	mg/Kg	1	☼	6010	Total/NA
Vanadium	16.6		0.804	0.177	mg/Kg	1	☼	6010	Total/NA
Zinc	206		4.02	1.03	mg/Kg	1	☼	6010	Total/NA
Lead	212		0.804	0.386	mg/Kg	1	☼	6010	Total/NA
Copper	55.9		1.61	0.338	mg/Kg	1	☼	6010	Total/NA
Mercury	0.138	J	0.167	0.0136	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1232	8.40		1.42	1.42	mg/Kg	1	☼	8082	Total/NA

Client Sample ID: REF-SW-02 — Lab Sample ID: 480-86375-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	67.9		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	1.42	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	6.53	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	1.60	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	84.0		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Client Sample ID: REF-PW-02 — Lab Sample ID: 480-86375-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	98.7		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	1.40	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	7.99	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	112		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	1.70		0.236	0.236	ug/L	1		8082	Total/NA

Client Sample ID: TB-04 — Lab Sample ID: 480-86375-12

No Detections.

Client Sample ID: REF-SED-02 — Lab Sample ID: 480-86375-13

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	16.5				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.81		4.56	1.82	mg/Kg	1	☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: REF-SED-02 (Continued) — Lab Sample ID: 480-86375-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	103		2.28	0.501	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.551	J	0.911	0.128	mg/Kg	1	☼	6010	Total/NA
Cadmium	1.82		0.911	0.137	mg/Kg	1	☼	6010	Total/NA
Chromium	47.3		2.28	0.911	mg/Kg	1	☼	6010	Total/NA
Nickel	15.8		4.56	1.05	mg/Kg	1	☼	6010	Total/NA
Vanadium	30.4		2.28	0.501	mg/Kg	1	☼	6010	Total/NA
Zinc	333		11.4	2.92	mg/Kg	1	☼	6010	Total/NA
Lead	144		2.28	1.09	mg/Kg	1	☼	6010	Total/NA
Copper	75.3		4.56	0.957	mg/Kg	1	☼	6010	Total/NA
Mercury	0.464		0.449	0.0364	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1232	47.4		18.9	18.9	mg/Kg	5	☼	8082	Total/NA

Client Sample ID: REF-SW-03 — Lab Sample ID: 480-86375-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	62.5		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	4.12	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.31	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	80.0		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Client Sample ID: REF-PW-03 — Lab Sample ID: 480-86375-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.66	J	10.0	5.55	ug/L	1		6010	Dissolved
Barium	42.3		10.0	0.700	ug/L	1		6010	Dissolved
Chromium	2.57	J	5.00	1.00	ug/L	1		6010	Dissolved
Vanadium	2.67	J	10.0	1.50	ug/L	1		6010	Dissolved
Zinc	3.35	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	20.0		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1242	1.15		0.234	0.234	ug/L	1		8082	Total/NA
PCB-1254	0.272		0.234	0.234	ug/L	1		8082	Total/NA

Client Sample ID: REF-SED-03 — Lab Sample ID: 480-86375-16

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	1.4				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.74		1.13	0.450	mg/Kg	1	☼	6010	Total/NA
Barium	16.7		0.563	0.124	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.127	J	0.225	0.0315	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.146	J	0.225	0.0338	mg/Kg	1	☼	6010	Total/NA
Chromium	6.65		0.563	0.225	mg/Kg	1	☼	6010	Total/NA
Nickel	5.97		1.13	0.259	mg/Kg	1	☼	6010	Total/NA
Vanadium	12.2		0.563	0.124	mg/Kg	1	☼	6010	Total/NA
Zinc	73.1		2.81	0.720	mg/Kg	1	☼	6010	Total/NA
Lead	50.7		0.563	0.270	mg/Kg	1	☼	6010	Total/NA
Copper	17.0		1.13	0.236	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0266	J	0.114	0.00922	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: REF-SED-03 (Continued) — Lab Sample ID: 480-86375-16

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Tetrahydrofuran	0.0561	*	0.0431	0.0431	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: REF-SW-04 — Lab Sample ID: 480-86375-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	59.0		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	5.02	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.20	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	32.0		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Client Sample ID: REF-SED-04 — Lab Sample ID: 480-86375-18

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	4.3				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	48.7		1.11	0.245	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.757	J	2.23	0.334	mg/Kg	5	☼	6010	Total/NA
Chromium	31.5		5.56	2.23	mg/Kg	5	☼	6010	Total/NA
Nickel	7.25	J	11.1	2.56	mg/Kg	5	☼	6010	Total/NA
Vanadium	16.1		5.56	1.22	mg/Kg	5	☼	6010	Total/NA
Zinc	134		27.8	7.12	mg/Kg	5	☼	6010	Total/NA
Lead	60.5		5.56	2.67	mg/Kg	5	☼	6010	Total/NA
Copper	26.1		11.1	2.34	mg/Kg	5	☼	6010	Total/NA
Mercury	0.198	J	0.216	0.0175	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SED-13 — Lab Sample ID: 480-86375-19

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	8.1				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.56		2.97	1.19	mg/Kg	1	☼	6010	Total/NA
Barium	78.0		1.49	0.327	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.315	J	0.594	0.0832	mg/Kg	1	☼	6010	Total/NA
Cadmium	1.05		0.594	0.0891	mg/Kg	1	☼	6010	Total/NA
Chromium	29.3		1.49	0.594	mg/Kg	1	☼	6010	Total/NA
Nickel	10.1		2.97	0.683	mg/Kg	1	☼	6010	Total/NA
Vanadium	20.6		1.49	0.327	mg/Kg	1	☼	6010	Total/NA
Zinc	224		7.43	1.90	mg/Kg	1	☼	6010	Total/NA
Lead	88.0		1.49	0.713	mg/Kg	1	☼	6010	Total/NA
Copper	39.9		2.97	0.624	mg/Kg	1	☼	6010	Total/NA
Mercury	0.213	J	0.285	0.0231	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.274		0.0166	0.0166	mg/Kg	1	☼	8260C	Total/NA
2-Butanone (MEK)	0.177	*	0.0831	0.0831	mg/Kg	1	☼	8260C	Total/NA
Chlorobenzene	0.0527		0.0166	0.0166	mg/Kg	1	☼	8260C	Total/NA
Chloroethane	0.0198		0.0166	0.0166	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: SED-14 — Lab Sample ID: 480-86375-20

This Detection Summary does not include radiochemical test results.

Client Sample ID: SED-14 (Continued) — Lab Sample ID: 480-86375-20

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	3.0				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.82		1.97	0.790	mg/Kg	1	☼	6010	Total/NA
Barium	51.6		0.987	0.217	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.257	J	0.395	0.0553	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.699		0.395	0.0592	mg/Kg	1	☼	6010	Total/NA
Chromium	24.1		0.987	0.395	mg/Kg	1	☼	6010	Total/NA
Nickel	18.9		1.97	0.454	mg/Kg	1	☼	6010	Total/NA
Vanadium	16.9		0.987	0.217	mg/Kg	1	☼	6010	Total/NA
Zinc	207		4.94	1.26	mg/Kg	1	☼	6010	Total/NA
Lead	79.9		0.987	0.474	mg/Kg	1	☼	6010	Total/NA
Copper	41.3		1.97	0.415	mg/Kg	1	☼	6010	Total/NA
Mercury	0.309		0.200	0.0162	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00948		0.00936	0.00936	mg/Kg	1	☼	8260C	Total/NA
2-Butanone (MEK)	0.167	*	0.0468	0.0468	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.553		0.468	0.468	mg/Kg	1	☼	8260C	Total/NA
Chloroethane	0.0665		0.00936	0.00936	mg/Kg	1	☼	8260C	Total/NA
Tetrahydrofuran	0.112	*	0.0936	0.0936	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: SED-16 — Lab Sample ID: 480-86375-21

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	8.7				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.36		2.27	0.907	mg/Kg	1	☼	6010	Total/NA
Barium	113		1.13	0.249	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.428	J	0.453	0.0635	mg/Kg	1	☼	6010	Total/NA
Cadmium	1.94		0.453	0.0680	mg/Kg	1	☼	6010	Total/NA
Chromium	71.3		1.13	0.453	mg/Kg	1	☼	6010	Total/NA
Nickel	18.4		2.27	0.521	mg/Kg	1	☼	6010	Total/NA
Vanadium	26.9		1.13	0.249	mg/Kg	1	☼	6010	Total/NA
Zinc	335		5.67	1.45	mg/Kg	1	☼	6010	Total/NA
Lead	378		1.13	0.544	mg/Kg	1	☼	6010	Total/NA
Antimony	1.97		1.13	0.907	mg/Kg	1	☼	6010	Total/NA
Copper	110		2.27	0.476	mg/Kg	1	☼	6010	Total/NA
Mercury	0.844		0.244	0.0198	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.0153		0.0116	0.0116	mg/Kg	1	☼	8260C	Total/NA
2-Butanone (MEK)	0.153	*	0.0580	0.0580	mg/Kg	1	☼	8260C	Total/NA
Chloroethane	0.228		0.0116	0.0116	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.0178		0.0116	0.0116	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.0285		0.0116	0.0116	mg/Kg	1	☼	8260C	Total/NA
Tetrahydrofuran	0.131	*	0.116	0.116	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.0128		0.0116	0.0116	mg/Kg	1	☼	8260C	Total/NA
Aroclor-1232	128		9.03	9.03	mg/Kg	5	☼	8082	Total/NA

Client Sample ID: SW-18 — Lab Sample ID: 480-86375-22

This Detection Summary does not include radiochemical test results.

Client Sample ID: SW-18 (Continued) — Lab Sample ID: 480-86375-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	60.7		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	5.18	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.48	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	88.0		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Client Sample ID: TB-03 — Lab Sample ID: 480-86375-23

No Detections.

Client Sample ID: TB-04 — Lab Sample ID: 480-86375-24

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-03
Date Collected: 08/26/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 12:07	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 12:07	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 12:07	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 12:07	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 12:07	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 12:07	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 12:07	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 12:07	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 12:07	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 12:07	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 12:07	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 12:07	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 12:07	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 12:07	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 12:07	1

Client Sample ID: TB-03

Date Collected: 08/26/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 12:07	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 12:07	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 12:07	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 12:07	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 12:07	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 12:07	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 12:07	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/31/15 12:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*08/31/15 12:07*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/31/15 12:07*	*1*

Client Sample ID: SED-12

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2
Matrix: Solid
Percent Solids: 31.3

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.155		1.55	0.155	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,1,1-Trichloroethane	**0.129**	**J**	1.55	0.113	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,1,2,2-Tetrachloroethane	<0.251		1.55	0.251	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Freon 113	<0.353		1.55	0.353	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,1,2-Trichloroethane	<0.202		1.55	0.202	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,1-Dichloroethane	<0.189		1.55	0.189	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,1-Dichloroethene	<0.190		1.55	0.190	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,1-Dichloropropene	<0.220		1.55	0.220	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2,3-Trichlorobenzene	<0.165		1.55	0.165	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2,3-Trichloropropane	<0.158		1.55	0.158	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2,4-Trichlorobenzene	**0.101**	**J**	1.55	0.0942	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2,4-Trimethylbenzene	<0.298		1.55	0.298	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2-Dibromo-3-Chloropropane	<0.775		7.75	0.775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2-Dichlorobenzene	**0.381**	**J**	1.55	0.121	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2-Dichloroethane	<0.0778		1.55	0.0778	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1

Client Sample ID: SED-12

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2

Matrix: Solid
Percent Solids: 31.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.775		1.55	0.775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,3,5-Trimethylbenzene	<0.0998		1.55	0.0998	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,3-Dichlorobenzene	<0.0797		1.55	0.0797	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,3-Dichloropropane	<0.0930		1.55	0.0930	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,4-Dichlorobenzene	<0.217		1.55	0.217	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,4-Dioxane	<7.47		77.5	7.47	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
2,2-Dichloropropane	<0.264		1.55	0.264	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
2-Butanone (MEK)	<0.567	*	7.75	0.567	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
2-Chlorotoluene	<0.102		1.55	0.102	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
2-Hexanone	<0.775		7.75	0.775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
4-Chlorotoluene	<0.183		1.55	0.183	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
4-Isopropyltoluene	<0.124		1.55	0.124	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
4-Methyl-2-pentanone (MIBK)	<0.508		7.75	0.508	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Acetone	<1.31		77.5	1.31	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Benzene	<0.0760		1.55	0.0760	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Bromobenzene	<0.273		1.55	0.273	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Bromoform	<0.775		1.55	0.775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Bromomethane	<0.140		1.55	0.140	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Carbon disulfide	<0.775		1.55	0.775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Carbon tetrachloride	<0.150		1.55	0.150	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Chlorobenzene	<0.205		1.55	0.205	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Chlorobromomethane	<0.112		1.55	0.112	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Chlorodibromomethane	<0.198		1.55	0.198	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Chloroethane	<0.350	*	1.55	0.350	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Chloroform	<0.0958		1.55	0.0958	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Chloromethane	<0.0936		1.55	0.0936	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
cis-1,2-Dichloroethene	**0.469**	**J**	1.55	0.198	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
cis-1,3-Dichloropropene	<0.223		1.55	0.223	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Dibromomethane	<0.160		1.55	0.160	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Dichlorobromomethane	<0.208		1.55	0.208	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Dichlorodifluoromethane	<0.128	*	1.55	0.128	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Ethyl ether	<0.651		1.55	0.651	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Ethylbenzene	<0.107		1.55	0.107	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Ethylene Dibromide	<0.199		1.55	0.199	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Hexachlorobutadiene	<0.182		1.55	0.182	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Isopropyl ether	<0.775		1.55	0.775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Isopropylbenzene	<0.234		1.55	0.234	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Methyl tert-butyl ether	<0.152		1.55	0.152	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Methylene Chloride	<0.713		1.55	0.713	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
m-Xylene & p-Xylene	<0.260		1.55	0.260	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Naphthalene	<0.208		7.75	0.208	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
n-Butylbenzene	<0.135		1.55	0.135	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
N-Propylbenzene	<0.124		1.55	0.124	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
o-Xylene	<0.202		1.55	0.202	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
sec-Butylbenzene	<0.135		1.55	0.135	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Styrene	<0.0775		1.55	0.0775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Tert-amyl methyl ether	<0.397		1.55	0.397	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Tert-butyl ethyl ether	<0.682		1.55	0.682	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
tert-Butylbenzene	<0.161		1.55	0.161	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1

Client Sample ID: SED-12

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2

Matrix: Solid
Percent Solids: 31.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.208		1.55	0.208	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Tetrahydrofuran	<1.43		15.5	1.43	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Toluene	**0.191**	**J**	1.55	0.117	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
trans-1,2-Dichloroethene	<0.160		1.55	0.160	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
trans-1,3-Dichloropropene	<0.682		1.55	0.682	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Trichloroethene	<0.341		1.55	0.341	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Trichlorofluoromethane	<0.147		1.55	0.147	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Vinyl chloride	<0.189		1.55	0.189	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,1,1-Trichloroethane	**0.0635**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,1,2,2-Tetrachloroethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,1,2-Trichloroethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Freon 113	**0.0903**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,1-Dichloroethane	**0.0725**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,1-Dichloroethene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,1-Dichloropropene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2,3-Trichlorobenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2,3-Trichloropropane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2,4-Trichlorobenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2,4-Trimethylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2-Dibromo-3-Chloropropane	<0.0762	H	0.0762	0.0762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2-Dichlorobenzene	**0.156**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2-Dichloroethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2-Dichloropropane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,3,5-Trimethylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,3-Dichlorobenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,3-Dichloropropane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,4-Dichlorobenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,4-Dioxane	<0.762	H	0.762	0.762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
2,2-Dichloropropane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
2-Butanone (MEK)	<0.0762	H *	0.0762	0.0762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
2-Chlorotoluene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
2-Hexanone	<0.0762	H	0.0762	0.0762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
4-Chlorotoluene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
4-Isopropyltoluene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
4-Methyl-2-pentanone (MIBK)	<0.0762	H	0.0762	0.0762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Acetone	<0.762	H	0.762	0.762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Benzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Bromobenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Bromoform	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Bromomethane	<0.0152	H *	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Carbon disulfide	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Carbon tetrachloride	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Chlorobenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Chlorobromomethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Chlorodibromomethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Chloroethane	**0.130**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Chloroform	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1

Client Sample ID: SED-12
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2
Matrix: Solid
Percent Solids: 31.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
cis-1,2-Dichloroethene	**0.0272**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
cis-1,3-Dichloropropene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Dichlorobromomethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Dichlorodifluoromethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Ethyl ether	<0.0152	H *	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Ethylbenzene	**0.0311**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Ethylene Dibromide	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Hexachlorobutadiene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Isopropyl ether	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Isopropylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Methyl tert-butyl ether	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Methylene Chloride	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
m-Xylene & p-Xylene	**0.0498**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Naphthalene	<0.0762	H	0.0762	0.0762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
n-Butylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
N-Propylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
o-Xylene	**0.0790**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
sec-Butylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Styrene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Tert-amyl methyl ether	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Tert-butyl ethyl ether	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
tert-Butylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Tetrachloroethene	**0.0195**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Tetrahydrofuran	<0.152	H *	0.152	0.152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Toluene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
trans-1,2-Dichloroethene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
trans-1,3-Dichloropropene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Trichloroethene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Trichlorofluoromethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Vinyl chloride	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Dibromomethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/29/15 04:10*	*09/03/15 00:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*	*08/29/15 04:10*	*09/03/15 00:15*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*08/29/15 04:10*	*09/03/15 00:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*70 - 130*	*08/29/15 04:10*	*08/31/15 13:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*	*08/29/15 04:10*	*08/31/15 13:53*	*1*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*08/29/15 04:10*	*08/31/15 13:53*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1221	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1232	**768**		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1242	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1248	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50

Client Sample ID: SED-12

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2

Matrix: Solid
Percent Solids: 31.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1254	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1260	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1262	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1268	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*392*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 11:33*	*50*
Tetrachloro-m-xylene	*32*	*p*	*30 - 150*	*09/03/15 08:19*	*09/08/15 11:33*	*50*
DCB Decachlorobiphenyl	*1613*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 11:33*	*50*
DCB Decachlorobiphenyl	*1454*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 11:33*	*50*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**1.14**	**J**	1.52	0.610	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Arsenic	**11.1**		3.05	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Barium	**246**		1.52	0.335	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Beryllium	**0.896**		0.610	0.0853	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Cadmium	**4.57**		0.610	0.0914	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Chromium	**167**		1.52	0.610	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Nickel	**28.3**		3.05	0.701	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Thallium	<0.914		3.05	0.914	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Vanadium	**68.4**		1.52	0.335	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Zinc	**474**		7.62	1.95	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Lead	**544**		1.52	0.732	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Selenium	<1.22		1.52	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Antimony	**2.34**		1.52	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Copper	**164**		3.05	0.640	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**2.01**		0.298	0.0241	mg/Kg	☼	09/01/15 08:30	09/01/15 12:05	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**9.1**				%			09/01/15 15:42	1

Client Sample ID: SED-12 (DUP)

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3

Matrix: Solid
Percent Solids: 32.6

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.128		1.28	0.128	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,1,1-Trichloroethane	**0.0952**	**J**	1.28	0.0928	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,1,2,2-Tetrachloroethane	<0.207		1.28	0.207	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Freon 113	<0.292		1.28	0.292	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,1,2-Trichloroethane	<0.166		1.28	0.166	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,1-Dichloroethane	<0.156		1.28	0.156	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,1-Dichloroethene	<0.157		1.28	0.157	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,1-Dichloropropene	<0.182		1.28	0.182	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2,3-Trichlorobenzene	<0.136		1.28	0.136	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: SED-12 (DUP)
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3
Matrix: Solid
Percent Solids: 32.6

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.130		1.28	0.130	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2,4-Trichlorobenzene	<0.0778		1.28	0.0778	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2,4-Trimethylbenzene	<0.246		1.28	0.246	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2-Dibromo-3-Chloropropane	<0.639		6.39	0.639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2-Dichlorobenzene	**0.320**	**J**	1.28	0.100	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2-Dichloroethane	<0.0642		1.28	0.0642	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2-Dichloropropane	<0.639		1.28	0.639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,3,5-Trimethylbenzene	<0.0824		1.28	0.0824	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,3-Dichlorobenzene	<0.0657		1.28	0.0657	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,3-Dichloropropane	<0.0767		1.28	0.0767	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,4-Dichlorobenzene	<0.179		1.28	0.179	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,4-Dioxane	<6.16		63.9	6.16	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
2,2-Dichloropropane	<0.217		1.28	0.217	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
2-Butanone (MEK)	<0.468	*	6.39	0.468	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
2-Chlorotoluene	<0.0839		1.28	0.0839	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
2-Hexanone	<0.639		6.39	0.639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
4-Chlorotoluene	<0.151		1.28	0.151	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
4-Isopropyltoluene	<0.103		1.28	0.103	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
4-Methyl-2-pentanone (MIBK)	<0.419		6.39	0.419	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Acetone	<1.08		63.9	1.08	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Benzene	<0.0627		1.28	0.0627	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Bromobenzene	<0.225		1.28	0.225	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Bromoform	<0.639		1.28	0.639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Bromomethane	<0.115		1.28	0.115	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Carbon disulfide	<0.639		1.28	0.639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Carbon tetrachloride	<0.124		1.28	0.124	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Chlorobenzene	<0.169		1.28	0.169	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Chlorobromomethane	<0.0923		1.28	0.0923	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Chlorodibromomethane	<0.164		1.28	0.164	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Chloroethane	<0.289	*	1.28	0.289	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Chloroform	<0.0790		1.28	0.0790	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Chloromethane	<0.0772		1.28	0.0772	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
cis-1,2-Dichloroethene	**0.398**	**J**	1.28	0.164	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
cis-1,3-Dichloropropene	<0.184		1.28	0.184	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Dibromomethane	<0.132		1.28	0.132	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Dichlorobromomethane	<0.171		1.28	0.171	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Dichlorodifluoromethane	<0.106	*	1.28	0.106	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Ethyl ether	<0.537		1.28	0.537	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Ethylbenzene	<0.0882		1.28	0.0882	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Ethylene Dibromide	<0.164		1.28	0.164	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Hexachlorobutadiene	<0.150		1.28	0.150	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Isopropyl ether	<0.639		1.28	0.639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Isopropylbenzene	<0.193		1.28	0.193	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Methyl tert-butyl ether	<0.126		1.28	0.126	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Methylene Chloride	<0.588		1.28	0.588	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
m-Xylene & p-Xylene	<0.215		1.28	0.215	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Naphthalene	<0.171		6.39	0.171	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
n-Butylbenzene	<0.111		1.28	0.111	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
N-Propylbenzene	<0.102		1.28	0.102	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1

Client Sample ID: SED-12 (DUP)
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3
Matrix: Solid
Percent Solids: 32.6

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.167		1.28	0.167	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
sec-Butylbenzene	<0.111		1.28	0.111	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Styrene	<0.0639		1.28	0.0639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Tert-amyl methyl ether	<0.327		1.28	0.327	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Tert-butyl ethyl ether	<0.563		1.28	0.563	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
tert-Butylbenzene	<0.133		1.28	0.133	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Tetrachloroethene	<0.172		1.28	0.172	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Tetrahydrofuran	<1.18		12.8	1.18	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Toluene	<0.0967		1.28	0.0967	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
trans-1,2-Dichloroethene	<0.132		1.28	0.132	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
trans-1,3-Dichloropropene	<0.563		1.28	0.563	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Trichloroethene	<0.281		1.28	0.281	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Trichlorofluoromethane	<0.121		1.28	0.121	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Vinyl chloride	<0.156		1.28	0.156	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,1,1-Trichloroethane	**0.0705**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,1,2,2-Tetrachloroethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,1,2-Trichloroethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Freon 113	**0.132**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,1-Dichloroethane	**0.0845**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,1-Dichloroethene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,1-Dichloropropene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2,3-Trichlorobenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2,3-Trichloropropane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2,4-Trichlorobenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2,4-Trimethylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2-Dibromo-3-Chloropropane	<0.0772	H	0.0772	0.0772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2-Dichlorobenzene	**0.0890**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2-Dichloroethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2-Dichloropropane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,3,5-Trimethylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,3-Dichlorobenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,3-Dichloropropane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,4-Dichlorobenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,4-Dioxane	<0.772	H	0.772	0.772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
2,2-Dichloropropane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
2-Butanone (MEK)	<0.0772	H *	0.0772	0.0772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
2-Chlorotoluene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
2-Hexanone	<0.0772	H	0.0772	0.0772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
4-Chlorotoluene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
4-Isopropyltoluene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
4-Methyl-2-pentanone (MIBK)	<0.0772	H	0.0772	0.0772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Acetone	<0.772	H	0.772	0.772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Benzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Bromobenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Bromoform	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Bromomethane	<0.0154	H *	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Carbon disulfide	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1

Client Sample ID: SED-12 (DUP)

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3

Matrix: Solid
Percent Solids: 32.6

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Chlorobenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Chlorobromomethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Chlorodibromomethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Chloroethane	**0.0651**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Chloroform	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Chloromethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
cis-1,2-Dichloroethene	**0.0310**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
cis-1,3-Dichloropropene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Dichlorobromomethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Dichlorodifluoromethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Ethyl ether	<0.0154	H *	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Ethylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Ethylene Dibromide	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Hexachlorobutadiene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Isopropyl ether	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Isopropylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Methyl tert-butyl ether	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Methylene Chloride	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
m-Xylene & p-Xylene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Naphthalene	<0.0772	H	0.0772	0.0772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
n-Butylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
N-Propylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
o-Xylene	**0.0234**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
sec-Butylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Styrene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Tert-amyl methyl ether	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Tert-butyl ethyl ether	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
tert-Butylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Tetrachloroethene	**0.0251**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Tetrahydrofuran	<0.154	H *	0.154	0.154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Toluene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
trans-1,2-Dichloroethene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
trans-1,3-Dichloropropene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Trichloroethene	**0.0228**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Trichlorofluoromethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Vinyl chloride	**0.0171**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Dibromomethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 130*	*08/29/15 04:10*	*09/03/15 00:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*	*08/29/15 04:10*	*09/03/15 00:39*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*08/29/15 04:10*	*09/03/15 00:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/29/15 04:10*	*08/31/15 14:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*	*08/29/15 04:10*	*08/31/15 14:19*	*1*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*08/29/15 04:10*	*08/31/15 14:19*	*1*

Client Sample ID: SED-12 (DUP)

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3

Matrix: Solid
Percent Solids: 32.6

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1221	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1232	**963**		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1242	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1248	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1254	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1260	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1262	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1268	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*696*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 12:11*	*50*
Tetrachloro-m-xylene	*30*	*p*	*30 - 150*	*09/03/15 08:19*	*09/08/15 12:11*	*50*
DCB Decachlorobiphenyl	*875*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 12:11*	*50*
DCB Decachlorobiphenyl	*1258*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 12:11*	*50*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.721**	**J**	1.52	0.609	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Arsenic	**8.87**		3.04	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Barium	**164**		1.52	0.335	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Beryllium	**0.606**	**J**	0.609	0.0852	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Cadmium	**3.18**		0.609	0.0913	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Chromium	**112**		1.52	0.609	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Nickel	**19.3**		3.04	0.700	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Thallium	<0.913		3.04	0.913	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Vanadium	**47.7**		1.52	0.335	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Zinc	**323**		7.61	1.95	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Lead	**366**		1.52	0.731	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Selenium	<1.22		1.52	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Antimony	**2.27**		1.52	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Copper	**153**		3.04	0.639	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.76**		0.311	0.0252	mg/Kg	☼	09/01/15 08:30	09/01/15 12:11	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**9.2**				%			09/01/15 15:42	1

Client Sample ID: SED-15

Date Collected: 08/27/15 08:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-4

Matrix: Solid
Percent Solids: 31.0

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	**1.18**	**J ***	1.44	0.325	mg/Kg	☼	08/29/15 04:10	09/02/15 13:20	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1

Client Sample ID: SED-15
Date Collected: 08/27/15 08:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-4
Matrix: Solid
Percent Solids: 31.0

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,1,2,2-Tetrachloroethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,1,2-Trichloroethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Freon 113	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,1-Dichloroethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,1-Dichloroethene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,1-Dichloropropene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2,3-Trichlorobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2,3-Trichloropropane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2,4-Trichlorobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2,4-Trimethylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2-Dibromo-3-Chloropropane	<0.0924		0.0924	0.0924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2-Dichlorobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2-Dichloroethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2-Dichloropropane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,3,5-Trimethylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,3-Dichlorobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,3-Dichloropropane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,4-Dichlorobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,4-Dioxane	<0.924		0.924	0.924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
2,2-Dichloropropane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
2-Butanone (MEK)	**0.312**	*	0.0924	0.0924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
2-Chlorotoluene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
2-Hexanone	<0.0924		0.0924	0.0924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
4-Chlorotoluene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
4-Isopropyltoluene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
4-Methyl-2-pentanone (MIBK)	<0.0924		0.0924	0.0924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Acetone	**1.07**		0.924	0.924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Benzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Bromobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Bromoform	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Bromomethane	<0.0185	*	0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Carbon disulfide	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Carbon tetrachloride	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Chlorobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Chlorobromomethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Chlorodibromomethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Chloroform	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Chloromethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
cis-1,2-Dichloroethene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
cis-1,3-Dichloropropene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Dichlorobromomethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Dichlorodifluoromethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Ethyl ether	<0.0185	*	0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Ethylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Ethylene Dibromide	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Hexachlorobutadiene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Isopropyl ether	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Isopropylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1

Client Sample ID: SED-15
Date Collected: 08/27/15 08:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-4
Matrix: Solid
Percent Solids: 31.0

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Methylene Chloride	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
m-Xylene & p-Xylene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Naphthalene	<0.0924		0.0924	0.0924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
n-Butylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
N-Propylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
o-Xylene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
sec-Butylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Styrene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Tert-amyl methyl ether	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Tert-butyl ethyl ether	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
tert-Butylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Tetrachloroethene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Tetrahydrofuran	<0.185	*	0.185	0.185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Toluene	**0.0202**		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
trans-1,2-Dichloroethene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
trans-1,3-Dichloropropene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Trichloroethene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Trichlorofluoromethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Vinyl chloride	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Dibromomethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/29/15 04:10*	*09/02/15 13:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*	*08/29/15 04:10*	*09/02/15 13:20*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*08/29/15 04:10*	*09/02/15 13:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*70 - 130*	*08/29/15 04:10*	*08/31/15 14:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*	*08/29/15 04:10*	*08/31/15 14:45*	*1*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*08/29/15 04:10*	*08/31/15 14:45*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1221	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1232	**218**		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1242	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1248	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1254	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1260	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1262	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1268	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*176*	*X*	*30 - 150*	*09/03/15 08:19*	*09/09/15 09:06*	*10*
Tetrachloro-m-xylene	*67*	*p*	*30 - 150*	*09/03/15 08:19*	*09/09/15 09:06*	*10*
DCB Decachlorobiphenyl	*74*		*30 - 150*	*09/03/15 08:19*	*09/09/15 09:06*	*10*
DCB Decachlorobiphenyl	*58*		*30 - 150*	*09/03/15 08:19*	*09/09/15 09:06*	*10*

Client Sample ID: SED-15

Date Collected: 08/27/15 08:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-4

Matrix: Solid
Percent Solids: 31.0

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.623		1.56	0.623	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Arsenic	**7.99**		3.12	1.25	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Barium	**123**	**F1**	1.56	0.343	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Beryllium	**0.517**	**J**	0.623	0.0873	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Cadmium	**2.57**		0.623	0.0935	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Chromium	**91.4**		1.56	0.623	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Nickel	**22.9**		3.12	0.717	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Thallium	<0.935		3.12	0.935	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Vanadium	**35.8**		1.56	0.343	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Zinc	**398**	**F1**	7.79	1.99	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Lead	**427**	**F1**	1.56	0.748	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Selenium	<1.25		1.56	1.25	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Antimony	**2.44**		1.56	1.25	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Copper	**146**		3.12	0.654	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.16**	**F1**	0.589	0.0477	mg/Kg	☼	09/01/15 08:30	09/01/15 13:10	2

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**2.6**				%			09/01/15 15:42	1

Client Sample ID: SW-17

Date Collected: 08/27/15 08:50
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 12:55	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 12:55	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 12:55	1

Client Sample ID: SW-17
Date Collected: 08/27/15 08:50
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 12:55	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 12:55	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 12:55	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 12:55	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 12:55	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 12:55	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 12:55	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 12:55	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 12:55	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 12:55	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 12:55	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 12:55	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 12:55	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 12:55	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 12:55	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 12:55	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 12:55	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 12:55	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 12:55	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1

Client Sample ID: SW-17

Date Collected: 08/27/15 08:50
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/31/15 12:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*08/31/15 12:55*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/31/15 12:55*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1221	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1232	**0.292**		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1242	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1248	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1254	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1260	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1262	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1268	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:59*	*1*
Tetrachloro-m-xylene	*95*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:59*	*1*
DCB Decachlorobiphenyl	*59*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:59*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:59*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 17:48	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 17:48	1
Barium	**64.4**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 17:48	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 17:48	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 17:48	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 17:48	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 17:48	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 17:48	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 17:48	1
Zinc	**5.57**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 17:48	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 17:48	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 17:48	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 17:48	1
Copper	**2.44**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 17:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:07	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**90.0**		10.0	2.63	mg/L			09/04/15 10:30	1

Client Sample ID: SED-17
Date Collected: 08/27/15 09:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-6
Matrix: Solid
Percent Solids: 28.2

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,1,1-Trichloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,1,2,2-Tetrachloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,1,2-Trichloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Freon 113	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,1-Dichloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,1-Dichloroethene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,1-Dichloropropene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2,3-Trichlorobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2,3-Trichloropropane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2,4-Trichlorobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2,4-Trimethylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2-Dibromo-3-Chloropropane	<0.0968		0.0968	0.0968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2-Dichlorobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2-Dichloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2-Dichloropropane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,3,5-Trimethylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,3-Dichlorobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,3-Dichloropropane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,4-Dichlorobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,4-Dioxane	<0.968		0.968	0.968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
2,2-Dichloropropane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
2-Butanone (MEK)	<0.0968	*	0.0968	0.0968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
2-Chlorotoluene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
2-Hexanone	<0.0968		0.0968	0.0968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
4-Chlorotoluene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
4-Isopropyltoluene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
4-Methyl-2-pentanone (MIBK)	<0.0968		0.0968	0.0968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Acetone	<0.968		0.968	0.968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Benzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Bromobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Bromoform	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Bromomethane	<0.0194	*	0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Carbon disulfide	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Carbon tetrachloride	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Chlorobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Chlorobromomethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Chlorodibromomethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Chloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Chloroform	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Chloromethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
cis-1,2-Dichloroethene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
cis-1,3-Dichloropropene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Dichlorobromomethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Dichlorodifluoromethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Ethyl ether	<0.0194	*	0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Ethylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Ethylene Dibromide	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Hexachlorobutadiene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1

Client Sample ID: SED-17
Date Collected: 08/27/15 09:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-6
Matrix: Solid
Percent Solids: 28.2

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Isopropylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Methyl tert-butyl ether	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Methylene Chloride	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
m-Xylene & p-Xylene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Naphthalene	<0.0968		0.0968	0.0968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
n-Butylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
N-Propylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
o-Xylene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
sec-Butylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Styrene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Tert-amyl methyl ether	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Tert-butyl ethyl ether	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
tert-Butylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Tetrachloroethene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Tetrahydrofuran	<0.194	*	0.194	0.194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Toluene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
trans-1,2-Dichloroethene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
trans-1,3-Dichloropropene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Trichloroethene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Trichlorofluoromethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Vinyl chloride	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Dibromomethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*108*		*70 - 130*	*08/29/15 04:10*	*08/31/15 15:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*	*08/29/15 04:10*	*08/31/15 15:11*	*1*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*08/29/15 04:10*	*08/31/15 15:11*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1221	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1232	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1242	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1248	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1254	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1260	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1262	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1268	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*30 - 150*	*09/03/15 08:19*	*09/08/15 12:30*	*5*
Tetrachloro-m-xylene	*76*		*30 - 150*	*09/03/15 08:19*	*09/08/15 12:30*	*5*
DCB Decachlorobiphenyl	*95*	*p*	*30 - 150*	*09/03/15 08:19*	*09/08/15 12:30*	*5*
DCB Decachlorobiphenyl	*192*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 12:30*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.665		1.66	0.665	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1

Client Sample ID: SED-17

Date Collected: 08/27/15 09:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-6
Matrix: Solid
Percent Solids: 28.2

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.00		3.33	1.33	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Barium	127		1.66	0.366	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Beryllium	0.475	J	0.665	0.0931	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Cadmium	1.87		0.665	0.0998	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Chromium	46.0		1.66	0.665	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Nickel	13.9		3.33	0.765	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Thallium	<0.998		3.33	0.998	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Vanadium	25.5		1.66	0.366	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Zinc	342		8.31	2.13	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Lead	131		1.66	0.798	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Selenium	1.63	J	1.66	1.33	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Antimony	1.61	J	1.66	1.33	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Copper	69.0		3.33	0.698	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.495		0.360	0.0292	mg/Kg	☼	09/01/15 08:30	09/01/15 12:20	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	10.8				%			09/01/15 15:42	1

Client Sample ID: REF-SW-01

Date Collected: 08/27/15 09:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 13:19	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 13:19	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 13:19	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1

Client Sample ID: REF-SW-01
Date Collected: 08/27/15 09:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 13:19	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 13:19	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 13:19	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 13:19	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 13:19	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 13:19	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 13:19	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 13:19	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 13:19	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 13:19	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 13:19	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 13:19	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 13:19	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 13:19	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 13:19	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 13:19	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 13:19	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 13:19	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 13:19	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1

Client Sample ID: REF-SW-01

Date Collected: 08/27/15 09:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/31/15 13:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/31/15 13:19*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/31/15 13:19*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1221	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1232	**1.25**		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1242	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1248	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1254	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1260	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1262	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1268	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:15*	*1*
Tetrachloro-m-xylene	*99*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:15*	*1*
DCB Decachlorobiphenyl	*58*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:15*	*1*
DCB Decachlorobiphenyl	*66*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:15*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:11	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:11	1
Barium	**60.1**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:11	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:11	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:11	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:11	1
Nickel	**1.27**	**J**	10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:11	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:11	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:11	1
Zinc	**9.17**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:11	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:11	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:11	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:11	1
Copper	**2.74**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:11	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.142**	**J**	0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**88.0**		4.00	1.05	mg/L			09/04/15 10:30	1

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: REF-PW-01
Date Collected: 08/27/15 09:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 13:43	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,1-Dichloroethane	**9.57**		1.00	1.00	ug/L			08/31/15 13:43	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 13:43	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 13:43	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 13:43	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 13:43	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 13:43	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 13:43	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 13:43	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 13:43	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 13:43	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 13:43	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 13:43	1
cis-1,2-Dichloroethene	**9.87**		1.00	1.00	ug/L			08/31/15 13:43	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 13:43	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 13:43	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 13:43	1

Client Sample ID: REF-PW-01

Date Collected: 08/27/15 09:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 13:43	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 13:43	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 13:43	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 13:43	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 13:43	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 13:43	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 13:43	1
Trichloroethene	**4.38**		1.00	1.00	ug/L			08/31/15 13:43	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Vinyl chloride	**3.55**		1.00	1.00	ug/L			08/31/15 13:43	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/31/15 13:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*08/31/15 13:43*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/31/15 13:43*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1221	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1232	**9.11**		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1242	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1248	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1254	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1260	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1262	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1268	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:31*	*1*
Tetrachloro-m-xylene	*100*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:31*	*1*
DCB Decachlorobiphenyl	*61*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:31*	*1*
DCB Decachlorobiphenyl	*67*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:31*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:14	1

Client Sample ID: REF-PW-01

Date Collected: 08/27/15 09:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-8
Matrix: Water

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:14	1
Barium	**234**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:14	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:14	1
Cadmium	**0.630**	**J**	1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:14	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:14	1
Nickel	**15.4**		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:14	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:14	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:14	1
Zinc	**440**		50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:14	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:14	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:14	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:14	1
Copper	<1.60		10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:14	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:19	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**348**		4.00	1.05	mg/L			09/04/15 10:30	1

Client Sample ID: REF-SED-01

Date Collected: 08/27/15 10:10
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-9
Matrix: Solid
Percent Solids: 60.1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,1,1-Trichloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,1,2,2-Tetrachloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,1,2-Trichloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Freon 113	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,1-Dichloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,1-Dichloroethene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,1-Dichloropropene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2,3-Trichlorobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2,3-Trichloropropane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2,4-Trichlorobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2,4-Trimethylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2-Dibromo-3-Chloropropane	<0.0474		0.0474	0.0474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2-Dichlorobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2-Dichloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2-Dichloropropane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,3,5-Trimethylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,3-Dichlorobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,3-Dichloropropane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,4-Dichlorobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,4-Dioxane	<0.474		0.474	0.474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
2,2-Dichloropropane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1

Client Sample ID: REF-SED-01
Date Collected: 08/27/15 10:10
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-9
Matrix: Solid
Percent Solids: 60.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<0.0474	*	0.0474	0.0474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
2-Chlorotoluene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
2-Hexanone	<0.0474		0.0474	0.0474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
4-Chlorotoluene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
4-Isopropyltoluene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
4-Methyl-2-pentanone (MIBK)	<0.0474		0.0474	0.0474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Acetone	<0.474		0.474	0.474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Benzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Bromobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Bromoform	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Bromomethane	<0.00948	*	0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Carbon disulfide	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Carbon tetrachloride	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Chlorobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Chlorobromomethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Chlorodibromomethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Chloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Chloroform	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Chloromethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
cis-1,2-Dichloroethene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
cis-1,3-Dichloropropene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Dichlorobromomethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Dichlorodifluoromethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Ethyl ether	<0.00948	*	0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Ethylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Ethylene Dibromide	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Hexachlorobutadiene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Isopropyl ether	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Isopropylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Methyl tert-butyl ether	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Methylene Chloride	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
m-Xylene & p-Xylene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Naphthalene	<0.0474		0.0474	0.0474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
n-Butylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
N-Propylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
o-Xylene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
sec-Butylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Styrene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Tert-amyl methyl ether	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Tert-butyl ethyl ether	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
tert-Butylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Tetrachloroethene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Tetrahydrofuran	<0.0948	*	0.0948	0.0948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Toluene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
trans-1,2-Dichloroethene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
trans-1,3-Dichloropropene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Trichloroethene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Trichlorofluoromethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Vinyl chloride	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1

Client Sample ID: REF-SED-01

Date Collected: 08/27/15 10:10
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-9

Matrix: Solid
Percent Solids: 60.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*70 - 130*	*08/29/15 04:10*	*08/31/15 15:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*	*08/29/15 04:10*	*08/31/15 15:37*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*08/29/15 04:10*	*08/31/15 15:37*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1221	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1232	**8.40**		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1242	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1248	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1254	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1260	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1262	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1268	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*30 - 150*	*09/03/15 08:19*	*09/08/15 12:49*	*1*
Tetrachloro-m-xylene	*68*		*30 - 150*	*09/03/15 08:19*	*09/08/15 12:49*	*1*
DCB Decachlorobiphenyl	*72*		*30 - 150*	*09/03/15 08:19*	*09/08/15 12:49*	*1*
DCB Decachlorobiphenyl	*69*		*30 - 150*	*09/03/15 08:19*	*09/08/15 12:49*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.322		0.804	0.322	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Arsenic	**3.29**		1.61	0.643	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Barium	**40.1**		0.804	0.177	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Beryllium	**0.230**	**J**	0.322	0.0450	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Cadmium	**0.500**		0.322	0.0483	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Chromium	**25.1**		0.804	0.322	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Nickel	**11.5**		1.61	0.370	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Thallium	<0.483		1.61	0.483	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Vanadium	**16.6**		0.804	0.177	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Zinc	**206**		4.02	1.03	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Lead	**212**		0.804	0.386	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Selenium	<0.643		0.804	0.643	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Antimony	<0.643		0.804	0.643	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Copper	**55.9**		1.61	0.338	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.138**	**J**	0.167	0.0136	mg/Kg	☼	09/01/15 08:30	09/01/15 12:22	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**5.3**				%			09/01/15 15:42	1

Client Sample ID: REF-SW-02

Date Collected: 08/27/15 10:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 14:06	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 14:06	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 14:06	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 14:06	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 14:06	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 14:06	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 14:06	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 14:06	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 14:06	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 14:06	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 14:06	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 14:06	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 14:06	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 14:06	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 14:06	1

Client Sample ID: REF-SW-02

Date Collected: 08/27/15 10:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 14:06	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 14:06	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 14:06	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 14:06	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 14:06	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 14:06	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 14:06	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/31/15 14:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*08/31/15 14:06*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/31/15 14:06*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1221	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1232	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1242	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1248	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1254	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1260	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1262	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1268	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:47*	*1*
Tetrachloro-m-xylene	*96*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:47*	*1*
DCB Decachlorobiphenyl	*51*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:47*	*1*
DCB Decachlorobiphenyl	*59*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:47*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:17	1

Client Sample ID: REF-SW-02

Lab Sample ID: 480-86375-10

Date Collected: 08/27/15 10:55
Matrix: Water
Date Received: 08/29/15 02:15

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:17	1
Barium	**67.9**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:17	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:17	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:17	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:17	1
Nickel	**1.42**	**J**	10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:17	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:17	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:17	1
Zinc	**6.53**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:17	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:17	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:17	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:17	1
Copper	**1.60**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:17	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**84.0**		4.00	1.05	mg/L			09/04/15 10:30	1

Client Sample ID: REF-PW-02

Lab Sample ID: 480-86375-11

Date Collected: 08/27/15 11:30
Matrix: Water
Date Received: 08/29/15 02:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 14:30	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 14:30	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 14:30	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1

Client Sample ID: REF-PW-02
Date Collected: 08/27/15 11:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 14:30	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 14:30	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 14:30	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 14:30	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 14:30	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 14:30	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 14:30	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 14:30	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 14:30	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 14:30	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 14:30	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 14:30	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 14:30	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 14:30	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 14:30	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 14:30	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 14:30	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 14:30	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 14:30	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1

Client Sample ID: REF-PW-02

Date Collected: 08/27/15 11:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/31/15 14:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/31/15 14:30*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/31/15 14:30*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1221	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1232	**1.70**		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1242	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1248	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1254	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1260	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1262	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1268	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:03*	*1*
Tetrachloro-m-xylene	*97*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:03*	*1*
DCB Decachlorobiphenyl	*54*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:03*	*1*
DCB Decachlorobiphenyl	*60*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:03*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:19	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:19	1
Barium	**98.7**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:19	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:19	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:19	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:19	1
Nickel	**1.40**	**J**	10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:19	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:19	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:19	1
Zinc	**7.99**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:19	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:19	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:19	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:19	1
Copper	<1.60		10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:19	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:22	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**112**		4.00	1.05	mg/L			09/04/15 10:30	1

Client Sample ID: TB-04

Date Collected: 08/27/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-12

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 12:31	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 12:31	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 12:31	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 12:31	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 12:31	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 12:31	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 12:31	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 12:31	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 12:31	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 12:31	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 12:31	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 12:31	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 12:31	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 12:31	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 12:31	1

Client Sample ID: TB-04

Date Collected: 08/27/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 12:31	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 12:31	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 12:31	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 12:31	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 12:31	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 12:31	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 12:31	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/31/15 12:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*08/31/15 12:31*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/31/15 12:31*	*1*

Client Sample ID: REF-SED-02

Date Collected: 08/27/15 11:50
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-13
Matrix: Solid
Percent Solids: 22.1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,1,1-Trichloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,1,2,2-Tetrachloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,1,2-Trichloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Freon 113	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,1-Dichloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,1-Dichloroethene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,1-Dichloropropene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2,3-Trichlorobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2,3-Trichloropropane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2,4-Trichlorobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2,4-Trimethylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2-Dibromo-3-Chloropropane	<0.125		0.125	0.125	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2-Dichlorobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2-Dichloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1

Client Sample ID: REF-SED-02
Date Collected: 08/27/15 11:50
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-13
Matrix: Solid
Percent Solids: 22.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,3,5-Trimethylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,3-Dichlorobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,3-Dichloropropane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,4-Dichlorobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,4-Dioxane	<1.25		1.25	1.25	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
2,2-Dichloropropane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
2-Butanone (MEK)	<0.125	*	0.125	0.125	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
2-Chlorotoluene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
2-Hexanone	<0.125		0.125	0.125	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
4-Chlorotoluene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
4-Isopropyltoluene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
4-Methyl-2-pentanone (MIBK)	<0.125		0.125	0.125	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Acetone	<1.25		1.25	1.25	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Benzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Bromobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Bromoform	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Bromomethane	<0.0250	*	0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Carbon disulfide	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Carbon tetrachloride	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Chlorobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Chlorobromomethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Chlorodibromomethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Chloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Chloroform	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Chloromethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
cis-1,2-Dichloroethene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
cis-1,3-Dichloropropene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Dichlorobromomethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Dichlorodifluoromethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Ethyl ether	<0.0250	*	0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Ethylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Ethylene Dibromide	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Hexachlorobutadiene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Isopropyl ether	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Isopropylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Methyl tert-butyl ether	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Methylene Chloride	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
m-Xylene & p-Xylene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Naphthalene	<0.125		0.125	0.125	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
n-Butylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
N-Propylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
o-Xylene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
sec-Butylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Styrene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Tert-amyl methyl ether	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Tert-butyl ethyl ether	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
tert-Butylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Tetrachloroethene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1

Client Sample ID: REF-SED-02

Date Collected: 08/27/15 11:50
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-13

Matrix: Solid
Percent Solids: 22.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<0.250	*	0.250	0.250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Toluene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
trans-1,2-Dichloroethene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
trans-1,3-Dichloropropene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Trichloroethene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Trichlorofluoromethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Vinyl chloride	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Dibromomethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:03*	*1*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:03*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1221	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1232	**47.4**		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1242	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1248	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1254	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1260	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1262	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1268	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:09*	*5*
Tetrachloro-m-xylene	*81*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:09*	*5*
DCB Decachlorobiphenyl	*80*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:09*	*5*
DCB Decachlorobiphenyl	*91*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:09*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.911		2.28	0.911	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Arsenic	**7.81**		4.56	1.82	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Barium	**103**		2.28	0.501	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Beryllium	**0.551**	**J**	0.911	0.128	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Cadmium	**1.82**		0.911	0.137	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Chromium	**47.3**		2.28	0.911	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Nickel	**15.8**		4.56	1.05	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Thallium	<1.37		4.56	1.37	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Vanadium	**30.4**		2.28	0.501	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Zinc	**333**		11.4	2.92	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Lead	**144**		2.28	1.09	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Selenium	<1.82		2.28	1.82	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Antimony	<1.82		2.28	1.82	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Copper	**75.3**		4.56	0.957	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1

Client Sample ID: REF-SED-02

Lab Sample ID: 480-86375-13
Date Collected: 08/27/15 11:50
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 22.1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.464		0.449	0.0364	mg/Kg	☼	09/01/15 08:30	09/01/15 12:25	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	16.5				%			09/01/15 15:42	1

Client Sample ID: REF-SW-03

Lab Sample ID: 480-86375-14
Date Collected: 08/27/15 12:10
Matrix: Water
Date Received: 08/29/15 02:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 14:54	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 14:54	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 14:54	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 14:54	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 14:54	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 14:54	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 14:54	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 14:54	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 14:54	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 14:54	1

Client Sample ID: REF-SW-03

Date Collected: 08/27/15 12:10
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-14

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 14:54	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 14:54	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 14:54	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 14:54	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 14:54	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 14:54	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 14:54	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 14:54	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 14:54	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 14:54	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 14:54	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 14:54	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/31/15 14:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/31/15 14:54*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/31/15 14:54*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1221	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1232	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1242	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1248	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1254	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1260	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1262	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1

Client Sample ID: REF-SW-03

Date Collected: 08/27/15 12:10
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-14
Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:19*	*1*
Tetrachloro-m-xylene	*96*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:19*	*1*
DCB Decachlorobiphenyl	*59*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:19*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:19*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:22	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:22	1
Barium	**62.5**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:22	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:22	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:22	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:22	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:22	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:22	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:22	1
Zinc	**4.12**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:22	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:22	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:22	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:22	1
Copper	**2.31**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:22	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:24	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**80.0**		4.00	1.05	mg/L			09/02/15 11:30	1

Client Sample ID: REF-PW-03

Date Collected: 08/27/15 12:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-15
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 15:42	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1

Client Sample ID: REF-PW-03
Date Collected: 08/27/15 12:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-15
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 15:42	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 15:42	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 15:42	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 15:42	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 15:42	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 15:42	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 15:42	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 15:42	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 15:42	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 15:42	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 15:42	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 15:42	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 15:42	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 15:42	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 15:42	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 15:42	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 15:42	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 15:42	1

Client Sample ID: REF-PW-03

Date Collected: 08/27/15 12:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-15

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 15:42	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 15:42	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 15:42	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/31/15 15:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/31/15 15:42*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/31/15 15:42*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1221	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1232	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1242	**1.15**		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1248	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1254	**0.272**		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1260	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1262	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1268	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:35*	*1*
Tetrachloro-m-xylene	*100*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:35*	*1*
DCB Decachlorobiphenyl	*40*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:35*	*1*
DCB Decachlorobiphenyl	*45*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:35*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:25	1
Arsenic	**5.66**	**J**	10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:25	1
Barium	**42.3**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:25	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:25	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:25	1
Chromium	**2.57**	**J**	5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:25	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:25	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:25	1
Vanadium	**2.67**	**J**	10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:25	1
Zinc	**3.35**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:25	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:25	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:25	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:25	1

Client Sample ID: REF-PW-03

Date Collected: 08/27/15 12:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-15
Matrix: Water

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	<1.60		10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:25	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:25	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	20.0		4.00	1.05	mg/L			09/02/15 11:30	1

Client Sample ID: REF-SED-03

Date Collected: 08/27/15 12:45
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-16
Matrix: Solid
Percent Solids: 82.0

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,1,1-Trichloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,1,2,2-Tetrachloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,1,2-Trichloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Freon 113	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,1-Dichloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,1-Dichloroethene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,1-Dichloropropene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2,3-Trichlorobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2,3-Trichloropropane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2,4-Trichlorobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2,4-Trimethylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2-Dibromo-3-Chloropropane	<0.0216		0.0216	0.0216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2-Dichlorobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2-Dichloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2-Dichloropropane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,3,5-Trimethylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,3-Dichlorobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,3-Dichloropropane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,4-Dichlorobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,4-Dioxane	<0.216		0.216	0.216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
2,2-Dichloropropane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
2-Butanone (MEK)	<0.0216	*	0.0216	0.0216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
2-Chlorotoluene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
2-Hexanone	<0.0216		0.0216	0.0216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
4-Chlorotoluene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
4-Isopropyltoluene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
4-Methyl-2-pentanone (MIBK)	<0.0216		0.0216	0.0216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Acetone	<0.216		0.216	0.216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Benzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Bromobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Bromoform	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Bromomethane	<0.00431	*	0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Carbon disulfide	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1

Client Sample ID: REF-SED-03
Date Collected: 08/27/15 12:45
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-16
Matrix: Solid
Percent Solids: 82.0

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Chlorobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Chlorobromomethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Chlorodibromomethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Chloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Chloroform	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Chloromethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
cis-1,2-Dichloroethene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
cis-1,3-Dichloropropene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Dichlorobromomethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Dichlorodifluoromethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Ethyl ether	<0.00431	*	0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Ethylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Ethylene Dibromide	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Hexachlorobutadiene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Isopropyl ether	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Isopropylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Methyl tert-butyl ether	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Methylene Chloride	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
m-Xylene & p-Xylene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Naphthalene	<0.0216		0.0216	0.0216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
n-Butylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
N-Propylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
o-Xylene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
sec-Butylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Styrene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Tert-amyl methyl ether	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Tert-butyl ethyl ether	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
tert-Butylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Tetrachloroethene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Tetrahydrofuran	**0.0561**	*	0.0431	0.0431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Toluene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
trans-1,2-Dichloroethene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
trans-1,3-Dichloropropene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Trichloroethene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Trichlorofluoromethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Vinyl chloride	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Dibromomethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:29*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:29*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1221	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1232	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1242	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1

Client Sample ID: REF-SED-03

Date Collected: 08/27/15 12:45
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-16

Matrix: Solid
Percent Solids: 82.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1248	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1254	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1260	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1262	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1268	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:28*	*1*
Tetrachloro-m-xylene	*74*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:28*	*1*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:28*	*1*
DCB Decachlorobiphenyl	*83*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:28*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.225		0.563	0.225	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Arsenic	**1.74**		1.13	0.450	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Barium	**16.7**		0.563	0.124	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Beryllium	**0.127**	**J**	0.225	0.0315	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Cadmium	**0.146**	**J**	0.225	0.0338	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Chromium	**6.65**		0.563	0.225	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Nickel	**5.97**		1.13	0.259	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Thallium	<0.338		1.13	0.338	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Vanadium	**12.2**		0.563	0.124	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Zinc	**73.1**		2.81	0.720	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Lead	**50.7**		0.563	0.270	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Selenium	<0.450		0.563	0.450	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Antimony	<0.450		0.563	0.450	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Copper	**17.0**		1.13	0.236	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0266**	**J**	0.114	0.00922	mg/Kg	☼	09/01/15 08:30	09/01/15 12:27	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**1.4**				%			09/01/15 15:42	1

Client Sample ID: REF-SW-04

Date Collected: 08/27/15 13:05
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-17

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 16:06	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1

Client Sample ID: REF-SW-04
Date Collected: 08/27/15 13:05
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-17
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 16:06	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 16:06	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 16:06	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 16:06	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 16:06	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 16:06	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 16:06	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 16:06	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 16:06	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 16:06	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 16:06	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 16:06	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 16:06	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 16:06	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 16:06	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 16:06	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 16:06	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1

Client Sample ID: REF-SW-04

Date Collected: 08/27/15 13:05
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-17

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 16:06	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 16:06	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 16:06	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 16:06	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/31/15 16:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/31/15 16:06*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/31/15 16:06*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1221	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1232	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1242	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1248	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1254	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1260	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1262	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1268	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:22*	*1*
Tetrachloro-m-xylene	*100*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:22*	*1*
DCB Decachlorobiphenyl	*60*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:22*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:22*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:37	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:37	1
Barium	**59.0**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:37	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:37	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:37	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:37	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:37	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:37	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:37	1

Client Sample ID: REF-SW-04

Lab Sample ID: 480-86375-17

Date Collected: 08/27/15 13:05

Matrix: Water

Date Received: 08/29/15 02:15

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	**5.02**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:37	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:37	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:37	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:37	1
Copper	**2.20**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**32.0**		4.00	1.05	mg/L			09/02/15 11:30	1

Client Sample ID: REF-SED-04

Lab Sample ID: 480-86375-18

Date Collected: 08/27/15 13:20

Matrix: Solid

Date Received: 08/29/15 02:15

Percent Solids: 46.3

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,1,1-Trichloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,1,2,2-Tetrachloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,1,2-Trichloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Freon 113	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,1-Dichloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,1-Dichloroethene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,1-Dichloropropene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2,3-Trichlorobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2,3-Trichloropropane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2,4-Trichlorobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2,4-Trimethylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2-Dibromo-3-Chloropropane	<0.0563		0.0563	0.0563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2-Dichlorobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2-Dichloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2-Dichloropropane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,3,5-Trimethylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,3-Dichlorobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,3-Dichloropropane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,4-Dichlorobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,4-Dioxane	<0.563		0.563	0.563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
2,2-Dichloropropane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
2-Butanone (MEK)	<0.0563	*	0.0563	0.0563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
2-Chlorotoluene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
2-Hexanone	<0.0563		0.0563	0.0563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
4-Chlorotoluene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
4-Isopropyltoluene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
4-Methyl-2-pentanone (MIBK)	<0.0563		0.0563	0.0563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Acetone	<0.563		0.563	0.563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Benzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1

Client Sample ID: REF-SED-04
Date Collected: 08/27/15 13:20
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-18
Matrix: Solid
Percent Solids: 46.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Bromoform	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Bromomethane	<0.0113	*	0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Carbon disulfide	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Carbon tetrachloride	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Chlorobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Chlorobromomethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Chlorodibromomethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Chloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Chloroform	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Chloromethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
cis-1,2-Dichloroethene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
cis-1,3-Dichloropropene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Dichlorobromomethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Dichlorodifluoromethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Ethyl ether	<0.0113	*	0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Ethylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Ethylene Dibromide	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Hexachlorobutadiene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Isopropyl ether	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Isopropylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Methyl tert-butyl ether	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Methylene Chloride	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
m-Xylene & p-Xylene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Naphthalene	<0.0563		0.0563	0.0563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
n-Butylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
N-Propylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
o-Xylene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
sec-Butylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Styrene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Tert-amyl methyl ether	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Tert-butyl ethyl ether	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
tert-Butylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Tetrachloroethene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Tetrahydrofuran	<0.113	*	0.113	0.113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Toluene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
trans-1,2-Dichloroethene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
trans-1,3-Dichloropropene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Trichloroethene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Trichlorofluoromethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Vinyl chloride	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Dibromomethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:55*	*1*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:55*	*1*

Client Sample ID: REF-SED-04

Date Collected: 08/27/15 13:20
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-18

Matrix: Solid
Percent Solids: 46.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1221	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1232	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1242	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1248	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1254	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1260	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1262	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1268	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:22*	*5*
Tetrachloro-m-xylene	*75*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:22*	*5*
DCB Decachlorobiphenyl	*78*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:22*	*5*
DCB Decachlorobiphenyl	*75*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:22*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<2.23		5.56	2.23	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Arsenic	<4.45		11.1	4.45	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Barium	**48.7**		1.11	0.245	mg/Kg	☼	09/01/15 09:27	09/02/15 15:30	1
Beryllium	<0.312		2.23	0.312	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Cadmium	**0.757**	**J**	2.23	0.334	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Chromium	**31.5**		5.56	2.23	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Nickel	**7.25**	**J**	11.1	2.56	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Thallium	<3.34		11.1	3.34	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Vanadium	**16.1**		5.56	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Zinc	**134**		27.8	7.12	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Lead	**60.5**		5.56	2.67	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Selenium	<4.45		5.56	4.45	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Antimony	<4.45		5.56	4.45	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Copper	**26.1**		11.1	2.34	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.198**	**J**	0.216	0.0175	mg/Kg	☼	09/01/15 08:30	09/01/15 12:29	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**4.3**				%			09/01/15 15:42	1

Client Sample ID: SED-13

Date Collected: 08/27/15 14:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-19

Matrix: Solid
Percent Solids: 35.1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,1,1-Trichloroethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,1,2,2-Tetrachloroethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,1,2-Trichloroethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1

Client Sample ID: SED-13
Date Collected: 08/27/15 14:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-19
Matrix: Solid
Percent Solids: 35.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,1-Dichloroethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,1-Dichloroethene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,1-Dichloropropene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2,3-Trichlorobenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2,3-Trichloropropane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2,4-Trichlorobenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2,4-Trimethylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2-Dibromo-3-Chloropropane	<0.0831		0.0831	0.0831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2-Dichlorobenzene	**0.274**		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2-Dichloroethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2-Dichloropropane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,3,5-Trimethylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,3-Dichlorobenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,3-Dichloropropane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,4-Dichlorobenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,4-Dioxane	<0.831		0.831	0.831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
2,2-Dichloropropane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
2-Butanone (MEK)	**0.177**	*	0.0831	0.0831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
2-Chlorotoluene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
2-Hexanone	<0.0831		0.0831	0.0831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
4-Chlorotoluene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
4-Isopropyltoluene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
4-Methyl-2-pentanone (MIBK)	<0.0831		0.0831	0.0831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Acetone	<0.831		0.831	0.831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Benzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Bromobenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Bromoform	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Bromomethane	<0.0166	*	0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Carbon disulfide	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Carbon tetrachloride	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Chlorobenzene	**0.0527**		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Chlorobromomethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Chlorodibromomethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Chloroethane	**0.0198**		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Chloroform	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Chloromethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
cis-1,2-Dichloroethene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
cis-1,3-Dichloropropene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Dichlorobromomethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Dichlorodifluoromethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Ethyl ether	<0.0166	*	0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Ethylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Ethylene Dibromide	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Hexachlorobutadiene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Isopropyl ether	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Isopropylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Methyl tert-butyl ether	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Methylene Chloride	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1

Client Sample ID: SED-13
Date Collected: 08/27/15 14:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-19
Matrix: Solid
Percent Solids: 35.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Naphthalene	<0.0831		0.0831	0.0831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
n-Butylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
N-Propylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
o-Xylene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
sec-Butylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Styrene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Tert-amyl methyl ether	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Tert-butyl ethyl ether	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
tert-Butylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Tetrachloroethene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Tetrahydrofuran	<0.166	*	0.166	0.166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Toluene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
trans-1,2-Dichloroethene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
trans-1,3-Dichloropropene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Trichloroethene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Trichlorofluoromethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Vinyl chloride	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Dibromomethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/29/15 04:10*	*08/31/15 17:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*	*08/29/15 04:10*	*08/31/15 17:21*	*1*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*08/29/15 04:10*	*08/31/15 17:21*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1221	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1232	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1242	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1248	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1254	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1260	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1262	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1268	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:41*	*5*
Tetrachloro-m-xylene	*74*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:41*	*5*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:41*	*5*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:41*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.594		1.49	0.594	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Arsenic	**3.56**		2.97	1.19	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Barium	**78.0**		1.49	0.327	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Beryllium	**0.315**	**J**	0.594	0.0832	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Cadmium	**1.05**		0.594	0.0891	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1

Client Sample ID: SED-13

Date Collected: 08/27/15 14:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-19

Matrix: Solid
Percent Solids: 35.1

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**29.3**		1.49	0.594	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Nickel	**10.1**		2.97	0.683	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Thallium	<0.891		2.97	0.891	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Vanadium	**20.6**		1.49	0.327	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Zinc	**224**		7.43	1.90	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Lead	**88.0**		1.49	0.713	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Selenium	<1.19		1.49	1.19	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Antimony	<1.19		1.49	1.19	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Copper	**39.9**		2.97	0.624	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.213**	**J**	0.285	0.0231	mg/Kg	☼	09/01/15 08:30	09/01/15 12:35	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**8.1**				%			09/01/15 15:42	1

Client Sample ID: SED-14

Date Collected: 08/27/15 14:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-20

Matrix: Solid
Percent Solids: 50.8

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,1,1-Trichloroethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,1,2,2-Tetrachloroethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,1,2-Trichloroethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Freon 113	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,1-Dichloroethane	**0.00948**		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,1-Dichloroethene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,1-Dichloropropene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2,3-Trichlorobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2,3-Trichloropropane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2,4-Trichlorobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2,4-Trimethylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2-Dibromo-3-Chloropropane	<0.0468		0.0468	0.0468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2-Dichlorobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2-Dichloroethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2-Dichloropropane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,3,5-Trimethylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,3-Dichlorobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,3-Dichloropropane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,4-Dichlorobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,4-Dioxane	<0.468		0.468	0.468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
2,2-Dichloropropane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
2-Butanone (MEK)	**0.167**	*	0.0468	0.0468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
2-Chlorotoluene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
2-Hexanone	<0.0468		0.0468	0.0468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
4-Chlorotoluene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1

Client Sample ID: SED-14
Date Collected: 08/27/15 14:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-20
Matrix: Solid
Percent Solids: 50.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
4-Methyl-2-pentanone (MIBK)	<0.0468		0.0468	0.0468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Acetone	**0.553**		0.468	0.468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Benzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Bromobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Bromoform	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Bromomethane	<0.00936	*	0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Carbon disulfide	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Carbon tetrachloride	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Chlorobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Chlorobromomethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Chlorodibromomethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Chloroethane	**0.0665**		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Chloroform	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Chloromethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
cis-1,2-Dichloroethene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
cis-1,3-Dichloropropene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Dichlorobromomethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Dichlorodifluoromethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Ethyl ether	<0.00936	*	0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Ethylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Ethylene Dibromide	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Hexachlorobutadiene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Isopropyl ether	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Isopropylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Methyl tert-butyl ether	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Methylene Chloride	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
m-Xylene & p-Xylene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Naphthalene	<0.0468		0.0468	0.0468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
n-Butylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
N-Propylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
o-Xylene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
sec-Butylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Styrene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Tert-amyl methyl ether	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Tert-butyl ethyl ether	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
tert-Butylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Tetrachloroethene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Tetrahydrofuran	**0.112**	*	0.0936	0.0936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Toluene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
trans-1,2-Dichloroethene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
trans-1,3-Dichloropropene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Trichloroethene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Trichlorofluoromethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Vinyl chloride	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Dibromomethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/29/15 04:10*	*08/31/15 17:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*	*08/29/15 04:10*	*08/31/15 17:47*	*1*

Client Sample ID: SED-14

Date Collected: 08/27/15 14:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-20

Matrix: Solid
Percent Solids: 50.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*08/29/15 04:10*	*08/31/15 17:47*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1221	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1232	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1242	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1248	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1254	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1260	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1262	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1268	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*52*		*30 - 150*	*09/03/15 08:19*	*09/08/15 16:00*	*5*
Tetrachloro-m-xylene	*60*		*30 - 150*	*09/03/15 08:19*	*09/08/15 16:00*	*5*
DCB Decachlorobiphenyl	*70*		*30 - 150*	*09/03/15 08:19*	*09/08/15 16:00*	*5*
DCB Decachlorobiphenyl	*65*		*30 - 150*	*09/03/15 08:19*	*09/08/15 16:00*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.395		0.987	0.395	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Arsenic	**3.82**		1.97	0.790	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Barium	**51.6**		0.987	0.217	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Beryllium	**0.257**	**J**	0.395	0.0553	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Cadmium	**0.699**		0.395	0.0592	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Chromium	**24.1**		0.987	0.395	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Nickel	**18.9**		1.97	0.454	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Thallium	<0.592		1.97	0.592	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Vanadium	**16.9**		0.987	0.217	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Zinc	**207**		4.94	1.26	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Lead	**79.9**		0.987	0.474	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Selenium	<0.790		0.987	0.790	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Antimony	<0.790		0.987	0.790	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Copper	**41.3**		1.97	0.415	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.309**		0.200	0.0162	mg/Kg	☼	09/01/15 08:30	09/01/15 12:37	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**3.0**				%			09/01/15 15:42	1

Client Sample ID: SED-16
Date Collected: 08/27/15 14:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-21
Matrix: Solid
Percent Solids: 40.3

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,1,1-Trichloroethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,1,2,2-Tetrachloroethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,1,2-Trichloroethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Freon 113	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,1-Dichloroethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,1-Dichloroethene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,1-Dichloropropene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2,3-Trichlorobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2,3-Trichloropropane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2,4-Trichlorobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2,4-Trimethylbenzene	**0.0153**		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2-Dibromo-3-Chloropropane	<0.0580		0.0580	0.0580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2-Dichlorobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2-Dichloroethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2-Dichloropropane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,3,5-Trimethylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,3-Dichlorobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,3-Dichloropropane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,4-Dichlorobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,4-Dioxane	<0.580		0.580	0.580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
2,2-Dichloropropane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
2-Butanone (MEK)	**0.153**	*	0.0580	0.0580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
2-Chlorotoluene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
2-Hexanone	<0.0580		0.0580	0.0580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
4-Chlorotoluene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
4-Isopropyltoluene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
4-Methyl-2-pentanone (MIBK)	<0.0580		0.0580	0.0580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Acetone	<0.580		0.580	0.580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Benzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Bromobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Bromoform	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Bromomethane	<0.0116	*	0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Carbon disulfide	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Carbon tetrachloride	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Chlorobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Chlorobromomethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Chlorodibromomethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Chloroethane	**0.228**		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Chloroform	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Chloromethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
cis-1,2-Dichloroethene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
cis-1,3-Dichloropropene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Dichlorobromomethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Dichlorodifluoromethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Ethyl ether	<0.0116	*	0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Ethylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Ethylene Dibromide	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Hexachlorobutadiene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1

Client Sample ID: SED-16
Date Collected: 08/27/15 14:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-21
Matrix: Solid
Percent Solids: 40.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Isopropylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Methyl tert-butyl ether	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Methylene Chloride	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
m-Xylene & p-Xylene	**0.0178**		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Naphthalene	<0.0580		0.0580	0.0580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
n-Butylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
N-Propylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
o-Xylene	**0.0285**		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
sec-Butylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Styrene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Tert-amyl methyl ether	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Tert-butyl ethyl ether	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
tert-Butylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Tetrachloroethene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Tetrahydrofuran	**0.131**	*	0.116	0.116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Toluene	**0.0128**		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
trans-1,2-Dichloroethene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
trans-1,3-Dichloropropene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Trichloroethene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Trichlorofluoromethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Vinyl chloride	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Dibromomethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*70 - 130*	*08/29/15 04:10*	*08/31/15 18:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*	*08/29/15 04:10*	*08/31/15 18:12*	*1*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*08/29/15 04:10*	*08/31/15 18:12*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1221	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1232	**128**		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1242	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1248	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1254	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1260	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1262	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1268	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*173*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 16:20*	*5*
Tetrachloro-m-xylene	*61*	*p*	*30 - 150*	*09/03/15 08:19*	*09/08/15 16:20*	*5*
DCB Decachlorobiphenyl	*75*		*30 - 150*	*09/03/15 08:19*	*09/08/15 16:20*	*5*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*09/03/15 08:19*	*09/08/15 16:20*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.453		1.13	0.453	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1

Client Sample ID: SED-16

Date Collected: 08/27/15 14:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-21

Matrix: Solid
Percent Solids: 40.3

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.36		2.27	0.907	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Barium	113		1.13	0.249	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Beryllium	0.428	J	0.453	0.0635	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Cadmium	1.94		0.453	0.0680	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Chromium	71.3		1.13	0.453	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Nickel	18.4		2.27	0.521	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Thallium	<0.680		2.27	0.680	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Vanadium	26.9		1.13	0.249	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Zinc	335		5.67	1.45	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Lead	378		1.13	0.544	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Selenium	<0.907		1.13	0.907	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Antimony	1.97		1.13	0.907	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Copper	110		2.27	0.476	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.844		0.244	0.0198	mg/Kg	☼	09/01/15 08:30	09/01/15 12:39	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	8.7				%			09/01/15 15:42	1

Client Sample ID: SW-18

Date Collected: 08/27/15 15:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-22

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 16:30	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 16:30	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 16:30	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1

Client Sample ID: SW-18
Date Collected: 08/27/15 15:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-22
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 16:30	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 16:30	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 16:30	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 16:30	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 16:30	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 16:30	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 16:30	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 16:30	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 16:30	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 16:30	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 16:30	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 16:30	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 16:30	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 16:30	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 16:30	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 16:30	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 16:30	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 16:30	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 16:30	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1

Client Sample ID: SW-18

Date Collected: 08/27/15 15:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-22

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/31/15 16:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*08/31/15 16:30*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/31/15 16:30*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1221	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1232	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1242	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1248	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1254	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1260	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1262	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1268	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:38*	*1*
Tetrachloro-m-xylene	*102*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:38*	*1*
DCB Decachlorobiphenyl	*57*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:38*	*1*
DCB Decachlorobiphenyl	*64*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:38*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:40	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:40	1
Barium	**60.7**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:40	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:40	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:40	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:40	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:40	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:40	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:40	1
Zinc	**5.18**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:40	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:40	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:40	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:40	1
Copper	**2.48**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:40	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:29	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**88.0**		4.00	1.05	mg/L			09/02/15 11:30	1

Client Sample ID: TB-03

Date Collected: 08/26/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-23

Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,1,1-Trichloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,1,2,2-Tetrachloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,1,2-Trichloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Freon 113	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,1-Dichloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,1-Dichloroethene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,1-Dichloropropene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2,3-Trichlorobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2,3-Trichloropropane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2,4-Trichlorobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2,4-Trimethylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2-Dibromo-3-Chloropropane	<0.0250	H	0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2-Dichlorobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2-Dichloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2-Dichloropropane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,3,5-Trimethylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,3-Dichlorobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,3-Dichloropropane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,4-Dichlorobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,4-Dioxane	<0.250	H	0.250	0.250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
2,2-Dichloropropane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
2-Butanone (MEK)	<0.0250	H *	0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
2-Chlorotoluene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
2-Hexanone	<0.0250	H	0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
4-Chlorotoluene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
4-Isopropyltoluene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
4-Methyl-2-pentanone (MIBK)	<0.0250	H	0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Acetone	<0.250	H	0.250	0.250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Benzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Bromobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Bromoform	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Bromomethane	<0.00500	H *	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Carbon disulfide	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Carbon tetrachloride	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Chlorobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Chlorobromomethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Chlorodibromomethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Chloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Chloroform	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Chloromethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
cis-1,2-Dichloroethene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
cis-1,3-Dichloropropene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Dichlorobromomethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Dichlorodifluoromethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Ethyl ether	<0.00500	H *	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Ethylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Ethylene Dibromide	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Hexachlorobutadiene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1

Client Sample ID: TB-03

Date Collected: 08/26/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-23
Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Isopropylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Methyl tert-butyl ether	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Methylene Chloride	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
m-Xylene & p-Xylene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Naphthalene	<0.0250	H	0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
n-Butylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
N-Propylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
o-Xylene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
sec-Butylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Styrene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Tert-amyl methyl ether	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Tert-butyl ethyl ether	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
tert-Butylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Tetrachloroethene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Tetrahydrofuran	<0.0500	H *	0.0500	0.0500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Toluene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
trans-1,2-Dichloroethene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
trans-1,3-Dichloropropene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Trichloroethene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Trichlorofluoromethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Vinyl chloride	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Dibromomethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/29/15 04:10*	*08/31/15 18:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*125*		*70 - 130*	*08/29/15 04:10*	*08/31/15 18:39*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/29/15 04:10*	*08/31/15 18:39*	*1*

Client Sample ID: TB-04

Date Collected: 08/27/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-24
Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,1,1-Trichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,1,2,2-Tetrachloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,1,2-Trichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Freon 113	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,1-Dichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,1-Dichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,1-Dichloropropene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2,3-Trichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2,3-Trichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2,4-Trichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2,4-Trimethylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2-Dibromo-3-Chloropropane	<0.0250		0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2-Dichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2-Dichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1

Client Sample ID: TB-04
Date Collected: 08/27/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-24
Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,3,5-Trimethylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,3-Dichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,3-Dichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,4-Dichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,4-Dioxane	<0.250		0.250	0.250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
2,2-Dichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
2-Butanone (MEK)	<0.0250	*	0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
2-Chlorotoluene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
2-Hexanone	<0.0250		0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
4-Chlorotoluene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
4-Isopropyltoluene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
4-Methyl-2-pentanone (MIBK)	<0.0250		0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Acetone	<0.250		0.250	0.250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Benzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Bromobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Bromoform	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Bromomethane	<0.00500	*	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Carbon disulfide	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Carbon tetrachloride	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Chlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Chlorobromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Chlorodibromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Chloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Chloroform	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Chloromethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
cis-1,2-Dichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
cis-1,3-Dichloropropene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Dichlorobromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Dichlorodifluoromethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Ethyl ether	<0.00500	*	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Ethylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Ethylene Dibromide	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Hexachlorobutadiene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Isopropyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Isopropylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Methyl tert-butyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Methylene Chloride	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
m-Xylene & p-Xylene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Naphthalene	<0.0250		0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
n-Butylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
N-Propylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
o-Xylene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
sec-Butylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Styrene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Tert-amyl methyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Tert-butyl ethyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
tert-Butylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Tetrachloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: TB-04
Date Collected: 08/27/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-24
Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<0.0500	*	0.0500	0.0500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Toluene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
trans-1,2-Dichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
trans-1,3-Dichloropropene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Trichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Trichlorofluoromethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Vinyl chloride	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Dibromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/29/15 04:10*	*08/31/15 19:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*	*08/29/15 04:10*	*08/31/15 19:05*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/29/15 04:10*	*08/31/15 19:05*	*1*

Surrogate Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
480-86375-2	SED-12	105	117	80
480-86375-2	SED-12	95	91	95
480-86375-3	SED-12 (DUP)	106	113	79
480-86375-3	SED-12 (DUP)	93	91	94
480-86375-4	SED-15	107	112	72
480-86375-4	SED-15	95	88	93
480-86375-6	SED-17	108	112	77
480-86375-9	REF-SED-01	104	119	90
480-86375-13	REF-SED-02	109	111	80
480-86375-16	REF-SED-03	102	123	100
480-86375-18	REF-SED-04	107	116	76
480-86375-19	SED-13	106	113	74
480-86375-20	SED-14	106	113	75
480-86375-21	SED-16	110	114	72
480-86375-23	TB-03	100	125	101
480-86375-24	TB-04	100	123	99
LCS 480-261236/1-A	Lab Control Sample	100	129	102
LCS 480-261608/1-A	Lab Control Sample	95	89	97
LCSD 480-261236/2-A	Lab Control Sample Dup	99	129	100
LCSD 480-261608/2-A	Lab Control Sample Dup	94	88	97
MB 480-261236/3-A	Method Blank	101	119	101
MB 480-261608/3-A	Method Blank	95	92	96

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
480-86375-1	TB-03	94	90	94
480-86375-5	SW-17	95	93	94
480-86375-7	REF-SW-01	96	96	98
480-86375-8	REF-PW-01	94	92	95
480-86375-10	REF-SW-02	95	94	93
480-86375-11	REF-PW-02	96	99	97
480-86375-12	TB-04	96	95	95
480-86375-14	REF-SW-03	94	99	94
480-86375-15	REF-PW-03	96	98	95
480-86375-17	REF-SW-04	95	97	95
480-86375-22	SW-18	93	94	93
LCS 480-261184/5	Lab Control Sample	94	91	97
LCSD 480-261184/41	Lab Control Sample Dup	94	89	98
MB 480-261184/7	Method Blank	94	90	94

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
480-86375-2	SED-12	392 X	32 p	1613 X	1454 X
480-86375-3	SED-12 (DUP)	696 X	30 p	875 X	1258 X
480-86375-4	SED-15	176 X	67 p	74	58
480-86375-6	SED-17	76	76	95 p	192 X
480-86375-9	REF-SED-01	80	68	72	69
480-86375-13	REF-SED-02	77	81	80	91
480-86375-16	REF-SED-03	73	74	77	83
480-86375-18	REF-SED-04	65	75	78	75
480-86375-19	SED-13	66	74	77	77
480-86375-20	SED-14	52	60	70	65
480-86375-21	SED-16	173 X	61 p	75	82
LCS 240-196101/7-A	Lab Control Sample	99	90	109	107
LCSD 240-196101/20-A	Lab Control Sample Dup	104	95	116	111
MB 240-196101/6-A	Method Blank	61	59	82	81

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
480-86375-5	SW-17	80	95	59	68
480-86375-7	REF-SW-01	84	99	58	66
480-86375-8	REF-PW-01	85	100	61	67
480-86375-10	REF-SW-02	78	96	51	59
480-86375-11	REF-PW-02	83	97	54	60
480-86375-14	REF-SW-03	81	96	59	68
480-86375-15	REF-PW-03	82	100	40	45
480-86375-17	REF-SW-04	84	100	60	68
480-86375-22	SW-18	86	102	57	64
LCS 480-261294/2-A	Lab Control Sample	89	99	50	57
LCSD 480-261294/3-A	Lab Control Sample Dup	89	102	50	57
MB 480-261294/1-A	Method Blank	83	100	60	70

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-261184/7
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 11:03	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 11:03	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/31/15 11:03	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
2-Butanone (MEK)	<10.0		10.0	10.0	ug/L			08/31/15 11:03	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 11:03	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 11:03	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 11:03	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 11:03	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 11:03	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 11:03	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 11:03	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 11:03	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 11:03	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 11:03	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-261184/7
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 11:03	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 11:03	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 11:03	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 11:03	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 11:03	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 11:03	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 11:03	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 11:03	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/31/15 11:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*08/31/15 11:03*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/31/15 11:03*	*1*

Lab Sample ID: LCS 480-261184/5
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.27		ug/L		101	70 - 130
1,1,1-Trichloroethane	25.0	24.53		ug/L		98	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.14		ug/L		101	70 - 130
1,1,2-Trichloroethane	25.0	25.70		ug/L		103	70 - 130
Freon 113	25.0	24.85		ug/L		99	70 - 130
1,1-Dichloroethane	25.0	27.04		ug/L		108	70 - 130
1,1-Dichloroethene	25.0	24.40		ug/L		98	70 - 130
1,1-Dichloropropene	25.0	26.46		ug/L		106	70 - 130
1,2,3-Trichlorobenzene	25.0	24.86		ug/L		99	70 - 130
1,2,3-Trichloropropane	25.0	24.64		ug/L		99	70 - 130
1,2,4-Trichlorobenzene	25.0	25.47		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	25.0	26.40		ug/L		106	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	23.31		ug/L		93	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-261184/5
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	25.0	25.89		ug/L		104	70 - 130
1,2-Dichloroethane	25.0	23.95		ug/L		96	70 - 130
1,2-Dichloropropane	25.0	25.90		ug/L		104	70 - 130
1,3,5-Trimethylbenzene	25.0	26.57		ug/L		106	70 - 130
1,3-Dichlorobenzene	25.0	25.73		ug/L		103	70 - 130
1,3-Dichloropropane	25.0	24.72		ug/L		99	70 - 130
1,4-Dichlorobenzene	25.0	25.63		ug/L		103	70 - 130
1,4-Dioxane	500	496.7		ug/L		99	70 - 130
2,2-Dichloropropane	25.0	24.07		ug/L		96	70 - 130
2-Butanone (MEK)	125	232.1	*	ug/L		186	70 - 130
2-Chlorotoluene	25.0	26.25		ug/L		105	70 - 130
2-Hexanone	125	127.9		ug/L		102	70 - 130
4-Chlorotoluene	25.0	26.62		ug/L		106	70 - 130
4-Isopropyltoluene	25.0	26.85		ug/L		107	70 - 130
4-Methyl-2-pentanone (MIBK)	125	125.1		ug/L		100	70 - 130
Acetone	125	136.3		ug/L		109	70 - 130
Benzene	25.0	25.42		ug/L		102	70 - 130
Bromobenzene	25.0	25.99		ug/L		104	70 - 130
Bromoform	25.0	23.91		ug/L		96	70 - 130
Bromomethane	25.0	23.42		ug/L		94	70 - 130
Carbon disulfide	25.0	24.98		ug/L		100	70 - 130
Carbon tetrachloride	25.0	24.53		ug/L		98	70 - 130
Chlorobenzene	25.0	25.77		ug/L		103	70 - 130
Chlorobromomethane	25.0	24.37		ug/L		97	70 - 130
Chlorodibromomethane	25.0	24.90		ug/L		100	70 - 130
Chloroethane	25.0	25.07		ug/L		100	70 - 130
Chloroform	25.0	24.79		ug/L		99	70 - 130
Chloromethane	25.0	28.89		ug/L		116	70 - 130
cis-1,2-Dichloroethene	25.0	24.97		ug/L		100	70 - 130
cis-1,3-Dichloropropene	25.0	24.97		ug/L		100	70 - 130
Dichlorobromomethane	25.0	24.76		ug/L		99	70 - 130
Dichlorodifluoromethane	25.0	28.56		ug/L		114	70 - 130
Ethyl ether	25.0	24.18		ug/L		97	70 - 130
Ethylbenzene	25.0	26.17		ug/L		105	70 - 130
Ethylene Dibromide	25.0	24.81		ug/L		99	70 - 130
Hexachlorobutadiene	25.0	27.11		ug/L		108	70 - 130
Isopropyl ether	25.0	24.92		ug/L		100	70 - 130
Isopropylbenzene	25.0	26.56		ug/L		106	70 - 130
Methyl tert-butyl ether	25.0	22.91		ug/L		92	70 - 130
Methylene Chloride	25.0	24.43		ug/L		98	70 - 130
m-Xylene & p-Xylene	25.0	25.19		ug/L		101	70 - 130
Naphthalene	25.0	23.73		ug/L		95	70 - 130
n-Butylbenzene	25.0	27.26		ug/L		109	70 - 130
N-Propylbenzene	25.0	26.86		ug/L		107	70 - 130
o-Xylene	25.0	24.71		ug/L		99	70 - 130
sec-Butylbenzene	25.0	27.28		ug/L		109	70 - 130
Styrene	25.0	26.03		ug/L		104	70 - 130
Tert-amyl methyl ether	25.0	22.20		ug/L		89	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-261184/5
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tert-butyl ethyl ether	25.0	22.66		ug/L		91	70 - 130
tert-Butylbenzene	25.0	26.60		ug/L		106	70 - 130
Tetrachloroethene	25.0	26.17		ug/L		105	70 - 130
Tetrahydrofuran	50.0	62.30		ug/L		125	70 - 130
Toluene	25.0	25.93		ug/L		104	70 - 130
trans-1,2-Dichloroethene	25.0	25.49		ug/L		102	70 - 130
trans-1,3-Dichloropropene	25.0	25.17		ug/L		101	70 - 130
Trichloroethene	25.0	25.33		ug/L		101	70 - 130
Trichlorofluoromethane	25.0	25.30		ug/L		101	70 - 130
Vinyl chloride	25.0	26.99		ug/L		108	70 - 130
Dibromomethane	25.0	23.40		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 480-261184/41
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.64		ug/L		99	70 - 130	3	20
1,1,1-Trichloroethane	25.0	22.51		ug/L		90	70 - 130	9	20
1,1,2,2-Tetrachloroethane	25.0	25.07		ug/L		100	70 - 130	0	20
1,1,2-Trichloroethane	25.0	24.94		ug/L		100	70 - 130	3	20
Freon 113	25.0	23.38		ug/L		94	70 - 130	6	20
1,1-Dichloroethane	25.0	25.05		ug/L		100	70 - 130	8	20
1,1-Dichloroethene	25.0	22.29		ug/L		89	70 - 130	9	20
1,1-Dichloropropene	25.0	24.03		ug/L		96	70 - 130	10	20
1,2,3-Trichlorobenzene	25.0	24.52		ug/L		98	70 - 130	1	20
1,2,3-Trichloropropane	25.0	24.53		ug/L		98	70 - 130	0	20
1,2,4-Trichlorobenzene	25.0	25.32		ug/L		101	70 - 130	1	20
1,2,4-Trimethylbenzene	25.0	25.54		ug/L		102	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	24.71		ug/L		99	70 - 130	6	20
1,2-Dichlorobenzene	25.0	25.56		ug/L		102	70 - 130	1	20
1,2-Dichloroethane	25.0	22.62		ug/L		90	70 - 130	6	20
1,2-Dichloropropane	25.0	24.97		ug/L		100	70 - 130	4	20
1,3,5-Trimethylbenzene	25.0	25.80		ug/L		103	70 - 130	3	20
1,3-Dichlorobenzene	25.0	25.74		ug/L		103	70 - 130	0	20
1,3-Dichloropropane	25.0	24.98		ug/L		100	70 - 130	1	20
1,4-Dichlorobenzene	25.0	25.27		ug/L		101	70 - 130	1	20
1,4-Dioxane	500	715.2	*	ug/L		143	70 - 130	36	20
2,2-Dichloropropane	25.0	22.74		ug/L		91	70 - 130	6	20
2-Butanone (MEK)	125	228.8	*	ug/L		183	70 - 130	1	20
2-Chlorotoluene	25.0	25.88		ug/L		104	70 - 130	1	20
2-Hexanone	125	131.0		ug/L		105	70 - 130	2	20
4-Chlorotoluene	25.0	26.23		ug/L		105	70 - 130	1	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-261184/41
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Isopropyltoluene	25.0	25.68		ug/L		103	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	125	125.4		ug/L		100	70 - 130	0	20
Acetone	125	132.8		ug/L		106	70 - 130	3	20
Benzene	25.0	24.02		ug/L		96	70 - 130	6	20
Bromobenzene	25.0	25.28		ug/L		101	70 - 130	3	20
Bromoform	25.0	24.43		ug/L		98	70 - 130	2	20
Bromomethane	25.0	21.65		ug/L		87	70 - 130	8	20
Carbon disulfide	25.0	22.82		ug/L		91	70 - 130	9	20
Carbon tetrachloride	25.0	22.56		ug/L		90	70 - 130	8	20
Chlorobenzene	25.0	25.14		ug/L		101	70 - 130	2	20
Chlorobromomethane	25.0	23.15		ug/L		93	70 - 130	5	20
Chlorodibromomethane	25.0	24.30		ug/L		97	70 - 130	2	20
Chloroethane	25.0	21.52		ug/L		86	70 - 130	15	20
Chloroform	25.0	22.95		ug/L		92	70 - 130	8	20
Chloromethane	25.0	26.49		ug/L		106	70 - 130	9	20
cis-1,2-Dichloroethene	25.0	23.63		ug/L		95	70 - 130	6	20
cis-1,3-Dichloropropene	25.0	23.72		ug/L		95	70 - 130	5	20
Dichlorobromomethane	25.0	23.21		ug/L		93	70 - 130	6	20
Dichlorodifluoromethane	25.0	25.81		ug/L		103	70 - 130	10	20
Ethyl ether	25.0	22.66		ug/L		91	70 - 130	6	20
Ethylbenzene	25.0	24.98		ug/L		100	70 - 130	5	20
Ethylene Dibromide	25.0	24.23		ug/L		97	70 - 130	2	20
Hexachlorobutadiene	25.0	26.28		ug/L		105	70 - 130	3	20
Isopropyl ether	25.0	23.48		ug/L		94	70 - 130	6	20
Isopropylbenzene	25.0	25.31		ug/L		101	70 - 130	5	20
Methyl tert-butyl ether	25.0	22.70		ug/L		91	70 - 130	1	20
Methylene Chloride	25.0	23.40		ug/L		94	70 - 130	4	20
m-Xylene & p-Xylene	25.0	23.98		ug/L		96	70 - 130	5	20
Naphthalene	25.0	24.07		ug/L		96	70 - 130	1	20
n-Butylbenzene	25.0	26.47		ug/L		106	70 - 130	3	20
N-Propylbenzene	25.0	25.83		ug/L		103	70 - 130	4	20
o-Xylene	25.0	24.57		ug/L		98	70 - 130	1	20
sec-Butylbenzene	25.0	26.16		ug/L		105	70 - 130	4	20
Styrene	25.0	25.04		ug/L		100	70 - 130	4	20
Tert-amyl methyl ether	25.0	21.81		ug/L		87	70 - 130	2	20
Tert-butyl ethyl ether	25.0	21.91		ug/L		88	70 - 130	3	20
tert-Butylbenzene	25.0	25.21		ug/L		101	70 - 130	5	20
Tetrachloroethene	25.0	25.34		ug/L		101	70 - 130	3	20
Tetrahydrofuran	50.0	64.51		ug/L		129	70 - 130	3	20
Toluene	25.0	25.21		ug/L		101	70 - 130	3	20
trans-1,2-Dichloroethene	25.0	23.45		ug/L		94	70 - 130	8	20
trans-1,3-Dichloropropene	25.0	24.29		ug/L		97	70 - 130	4	20
Trichloroethene	25.0	24.44		ug/L		98	70 - 130	4	20
Trichlorofluoromethane	25.0	22.67		ug/L		91	70 - 130	11	20
Vinyl chloride	25.0	25.11		ug/L		100	70 - 130	7	20
Dibromomethane	25.0	23.27		ug/L		93	70 - 130	1	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-261184/41
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 480-261236/3-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261236

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,1,1-Trichloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,1,2,2-Tetrachloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,1,2-Trichloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Freon 113	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,1-Dichloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,1-Dichloroethene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,1-Dichloropropene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2,3-Trichlorobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2,3-Trichloropropane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2,4-Trichlorobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2,4-Trimethylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2-Dibromo-3-Chloropropane	<0.0252		0.0252	0.0252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2-Dichlorobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2-Dichloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2-Dichloropropane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,3,5-Trimethylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,3-Dichlorobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,3-Dichloropropane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,4-Dichlorobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,4-Dioxane	<0.252		0.252	0.252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
2,2-Dichloropropane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
2-Butanone (MEK)	<0.0252		0.0252	0.0252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
2-Chlorotoluene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
2-Hexanone	<0.0252		0.0252	0.0252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
4-Chlorotoluene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
4-Isopropyltoluene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
4-Methyl-2-pentanone (MIBK)	<0.0252		0.0252	0.0252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Acetone	<0.252		0.252	0.252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Benzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Bromobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Bromoform	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Bromomethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Carbon disulfide	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Carbon tetrachloride	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Chlorobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Chlorobromomethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Chlorodibromomethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Chloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-261236/3-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261236

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Chloromethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
cis-1,2-Dichloroethene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
cis-1,3-Dichloropropene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Dichlorobromomethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Dichlorodifluoromethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Ethyl ether	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Ethylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Ethylene Dibromide	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Hexachlorobutadiene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Isopropyl ether	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Isopropylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Methyl tert-butyl ether	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Methylene Chloride	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
m-Xylene & p-Xylene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Naphthalene	<0.0252		0.0252	0.0252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
n-Butylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
N-Propylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
o-Xylene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
sec-Butylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Styrene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Tert-amyl methyl ether	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Tert-butyl ethyl ether	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
tert-Butylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Tetrachloroethene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Tetrahydrofuran	<0.0503		0.0503	0.0503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Toluene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
trans-1,2-Dichloroethene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
trans-1,3-Dichloropropene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Trichloroethene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Trichlorofluoromethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Vinyl chloride	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Dibromomethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/31/15 10:48*	*08/31/15 13:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*	*08/31/15 10:48*	*08/31/15 13:13*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/31/15 10:48*	*08/31/15 13:13*	*1*

Lab Sample ID: LCS 480-261236/1-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261236

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0499	0.04937		mg/Kg		99	70 - 130
1,1,1-Trichloroethane	0.0499	0.05245		mg/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	0.0499	0.05183		mg/Kg		104	70 - 130
1,1,2-Trichloroethane	0.0499	0.04958		mg/Kg		99	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-261236/1-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261236

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Freon 113	0.0499	0.04748		mg/Kg		95	70 - 130
1,1-Dichloroethane	0.0499	0.05402		mg/Kg		108	70 - 130
1,1-Dichloroethene	0.0499	0.04996		mg/Kg		100	70 - 130
1,1-Dichloropropene	0.0499	0.05232		mg/Kg		105	70 - 130
1,2,3-Trichlorobenzene	0.0499	0.04608		mg/Kg		92	70 - 130
1,2,3-Trichloropropane	0.0499	0.05199		mg/Kg		104	70 - 130
1,2,4-Trichlorobenzene	0.0499	0.04654		mg/Kg		93	70 - 130
1,2,4-Trimethylbenzene	0.0499	0.04789		mg/Kg		96	70 - 130
1,2-Dibromo-3-Chloropropane	0.0499	0.05758		mg/Kg		115	70 - 130
1,2-Dichlorobenzene	0.0499	0.04654		mg/Kg		93	70 - 130
1,2-Dichloroethane	0.0499	0.05470		mg/Kg		110	70 - 130
1,2-Dichloropropane	0.0499	0.05503		mg/Kg		110	70 - 130
1,3,5-Trimethylbenzene	0.0499	0.04735		mg/Kg		95	70 - 130
1,3-Dichlorobenzene	0.0499	0.04649		mg/Kg		93	70 - 130
1,3-Dichloropropane	0.0499	0.04888		mg/Kg		98	70 - 130
1,4-Dichlorobenzene	0.0499	0.04623		mg/Kg		93	70 - 130
1,4-Dioxane	0.998	1.079		mg/Kg		108	70 - 130
2,2-Dichloropropane	0.0499	0.05421		mg/Kg		109	70 - 130
2-Butanone (MEK)	0.250	0.6236	*	mg/Kg		250	70 - 130
2-Chlorotoluene	0.0499	0.04756		mg/Kg		95	70 - 130
2-Hexanone	0.250	0.2873		mg/Kg		115	70 - 130
4-Chlorotoluene	0.0499	0.05071		mg/Kg		102	70 - 130
4-Isopropyltoluene	0.0499	0.04780		mg/Kg		96	70 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2773		mg/Kg		111	70 - 130
Acetone	0.250	0.3022		mg/Kg		121	70 - 130
Benzene	0.0499	0.05331		mg/Kg		107	70 - 130
Bromobenzene	0.0499	0.04629		mg/Kg		93	70 - 130
Bromoform	0.0499	0.04865		mg/Kg		97	70 - 130
Bromomethane	0.0499	0.04878		mg/Kg		98	70 - 130
Carbon disulfide	0.0499	0.05286		mg/Kg		106	70 - 130
Carbon tetrachloride	0.0499	0.05249		mg/Kg		105	70 - 130
Chlorobenzene	0.0499	0.04690		mg/Kg		94	70 - 130
Chlorobromomethane	0.0499	0.05466		mg/Kg		110	70 - 130
Chlorodibromomethane	0.0499	0.05397		mg/Kg		108	70 - 130
Chloroethane	0.0499	0.04945		mg/Kg		99	70 - 130
Chloroform	0.0499	0.05311		mg/Kg		106	70 - 130
Chloromethane	0.0499	0.05337		mg/Kg		107	70 - 130
cis-1,2-Dichloroethene	0.0499	0.05360		mg/Kg		107	70 - 130
cis-1,3-Dichloropropene	0.0499	0.06144		mg/Kg		123	70 - 130
Dichlorobromomethane	0.0499	0.05887		mg/Kg		118	70 - 130
Dichlorodifluoromethane	0.0499	0.04931		mg/Kg		99	70 - 130
Ethyl ether	0.0499	0.06057		mg/Kg		121	70 - 130
Ethylbenzene	0.0499	0.04745		mg/Kg		95	70 - 130
Ethylene Dibromide	0.0499	0.05012		mg/Kg		100	70 - 130
Hexachlorobutadiene	0.0499	0.04242		mg/Kg		85	70 - 130
Isopropyl ether	0.0499	0.05661		mg/Kg		113	70 - 130
Isopropylbenzene	0.0499	0.04663		mg/Kg		93	70 - 130
Methyl tert-butyl ether	0.0499	0.05776		mg/Kg		116	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-261236/1-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261236

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	0.0499	0.05396		mg/Kg		108	70 - 130
m-Xylene & p-Xylene	0.0499	0.04777		mg/Kg		96	70 - 130
Naphthalene	0.0499	0.04914		mg/Kg		98	70 - 130
n-Butylbenzene	0.0499	0.04738		mg/Kg		95	70 - 130
N-Propylbenzene	0.0499	0.04641		mg/Kg		93	70 - 130
o-Xylene	0.0499	0.04792		mg/Kg		96	70 - 130
sec-Butylbenzene	0.0499	0.04593		mg/Kg		92	70 - 130
Styrene	0.0499	0.04937		mg/Kg		99	70 - 130
Tert-amyl methyl ether	0.0499	0.06044		mg/Kg		121	70 - 130
Tert-butyl ethyl ether	0.0499	0.05679		mg/Kg		114	70 - 130
tert-Butylbenzene	0.0499	0.04614		mg/Kg		92	70 - 130
Tetrachloroethene	0.0499	0.04737		mg/Kg		95	70 - 130
Tetrahydrofuran	0.0998	0.1469	*	mg/Kg		147	70 - 130
Toluene	0.0499	0.04671		mg/Kg		94	70 - 130
trans-1,2-Dichloroethene	0.0499	0.05192		mg/Kg		104	70 - 130
trans-1,3-Dichloropropene	0.0499	0.05328		mg/Kg		107	70 - 130
Trichloroethene	0.0499	0.05419		mg/Kg		109	70 - 130
Trichlorofluoromethane	0.0499	0.04694		mg/Kg		94	70 - 130
Vinyl chloride	0.0499	0.05197		mg/Kg		104	70 - 130
Dibromomethane	0.0499	0.05687		mg/Kg		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*129*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 480-261236/2-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261236

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0493	0.04880		mg/Kg		99	70 - 130	1	20
1,1,1-Trichloroethane	0.0493	0.05156		mg/Kg		105	70 - 130	2	20
1,1,2,2-Tetrachloroethane	0.0493	0.05107		mg/Kg		104	70 - 130	1	20
1,1,2-Trichloroethane	0.0493	0.04822		mg/Kg		98	70 - 130	3	20
Freon 113	0.0493	0.04526		mg/Kg		92	70 - 130	5	20
1,1-Dichloroethane	0.0493	0.05345		mg/Kg		108	70 - 130	1	20
1,1-Dichloroethene	0.0493	0.04860		mg/Kg		99	70 - 130	3	20
1,1-Dichloropropene	0.0493	0.05090		mg/Kg		103	70 - 130	3	20
1,2,3-Trichlorobenzene	0.0493	0.04583		mg/Kg		93	70 - 130	1	20
1,2,3-Trichloropropane	0.0493	0.05035		mg/Kg		102	70 - 130	3	20
1,2,4-Trichlorobenzene	0.0493	0.04570		mg/Kg		93	70 - 130	2	20
1,2,4-Trimethylbenzene	0.0493	0.04590		mg/Kg		93	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	0.0493	0.05822		mg/Kg		118	70 - 130	1	20
1,2-Dichlorobenzene	0.0493	0.04547		mg/Kg		92	70 - 130	2	20
1,2-Dichloroethane	0.0493	0.05400		mg/Kg		110	70 - 130	1	20
1,2-Dichloropropane	0.0493	0.05423		mg/Kg		110	70 - 130	1	20
1,3,5-Trimethylbenzene	0.0493	0.04533		mg/Kg		92	70 - 130	4	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-261236/2-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261236

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	0.0493	0.04490		mg/Kg		91	70 - 130	3	20
1,3-Dichloropropane	0.0493	0.04801		mg/Kg		97	70 - 130	2	20
1,4-Dichlorobenzene	0.0493	0.04452		mg/Kg		90	70 - 130	4	20
1,4-Dioxane	0.986	0.9549		mg/Kg		97	70 - 130	12	20
2,2-Dichloropropane	0.0493	0.05426		mg/Kg		110	70 - 130	0	20
2-Butanone (MEK)	0.247	0.6159	*	mg/Kg		250	70 - 130	1	20
2-Chlorotoluene	0.0493	0.04575		mg/Kg		93	70 - 130	4	20
2-Hexanone	0.247	0.2959		mg/Kg		120	70 - 130	3	20
4-Chlorotoluene	0.0493	0.04909		mg/Kg		100	70 - 130	3	20
4-Isopropyltoluene	0.0493	0.04574		mg/Kg		93	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	0.247	0.2815		mg/Kg		114	70 - 130	1	20
Acetone	0.247	0.3047		mg/Kg		124	70 - 130	1	20
Benzene	0.0493	0.05226		mg/Kg		106	70 - 130	2	20
Bromobenzene	0.0493	0.04533		mg/Kg		92	70 - 130	2	20
Bromoform	0.0493	0.04737		mg/Kg		96	70 - 130	3	20
Bromomethane	0.0493	0.06372	*	mg/Kg		129	70 - 130	27	20
Carbon disulfide	0.0493	0.05114		mg/Kg		104	70 - 130	3	20
Carbon tetrachloride	0.0493	0.05182		mg/Kg		105	70 - 130	1	20
Chlorobenzene	0.0493	0.04554		mg/Kg		92	70 - 130	3	20
Chlorobromomethane	0.0493	0.05479		mg/Kg		111	70 - 130	0	20
Chlorodibromomethane	0.0493	0.05287		mg/Kg		107	70 - 130	2	20
Chloroethane	0.0493	0.06050		mg/Kg		123	70 - 130	20	20
Chloroform	0.0493	0.05271		mg/Kg		107	70 - 130	1	20
Chloromethane	0.0493	0.05165		mg/Kg		105	70 - 130	3	20
cis-1,2-Dichloroethene	0.0493	0.05278		mg/Kg		107	70 - 130	2	20
cis-1,3-Dichloropropene	0.0493	0.06067		mg/Kg		123	70 - 130	1	20
Dichlorobromomethane	0.0493	0.05844		mg/Kg		119	70 - 130	1	20
Dichlorodifluoromethane	0.0493	0.04849		mg/Kg		98	70 - 130	2	20
Ethyl ether	0.0493	0.04846	*	mg/Kg		98	70 - 130	22	20
Ethylbenzene	0.0493	0.04551		mg/Kg		92	70 - 130	4	20
Ethylene Dibromide	0.0493	0.04954		mg/Kg		100	70 - 130	1	20
Hexachlorobutadiene	0.0493	0.04125		mg/Kg		84	70 - 130	3	20
Isopropyl ether	0.0493	0.05608		mg/Kg		114	70 - 130	1	20
Isopropylbenzene	0.0493	0.04485		mg/Kg		91	70 - 130	4	20
Methyl tert-butyl ether	0.0493	0.05815		mg/Kg		118	70 - 130	1	20
Methylene Chloride	0.0493	0.05442		mg/Kg		110	70 - 130	1	20
m-Xylene & p-Xylene	0.0493	0.04584		mg/Kg		93	70 - 130	4	20
Naphthalene	0.0493	0.05050		mg/Kg		102	70 - 130	3	20
n-Butylbenzene	0.0493	0.04530		mg/Kg		92	70 - 130	4	20
N-Propylbenzene	0.0493	0.04458		mg/Kg		90	70 - 130	4	20
o-Xylene	0.0493	0.04645		mg/Kg		94	70 - 130	3	20
sec-Butylbenzene	0.0493	0.04378		mg/Kg		89	70 - 130	5	20
Styrene	0.0493	0.04825		mg/Kg		98	70 - 130	2	20
Tert-amyl methyl ether	0.0493	0.06031		mg/Kg		122	70 - 130	0	20
Tert-butyl ethyl ether	0.0493	0.05713		mg/Kg		116	70 - 130	1	20
tert-Butylbenzene	0.0493	0.04442		mg/Kg		90	70 - 130	4	20
Tetrachloroethene	0.0493	0.04570		mg/Kg		93	70 - 130	4	20
Tetrahydrofuran	0.0986	0.1389	*	mg/Kg		141	70 - 130	6	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-261236/2-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261236

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.0493	0.04525		mg/Kg		92	70 - 130	3	20
trans-1,2-Dichloroethene			0.0493	0.05207		mg/Kg		106	70 - 130	0	20
trans-1,3-Dichloropropene			0.0493	0.05263		mg/Kg		107	70 - 130	1	20
Trichloroethene			0.0493	0.05280		mg/Kg		107	70 - 130	3	20
Trichlorofluoromethane			0.0493	0.04553		mg/Kg		92	70 - 130	3	20
Vinyl chloride			0.0493	0.04937		mg/Kg		100	70 - 130	5	20
Dibromomethane			0.0493	0.05672		mg/Kg		115	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*129*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 480-261608/3-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0499		0.499	0.0499	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,1,1-Trichloroethane	<0.0362		0.499	0.0362	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,1,2,2-Tetrachloroethane	<0.0809		0.499	0.0809	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,1,2-Trichloroethane	<0.0649		0.499	0.0649	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Freon 113	<0.114		0.499	0.114	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,1-Dichloroethane	<0.0609		0.499	0.0609	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,1-Dichloroethene	<0.0611		0.499	0.0611	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,1-Dichloropropene	<0.0709		0.499	0.0709	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2,3-Trichlorobenzene	<0.0530		0.499	0.0530	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2,3-Trichloropropane	<0.0508		0.499	0.0508	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2,4-Trichlorobenzene	<0.0303		0.499	0.0303	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2,4-Trimethylbenzene	<0.0958		0.499	0.0958	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2-Dibromo-3-Chloropropane	<0.250		2.50	0.250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2-Dichlorobenzene	<0.0390		0.499	0.0390	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2-Dichloroethane	<0.0250		0.499	0.0250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2-Dichloropropane	<0.250		0.499	0.250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,3,5-Trimethylbenzene	<0.0321		0.499	0.0321	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,3-Dichlorobenzene	<0.0256		0.499	0.0256	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,3-Dichloropropane	<0.0299		0.499	0.0299	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,4-Dichlorobenzene	<0.0699		0.499	0.0699	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,4-Dioxane	<2.41		25.0	2.41	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
2,2-Dichloropropane	<0.0848		0.499	0.0848	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
2-Butanone (MEK)	<0.183		2.50	0.183	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
2-Chlorotoluene	<0.0327		0.499	0.0327	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
2-Hexanone	<0.250		2.50	0.250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
4-Chlorotoluene	<0.0589		0.499	0.0589	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
4-Isopropyltoluene	<0.0400		0.499	0.0400	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
4-Methyl-2-pentanone (MIBK)	<0.164		2.50	0.164	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Acetone	<0.420		25.0	0.420	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Benzene	<0.0245		0.499	0.0245	mg/Kg		08/29/15 04:10	09/02/15 12:27	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-261608/3-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<0.0878		0.499	0.0878	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Bromoform	<0.250		0.499	0.250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Bromomethane	<0.0449		0.499	0.0449	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Carbon disulfide	<0.250		0.499	0.250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Carbon tetrachloride	<0.0483		0.499	0.0483	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Chlorobenzene	<0.0659		0.499	0.0659	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Chlorobromomethane	<0.0360		0.499	0.0360	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Chlorodibromomethane	<0.0639		0.499	0.0639	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Chloroethane	<0.113		0.499	0.113	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Chloroform	<0.0308		0.499	0.0308	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Chloromethane	<0.0301		0.499	0.0301	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
cis-1,2-Dichloroethene	<0.0639		0.499	0.0639	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
cis-1,3-Dichloropropene	<0.0719		0.499	0.0719	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Dichlorobromomethane	<0.0669		0.499	0.0669	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Dichlorodifluoromethane	<0.0412		0.499	0.0412	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Ethyl ether	<0.210		0.499	0.210	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Ethylbenzene	<0.0344		0.499	0.0344	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Ethylene Dibromide	<0.0641		0.499	0.0641	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Hexachlorobutadiene	<0.0585		0.499	0.0585	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Isopropyl ether	<0.250		0.499	0.250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Isopropylbenzene	<0.0752		0.499	0.0752	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Methyl tert-butyl ether	<0.0490		0.499	0.0490	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Methylene Chloride	<0.230		0.499	0.230	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
m-Xylene & p-Xylene	<0.0838		0.499	0.0838	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Naphthalene	<0.0669		2.50	0.0669	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
n-Butylbenzene	<0.0434		0.499	0.0434	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
N-Propylbenzene	<0.0399		0.499	0.0399	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
o-Xylene	<0.0652		0.499	0.0652	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
sec-Butylbenzene	<0.0434		0.499	0.0434	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Styrene	<0.0250		0.499	0.0250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Tert-amyl methyl ether	<0.128		0.499	0.128	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Tert-butyl ethyl ether	<0.220		0.499	0.220	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
tert-Butylbenzene	<0.0519		0.499	0.0519	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Tetrachloroethene	<0.0670		0.499	0.0670	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Tetrahydrofuran	<0.459		4.99	0.459	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Toluene	<0.0377		0.499	0.0377	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
trans-1,2-Dichloroethene	<0.0515		0.499	0.0515	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
trans-1,3-Dichloropropene	<0.220		0.499	0.220	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Trichloroethene	<0.110		0.499	0.110	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Trichlorofluoromethane	<0.0472		0.499	0.0472	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Vinyl chloride	<0.0609		0.499	0.0609	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Dibromomethane	<0.0514		0.499	0.0514	mg/Kg		08/29/15 04:10	09/02/15 12:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/29/15 04:10*	*09/02/15 12:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*	*08/29/15 04:10*	*09/02/15 12:27*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*08/29/15 04:10*	*09/02/15 12:27*	*1*

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-261608/1-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	2.50	2.389		mg/Kg		96	70 - 130
1,1,1-Trichloroethane	2.50	2.220		mg/Kg		89	70 - 130
1,1,2,2-Tetrachloroethane	2.50	2.336		mg/Kg		93	70 - 130
1,1,2-Trichloroethane	2.50	2.467		mg/Kg		99	70 - 130
Freon 113	2.50	2.166		mg/Kg		87	70 - 130
1,1-Dichloroethane	2.50	2.518		mg/Kg		101	70 - 130
1,1-Dichloroethene	2.50	2.282		mg/Kg		91	70 - 130
1,1-Dichloropropene	2.50	2.355		mg/Kg		94	70 - 130
1,2,3-Trichlorobenzene	2.50	2.319		mg/Kg		93	70 - 130
1,2,3-Trichloropropane	2.50	2.275		mg/Kg		91	70 - 130
1,2,4-Trichlorobenzene	2.50	2.378		mg/Kg		95	70 - 130
1,2,4-Trimethylbenzene	2.50	2.464		mg/Kg		99	70 - 130
1,2-Dibromo-3-Chloropropane	2.50	2.122	J	mg/Kg		85	70 - 130
1,2-Dichlorobenzene	2.50	2.388		mg/Kg		96	70 - 130
1,2-Dichloroethane	2.50	2.305		mg/Kg		92	70 - 130
1,2-Dichloropropane	2.50	2.527		mg/Kg		101	70 - 130
1,3,5-Trimethylbenzene	2.50	2.476		mg/Kg		99	70 - 130
1,3-Dichlorobenzene	2.50	2.469		mg/Kg		99	70 - 130
1,3-Dichloropropane	2.50	2.500		mg/Kg		100	70 - 130
1,4-Dichlorobenzene	2.50	2.430		mg/Kg		97	70 - 130
1,4-Dioxane	50.0	50.65		mg/Kg		101	70 - 130
2,2-Dichloropropane	2.50	2.245		mg/Kg		90	70 - 130
2-Butanone (MEK)	12.5	22.40	*	mg/Kg		179	70 - 130
2-Chlorotoluene	2.50	2.546		mg/Kg		102	70 - 130
2-Hexanone	12.5	11.93		mg/Kg		95	70 - 130
4-Chlorotoluene	2.50	2.480		mg/Kg		99	70 - 130
4-Isopropyltoluene	2.50	2.457		mg/Kg		98	70 - 130
4-Methyl-2-pentanone (MIBK)	12.5	11.75		mg/Kg		94	70 - 130
Acetone	12.5	12.85	J	mg/Kg		103	70 - 130
Benzene	2.50	2.475		mg/Kg		99	70 - 130
Bromobenzene	2.50	2.462		mg/Kg		98	70 - 130
Bromoform	2.50	2.198		mg/Kg		88	70 - 130
Bromomethane	2.50	1.765		mg/Kg		71	70 - 130
Carbon disulfide	2.50	2.443		mg/Kg		98	70 - 130
Carbon tetrachloride	2.50	2.130		mg/Kg		85	70 - 130
Chlorobenzene	2.50	2.548		mg/Kg		102	70 - 130
Chlorobromomethane	2.50	2.440		mg/Kg		98	70 - 130
Chlorodibromomethane	2.50	2.343		mg/Kg		94	70 - 130
Chloroethane	2.50	1.571	*	mg/Kg		63	70 - 130
Chloroform	2.50	2.380		mg/Kg		95	70 - 130
Chloromethane	2.50	2.267		mg/Kg		91	70 - 130
cis-1,2-Dichloroethene	2.50	2.410		mg/Kg		96	70 - 130
cis-1,3-Dichloropropene	2.50	2.406		mg/Kg		96	70 - 130
Dichlorobromomethane	2.50	2.330		mg/Kg		93	70 - 130
Dichlorodifluoromethane	2.50	1.310	*	mg/Kg		52	70 - 130
Ethyl ether	2.50	2.830		mg/Kg		113	70 - 130
Ethylbenzene	2.50	2.506		mg/Kg		100	70 - 130
Ethylene Dibromide	2.50	2.402		mg/Kg		96	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-261608/1-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobutadiene	2.50	2.480		mg/Kg		99	70 - 130
Isopropyl ether	2.50	2.458		mg/Kg		98	70 - 130
Isopropylbenzene	2.50	2.431		mg/Kg		97	70 - 130
Methyl tert-butyl ether	2.50	2.266		mg/Kg		91	70 - 130
Methylene Chloride	2.50	2.453		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	2.50	2.408		mg/Kg		96	70 - 130
Naphthalene	2.50	2.228	J	mg/Kg		89	70 - 130
n-Butylbenzene	2.50	2.448		mg/Kg		98	70 - 130
N-Propylbenzene	2.50	2.452		mg/Kg		98	70 - 130
o-Xylene	2.50	2.435		mg/Kg		97	70 - 130
sec-Butylbenzene	2.50	2.392		mg/Kg		96	70 - 130
Styrene	2.50	2.561		mg/Kg		102	70 - 130
Tert-amyl methyl ether	2.50	2.214		mg/Kg		89	70 - 130
Tert-butyl ethyl ether	2.50	2.274		mg/Kg		91	70 - 130
tert-Butylbenzene	2.50	2.407		mg/Kg		96	70 - 130
Tetrachloroethene	2.50	2.485		mg/Kg		99	70 - 130
Tetrahydrofuran	5.00	6.323		mg/Kg		126	70 - 130
Toluene	2.50	2.542		mg/Kg		102	70 - 130
trans-1,2-Dichloroethene	2.50	2.438		mg/Kg		98	70 - 130
trans-1,3-Dichloropropene	2.50	2.401		mg/Kg		96	70 - 130
Trichloroethene	2.50	2.451		mg/Kg		98	70 - 130
Trichlorofluoromethane	2.50	1.763		mg/Kg		71	70 - 130
Vinyl chloride	2.50	2.074		mg/Kg		83	70 - 130
Dibromomethane	2.50	2.347		mg/Kg		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 480-261608/2-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261608

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	2.52	2.333		mg/Kg		93	70 - 130	2	20
1,1,1-Trichloroethane	2.52	2.236		mg/Kg		89	70 - 130	1	20
1,1,2,2-Tetrachloroethane	2.52	2.311		mg/Kg		92	70 - 130	1	20
1,1,2-Trichloroethane	2.52	2.394		mg/Kg		95	70 - 130	3	20
Freon 113	2.52	2.156		mg/Kg		86	70 - 130	0	20
1,1-Dichloroethane	2.52	2.529		mg/Kg		101	70 - 130	0	20
1,1-Dichloroethene	2.52	2.331		mg/Kg		93	70 - 130	2	20
1,1-Dichloropropene	2.52	2.401		mg/Kg		95	70 - 130	2	20
1,2,3-Trichlorobenzene	2.52	2.302		mg/Kg		92	70 - 130	1	20
1,2,3-Trichloropropane	2.52	2.159		mg/Kg		86	70 - 130	5	20
1,2,4-Trichlorobenzene	2.52	2.412		mg/Kg		96	70 - 130	1	20
1,2,4-Trimethylbenzene	2.52	2.463		mg/Kg		98	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	2.52	1.937	J	mg/Kg		77	70 - 130	9	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-261608/2-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261608

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	2.52	2.448		mg/Kg		97	70 - 130	2	20
1,2-Dichloroethane	2.52	2.358		mg/Kg		94	70 - 130	2	20
1,2-Dichloropropane	2.52	2.665		mg/Kg		106	70 - 130	5	20
1,3,5-Trimethylbenzene	2.52	2.469		mg/Kg		98	70 - 130	0	20
1,3-Dichlorobenzene	2.52	2.483		mg/Kg		99	70 - 130	1	20
1,3-Dichloropropane	2.52	2.434		mg/Kg		97	70 - 130	3	20
1,4-Dichlorobenzene	2.52	2.459		mg/Kg		98	70 - 130	1	20
1,4-Dioxane	50.3	45.36		mg/Kg		90	70 - 130	11	20
2,2-Dichloropropane	2.52	2.249		mg/Kg		89	70 - 130	0	20
2-Butanone (MEK)	12.6	22.32	*	mg/Kg		177	70 - 130	0	20
2-Chlorotoluene	2.52	2.499		mg/Kg		99	70 - 130	2	20
2-Hexanone	12.6	11.37		mg/Kg		90	70 - 130	5	20
4-Chlorotoluene	2.52	2.508		mg/Kg		100	70 - 130	1	20
4-Isopropyltoluene	2.52	2.430		mg/Kg		97	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	12.6	11.11		mg/Kg		88	70 - 130	6	20
Acetone	12.6	12.81	J	mg/Kg		102	70 - 130	0	20
Benzene	2.52	2.500		mg/Kg		99	70 - 130	1	20
Bromobenzene	2.52	2.450		mg/Kg		97	70 - 130	0	20
Bromoform	2.52	2.037		mg/Kg		81	70 - 130	8	20
Bromomethane	2.52	1.810		mg/Kg		72	70 - 130	3	20
Carbon disulfide	2.52	2.415		mg/Kg		96	70 - 130	1	20
Carbon tetrachloride	2.52	2.108		mg/Kg		84	70 - 130	1	20
Chlorobenzene	2.52	2.486		mg/Kg		99	70 - 130	2	20
Chlorobromomethane	2.52	2.377		mg/Kg		95	70 - 130	3	20
Chlorodibromomethane	2.52	2.242		mg/Kg		89	70 - 130	4	20
Chloroethane	2.52	1.659	*	mg/Kg		66	70 - 130	5	20
Chloroform	2.52	2.401		mg/Kg		95	70 - 130	1	20
Chloromethane	2.52	2.221		mg/Kg		88	70 - 130	2	20
cis-1,2-Dichloroethene	2.52	2.462		mg/Kg		98	70 - 130	2	20
cis-1,3-Dichloropropene	2.52	2.471		mg/Kg		98	70 - 130	3	20
Dichlorobromomethane	2.52	2.309		mg/Kg		92	70 - 130	1	20
Dichlorodifluoromethane	2.52	1.324	*	mg/Kg		53	70 - 130	1	20
Ethyl ether	2.52	2.827		mg/Kg		112	70 - 130	0	20
Ethylbenzene	2.52	2.444		mg/Kg		97	70 - 130	2	20
Ethylene Dibromide	2.52	2.332		mg/Kg		93	70 - 130	3	20
Hexachlorobutadiene	2.52	2.390		mg/Kg		95	70 - 130	4	20
Isopropyl ether	2.52	2.498		mg/Kg		99	70 - 130	2	20
Isopropylbenzene	2.52	2.418		mg/Kg		96	70 - 130	1	20
Methyl tert-butyl ether	2.52	2.275		mg/Kg		90	70 - 130	0	20
Methylene Chloride	2.52	2.458		mg/Kg		98	70 - 130	0	20
m-Xylene & p-Xylene	2.52	2.331		mg/Kg		93	70 - 130	3	20
Naphthalene	2.52	2.182	J	mg/Kg		87	70 - 130	2	20
n-Butylbenzene	2.52	2.431		mg/Kg		97	70 - 130	1	20
N-Propylbenzene	2.52	2.424		mg/Kg		96	70 - 130	1	20
o-Xylene	2.52	2.387		mg/Kg		95	70 - 130	2	20
sec-Butylbenzene	2.52	2.436		mg/Kg		97	70 - 130	2	20
Styrene	2.52	2.505		mg/Kg		100	70 - 130	2	20
Tert-amyl methyl ether	2.52	2.197		mg/Kg		87	70 - 130	1	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-261608/2-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261608

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tert-butyl ethyl ether			2.52	2.308		mg/Kg		92	70 - 130	1	20
tert-Butylbenzene			2.52	2.472		mg/Kg		98	70 - 130	3	20
Tetrachloroethene			2.52	2.394		mg/Kg		95	70 - 130	4	20
Tetrahydrofuran			5.03	6.469		mg/Kg		129	70 - 130	2	20
Toluene			2.52	2.436		mg/Kg		97	70 - 130	4	20
trans-1,2-Dichloroethene			2.52	2.464		mg/Kg		98	70 - 130	1	20
trans-1,3-Dichloropropene			2.52	2.306		mg/Kg		92	70 - 130	4	20
Trichloroethene			2.52	2.473		mg/Kg		98	70 - 130	1	20
Trichlorofluoromethane			2.52	1.996		mg/Kg		79	70 - 130	12	20
Vinyl chloride			2.52	2.031		mg/Kg		81	70 - 130	2	20
Dibromomethane			2.52	2.329		mg/Kg		93	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Lab Sample ID: MB 240-196101/6-A
Matrix: Solid
Analysis Batch: 196511

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196101

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1221	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1232	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1242	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1248	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1254	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1260	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1262	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1268	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*30 - 150*	*09/03/15 07:28*	*09/08/15 09:00*	*1*
Tetrachloro-m-xylene	*59*		*30 - 150*	*09/03/15 07:28*	*09/08/15 09:00*	*1*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*09/03/15 07:28*	*09/08/15 09:00*	*1*
DCB Decachlorobiphenyl	*81*		*30 - 150*	*09/03/15 07:28*	*09/08/15 09:00*	*1*

Lab Sample ID: LCS 240-196101/7-A
Matrix: Solid
Analysis Batch: 196511

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196101

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016			0.333	0.2991		mg/Kg		90	40 - 140
Aroclor-1260			0.334	0.3306		mg/Kg		99	40 - 140

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: LCS 240-196101/7-A
Matrix: Solid
Analysis Batch: 196511

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196101

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*99*		*30 - 150*
Tetrachloro-m-xylene	*90*		*30 - 150*
DCB Decachlorobiphenyl	*109*		*30 - 150*
DCB Decachlorobiphenyl	*107*		*30 - 150*

Lab Sample ID: LCSD 240-196101/20-A
Matrix: Solid
Analysis Batch: 196511

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196101

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016			0.333	0.3104		mg/Kg		93	40 - 140	4	30
Aroclor-1260			0.334	0.3507		mg/Kg		105	40 - 140	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*104*		*30 - 150*
Tetrachloro-m-xylene	*95*		*30 - 150*
DCB Decachlorobiphenyl	*116*		*30 - 150*
DCB Decachlorobiphenyl	*111*		*30 - 150*

Lab Sample ID: MB 480-261294/1-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261294

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1221	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1232	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1242	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1248	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1254	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1260	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1262	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1268	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*
Tetrachloro-m-xylene	*100*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*
DCB Decachlorobiphenyl	*60*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*
DCB Decachlorobiphenyl	*70*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*

Lab Sample ID: LCS 480-261294/2-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261294

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016			4.00	3.703		ug/L		93	40 - 140
PCB-1260			4.00	3.634		ug/L		91	40 - 140

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: LCS 480-261294/2-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261294

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*30 - 150*
Tetrachloro-m-xylene	*99*		*30 - 150*
DCB Decachlorobiphenyl	*50*		*30 - 150*
DCB Decachlorobiphenyl	*57*		*30 - 150*

Lab Sample ID: LCSD 480-261294/3-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261294

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			4.00	3.692		ug/L		92	40 - 140	0	20
PCB-1260			4.00	3.594		ug/L		90	40 - 140	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*30 - 150*
Tetrachloro-m-xylene	*102*		*30 - 150*
DCB Decachlorobiphenyl	*50*		*30 - 150*
DCB Decachlorobiphenyl	*57*		*30 - 150*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-261388/1-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261388

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.186		0.466	0.186	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Arsenic	<0.373		0.932	0.373	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Barium	<0.103		0.466	0.103	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Beryllium	<0.0261		0.186	0.0261	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Cadmium	<0.0280		0.186	0.0280	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Chromium	<0.186		0.466	0.186	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Nickel	<0.214		0.932	0.214	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Thallium	<0.280		0.932	0.280	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Vanadium	<0.103		0.466	0.103	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Zinc	<0.596		2.33	0.596	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Lead	<0.224		0.466	0.224	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Selenium	<0.373		0.466	0.373	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Antimony	<0.373		0.466	0.373	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Copper	<0.196		0.932	0.196	mg/Kg		09/01/15 09:27	09/02/15 13:08	1

Lab Sample ID: LCDSRM 480-261388/3-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261388

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver			52.6	45.23		mg/Kg		86.0	66.7 - 133.5	4	30

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-261388/3-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261388

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	113	92.65		mg/Kg		82.0	69.7 - 142.5	2	30
Barium	155	145.5		mg/Kg		93.9	72.9 - 127.1	2	30
Beryllium	109	92.51		mg/Kg		84.9	74.7 - 124.8	3	30
Cadmium	67.5	58.73		mg/Kg		87.0	73.2 - 126.8	1	30
Chromium	164	149.6		mg/Kg		91.2	70.7 - 129.9	2	30
Nickel	89.3	86.93		mg/Kg		97.3	72.0 - 127.7	2	30
Thallium	116	114.7		mg/Kg		98.9	67.4 - 131.9	2	30
Vanadium	73.0	67.84		mg/Kg		92.9	59.7 - 139.7	4	30
Zinc	168	149.5		mg/Kg		89.0	69.0 - 131.5	4	30
Lead	90.1	86.91		mg/Kg		96.5	70.1 - 129.9	5	30
Selenium	156	136.9		mg/Kg		87.8	67.3 - 132.1	3	30
Antimony	94.0	70.75		mg/Kg		75.3	22.8 - 257.4	2	30
Copper	100	107.6		mg/Kg		107.6	96.2 - 161.0	2	30

Lab Sample ID: LCSSRM 480-261388/2-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261388

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	52.6	46.88		mg/Kg		89.1	66.7 - 133.5
Arsenic	113	94.92		mg/Kg		84.0	69.7 - 142.5
Barium	155	148.8		mg/Kg		96.0	72.9 - 127.1
Beryllium	109	95.09		mg/Kg		87.2	74.7 - 124.8
Cadmium	67.5	59.18		mg/Kg		87.7	73.2 - 126.8
Chromium	164	153.3		mg/Kg		93.5	70.7 - 129.9
Nickel	89.3	88.78		mg/Kg		99.4	72.0 - 127.7
Thallium	116	116.8		mg/Kg		100.7	67.4 - 131.9
Vanadium	73.0	70.49		mg/Kg		96.6	59.7 - 139.7
Zinc	168	155.1		mg/Kg		92.3	69.0 - 131.5
Lead	90.1	91.20		mg/Kg		101.2	70.1 - 129.9

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-261388/2-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261388

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Selenium			156	141.1		mg/Kg		90.5	67.3 - 132.1		
Antimony			94.0	71.91		mg/Kg		76.5	22.8 - 257.4		
Copper			100	110.2		mg/Kg		110.2	96.2 - 161.0		

Lab Sample ID: 480-86375-4 MS
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: SED-15
Prep Type: Total/NA
Prep Batch: 261388

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver	<0.623		31.0	28.85		mg/Kg	☼	93	75 - 125		
Arsenic	7.99		124	112.8		mg/Kg	☼	84	75 - 125		
Barium	123	F1	124	376.3	F1	mg/Kg	☼	204	75 - 125		
Beryllium	0.517	J	124	105.8		mg/Kg	☼	85	75 - 125		
Cadmium	2.57		124	112.6		mg/Kg	☼	89	75 - 125		
Chromium	91.4		124	208.1		mg/Kg	☼	94	75 - 125		
Nickel	22.9		124	137.5		mg/Kg	☼	92	75 - 125		
Thallium	<0.935		124	115.6		mg/Kg	☼	93	75 - 125		
Vanadium	35.8		124	162.1		mg/Kg	☼	102	75 - 125		
Zinc	398	F1	124	682.8	F1	mg/Kg	☼	230	75 - 125		
Lead	427	F1	124	538.1		mg/Kg	☼	89	75 - 125		
Selenium	<1.25		124	110.8		mg/Kg	☼	89	75 - 125		
Antimony	2.44		124	98.77		mg/Kg	☼	78	75 - 125		
Copper	146		124	279.3		mg/Kg	☼	107	75 - 125		

Lab Sample ID: 480-86375-4 MSD
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: SED-15
Prep Type: Total/NA
Prep Batch: 261388

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<0.623		30.0	28.09		mg/Kg	☼	94	75 - 125	3	35
Arsenic	7.99		120	108.5		mg/Kg	☼	84	75 - 125	4	35
Barium	123	F1	120	276.0	F1	mg/Kg	☼	128	75 - 125	31	35
Beryllium	0.517	J	120	102.2		mg/Kg	☼	85	75 - 125	3	35
Cadmium	2.57		120	108.3		mg/Kg	☼	88	75 - 125	4	35
Chromium	91.4		120	194.5		mg/Kg	☼	86	75 - 125	7	35
Nickel	22.9		120	132.3		mg/Kg	☼	91	75 - 125	4	35
Thallium	<0.935		120	111.2		mg/Kg	☼	93	75 - 125	4	35
Vanadium	35.8		120	153.1		mg/Kg	☼	98	75 - 125	6	35
Zinc	398	F1	120	608.4	F1	mg/Kg	☼	176	75 - 125	12	35
Lead	427	F1	120	437.6	F1	mg/Kg	☼	8	75 - 125	21	35
Selenium	<1.25		120	104.8		mg/Kg	☼	87	75 - 125	6	35
Antimony	2.44		120	98.63		mg/Kg	☼	80	75 - 125	0	35
Copper	146		120	287.0		mg/Kg	☼	117	75 - 125	3	35

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: MB 480-261392/1-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261392

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.188		0.470	0.188	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Arsenic	<0.376		0.940	0.376	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Barium	<0.103		0.470	0.103	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Beryllium	<0.0263		0.188	0.0263	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Cadmium	<0.0282		0.188	0.0282	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Chromium	<0.188		0.470	0.188	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Nickel	<0.216		0.940	0.216	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Thallium	<0.282		0.940	0.282	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Vanadium	<0.103		0.470	0.103	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Zinc	<0.602		2.35	0.602	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Lead	<0.226		0.470	0.226	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Selenium	<0.376		0.470	0.376	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Antimony	<0.376		0.470	0.376	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Copper	<0.197		0.940	0.197	mg/Kg		09/01/15 09:27	09/02/15 12:13	1

Lab Sample ID: LCDSRM 480-261392/3-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261392

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver			52.6	44.65		mg/Kg		84.9	66.7 - 133.5	4	30
Arsenic			113	92.66		mg/Kg		82.0	69.7 - 142.5	1	30
Barium			155	147.7		mg/Kg		95.3	72.9 - 127.1	0	30
Beryllium			109	92.45		mg/Kg		84.8	74.7 - 124.8	2	30
Cadmium			67.5	59.17		mg/Kg		87.7	73.2 - 126.8	2	30
Chromium			164	148.7		mg/Kg		90.7	70.7 - 129.9	1	30
Nickel			89.3	87.43		mg/Kg		97.9	72.0 - 127.7	0	30
Thallium			116	116.7		mg/Kg		100.6	67.4 - 131.9	1	30
Vanadium			73.0	67.39		mg/Kg		92.3	59.7 - 139.7	2	30
Zinc			168	147.8		mg/Kg		88.0	69.0 - 131.5	2	30
Lead			90.1	87.19		mg/Kg		96.8	70.1 - 129.9	3	30
Selenium			156	137.0		mg/Kg		87.8	67.3 - 132.1	0	30
Antimony			94.0	73.75		mg/Kg		78.5	22.8 - 257.4	3	30
Copper			100	105.8		mg/Kg		105.8	96.2 - 161.0	3	30

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-261392/2-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261392

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	52.6	46.38		mg/Kg		88.2	66.7 - 133.5
Arsenic	113	93.89		mg/Kg		83.1	69.7 - 142.5
Barium	155	147.0		mg/Kg		94.8	72.9 - 127.1
Beryllium	109	94.22		mg/Kg		86.4	74.7 - 124.8
Cadmium	67.5	58.08		mg/Kg		86.0	73.2 - 126.8
Chromium	164	150.5		mg/Kg		91.7	70.7 - 129.9
Nickel	89.3	87.28		mg/Kg		97.7	72.0 - 127.7
Thallium	116	115.9		mg/Kg		99.9	67.4 - 131.9
Vanadium	73.0	69.02		mg/Kg		94.5	59.7 - 139.7
Zinc	168	150.9		mg/Kg		89.8	69.0 - 131.5
Lead	90.1	89.60		mg/Kg		99.4	70.1 - 129.9
Selenium	156	136.3		mg/Kg		87.4	67.3 - 132.1
Antimony	94.0	71.49		mg/Kg		76.1	22.8 - 257.4
Copper	100	109.4		mg/Kg		109.4	96.2 - 161.0

Lab Sample ID: MB 480-261254/1-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 17:40	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 17:40	1
Barium	<0.700		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 17:40	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 17:40	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 17:40	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 17:40	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 17:40	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 17:40	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 17:40	1
Zinc	<1.50		50.0	1.50	ug/L		08/31/15 11:31	09/01/15 17:40	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 17:40	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 17:40	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 17:40	1
Copper	<1.60		10.0	1.60	ug/L		08/31/15 11:31	09/01/15 17:40	1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-261254/2-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	50.0	46.66		ug/L		93	80 - 120
Arsenic	200	193.2		ug/L		97	80 - 120
Barium	200	198.4		ug/L		99	80 - 120
Beryllium	200	200.2		ug/L		100	80 - 120
Cadmium	200	200.0		ug/L		100	80 - 120
Chromium	200	203.9		ug/L		102	80 - 120
Nickel	200	190.9		ug/L		95	80 - 120
Thallium	200	195.7		ug/L		98	80 - 120
Vanadium	200	198.2		ug/L		99	80 - 120
Zinc	200	194.5		ug/L		97	80 - 120
Lead	200	203.8		ug/L		102	80 - 120
Selenium	200	193.9		ug/L		97	80 - 120
Antimony	200	194.6	^	ug/L		97	80 - 120
Copper	200	194.6		ug/L		97	80 - 120

Lab Sample ID: LCSD 480-261254/3-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	50.0	47.10		ug/L		94	80 - 120	1	20
Arsenic	200	190.7		ug/L		95	80 - 120	1	20
Barium	200	193.9		ug/L		97	80 - 120	2	20
Beryllium	200	196.6		ug/L		98	80 - 120	2	20
Cadmium	200	196.6		ug/L		98	80 - 120	2	20
Chromium	200	198.7		ug/L		99	80 - 120	3	20
Nickel	200	186.5		ug/L		93	80 - 120	2	20
Thallium	200	192.2		ug/L		96	80 - 120	2	20
Vanadium	200	192.6		ug/L		96	80 - 120	3	20
Zinc	200	192.1		ug/L		96	80 - 120	1	20
Lead	200	199.5		ug/L		100	80 - 120	2	20
Selenium	200	187.6		ug/L		94	80 - 120	3	20
Antimony	200	192.3	^	ug/L		96	80 - 120	1	20
Copper	200	191.8		ug/L		96	80 - 120	1	20

Lab Sample ID: 480-86375-5 MS
Matrix: Water
Analysis Batch: 261549

Client Sample ID: SW-17
Prep Type: Dissolved
Prep Batch: 261254

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<1.70		50.0	47.56		ug/L		95	75 - 125
Arsenic	<5.55		200	199.5		ug/L		100	75 - 125
Barium	64.4		200	254.5		ug/L		95	75 - 125
Beryllium	<0.300		200	201.2		ug/L		101	75 - 125
Cadmium	<0.500		200	201.2		ug/L		101	75 - 125
Chromium	<1.00		200	202.1		ug/L		101	75 - 125
Nickel	<1.26		200	193.8		ug/L		97	75 - 125
Thallium	<10.2		200	194.6		ug/L		97	75 - 125

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: 480-86375-5 MS
Matrix: Water
Analysis Batch: 261549

Client Sample ID: SW-17
Prep Type: Dissolved
Prep Batch: 261254

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	<1.50		200	197.0		ug/L		98	75 - 125
Zinc	5.57	J	200	199.2		ug/L		97	75 - 125
Lead	<3.00		200	205.4		ug/L		103	75 - 125
Selenium	<8.70		200	194.8		ug/L		97	75 - 125
Antimony	<6.79	^	200	194.7	^	ug/L		97	75 - 125
Copper	2.44	J	200	196.8		ug/L		97	75 - 125

Lab Sample ID: 480-86375-5 MSD
Matrix: Water
Analysis Batch: 261549

Client Sample ID: SW-17
Prep Type: Dissolved
Prep Batch: 261254

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<1.70		50.0	48.84		ug/L		98	75 - 125	3	20
Arsenic	<5.55		200	199.4		ug/L		100	75 - 125	0	20
Barium	64.4		200	257.7		ug/L		97	75 - 125	1	20
Beryllium	<0.300		200	203.6		ug/L		102	75 - 125	1	20
Cadmium	<0.500		200	203.0		ug/L		102	75 - 125	1	20
Chromium	<1.00		200	203.6		ug/L		102	75 - 125	1	20
Nickel	<1.26		200	195.2		ug/L		98	75 - 125	1	20
Thallium	<10.2		200	197.1		ug/L		99	75 - 125	1	20
Vanadium	<1.50		200	198.6		ug/L		99	75 - 125	1	20
Zinc	5.57	J	200	202.1		ug/L		98	75 - 125	1	20
Lead	<3.00		200	207.6		ug/L		104	75 - 125	1	20
Selenium	<8.70		200	199.3		ug/L		100	75 - 125	2	20
Antimony	<6.79	^	200	197.3	^	ug/L		99	75 - 125	1	20
Copper	2.44	J	200	198.0		ug/L		98	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-260081/1-D
Matrix: Water
Analysis Batch: 261361

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 261196

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:00	1

Lab Sample ID: LCS 480-260081/2-C
Matrix: Water
Analysis Batch: 261361

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 261196

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	6.67	6.350		ug/L		95	80 - 120

Lab Sample ID: LCSD 480-260081/3-C
Matrix: Water
Analysis Batch: 261361

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved
Prep Batch: 261196

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	6.67	6.300		ug/L		94	80 - 120	1	20

Lab Sample ID: 480-86375-7 MS
Matrix: Water
Analysis Batch: 261361

Client Sample ID: REF-SW-01
Prep Type: Dissolved
Prep Batch: 261196

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.142	J	6.67	6.783		ug/L		100	75 - 125

Lab Sample ID: 480-86375-7 MSD
Matrix: Water
Analysis Batch: 261361

Client Sample ID: REF-SW-01
Prep Type: Dissolved
Prep Batch: 261196

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.142	J	6.67	6.717		ug/L		99	75 - 125	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-261276/1-A
Matrix: Solid
Analysis Batch: 261461

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00814		0.101	0.00814	mg/Kg		09/01/15 08:30	09/01/15 11:46	1

Lab Sample ID: LCDSRM 480-261276/3-A
Matrix: Solid
Analysis Batch: 261461

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261276

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	8.37	8.411		mg/Kg		100.5	51.3 - 148.1	8	

Lab Sample ID: LCSSRM 480-261276/2-A
Matrix: Solid
Analysis Batch: 261461

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261276

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	8.37	9.093		mg/Kg		108.6	51.3 - 148.1

Lab Sample ID: 480-86375-4 MS
Matrix: Solid
Analysis Batch: 261461

Client Sample ID: SED-15
Prep Type: Total/NA
Prep Batch: 261276

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.16	F1	1.04	3.014	F1	mg/Kg	☼	178	75 - 125

Lab Sample ID: 480-86375-4 MSD
Matrix: Solid
Analysis Batch: 261461

Client Sample ID: SED-15
Prep Type: Total/NA
Prep Batch: 261276

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	1.16	F1	1.05	2.904	F1	mg/Kg	☼	167	75 - 125	4	35

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 480-261715/3
Matrix: Water
Analysis Batch: 261715

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<0.525		2.00	0.525	mg/L			09/02/15 11:30	1

Lab Sample ID: MB 480-261715/50
Matrix: Water
Analysis Batch: 261715

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<0.525		2.00	0.525	mg/L			09/02/15 11:30	1

Lab Sample ID: LCS 480-261715/4
Matrix: Water
Analysis Batch: 261715

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362	368.0		mg/L		102	90 - 110

Lab Sample ID: LCS 480-261715/51
Matrix: Water
Analysis Batch: 261715

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362	360.0		mg/L		99	90 - 110

Lab Sample ID: MB 480-262156/27
Matrix: Water
Analysis Batch: 262156

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<0.525		2.00	0.525	mg/L			09/04/15 10:30	1

Lab Sample ID: MB 480-262156/51
Matrix: Water
Analysis Batch: 262156

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<0.525		2.00	0.525	mg/L			09/04/15 10:30	1

Lab Sample ID: LCS 480-262156/28
Matrix: Water
Analysis Batch: 262156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362	356.0		mg/L		98	90 - 110

Lab Sample ID: LCS 480-262156/52
Matrix: Water
Analysis Batch: 262156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362	356.0		mg/L		98	90 - 110

Lab Sample ID: 480-86375-15 MS
Matrix: Water
Analysis Batch: 261715

Client Sample ID: REF-PW-03
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness as calcium carbonate	20.0		200	236.0		mg/L		108	74 - 130		

Lab Sample ID: 480-86375-14 DU
Matrix: Water
Analysis Batch: 261715

Client Sample ID: REF-SW-03
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hardness as calcium carbonate	80.0		80.00		mg/L		0	15

Lab Sample ID: 480-86375-8 MS
Matrix: Water
Analysis Batch: 262156

Client Sample ID: REF-PW-01
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness as calcium carbonate	348		200	560.0		mg/L		106	74 - 130		

Lab Sample ID: 480-86375-11 MS
Matrix: Water
Analysis Batch: 262156

Client Sample ID: REF-PW-02
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness as calcium carbonate	112		200	324.0		mg/L		106	74 - 130		

Lab Sample ID: 480-86375-7 DU
Matrix: Water
Analysis Batch: 262156

Client Sample ID: REF-SW-01
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hardness as calcium carbonate	88.0		84.00		mg/L		5	15

Lab Sample ID: 480-86375-11 DU
Matrix: Water
Analysis Batch: 262156

Client Sample ID: REF-PW-02
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hardness as calcium carbonate	112		116.0		mg/L		4	15

GC/MS VOA

Analysis Batch: 261184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-1	TB-03	Total/NA	Water	8260C	
480-86375-5	SW-17	Total/NA	Water	8260C	
480-86375-7	REF-SW-01	Total/NA	Water	8260C	
480-86375-8	REF-PW-01	Total/NA	Water	8260C	
480-86375-10	REF-SW-02	Total/NA	Water	8260C	
480-86375-11	REF-PW-02	Total/NA	Water	8260C	
480-86375-12	TB-04	Total/NA	Water	8260C	
480-86375-14	REF-SW-03	Total/NA	Water	8260C	
480-86375-15	REF-PW-03	Total/NA	Water	8260C	
480-86375-17	REF-SW-04	Total/NA	Water	8260C	
480-86375-22	SW-18	Total/NA	Water	8260C	
LCS 480-261184/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-261184/41	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-261184/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 261208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	8260C	261236
480-86375-3	SED-12 (DUP)	Total/NA	Solid	8260C	261236
480-86375-4	SED-15	Total/NA	Solid	8260C	261236
480-86375-6	SED-17	Total/NA	Solid	8260C	261236
480-86375-9	REF-SED-01	Total/NA	Solid	8260C	261236
480-86375-13	REF-SED-02	Total/NA	Solid	8260C	261236
480-86375-16	REF-SED-03	Total/NA	Solid	8260C	261236
480-86375-18	REF-SED-04	Total/NA	Solid	8260C	261236
480-86375-19	SED-13	Total/NA	Solid	8260C	261236
480-86375-20	SED-14	Total/NA	Solid	8260C	261236
480-86375-21	SED-16	Total/NA	Solid	8260C	261236
480-86375-23	TB-03	Total/NA	Solid	8260C	261236
480-86375-24	TB-04	Total/NA	Solid	8260C	261236
LCS 480-261236/1-A	Lab Control Sample	Total/NA	Solid	8260C	261236
LCSD 480-261236/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	261236
MB 480-261236/3-A	Method Blank	Total/NA	Solid	8260C	261236

Prep Batch: 261236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	5035A	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	5035A	
480-86375-4	SED-15	Total/NA	Solid	5035A	
480-86375-6	SED-17	Total/NA	Solid	5035A	
480-86375-9	REF-SED-01	Total/NA	Solid	5035A	
480-86375-13	REF-SED-02	Total/NA	Solid	5035A	
480-86375-16	REF-SED-03	Total/NA	Solid	5035A	
480-86375-18	REF-SED-04	Total/NA	Solid	5035A	
480-86375-19	SED-13	Total/NA	Solid	5035A	
480-86375-20	SED-14	Total/NA	Solid	5035A	
480-86375-21	SED-16	Total/NA	Solid	5035A	
480-86375-23	TB-03	Total/NA	Solid	5035A	
480-86375-24	TB-04	Total/NA	Solid	5035A	
LCS 480-261236/1-A	Lab Control Sample	Total/NA	Solid	5035A	
LCSD 480-261236/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A	

GC/MS VOA (Continued)

Prep Batch: 261236 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-261236/3-A	Method Blank	Total/NA	Solid	5035A	

Analysis Batch: 261576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-4	SED-15	Total/NA	Solid	8260C	261608
LCS 480-261608/1-A	Lab Control Sample	Total/NA	Solid	8260C	261608
LCSD 480-261608/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	261608
MB 480-261608/3-A	Method Blank	Total/NA	Solid	8260C	261608

Prep Batch: 261608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	5035A	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	5035A	
480-86375-4	SED-15	Total/NA	Solid	5035A	
LCS 480-261608/1-A	Lab Control Sample	Total/NA	Solid	5035A	
LCSD 480-261608/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A	
MB 480-261608/3-A	Method Blank	Total/NA	Solid	5035A	

Analysis Batch: 261728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	8260C	261608
480-86375-3	SED-12 (DUP)	Total/NA	Solid	8260C	261608

GC Semi VOA

Prep Batch: 196101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	3540C	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	3540C	
480-86375-4	SED-15	Total/NA	Solid	3540C	
480-86375-6	SED-17	Total/NA	Solid	3540C	
480-86375-9	REF-SED-01	Total/NA	Solid	3540C	
480-86375-13	REF-SED-02	Total/NA	Solid	3540C	
480-86375-16	REF-SED-03	Total/NA	Solid	3540C	
480-86375-18	REF-SED-04	Total/NA	Solid	3540C	
480-86375-19	SED-13	Total/NA	Solid	3540C	
480-86375-20	SED-14	Total/NA	Solid	3540C	
480-86375-21	SED-16	Total/NA	Solid	3540C	
LCS 240-196101/7-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-196101/20-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-196101/6-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 196511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	8082	196101
480-86375-3	SED-12 (DUP)	Total/NA	Solid	8082	196101
480-86375-6	SED-17	Total/NA	Solid	8082	196101
480-86375-9	REF-SED-01	Total/NA	Solid	8082	196101
480-86375-13	REF-SED-02	Total/NA	Solid	8082	196101
480-86375-16	REF-SED-03	Total/NA	Solid	8082	196101

GC Semi VOA (Continued)

Analysis Batch: 196511 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-18	REF-SED-04	Total/NA	Solid	8082	196101
480-86375-19	SED-13	Total/NA	Solid	8082	196101
480-86375-20	SED-14	Total/NA	Solid	8082	196101
480-86375-21	SED-16	Total/NA	Solid	8082	196101
LCS 240-196101/7-A	Lab Control Sample	Total/NA	Solid	8082	196101
LCSD 240-196101/20-A	Lab Control Sample Dup	Total/NA	Solid	8082	196101
MB 240-196101/6-A	Method Blank	Total/NA	Solid	8082	196101

Analysis Batch: 196704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-4	SED-15	Total/NA	Solid	8082	196101

Prep Batch: 261294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Total/NA	Water	3510C	
480-86375-7	REF-SW-01	Total/NA	Water	3510C	
480-86375-8	REF-PW-01	Total/NA	Water	3510C	
480-86375-10	REF-SW-02	Total/NA	Water	3510C	
480-86375-11	REF-PW-02	Total/NA	Water	3510C	
480-86375-14	REF-SW-03	Total/NA	Water	3510C	
480-86375-15	REF-PW-03	Total/NA	Water	3510C	
480-86375-17	REF-SW-04	Total/NA	Water	3510C	
480-86375-22	SW-18	Total/NA	Water	3510C	
LCS 480-261294/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-261294/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-261294/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 261409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Total/NA	Water	8082	261294
480-86375-7	REF-SW-01	Total/NA	Water	8082	261294
480-86375-8	REF-PW-01	Total/NA	Water	8082	261294
480-86375-10	REF-SW-02	Total/NA	Water	8082	261294
480-86375-11	REF-PW-02	Total/NA	Water	8082	261294
480-86375-14	REF-SW-03	Total/NA	Water	8082	261294
480-86375-15	REF-PW-03	Total/NA	Water	8082	261294
480-86375-17	REF-SW-04	Total/NA	Water	8082	261294
480-86375-22	SW-18	Total/NA	Water	8082	261294
LCS 480-261294/2-A	Lab Control Sample	Total/NA	Water	8082	261294
LCSD 480-261294/3-A	Lab Control Sample Dup	Total/NA	Water	8082	261294
MB 480-261294/1-A	Method Blank	Total/NA	Water	8082	261294

Metals

Filtration Batch: 260081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-260081/2-C	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 480-260081/3-C	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
MB 480-260081/1-D	Method Blank	Dissolved	Water	FILTRATION	

Metals (Continued)

Prep Batch: 261196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Dissolved	Water	7470A	
480-86375-7	REF-SW-01	Dissolved	Water	7470A	
480-86375-7 MS	REF-SW-01	Dissolved	Water	7470A	
480-86375-7 MSD	REF-SW-01	Dissolved	Water	7470A	
480-86375-8	REF-PW-01	Dissolved	Water	7470A	
480-86375-10	REF-SW-02	Dissolved	Water	7470A	
480-86375-11	REF-PW-02	Dissolved	Water	7470A	
480-86375-14	REF-SW-03	Dissolved	Water	7470A	
480-86375-15	REF-PW-03	Dissolved	Water	7470A	
480-86375-17	REF-SW-04	Dissolved	Water	7470A	
480-86375-22	SW-18	Dissolved	Water	7470A	
LCS 480-260081/2-C	Lab Control Sample	Dissolved	Water	7470A	260081
LCSD 480-260081/3-C	Lab Control Sample Dup	Dissolved	Water	7470A	260081
MB 480-260081/1-D	Method Blank	Dissolved	Water	7470A	260081

Prep Batch: 261254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Dissolved	Water	3005A	
480-86375-5 MS	SW-17	Dissolved	Water	3005A	
480-86375-5 MSD	SW-17	Dissolved	Water	3005A	
480-86375-7	REF-SW-01	Dissolved	Water	3005A	
480-86375-8	REF-PW-01	Dissolved	Water	3005A	
480-86375-10	REF-SW-02	Dissolved	Water	3005A	
480-86375-11	REF-PW-02	Dissolved	Water	3005A	
480-86375-14	REF-SW-03	Dissolved	Water	3005A	
480-86375-15	REF-PW-03	Dissolved	Water	3005A	
480-86375-17	REF-SW-04	Dissolved	Water	3005A	
480-86375-22	SW-18	Dissolved	Water	3005A	
LCS 480-261254/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 480-261254/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 480-261254/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 261276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	7471A	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	7471A	
480-86375-4	SED-15	Total/NA	Solid	7471A	
480-86375-4 MS	SED-15	Total/NA	Solid	7471A	
480-86375-4 MSD	SED-15	Total/NA	Solid	7471A	
480-86375-6	SED-17	Total/NA	Solid	7471A	
480-86375-9	REF-SED-01	Total/NA	Solid	7471A	
480-86375-13	REF-SED-02	Total/NA	Solid	7471A	
480-86375-16	REF-SED-03	Total/NA	Solid	7471A	
480-86375-18	REF-SED-04	Total/NA	Solid	7471A	
480-86375-19	SED-13	Total/NA	Solid	7471A	
480-86375-20	SED-14	Total/NA	Solid	7471A	
480-86375-21	SED-16	Total/NA	Solid	7471A	
LCDSRM 480-261276/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-261276/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-261276/1-A	Method Blank	Total/NA	Solid	7471A	

Metals (Continued)

Analysis Batch: 261361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Dissolved	Water	7470A	261196
480-86375-7	REF-SW-01	Dissolved	Water	7470A	261196
480-86375-7 MS	REF-SW-01	Dissolved	Water	7470A	261196
480-86375-7 MSD	REF-SW-01	Dissolved	Water	7470A	261196
480-86375-8	REF-PW-01	Dissolved	Water	7470A	261196
480-86375-10	REF-SW-02	Dissolved	Water	7470A	261196
480-86375-11	REF-PW-02	Dissolved	Water	7470A	261196
480-86375-14	REF-SW-03	Dissolved	Water	7470A	261196
480-86375-15	REF-PW-03	Dissolved	Water	7470A	261196
480-86375-17	REF-SW-04	Dissolved	Water	7470A	261196
480-86375-22	SW-18	Dissolved	Water	7470A	261196
LCS 480-260081/2-C	Lab Control Sample	Dissolved	Water	7470A	261196
LCSD 480-260081/3-C	Lab Control Sample Dup	Dissolved	Water	7470A	261196
MB 480-260081/1-D	Method Blank	Dissolved	Water	7470A	261196

Prep Batch: 261388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	3050B	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	3050B	
480-86375-4	SED-15	Total/NA	Solid	3050B	
480-86375-4 MS	SED-15	Total/NA	Solid	3050B	
480-86375-4 MSD	SED-15	Total/NA	Solid	3050B	
480-86375-6	SED-17	Total/NA	Solid	3050B	
480-86375-9	REF-SED-01	Total/NA	Solid	3050B	
480-86375-13	REF-SED-02	Total/NA	Solid	3050B	
480-86375-16	REF-SED-03	Total/NA	Solid	3050B	
LCDSRM 480-261388/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-261388/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-261388/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 261392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-18	REF-SED-04	Total/NA	Solid	3050B	
480-86375-19	SED-13	Total/NA	Solid	3050B	
480-86375-20	SED-14	Total/NA	Solid	3050B	
480-86375-21	SED-16	Total/NA	Solid	3050B	
LCDSRM 480-261392/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-261392/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-261392/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 261461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	7471A	261276
480-86375-3	SED-12 (DUP)	Total/NA	Solid	7471A	261276
480-86375-4	SED-15	Total/NA	Solid	7471A	261276
480-86375-4 MS	SED-15	Total/NA	Solid	7471A	261276
480-86375-4 MSD	SED-15	Total/NA	Solid	7471A	261276
480-86375-6	SED-17	Total/NA	Solid	7471A	261276
480-86375-9	REF-SED-01	Total/NA	Solid	7471A	261276
480-86375-13	REF-SED-02	Total/NA	Solid	7471A	261276
480-86375-16	REF-SED-03	Total/NA	Solid	7471A	261276

Metals (Continued)

Analysis Batch: 261461 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-18	REF-SED-04	Total/NA	Solid	7471A	261276
480-86375-19	SED-13	Total/NA	Solid	7471A	261276
480-86375-20	SED-14	Total/NA	Solid	7471A	261276
480-86375-21	SED-16	Total/NA	Solid	7471A	261276
LCDSRM 480-261276/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	261276
LCSSRM 480-261276/2-A	Lab Control Sample	Total/NA	Solid	7471A	261276
MB 480-261276/1-A	Method Blank	Total/NA	Solid	7471A	261276

Analysis Batch: 261549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Dissolved	Water	6010	261254
480-86375-5 MS	SW-17	Dissolved	Water	6010	261254
480-86375-5 MSD	SW-17	Dissolved	Water	6010	261254
480-86375-7	REF-SW-01	Dissolved	Water	6010	261254
480-86375-8	REF-PW-01	Dissolved	Water	6010	261254
480-86375-10	REF-SW-02	Dissolved	Water	6010	261254
480-86375-11	REF-PW-02	Dissolved	Water	6010	261254
480-86375-14	REF-SW-03	Dissolved	Water	6010	261254
480-86375-15	REF-PW-03	Dissolved	Water	6010	261254
480-86375-17	REF-SW-04	Dissolved	Water	6010	261254
480-86375-22	SW-18	Dissolved	Water	6010	261254
LCS 480-261254/2-A	Lab Control Sample	Total Recoverable	Water	6010	261254
LCSD 480-261254/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010	261254
MB 480-261254/1-A	Method Blank	Total Recoverable	Water	6010	261254

Analysis Batch: 261800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	6010	261388
480-86375-3	SED-12 (DUP)	Total/NA	Solid	6010	261388
480-86375-4	SED-15	Total/NA	Solid	6010	261388
480-86375-4 MS	SED-15	Total/NA	Solid	6010	261388
480-86375-4 MSD	SED-15	Total/NA	Solid	6010	261388
480-86375-6	SED-17	Total/NA	Solid	6010	261388
480-86375-9	REF-SED-01	Total/NA	Solid	6010	261388
480-86375-13	REF-SED-02	Total/NA	Solid	6010	261388
480-86375-16	REF-SED-03	Total/NA	Solid	6010	261388
480-86375-18	REF-SED-04	Total/NA	Solid	6010	261392
480-86375-18	REF-SED-04	Total/NA	Solid	6010	261392
480-86375-19	SED-13	Total/NA	Solid	6010	261392
480-86375-20	SED-14	Total/NA	Solid	6010	261392
480-86375-21	SED-16	Total/NA	Solid	6010	261392
LCDSRM 480-261388/3-A	Lab Control Sample Dup	Total/NA	Solid	6010	261388
LCDSRM 480-261392/3-A	Lab Control Sample Dup	Total/NA	Solid	6010	261392
LCSSRM 480-261388/2-A	Lab Control Sample	Total/NA	Solid	6010	261388
LCSSRM 480-261392/2-A	Lab Control Sample	Total/NA	Solid	6010	261392
MB 480-261388/1-A	Method Blank	Total/NA	Solid	6010	261388
MB 480-261392/1-A	Method Blank	Total/NA	Solid	6010	261392

General Chemistry

Analysis Batch: 261146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	Moisture	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	Moisture	
480-86375-4	SED-15	Total/NA	Solid	Moisture	
480-86375-4 MS	SED-15	Total/NA	Solid	Moisture	
480-86375-4 MSD	SED-15	Total/NA	Solid	Moisture	
480-86375-6	SED-17	Total/NA	Solid	Moisture	
480-86375-9	REF-SED-01	Total/NA	Solid	Moisture	
480-86375-13	REF-SED-02	Total/NA	Solid	Moisture	
480-86375-16	REF-SED-03	Total/NA	Solid	Moisture	
480-86375-18	REF-SED-04	Total/NA	Solid	Moisture	
480-86375-19	SED-13	Total/NA	Solid	Moisture	
480-86375-20	SED-14	Total/NA	Solid	Moisture	
480-86375-21	SED-16	Total/NA	Solid	Moisture	

Analysis Batch: 261715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-14	REF-SW-03	Dissolved	Water	SM 2340C	
480-86375-14 DU	REF-SW-03	Dissolved	Water	SM 2340C	
480-86375-15	REF-PW-03	Dissolved	Water	SM 2340C	
480-86375-15 MS	REF-PW-03	Dissolved	Water	SM 2340C	
480-86375-17	REF-SW-04	Dissolved	Water	SM 2340C	
480-86375-22	SW-18	Dissolved	Water	SM 2340C	
LCS 480-261715/4	Lab Control Sample	Total/NA	Water	SM 2340C	
LCS 480-261715/51	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 480-261715/3	Method Blank	Total/NA	Water	SM 2340C	
MB 480-261715/50	Method Blank	Total/NA	Water	SM 2340C	

Analysis Batch: 262156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Dissolved	Water	SM 2340C	
480-86375-7	REF-SW-01	Dissolved	Water	SM 2340C	
480-86375-7 DU	REF-SW-01	Dissolved	Water	SM 2340C	
480-86375-8	REF-PW-01	Dissolved	Water	SM 2340C	
480-86375-8 MS	REF-PW-01	Dissolved	Water	SM 2340C	
480-86375-10	REF-SW-02	Dissolved	Water	SM 2340C	
480-86375-11	REF-PW-02	Dissolved	Water	SM 2340C	
480-86375-11 DU	REF-PW-02	Dissolved	Water	SM 2340C	
480-86375-11 MS	REF-PW-02	Dissolved	Water	SM 2340C	
LCS 480-262156/28	Lab Control Sample	Total/NA	Water	SM 2340C	
LCS 480-262156/52	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 480-262156/27	Method Blank	Total/NA	Water	SM 2340C	
MB 480-262156/51	Method Blank	Total/NA	Water	SM 2340C	

Geotechnical

Analysis Batch: 93493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	D2974	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	D2974	
480-86375-4	SED-15	Total/NA	Solid	D2974	

Geotechnical (Continued)

Analysis Batch: 93493 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-6	SED-17	Total/NA	Solid	D2974	
480-86375-9	REF-SED-01	Total/NA	Solid	D2974	
480-86375-13	REF-SED-02	Total/NA	Solid	D2974	
480-86375-16	REF-SED-03	Total/NA	Solid	D2974	
480-86375-18	REF-SED-04	Total/NA	Solid	D2974	
480-86375-19	SED-13	Total/NA	Solid	D2974	
480-86375-20	SED-14	Total/NA	Solid	D2974	
480-86375-21	SED-16	Total/NA	Solid	D2974	

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: TB-03
Date Collected: 08/26/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 12:07	SWO	TAL BUF

Client Sample ID: SED-12
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-12
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2
Matrix: Solid
Percent Solids: 31.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 13:53	NQN	TAL BUF
Total/NA	Prep	5035A			261608	08/29/15 04:10	GTG	TAL BUF
Total/NA	Analysis	8260C		1	261728	09/03/15 00:15	GTG	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		50	196511	09/08/15 11:33	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 14:32	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:05	TAS	TAL BUF

Client Sample ID: SED-12 (DUP)
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-12 (DUP)
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3
Matrix: Solid
Percent Solids: 32.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 14:19	NQN	TAL BUF
Total/NA	Prep	5035A			261608	08/29/15 04:10	GTG	TAL BUF

Client Sample ID: SED-12 (DUP)

Lab Sample ID: 480-86375-3
Date Collected: 08/26/15 15:43
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 32.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261728	09/03/15 00:39	GTG	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		50	196511	09/08/15 12:11	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 14:35	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:11	TAS	TAL BUF

Client Sample ID: SED-15

Lab Sample ID: 480-86375-4
Date Collected: 08/27/15 08:15
Matrix: Solid
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-15

Lab Sample ID: 480-86375-4
Date Collected: 08/27/15 08:15
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 31.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 14:45	NQN	TAL BUF
Total/NA	Prep	5035A			261608	08/29/15 04:10	GTG	TAL BUF
Total/NA	Analysis	8260C		1	261576	09/02/15 13:20	GTG	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		10	196704	09/09/15 09:06	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 14:38	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		2	261461	09/01/15 13:10	TAS	TAL BUF

Client Sample ID: SW-17

Lab Sample ID: 480-86375-5
Date Collected: 08/27/15 08:50
Matrix: Water
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 12:55	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 11:59	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 17:48	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF

Client Sample ID: SW-17

Lab Sample ID: 480-86375-5
Date Collected: 08/27/15 08:50
Matrix: Water
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	261361	08/31/15 14:07	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	262156	09/04/15 10:30	MDL	TAL BUF

Client Sample ID: SED-17

Lab Sample ID: 480-86375-6
Date Collected: 08/27/15 09:00
Matrix: Solid
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-17

Lab Sample ID: 480-86375-6
Date Collected: 08/27/15 09:00
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 28.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 15:11	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		5	196511	09/08/15 12:30	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 15:01	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:20	TAS	TAL BUF

Client Sample ID: REF-SW-01

Lab Sample ID: 480-86375-7
Date Collected: 08/27/15 09:40
Matrix: Water
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 13:19	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 12:15	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:11	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:08	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	262156	09/04/15 10:30	MDL	TAL BUF

Client Sample ID: REF-PW-01

Lab Sample ID: 480-86375-8
Matrix: Water
Date Collected: 08/27/15 09:55
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 13:43	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 12:31	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:14	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:19	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	262156	09/04/15 10:30	MDL	TAL BUF

Client Sample ID: REF-SED-01

Lab Sample ID: 480-86375-9
Matrix: Solid
Date Collected: 08/27/15 10:10
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: REF-SED-01

Lab Sample ID: 480-86375-9
Matrix: Solid
Date Collected: 08/27/15 10:10
Date Received: 08/29/15 02:15
Percent Solids: 60.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 15:37	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		1	196511	09/08/15 12:49	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 15:03	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:22	TAS	TAL BUF

Client Sample ID: REF-SW-02

Lab Sample ID: 480-86375-10
Matrix: Water
Date Collected: 08/27/15 10:55
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 14:06	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 12:47	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:17	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:20	TAS	TAL BUF

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	SM 2340C		1	262156	09/04/15 10:30	MDL	TAL BUF

Client Sample ID: REF-PW-02
Lab Sample ID: 480-86375-11
Date Collected: 08/27/15 11:30
Matrix: Water
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 14:30	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 13:03	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:19	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:22	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	262156	09/04/15 10:30	MDL	TAL BUF

Client Sample ID: TB-04
Lab Sample ID: 480-86375-12
Date Collected: 08/27/15 00:00
Matrix: Water
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 12:31	SWO	TAL BUF

Client Sample ID: REF-SED-02
Lab Sample ID: 480-86375-13
Date Collected: 08/27/15 11:50
Matrix: Solid
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: REF-SED-02
Lab Sample ID: 480-86375-13
Date Collected: 08/27/15 11:50
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 22.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 16:03	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		5	196511	09/08/15 13:09	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 15:06	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:25	TAS	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: REF-SW-03

Lab Sample ID: 480-86375-14
Matrix: Water
Date Collected: 08/27/15 12:10
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 14:54	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 13:19	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:22	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:24	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	261715	09/02/15 11:30	MDL	TAL BUF

Client Sample ID: REF-PW-03

Lab Sample ID: 480-86375-15
Matrix: Water
Date Collected: 08/27/15 12:30
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 15:42	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 13:35	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:25	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:25	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	261715	09/02/15 11:30	MDL	TAL BUF

Client Sample ID: REF-SED-03

Lab Sample ID: 480-86375-16
Matrix: Solid
Date Collected: 08/27/15 12:45
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: REF-SED-03

Lab Sample ID: 480-86375-16
Matrix: Solid
Date Collected: 08/27/15 12:45
Percent Solids: 82.0
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 16:29	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		1	196511	09/08/15 13:28	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 15:09	AMH	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: REF-SED-03

Lab Sample ID: 480-86375-16
Date Collected: 08/27/15 12:45
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:27	TAS	TAL BUF

Client Sample ID: REF-SW-04

Lab Sample ID: 480-86375-17
Date Collected: 08/27/15 13:05
Matrix: Water
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 16:06	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 14:22	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:37	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:27	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	261715	09/02/15 11:30	MDL	TAL BUF

Client Sample ID: REF-SED-04

Lab Sample ID: 480-86375-18
Date Collected: 08/27/15 13:20
Matrix: Solid
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: REF-SED-04

Lab Sample ID: 480-86375-18
Date Collected: 08/27/15 13:20
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 46.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 16:55	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		5	196511	09/08/15 15:22	LSH	TAL CAN
Total/NA	Prep	3050B			261392	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 15:30	AMH	TAL BUF
Total/NA	Prep	3050B			261392	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		5	261800	09/02/15 15:32	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:29	TAS	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: SED-13
Date Collected: 08/27/15 14:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-13
Date Collected: 08/27/15 14:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-19
Matrix: Solid
Percent Solids: 35.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 17:21	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		5	196511	09/08/15 15:41	LSH	TAL CAN
Total/NA	Prep	3050B			261392	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 12:33	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:35	TAS	TAL BUF

Client Sample ID: SED-14
Date Collected: 08/27/15 14:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-14
Date Collected: 08/27/15 14:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-20
Matrix: Solid
Percent Solids: 50.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 17:47	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		5	196511	09/08/15 16:00	LSH	TAL CAN
Total/NA	Prep	3050B			261392	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 12:36	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:37	TAS	TAL BUF

Client Sample ID: SED-16
Date Collected: 08/27/15 14:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-16
Date Collected: 08/27/15 14:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-21
Matrix: Solid
Percent Solids: 40.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 18:12	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		5	196511	09/08/15 16:20	LSH	TAL CAN
Total/NA	Prep	3050B			261392	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 12:38	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:39	TAS	TAL BUF

Client Sample ID: SW-18
Date Collected: 08/27/15 15:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 16:30	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 14:38	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:40	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:29	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	261715	09/02/15 11:30	MDL	TAL BUF

Client Sample ID: TB-03
Date Collected: 08/26/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 18:39	NQN	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: TB-04

Date Collected: 08/27/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 19:05	NQN	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010	3005A	Water	Antimony
6010	3005A	Water	Arsenic
6010	3005A	Water	Barium
6010	3005A	Water	Beryllium
6010	3005A	Water	Cadmium
6010	3005A	Water	Chromium
6010	3005A	Water	Copper
6010	3005A	Water	Lead
6010	3005A	Water	Nickel
6010	3005A	Water	Selenium
6010	3005A	Water	Silver
6010	3005A	Water	Thallium
6010	3005A	Water	Vanadium
6010	3005A	Water	Zinc
6010	3050B	Solid	Antimony
6010	3050B	Solid	Arsenic
6010	3050B	Solid	Barium
6010	3050B	Solid	Beryllium
6010	3050B	Solid	Cadmium
6010	3050B	Solid	Chromium
6010	3050B	Solid	Copper
6010	3050B	Solid	Lead
6010	3050B	Solid	Nickel
6010	3050B	Solid	Selenium
6010	3050B	Solid	Silver
6010	3050B	Solid	Thallium
6010	3050B	Solid	Vanadium
6010	3050B	Solid	Zinc
7470A	7470A	Water	Mercury
7471A	7471A	Solid	Mercury
8082	3510C	Water	PCB-1016
8082	3510C	Water	PCB-1221
8082	3510C	Water	PCB-1232
8082	3510C	Water	PCB-1242
8082	3510C	Water	PCB-1248
8082	3510C	Water	PCB-1254
8082	3510C	Water	PCB-1260
8082	3510C	Water	PCB-1262
8082	3510C	Water	PCB-1268
8260C		Water	1,1,1,2-Tetrachloroethane
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,1-Dichloropropene

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trichlorobenzene
8260C		Water	1,2,3-Trichloropropane
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2,4-Trimethylbenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dichlorobenzene
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloropropane
8260C		Water	1,3,5-Trimethylbenzene
8260C		Water	1,3-Dichlorobenzene
8260C		Water	1,3-Dichloropropane
8260C		Water	1,4-Dichlorobenzene
8260C		Water	1,4-Dioxane
8260C		Water	2,2-Dichloropropane
8260C		Water	2-Butanone (MEK)
8260C		Water	2-Chlorotoluene
8260C		Water	2-Hexanone
8260C		Water	4-Chlorotoluene
8260C		Water	4-Isopropyltoluene
8260C		Water	4-Methyl-2-pentanone (MIBK)
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromobenzene
8260C		Water	Bromoform
8260C		Water	Bromomethane
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorobromomethane
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Dibromomethane
8260C		Water	Dichlorobromomethane
8260C		Water	Dichlorodifluoromethane
8260C		Water	Ethyl ether
8260C		Water	Ethylbenzene
8260C		Water	Ethylene Dibromide
8260C		Water	Freon 113
8260C		Water	Hexachlorobutadiene
8260C		Water	Isopropyl ether
8260C		Water	Isopropylbenzene
8260C		Water	Methyl tert-butyl ether

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Methylene Chloride
8260C		Water	m-Xylene & p-Xylene
8260C		Water	Naphthalene
8260C		Water	n-Butylbenzene
8260C		Water	N-Propylbenzene
8260C		Water	o-Xylene
8260C		Water	sec-Butylbenzene
8260C		Water	Styrene
8260C		Water	Tert-amyl methyl ether
8260C		Water	Tert-butyl ethyl ether
8260C		Water	tert-Butylbenzene
8260C		Water	Tetrachloroethene
8260C		Water	Tetrahydrofuran
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Trichlorofluoromethane
8260C		Water	Vinyl chloride
8260C	5035A	Solid	1,1,1,2-Tetrachloroethane
8260C	5035A	Solid	1,1,1-Trichloroethane
8260C	5035A	Solid	1,1,2,2-Tetrachloroethane
8260C	5035A	Solid	1,1,2-Trichloroethane
8260C	5035A	Solid	1,1-Dichloroethane
8260C	5035A	Solid	1,1-Dichloroethene
8260C	5035A	Solid	1,1-Dichloropropene
8260C	5035A	Solid	1,2,3-Trichlorobenzene
8260C	5035A	Solid	1,2,3-Trichloropropane
8260C	5035A	Solid	1,2,4-Trichlorobenzene
8260C	5035A	Solid	1,2,4-Trimethylbenzene
8260C	5035A	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035A	Solid	1,2-Dichlorobenzene
8260C	5035A	Solid	1,2-Dichloroethane
8260C	5035A	Solid	1,2-Dichloropropane
8260C	5035A	Solid	1,3,5-Trimethylbenzene
8260C	5035A	Solid	1,3-Dichlorobenzene
8260C	5035A	Solid	1,3-Dichloropropane
8260C	5035A	Solid	1,4-Dichlorobenzene
8260C	5035A	Solid	1,4-Dioxane
8260C	5035A	Solid	2,2-Dichloropropane
8260C	5035A	Solid	2-Butanone (MEK)
8260C	5035A	Solid	2-Chlorotoluene
8260C	5035A	Solid	2-Hexanone
8260C	5035A	Solid	4-Chlorotoluene
8260C	5035A	Solid	4-Isopropyltoluene
8260C	5035A	Solid	4-Methyl-2-pentanone (MIBK)

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C	5035A	Solid	Acetone
8260C	5035A	Solid	Benzene
8260C	5035A	Solid	Bromobenzene
8260C	5035A	Solid	Bromoform
8260C	5035A	Solid	Bromomethane
8260C	5035A	Solid	Carbon disulfide
8260C	5035A	Solid	Carbon tetrachloride
8260C	5035A	Solid	Chlorobenzene
8260C	5035A	Solid	Chlorobromomethane
8260C	5035A	Solid	Chlorodibromomethane
8260C	5035A	Solid	Chloroethane
8260C	5035A	Solid	Chloroform
8260C	5035A	Solid	Chloromethane
8260C	5035A	Solid	cis-1,2-Dichloroethene
8260C	5035A	Solid	cis-1,3-Dichloropropene
8260C	5035A	Solid	Dibromomethane
8260C	5035A	Solid	Dichlorobromomethane
8260C	5035A	Solid	Dichlorodifluoromethane
8260C	5035A	Solid	Ethyl ether
8260C	5035A	Solid	Ethylbenzene
8260C	5035A	Solid	Ethylene Dibromide
8260C	5035A	Solid	Freon 113
8260C	5035A	Solid	Hexachlorobutadiene
8260C	5035A	Solid	Isopropyl ether
8260C	5035A	Solid	Isopropylbenzene
8260C	5035A	Solid	Methyl tert-butyl ether
8260C	5035A	Solid	Methylene Chloride
8260C	5035A	Solid	m-Xylene & p-Xylene
8260C	5035A	Solid	Naphthalene
8260C	5035A	Solid	n-Butylbenzene
8260C	5035A	Solid	N-Propylbenzene
8260C	5035A	Solid	o-Xylene
8260C	5035A	Solid	sec-Butylbenzene
8260C	5035A	Solid	Styrene
8260C	5035A	Solid	Tert-amyl methyl ether
8260C	5035A	Solid	Tert-butyl ethyl ether
8260C	5035A	Solid	tert-Butylbenzene
8260C	5035A	Solid	Tetrachloroethene
8260C	5035A	Solid	Tetrahydrofuran
8260C	5035A	Solid	Toluene
8260C	5035A	Solid	trans-1,2-Dichloroethene
8260C	5035A	Solid	trans-1,3-Dichloropropene
8260C	5035A	Solid	Trichloroethene
8260C	5035A	Solid	Trichlorofluoromethane
8260C	5035A	Solid	Vinyl chloride
Moisture		Solid	Percent Moisture

Certification Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-15
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-13-16
Florida	NELAP	4	E87467	06-30-16
L-A-B	DoD ELAP		L2336	02-26-17
Maine	State Program	1	VT00008	04-17-17
Minnesota	NELAP	5	050-999-436	12-31-15
New Hampshire	NELAP	1	2006	12-18-15
New Jersey	NELAP	2	VT972	09-30-15
New York	NELAP	2	10391	03-31-16
Pennsylvania	NELAP	3	68-00489	04-30-16
Rhode Island	State Program	1	LAO00298	12-30-15
US Fish & Wildlife	Federal		LE-058448-0	02-28-16
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-15
Virginia	NELAP	3	460209	12-14-15

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	09-30-15 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	10-31-15 *
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL CAN
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	TAL BUF
D2974	Moisture, Ash and Organic Matter	ASTM	TAL BUR

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
MA DEP = Massachusetts Department Of Environmental Protection
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-86375-1	TB-03	Water	08/26/15 00:00	08/29/15 02:15
480-86375-2	SED-12	Solid	08/26/15 15:43	08/29/15 02:15
480-86375-3	SED-12 (DUP)	Solid	08/26/15 15:43	08/29/15 02:15
480-86375-4	SED-15	Solid	08/27/15 08:15	08/29/15 02:15
480-86375-5	SW-17	Water	08/27/15 08:50	08/29/15 02:15
480-86375-6	SED-17	Solid	08/27/15 09:00	08/29/15 02:15
480-86375-7	REF-SW-01	Water	08/27/15 09:40	08/29/15 02:15
480-86375-8	REF-PW-01	Water	08/27/15 09:55	08/29/15 02:15
480-86375-9	REF-SED-01	Solid	08/27/15 10:10	08/29/15 02:15
480-86375-10	REF-SW-02	Water	08/27/15 10:55	08/29/15 02:15
480-86375-11	REF-PW-02	Water	08/27/15 11:30	08/29/15 02:15
480-86375-12	TB-04	Water	08/27/15 00:00	08/29/15 02:15
480-86375-13	REF-SED-02	Solid	08/27/15 11:50	08/29/15 02:15
480-86375-14	REF-SW-03	Water	08/27/15 12:10	08/29/15 02:15
480-86375-15	REF-PW-03	Water	08/27/15 12:30	08/29/15 02:15
480-86375-16	REF-SED-03	Solid	08/27/15 12:45	08/29/15 02:15
480-86375-17	REF-SW-04	Water	08/27/15 13:05	08/29/15 02:15
480-86375-18	REF-SED-04	Solid	08/27/15 13:20	08/29/15 02:15
480-86375-19	SED-13	Solid	08/27/15 14:30	08/29/15 02:15
480-86375-20	SED-14	Solid	08/27/15 14:40	08/29/15 02:15
480-86375-21	SED-16	Solid	08/27/15 14:55	08/29/15 02:15
480-86375-22	SW-18	Water	08/27/15 15:15	08/29/15 02:15
480-86375-23	TB-03	Solid	08/26/15 00:00	08/29/15 02:15
480-86375-24	TB-04	Solid	08/27/15 00:00	08/29/15 02:15

Login Sample Receipt Checklist

Client: Woodard & Curran, Inc.

Job Number: 480-86375-1
SDG Number: #2

Login Number: 86375
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	8/29/2015 0410
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	W AND C
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Woodard & Curran, Inc.

Job Number: 480-86375-1
SDG Number: #2

Login Number: 86375
List Number: 2
Creator: Lavigne, Scott M

List Source: TestAmerica Burlington
List Creation: 09/01/15 11:32 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	651724
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

★SDG #2 start★

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501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road – Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:
Client Contact: Keri Stevers
Company: Woodard + Curran
Address: 40 Shattuck Rd Suite 110
City: Andover
State and Zip: MA, 01810
Client's Phone: 978-557-8150
Client's Contact Email: kstevers@
Client's Project Name/Number: 229286 Lewis Chem
Sample Collection Site Name & Location: Boston, MA

Sample Collector's Name (Please Print Neatly): Ben Gregory
Sample Collector's Phone: 781 801 2476
Lab PM: Becky Mason
E-Mail:
Lab COC Barcode Label

COC No: 33398
Page: 1 of 3
Job #:

Due Date Requested:
Turnaround Time (TAT) Requested (business days): 5 day per MSA
Quote # or Project #:
PO #:
WO #:
PWS ID #:

Analysis Requested

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	VOCs - 8260	VOCs - 8260	Total Metals MCP14+Cu	Diss. Metals MCP14+Cu	Hardness	Total PCBs 8082	total PCBs w/ soxhlet	FOC	% solids	Total Number of Containers (enter total for each line)
Preservation Codes →					A	F	D	D	D	N	N	N	N	
TB-03	8/26/15				X	X								5
SED-12	8/26/15	1543	G	S		X	X				X	X	X	7
SED-12 (DUP)	8/26/15	1543	G	S		X	X				X	X	X	7
SED-15	8/27/15	815	G	S		X	X				X	X	X	7
SED-15 (MS)	8/27/15	815	G	S			X							1
SW-17	8/27/15	850	G	W	X			X	X	X				5
SED-17	8/27/15	900	G	S		X	X				X	X	X	7
REF-SW-01	8/27/15	940	G	W	X			X	X	X				5
REF-PW-01	8/27/15	955	G	W	X			X	X	X				5
REF-SED-01	8/27/15	1010	G	S		X	X				X	X	Y	6

480-86375 Chain of Custody

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP [X] GW1/S1 [ ]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [ ]
eDEP Filing [ ] NPDES [ ]

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit TestAmerica to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Special Instructions & Notes:
Dissolved metals + hardness are field filtered

Possible Hazard Identification (please check off each that may apply):
[ ] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [X] Unknown [ ] Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month) :
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

** **Matrix Types:** A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► **NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !!** ◄

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	8-28-15 - 14:10	WTC	Keri B. Lever	8-28-15 14:10	WTC
Relinquished by: Keri B. Lever	8-25-15 14:10		Received by:	8-28-15 1410	TAB
Relinquished by:	8-28-15 1701		Received by:	8-29-15 0215	TAB

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.4, 1.0 #1

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15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

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501 Southampton Road
Westfield MA 01085
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Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:
Client Contact: Keri Stevens
Company: Woodard + Curran
Address: 40 Shattuck Rd Suite 110
City: Andover
State and Zip: MA 01810
Client's Phone: 978 557 8150
Client's Contact Email: kstevens@
Client's Project Name/Number: 229286 Lewis Chen
Sample Collection Site Name & Location: Boston DND

Sample Collector's Name (Please Print Neatly): Ben Gregory
Sample Collector's Phone: 781-801-2776
Lab PM: Becky Mason
E-Mail:
Lab COC Barcode Label
COC No: 33403
Page: 2 of 3
Job #:

Due Date Requested:
Turnaround Time (TAT) Requested (business days): 5 day pre MSA
Quote # or Project #:
PO #:
WO #:
PWS ID #:

Analysis Requested

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP [X] GW1/S1 [ ]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [ ]
eDEP Filing [ ] NPDES [ ]

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Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	VOCs-8260	VOCs-8260	Total Metals MCP14+Cu	Diss Metals MCP14+Cu	Hardness	Total PCBs 8082	Total PCBs w/ soxhlet	TOC	% Solids						Total Number of Containers (enter total for each line)	Special Instructions & Notes:
Preservation Codes →					A	F	D	D	D	W	N	N	N						↓	
REF-SW-02	8/27/15	1055	G	W	X			X	X	X									5	Dissolved metals + hardness field filtered.
REF-SW-02	8/27/15	1130	G	W	X			X	X	X									5	
TB-04	8/27/15				X	X													5	
REF-SED-02	8/27/15	1150	G	S		X	X				X	X	X						7	
REF-SW-03	8/27/15	1210	G	W	X			X	X	X									5	
REF-PW-03	8/27/15	1230	G	W	X			X	X	X									5	
REF-SED-03	8/27/15	1245	G	S		X	X				X	X	X						7	
REF-SW-04	8/27/15	1305	G	W	X			X	X	X									5	
REF-SED-04	8/27/15	1320	G	S		X	X				X	X	X						7	
SED-13	8/27/15	1430	G	S		X	X				X	X	X						7	

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Possible Hazard Identification (please check off each that may apply):
[ ] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [X] Unknown [ ] Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month) :
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

** **Matrix Types:** A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► **NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !!** ◄

	Date/Time:	Company		Date/Time:	Company
Relinquished by:	8-28-15 14:10	WTC	Received by: Kurt B. Lauer	8-28-15 14:10	
Relinquished by: Kurt B. Lauer	8-28-15 19:10	WTC	Received by:	8-28-15 1900	
Relinquished by:	8-28-15 1700	TA	Received by:	8-29-15 0215	TAB

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.4, 1.3 #1

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Chain of Custody Record

TestAmerica
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Client Information:
Client Contact: Keri Stevens
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City: Andover
State and Zip: MA, 01810
Client's Phone: 978-557-8150
Client's Contact Email: kstevens@
Client's Project Name/Number: 229286 Lewis Chem
Sample Collection Site Name & Location: Boston DND

Sample Collector's Name (Please Print Neatly): Ben Gregory
Sample Collector's Phone: 781-801-2476
Lab PM: Becky Mason
E-Mail:
Lab COC Barcode Label

COC No: 33393
Page: 3 of 3
Job #:

Due Date Requested:
Turnaround Time (TAT) Requested (business days): 5 day per MSA
Quote # or Project #:
PO #:
WO #:
PWS ID #:

Analysis Requested

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	VOCs - 8260	VOCs - 8260	Total Metals MCP14 +Cu	Diss. Metals MCP14 +Cu	Hardness	Total PCBs 8082	Total PCB w/ Soxh ext	FOC	1 of 50 lids	Total Number of Containers (enter total for each line)	Special Instructions & Notes:
Preservation Codes →					A	F	D	D	D	N	N	N	N		
SED-14	8/27/15	1440	G	S		X	X				X	X	X	7	Dissolved Metals
SED-16	8/27/15	1455	G	S		X	X				X	X	X	7	+ hardness field
SW-18	8/27/15	1515	G	W	X			X	X	X				5	filtered

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP [X] GW1/S1 [ ]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [ ]
eDEP Filing [ ] NPDES [ ]

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Possible Hazard Identification (please check off each that may apply):
[ ] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [X] Unknown [ ] Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month):
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

** **Matrix Types**: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◄

	Date/Time:	Company		Date/Time:	Company
Relinquished by:	8-28-15 14:10	WTC	Received by: Ken Blaver	8-28-15 14:10	WTC
Relinquished by: Mich Hart	8-28-15 19:10	WTC	Received by:	8-29-15 1410	TD
Relinquished by:	8-29-15 1700		Received by:	8/29/15 0215	TAO

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.4, 1.3 #1

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TAL-8245-360R

WI-QA-010 rev 8

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9/16/2015

APPENDIX J: UPDATED STAGE 1 ECOLOGICAL EVALUATION

UPDATED STAGE I ECOLOGICAL SCREENING REPORT

DRAFT

229286.00

Boston Department of Neighborhood Development

November 2015

woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS

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ATTACHMENTS

Attachment 1: Historical River Data
Attachment 2: Comparison of Datasets - Box and Whisker Plots
Attachment 3: Summary of Ecological Benchmarks

DRAFT

1. UPDATED STAGE I ECOLOGICAL SCREENING & BACKGROUND EVALUATION

The Method 3 Risk Characterization (RC) included in the Phase II Comprehensive Disposal Site Assessment (CSA) report (Appendix F of W&C 2015) included an evaluation of "local conditions" within the Neponset River. The Neponset River flows through mixed residential, commercial, and industrial areas from its source in Foxborough, MA to its mouth at Boston Harbor and is and has been subject to both point and non-point sources of pollution, from industrial and municipal discharges to roadway run off and erosion. Numerous hazardous waste sites are also present along the Neponset River, notably the LE Mason polychlorinated biphenyl (PCB) site (MassDEP RTN 3-730). Consequently, water and sediment quality in this waterway were impacted by a variety of contaminants. This baseline level of contamination within the river is referred to as "local conditions", and includes heavy metals, PCBs, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs)in sediments located adjacent to as well as upriver of the disposal site.

The Method 3 RC conducted a local conditions evaluation that included a statistical comparison of concentrations of contaminants detected in sediment located along the reach of river adjacent to the disposal site to concentrations upriver (local conditions) and concluded that all detected VOCs, acenaphthene, arsenic, and selenium were present in sediment adjacent to the disposal site at levels exceeding those indicative of local conditions. These constituents were considered to be "disposal site-related" and were quantitatively evaluated in the human health and ecological risk characterization included as part of the Method 3 RC. PCBs were not evaluated in the Method 3 local conditions evaluation, given the lack of PCB data adjacent to the disposal site, the presence of a large PCB release located upriver of the disposal site (LE Mason), and the existence of additional river sediment data collected by the United States Geological Survey (USGS) that suggested that PCBs from the LE Mason disposal site have impacted sediments throughout the Neponset River from the Mother Brook confluence to Boston Harbor.

A Stage I Ecological Screening (ES) was included within the Method 3 to evaluate the potential risk of harm to the environment. The constituents identified as "disposal site-related" were carried through a conservative benchmark screening where maximum detected concentrations of chemicals of potential concern (COPC; i.e., "disposal site-related" constituents, as per the local conditions evaluation) were compared to conservative ecological benchmarks. The results of the Stage I ES presented in the Method 3 indicated that concentrations of VOCs and selenium exceeded sediment benchmarks protective of ecological receptors; therefore sediment COPCs may present a potential risk of harm to the environment at the levels present in the river adjacent to the disposal site, and that further evaluation of ecological effects and collection of supplemental sediment data, particularly for PCBs, was warranted (W&C 2015). The river sampling program described in the Phase III report was implemented in the summer of 2015 to address these data gaps and reduce uncertainties.

The objective of this updated Stage I ES is to evaluate the recent surface water, sediment, and pore water data from samples collected in the reach of the Neponset River adjacent to the disposal site ("disposal site" samples) with respect to local conditions within the river, to determine whether disposal site-related constituents may pose a significant risk to ecological receptors, and to determine whether remediation may be warranted within the river. The following sections present an updated local conditions evaluation based on the recent river data as well as an expanded benchmark evaluation that takes into consideration a broader range of published ecological benchmark concentrations and the spatial distribution of the revised dataset.

Sample collection and analysis methods as well as a description of the river channel was provided in Phase III Remedial Action Plan (Phase III) report, to which this report is appended. Historical analytical results as well as information on ecological receptors and habitat characteristics may be found in the Stage 1 ES in the Phase II report (Woodard & Curran 2015). Analytical results for sediment, pore water, and surface water samples collected in 2015 are presented on Tables 1, 2 and 3, respectively, and discussed in the Phase III report. Sample locations are depicted on Figure 4 of the Phase III report. Laboratory reports for ecological samples are provided in Appendix I of the Phase III report.

DRAFT

1.1 LOCAL CONDITIONS EVALUATION

This section discusses the overall approach used in discerning whether the constituents detected in surface water, sediment and pore water in the disposal site reach are consistent with or higher than those in upriver reference locations. The results of this evaluation are presented, and the COPC that will be carried through the ecological benchmark screening are identified.

1.1.1 Local Conditions Evaluation Approach

To determine whether the concentrations of these constituents are similar to those detected in upriver locations, Woodard & Curran conducted an updated statistical evaluation of Neponset River sediment data, based on the recent 2015 data collected by Woodard & Curran, as well as historical sediment data collected by ES&M (which was used in the Method 3 report), USGS (Breault 2014), and Shaw Environmental (Shaw, 2004, 2005; IT 2001, 2002). The local conditions evaluation focuses on the stretch of river adjacent to the disposal site and upriver, including the LE Mason disposal site located on Mother Brook, a channel that enters the Neponset River approximately 200 meters upriver of the Former Lewis Chemical Corporation site. As previously discussed in the Method 3 report, the LE Mason site is a known source of PCB impact to Mother Brook and downstream areas (Woodard & Curran 2015). Remediation to address PCB contamination at LE Mason in Mother Brook and adjacent upland areas was conducted over the last decade and included the excavation of soil and the dredging and removal of streambed sediments over a stretch of river adjacent to and downstream of the LE Mason disposal site. The local conditions evaluation also includes USGS sediment data collected from the Neponset River upriver of the Mother Brook confluence. The historical data collected by ES&M and the USGS/LE Mason local conditions sediment data are presented and described in Attachment 1. This evaluation was not conducted for pore water or surface water, given the lack of historical data for these media.

Due to the fact that the historical data were collected nine or more years ago from a river system where conditions have a high potential for changing over time, as well as the possible differences in sampling methodologies, media, incongruities among analytes etc., the 2015 dataset was statistically evaluated separately from the historical data. However, given the known upriver sources of PCBs and other contaminants, the ranges of concentrations observed in historical sediment samples were also evaluated graphically with respect to the more recent analytical results. These evaluations and results are presented in the following subsections.

1.1.1.1 2015 Results: MassDEP Statistical Evaluation

Disposal site concentrations for 2015 surface water, pore water, and sediment samples were compared to local condition concentrations following the procedure described in MCP Risk Assessment Guidance (MassDEP, 1995). Analytical results were grouped into either “disposal site” (adjacent to the disposal site) or “Reference” (upriver of the disposal site) categories and summary statistics (median and maximum concentrations) were calculated assuming a value equivalent to one-half of the reporting limit for non-detect results[1]. The results of these statistics are provided on Table 4 for pore water, Table 5 for surface water and Table 6 for sediment.

The median and maximum values of each data set (i.e., “disposal site” and “Local Conditions”) were compared to evaluate whether site concentrations are consistent with local conditions, in accordance with MassDEP guidance (1995). As recommended by MassDEP, the following conditions were used to determine if concentrations in each medium are consistent with local conditions:

[1] However, where a reporting limit was greater than twice the maximum detected concentration, then the reporting limit was not used in the calculation.

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1. Maximum and median concentrations at the disposal site are less than the maximum and median background concentrations. If only one disposal site statistic is less than background, one of the following must be true in order to conclude that the disposal site concentrations are consistent with Local Conditions;
2. Disposal site median concentration is below the background median concentration, and the disposal site maximum concentration is less than 1.5 times background maximum concentration; or
3. Disposal site maximum concentration is below the background maximum concentration, and the disposal site median concentration is less than 1.5 times the background median concentration.

These comparisons are presented on Tables 4, 5 and 6 for pore water, surface water and sediment, respectively.

Pore Water

Pore water analytical results for both Reference and disposal site samples are summarized in Table 1. Both chlorinated and non-chlorinated VOCs, Aroclors 1232, 1242 and 1254, and metals were detected in pore water samples.

Table 4 presents the local conditions evaluation for pore water. Results indicated that the disposal site concentrations of all detected VOCs, all Aroclors, and the metals barium, chromium, copper, mercury, nickel, and vanadium were higher than those in Reference samples. Only zinc concentrations were consistent with local conditions. However, the samples were turbid and may have resulted in biased high samples similar to groundwater concentrations described in the Phase III report.

Surface Water

Table 2 presents analytical results for disposal site and Reference surface water samples collected in 2015. VOCs, Aroclor 1232, barium, copper and zinc were detected in surface water samples. Table 5 presents the local conditions evaluation for surface water. Of the constituents detected, only Aroclor 1232 and copper were determined to be at levels consistent with or lower than local conditions, based on a comparison of median and maximum concentrations, as shown in Table 5. It should be noted, however, that reference concentrations of barium and zinc in disposal site samples overlapped with concentrations observed in Reference samples, with only a few samples with concentrations greater than the maximum concentrations observed in Reference samples.

Sediment

Sediment analytical results for disposal site and Reference samples collected in 2015 are summarized on Table 3. As noted in the Phase III report, sediment deposition along the reach of river adjacent to the disposal site was sporadic, due to the presence of large stones along the river bottom and embankments (i.e., armoring).

Table 6 presents the local conditions evaluation for sediment. Results of this comparison indicate that all detected analytes are higher in concentration in disposal site samples when compared to Reference samples. However, in many instances, there is considerable overlap in the range of concentrations between the disposal site and Reference samples.

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1.1.1.2 Historical Data Evaluation (Sediment)

As discussed in the Method 3 report, river sediment data have been collected by various entities (ES&M, USGS and Shaw) since 2002 (Woodard & Curran 2015). Historical sediment data are provided in Attachment 1.

To evaluate how the 2015 results compare to the historical dataset, Woodard & Curran generated "box and whisker plots" that compared the distribution of concentrations for each compound and each dataset. These plots are provided in Figures 2-1 through 2-18 of Attachment 2, and depict the detected concentration (as indicated by an open circle, "o") or, if non-detect, a value equivalent to one-half the laboratory reporting limit (indicated by an "x") of a constituent for each sample within each dataset. Box and whisker plots were generated to display measures of central tendency and the spread of the data. The "boxes" represent the 25th to 75th interquartile range, with the median represented as the horizontal line within the box. The "whiskers" extend to the outermost data point falling within 1.5 times the interquartile range (i.e., the range between the 25th and 75th quartiles). Points falling outside of the "whiskers" represent potential outliers in the data set. These box plot comparisons were conducted for only PCBs and metals, for which historical data are available. As indicated in many of these figures, the disposal site concentrations observed in 2015 samples overlap with the range of historical concentrations, suggesting that, while some individual disposal site concentrations are elevated with respect to 2015 Reference samples, the disposal site concentrations are relatively consistent with those previously detected upriver and thus may potentially reflect local, historical conditions.

1.1.1.3 Upland Contribution

As an additional line of evidence in the local conditions evaluation, disposal site soil and groundwater data were considered in determining whether a constituent was disposal site-related. Constituents that were rarely or never detected in disposal site soil and/or groundwater samples are assumed to be unlikely related to the disposal site release, whereas constituents present in all media were assumed to have a higher likelihood of being related to a disposal site release.

1.1.1.4 Summary of the Local Conditions Evaluation and Selection of COPC

Tables 7, 8 and 9 summarize the results of the local conditions evaluation for pore water, surface water and sediment, respectively. Each of these tables shows the results of the statistical evaluation (comparison of maximum and median concentrations based on 2015 data), the historical evaluation, and whether the constituent was detected in disposal site soil or groundwater. Only constituents that were determined to be disposal site-related were selected as COPCs. The determination of whether a constituent was disposal site-related entailed evaluating each of the following questions:

- Was the constituent detected at higher concentrations at the disposal site, based on 2015 results?
- Was the constituent detected at overall higher concentrations at the disposal site compared to historical results?
- Was the constituent detected in disposal site soil and/or groundwater?

A positive answer to the three questions resulted in the constituent's retention as a COPC; conversely, a negative answer to all three questions ruled out the constituent as a COPC. The majority of constituents, particularly for sediment, yielded both positive and negative answers, and so in such cases, additional information such as contaminant distribution, frequency of detection, presence of the constituent in other river media etc., was evaluated. On Tables 7, 8 and 9, the rationale is presented as to why an individual constituent was either excluded or retained as a COPC, taking into consideration the various factors described above. Results of this evaluation are discussed in the following subsections by medium.

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Pore Water

Table 7 shows the local conditions summary for pore water. Nearly all detected VOCs and metals were retained as COPC based on this screening. Dichlorodifluoromethane was detected in one disposal site sample (PW-12) and no Reference samples, but was excluded as a COPC since it was very rarely detected in adjacent disposal site soil (only one of 400 samples), and at a very low concentration, and was never detected in groundwater; this constituent is also a common laboratory contaminant (EPA 1991). Zinc was ruled out as a COPC since the Reference sample concentrations were higher than those of the disposal site samples. Aroclor 1232 was also ruled out as a COPC; although this compound was detected at a higher concentration in the pore water disposal site samples, it was generally not detected in site groundwater. Filtered groundwater samples collected in 2015 indicated that PCBs were not present in any wells above the laboratory reporting limits (0.25 ug/L) with the exception of one location (ESM-05; 2.1 ug/L) where PCBs are co-located with elevated chlorinated solvent concentrations. Additionally, Aroclor 1232 was detected at a low frequency in disposal site soil. Aroclor 1232 was detected in upriver samples of all media, and at higher concentrations in Reference surface water samples. As later discussed, sediment data also indicate that Aroclor 1232 concentrations were historically elevated in in sediment in upriver areas. (See below.)

It is believed that the elevated pore water concentrations of PCBs are reflective of suspended solids in the water column rather than dissolved within the pore water itself. Note that pore water samples were not filtered, with the exception of one sample location (PW-15) where a total and filtered sample were collected due to excessive turbidity observed in the sample. The Aroclor 1232 concentration in the unfiltered sample was 116 ug/L; Aroclor 1254 was also detected at a concentration of 0.48 ug/L. In the filtered pore water sample, Aroclor 1232 was detected at a concentration of 0.7 ug/L and Aroclor 1254 was not detected above a reporting limit of 0.248 ug/L. These results suggest that the PCBs in porewater are associated with suspended particulates. For the above reasons, Aroclor 1232 and Aroclor 1254 were ruled out as a COPC in pore water.

Surface Water

Table 8 shows the local conditions summary for surface water. All detected VOCs, barium and zinc were retained as COPC in surface water. Both copper and Aroclor 1232 concentrations were determined to be consistent with local conditions, based on the statistical evaluation of 2015 analytical results.

Sediment

Table 9 shows the local conditions summary for sediment. All except for two VOCs were retained as COPCs in sediment. Methyl ethyl ketone, a possible laboratory contaminant, and tetrahydrofuran were assumed to be unrelated to the disposal site, based on low frequency of detection in disposal site upland and other media. Metals, including barium, cadmium, chromium, lead, mercury, selenium, silver, vanadium and zinc, were selected as COPCs. For many of these metals, only one or two of the 2015 disposal site samples were higher than the reference data, with the majority of results consistent with those of both recent and historical results. However, given the presence of these metals in disposal site soil and/or groundwater, it was assumed in such cases these constituents were disposal site-related. See Attachment 2 for a comparison of the 2015 results and the historical datasets.

Aroclor 1232 concentrations detected in disposal site sediment in 2015 (up to 963 milligrams per kilogram [mg/kg]) were higher compared to the 2015 Reference samples, and historical samples. This Aroclor was detected at concentrations up to 44 mg/kg in the LE Mason dataset, and was not detected in the USGS dataset (see Figure 2-2 of Attachment 2). Aroclor 1242 concentrations in 2015 samples (one location, SED-10 at 5.42 mg/kg) were well within the range of those observed in historical upriver samples collected at the LE Mason site by Shaw (up to 1,800 mg/kg) and in upriver areas of the Neponset by USGS (up to 7.1 mg/kg) as shown on Figure 2-3 of Attachment 2. It is possible that weathering of PCBs over time has resulted in loss of chlorine content, such that Aroclor 1232 is now the prevalent PCB analyte (Ye et al., 1992; Nies and Vogel, 1990). PCB peaks can dechlorinate into a variety of compounds, which

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may or may not be captured quantitatively in the Aroclor analysis, as there is no specific degradation pathway for Aroclors.

The concentrations of Aroclor 1232 detected in disposal site samples is well within the historical range of Aroclor 1242 concentrations (up to 1,800 mg/kg). As a gross measure of total PCB concentration, concentrations of individual detected Aroclors at the disposal site were also summed and compared to that of historical data; total PCBs in historical USGS/LE Mason samples ranged from 0.16 mg/kg to 3,440 mg/kg, versus 8.4 mg/kg to 47.4 mg/kg in 2015 Reference samples and 5.4 mg/kg – 963 mg/kg in 2015 disposal site samples. As indicated by the spread of data, there is considerable overlap in the range of concentrations as well as in spatial variability of concentrations among sample locations. It is noted that the disposal site is located along a bend in the Neponset River that may preferentially accumulate fines and more organic sediments, unlike straighter reaches (such as directly upriver of the disposal site) that may have sandier sediments. Disposal site sediments had on average a slightly higher organic carbon content than upriver samples for the 2015 result.

The disposal site conceptual model suggests that PCB contamination in the disposal site reach of river could originate from 1) slumping/overland runoff of PCB-contaminated soils or 2) an off-site, upriver source. We note that Aroclor 1232 was detected in disposal site surface water samples at concentrations lower than those of Reference samples, was not detected in disposal site groundwater (with the exception of one sample, at a low concentration and within a VOC source area), and was detected in only one percent (1%) of disposal site soil samples, at a maximum concentration of 10 mg/kg, approximately 100 times lower than the highest concentration detected in sediment, and about 10 times lower than the other observed concentrations. In pore water, Aroclors appear to be related to suspended sediments rather than be dissolved in water. Similarly, Aroclor 1242 was detected in only 4% of disposal site soil samples, although at higher concentrations (maximum of 2,600 mg/kg); Aroclor 1248 was detected in approximately 34% of soil samples, with a maximum concentration of 13,000 mg/kg.

The pattern of PCB concentration in sediment does not appear to clearly correspond with the pattern observed in soils. While there is likely some contribution of PCBs from the disposal site, there appears to also be a substantial historical pollutant load from upriver sources, such as from the former LE Mason disposal site located on Mother Brook. Sediments in Mother Brook were remediated by LE Mason and site closure was achieved in 2011. However, legacy contamination likely remains at downriver locations from historical operations at the LE Mason site for more than 130 years based upon historical information provided in reports for RTN 3-730, adding to the presence of PCBs, VOCs, metals, and SVOCs in Reference and disposal site samples. Based on this information, Aroclors 1232 and 1242 were ruled out as COPC in sediment.

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1.2 ECOLOGICAL BENCHMARK COMPARISON

Ecological effects are estimated by the use of ecotoxicological benchmarks, which indicate concentrations at which effects are unlikely. Surface water benchmarks are used to evaluate effects on fish, amphibians and invertebrates, while sediment benchmarks are used to measure the potential for effects to benthic invertebrates, which reside close to or in the sediment matrix. These benchmarks are considered to be protective of other species that have similar aquatic life stages. Surface water benchmarks were also used to evaluate pore water results. Benchmarks for all media are presented in Attachment 3 of this Stage I ES.

The benchmark values presented in this section are considered to be conservative values that represent conditions where no to low adverse effects are likely under conditions of chronic exposure.

Surface water/pore water benchmarks used to screen COPC are provided on Table 3-1 of Attachment 3. These benchmarks were obtained from the following sources:

- USEPA National Recommended Water Quality Criteria, Freshwater acute and chronic aquatic standards (USEPA 2015). These values were available for only select metals. Where applicable, NRWQC, which

are for dissolved constituents, were adjusted to reflect total metals and/or an average disposal site-specific hardness of 76 milligrams per liter (mg/L), using the parameters and equations provided in Appendices A and B of USEPA 2015. Because the NRWQC were adopted as surface water quality standards by MassDEP, no other water quality benchmark comparison was made for COPCs for which NRWQC were available.

- OSWER Tier II Secondary Chronic Values. (Suter and Tsao, 1996).
- Oak Ridge National Laboratory (ORNL) lowest chronic values (LCVs) for surface water.
- Freshwater screening values from EPA regional offices.

Sediment benchmarks are summarized on Table 3-2 of Attachment 3 and were obtained from the following sources:

- Consensus-Based Probable Effects Concentration (PEC; MacDonald et al., 2000). These are used as sediment screening levels by MassDEP for many metals;
- Consensus-Based Threshold Effects Concentration (TEC; MacDonald et al., 2000). For cases where MassDEP does not specify the PEC as the sediment screening benchmark, the TEC was used as the sediment benchmark;
- Freshwater sediment screening benchmarks from EPA regional offices 3 and 5;
- National Oceanic and Atmospheric Administration (NOAA) Effects Range –Low (ER-L) and Effects-Range Median (ER-M) values (Buchman, 2008); and
- ORNL LCVs for sediment, and EPA Regional freshwater sediment benchmarks.

LCVs and the EPA Regional benchmarks for organic compounds are derived based on the principle of equilibrium partitioning between a contaminant and the sediment's organic carbon content. The published LCVs/regional benchmarks assume an organic carbon content of 1%. These default benchmarks were adjusted to reflect a site-specific average organic carbon (OC) of approximately 9%. This derivation is presented in Attachment 3 (Tables 3-3 for LCVs, Table 3-4 for Region 3 and Table 3-5 for Region 5).

The benchmarks listed above are intended to be protective of aquatic and/or benthic organisms, namely invertebrates and fish. There are limited ecotoxicological data for plants, amphibians and reptiles. Because NRWQC and Tier II aquatic benchmarks are derived based on toxicity information for a number of species of aquatic/benthic organisms, including fish and potentially other vertebrates such as amphibians, and invertebrates, such as crustaceans and insects presumably representing a range of sensitivities among species, it is assumed that these aquatic benchmarks will be protective of these other aquatic receptors.

Ecological risk was evaluated by comparing the analytical results for pore water, surface water and sediment to the range of benchmark values. Factors that were considered in this evaluation included the number and locations of benchmark exceedances, the magnitude of the exceedances; the relationship of the COPC to site- versus off-site sources; the concentration of the COPC relative to background/reference area concentrations; and the COPC concentration relative to the range of toxicological benchmarks. The goal of this analysis is to reduce the uncertainty associated with the use of the most conservative exposure and screening-level toxicity assumptions, so that the final risk conclusions are still conservative, but more relevant to site-specific conditions and actual levels of effect. The results of this analysis provide a more accurate understanding of potential site-related risk than the initial screening analysis conducted in the Method 3 and are used to inform subsequent investigation or risk management decisions.

The outcome of the benchmark comparison is the identification of the chemicals of concern (COC), which are the constituents that trigger the need for additional investigation and/or remediation. The results of the benchmark comparisons are described in the following subsections.

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1.2.1 Pore Water

Table 10 presents a comparison of pore water maximum concentrations to published aquatic freshwater benchmarks, as discussed in Section 1.2 above. Several chlorinated VOCs (chlorobenzene, 1,1-dichloroethane, trichloroethylene) and toluene exceeded their minimum benchmarks, but were lower than the median benchmark concentrations. Barium, 1,1,1-trichloroethane and 1,2-dichlorobenzene exceeded the highest benchmark. Most of the exceedances for VOCs occurred at sampling location PW-12. Barium in pore water exceeded the maximum benchmark at all disposal site locations. Barium exceedances in pore water were also observed in all Reference locations, suggesting that the barium benchmarks are set at a level below local conditions concentrations. Metals in pore water as well as sediment will need to be evaluated further. Based on this evaluation, it is recommended that chlorinated VOCs be identified as COCs in pore water. At this time, barium will also be carried as a COC in pore water until additional background assessment activities can be completed.

1.2.2 Surface Water

Table 11 presents a comparison of surface water maximum concentrations to NRWQC, if available, and the range of other published aquatic freshwater benchmarks, as discussed in Section 1.2 above. Of the COPC, only barium exceeded its lowest available benchmark. Benchmarks for barium ranged from approximately 4 ug/L to 220 ug/L. Concentrations of barium at all disposal site surface water samples (ranging from approximately 60 ug/L to 80 ug/L) exceeded the lowest benchmark, but we note that the concentrations of barium in Reference surface water samples (59-68 ug/L) also exceeded this benchmark, suggesting that this benchmark is set below baseline levels of barium in the river. This benchmark is a Tier II SCV, adopted by EPA Regions 3 and 5 as ESLs. None of the detected concentrations exceeded the maximum benchmark of 220 ug/L. This benchmark (EPA Region 5) is based on an Ohio water quality standard for total barium.

Given that the concentrations of barium in the disposal site reach are only slightly higher than those in the Reference reach, and the fact that all Reference locations exceeded the minimum benchmark, and that no detected concentration exceeded the maximum benchmark, it is concluded that barium poses negligible *incremental* risk to aquatic receptors above background. Thus, no COCs for surface water are identified.

1.2.3 Sediment

Table 12 presents a comparison of sediment maximum concentrations to sediment benchmarks. 1,2-Dichlorobenzene and cis-1,2-dichloroethylene concentrations exceeded the lowest of the VOC benchmarks, whereas acetone exceeded the second lowest benchmark but was less than the highest benchmark. Acetone was detected in only two samples, at a maximum concentration of 1 mg/kg. All detection limits also exceeded the lowest benchmarks for acetone. Concentrations of VOCs were generally at or below 1 mg/kg for all samples with detected concentrations (all but SED-17).

Numerous metals in sediment exceeded one or more of the available sediment benchmarks. However, of these, only barium, lead, vanadium, mercury and zinc exceeded the highest benchmark value. Chromium concentrations exceeded all but the highest benchmark of 370 mg/kg. Cadmium was detected at a maximum concentration below the PEC (the MassDEP screening benchmark), suggesting minimal potential for effects. The only detected concentration of silver at SED-12 was between the ER-L and ER-M; this one detected concentration was lower than the reporting limits for most other sediment samples.

Sample SED-12 had the most metals with an exceedance of one or more benchmarks, consistent with its relatively elevated concentrations. Sample SED-15 also had exceedances of the maximum benchmarks for lead and mercury. While metal exceedances were also seen in Reference samples, few Reference samples had concentrations greater than the maximum benchmarks.

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This comparison indicates that VOCs are detected at relatively low concentrations in sediment, with a low potential for risk to benthic receptors. Metals, particularly chromium, barium, lead, mercury, vanadium and zinc, however, are present at concentrations throughout the disposal site reach and reference locations that exceed effects-based screening levels. In particular, sample SED-12, SED-15 and SED-16 have the most elevated concentrations. At this time, chromium, barium, lead, mercury, vanadium, and zinc will be carried as a COC in sediment until additional background assessment activities can be completed.

1.2.4 Summary of Chemicals of Concern

Based on the results of the local conditions evaluation and benchmark comparisons, the following table summarizes the Chemicals of Concern (COC) for river media:

Pore Water	Surface Water	Sediment
VOCs; barium	None	chromium, barium, lead, mercury, vanadium and zinc

1.3 CONCLUSIONS

VOCs, metals, and PCBs have been detected in pore water, surface water, and sediment within the reach of the Neponset River adjacent to the disposal site, as well as in upriver Reference areas. A comparison of recent 2015 pore water, surface water and sediment analytical results suggest higher concentrations of certain contaminants along the disposal site, particularly for pore water and sediment. However, historical data indicate elevated concentrations of metals and PCBs in upriver locations, attributed to various sources including the LE Mason site, which had released PCBs to sediments within Mother Brook, which feeds into the Neponset River approximately 200 meters upriver of the disposal site. In the context of historical data, disposal site concentrations measured in 2015 for many constituents are consistent with those of upriver areas.

Constituents determined to be disposal site-related (VOCs) and those that require further investigation (metals) were compared to ecotoxicological benchmarks in order to determine the potential for risk of harm to the environment. In pore water, chlorinated VOCs and barium exceeded benchmark concentrations at a frequency and magnitude that suggested the potential for adverse effects to ecological receptors. In sediment, the metals chromium, barium, lead, mercury, vanadium and zinc were present in a number of disposal site samples at concentrations exceeding the range of benchmark values. Surface water COPCs were determined to pose negligible environmental risk.

Pore water and sediment samples collected at locations PW/SW-12, PW/SW-15 and PW/SW-16 (see Figure 4 of the Phase III) tended to have the highest concentrations of COPCs and hence, greatest number of benchmark exceedances. All three locations are located adjacent to soil/groundwater VOC Hot Spots identified near the bank of the river on the disposal site (refer to the Phase II report). Remediation of these hot spots, addressed in the Phase III report, should result in mitigation of VOC and other contaminant impacts in the river.

As noted in the Phase III report, the access to sediments in the disposal site reach of river is severely limited by a layer of stone armoring, with only marginal shoreline areas within the river bend readily accumulating sediments. Thus, while concentrations of COPCs are elevated above benchmarks in pore water and sediment, there is uncertainty on how suitable this stretch of river is as habitat for benthic invertebrates, as well as to what extent an ecological receptor may be exposed to impacted sediment/pore water.

Based on this evaluation, it is recommended that additional delineation of impacts at these three sample locations be conducted and additional background studies be conducted prior to the implementation of remedial action alternatives for the Neponset River.

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TABLES

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TABLE 1
2015 Pore Water Analytical Results

Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

Analyte	CAS No.	Units	PW-10	PW-12		PW-13	PW-14	PW-15	PW-16	REF-PW-01	REF-PW-02	REF-PW-03
			PW-10-20150825	PW-12-20150826	PW-12 (DUP)-20150826	PW-13-20150826	PW-14-20150826	PW-15-20150826	PW-16-20150826	REF-PW-01-20150827	REF-PW-02-20150827	REF-PW-03-20150827
			8/25/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015
Hardness as calcium carbonate	STL00009	mg/L	372	476	484	532	410	390	540	348	112	20
Total Metals												
Antimony	7440-36-0	ug/L	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79
Arsenic	7440-38-2	ug/L	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	5.66
Barium	7440-39-3	ug/L	247	438	454	508	269	232	169	234	98.7	42.3
Beryllium	7440-41-7	ug/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Cadmium	7440-43-9	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.63	<0.5	<0.5
Chromium	7440-47-3	ug/L	1.07	<1	<1	1.98	6.35	5.17	3.55	<1	<1	2.57
Copper	7440-50-8	ug/L	1.72	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Lead	7439-92-1	ug/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Mercury	7439-97-6	ug/L	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	0.147	<0.12	<0.12	<0.12
Nickel	7440-02-0	ug/L	2.63	<1.26	<1.26	<1.26	3.22	6.74	2.71	15.4	1.4	<1.26
Selenium	7782-49-2	ug/L	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7
Silver	7440-22-4	ug/L	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
Thallium	7440-28-0	ug/L	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2
Vanadium	7440-62-2	ug/L	<1.5	<1.5	<1.5	<1.5	2.72	4.29	2.41	<1.5	<1.5	2.67
Zinc	7440-66-6	ug/L	26.6	<1.5	1.85	<1.5	1.66	2.12	3.15	440	7.99	3.35
PCBs												
Aroclor-1016	12674-11-2	ug/L	<0.233	<0.23	<0.237	<0.24	<0.24	<0.234	<0.277	<0.238	<0.236	<0.234
Aroclor-1221	11104-28-2	ug/L	<0.233	<0.23	<0.237	<0.24	<0.24	<0.234	<0.277	<0.238	<0.236	<0.234
Aroclor-1232	11141-16-5	ug/L	<0.233	10.6 J	6.68 J	71.5 J	26.7 J	116 J	43 J	9.11	1.7	<0.234
Aroclor-1242	53469-21-9	ug/L	2.93	<0.23	<0.237	<0.24	<0.24	<0.234	<0.277	<0.238	<0.236	1.15
Aroclor-1248	12672-29-6	ug/L	<0.233	<0.23	<0.237	<0.24	<0.24	<0.234	<0.277	<0.238	<0.236	<0.234
Aroclor-1254	11097-69-1	ug/L	0.373	<0.23	<0.237	0.344 J	0.242 J	0.48 J	0.745 J	<0.238	<0.236	0.272
Aroclor-1260	11096-82-5	ug/L	<0.233	<0.23	<0.237	<0.24	<0.24	<0.234	<0.277	<0.238	<0.236	<0.234
Aroclor-1262	37324-23-5	ug/L	<0.233	<0.23	<0.237	<0.24	<0.24	<0.234	<0.277	<0.238	<0.236	<0.234
Aroclor-1268	11100-14-4	ug/L	<0.233	<0.23	<0.237	<0.24	<0.24	<0.234	<0.277	<0.238	<0.236	<0.234
VOCs												
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,1,1-Trichloroethane	71-55-6	ug/L	2.03	498	446	<1	<4	<20	<4	<1	<1	<1
1,1,2,2-Tetrachloroethane	79-34-5	ug/L	<0.5	<10	<10	<0.5	<2	<10	<2	<0.5	<0.5	<0.5
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/L	11.1	184	158	<1	<4	<20	<4	<1	<1	<1
1,1,2-Trichloroethane	79-00-5	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,1-Dichloroethane	75-34-3	ug/L	10.8	447	412	3.28	<4	<20	<4	9.57	<1	<1
1,1-Dichloroethylene	75-35-4	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,1-Dichloropropene	563-58-6	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,2,3-Trichlorobenzene	87-61-6	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,2,3-Trichloropropane	96-18-4	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,2,4-Trichlorobenzene	120-82-1	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,2,4-Trimethylbenzene	95-63-6	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8	ug/L	<5	<100	<100	<5	<20	<100	<20	<5	<5	<5
1,2-Dibromoethane (EDB)	106-93-4	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,2-Dichlorobenzene	95-50-1	ug/L	1.17	36.7	32.7	5.16	<4	<20	<4	<1	<1	<1
1,2-Dichloroethane	107-06-2	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,2-Dichloropropane	78-87-5	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,3,5-Trimethylbenzene	108-67-8	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,3-Dichlorobenzene	541-73-1	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,3-Dichloropropane	142-28-9	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,4-Dichlorobenzene	106-46-7	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
1,4-Dioxane	123-91-1	ug/L	<50	<1000	<1000	<50	<200	<1000	<200	<50	<50	<50
2,2-Dichloropropane	594-20-7	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
2-Butanone (MEK)	78-93-3	ug/L	<10	<200	<200	<10	<40	<200	<40	<10	<10	<10
2-Chlorotoluene	95-49-8	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
2-Hexanone	591-78-6	ug/L	<10	<200	<200	<10	<40	<200	<40	<10	<10	<10
4-Chlorotoluene	106-43-4	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
4-Isopropyltoluene	99-87-6	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
4-Methyl-2-Pentanone (MIBK)	108-10-1	ug/L	<10	<200	<200	<10	<40	<200	<40	<10	<10	<10
Acetone	67-64-1	ug/L	<50	<1000	<1000	<50	<200	<1000	<200	<50	<50	<50
Benzene	71-43-2	ug/L	<1	<20	<20	1.08	<4	<20	<4	<1	<1	<1
Bromobenzene	108-86-1	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
Bromochloromethane	74-97-5	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
Bromodichloromethane	75-27-4	ug/L	<0.5	<10	<10	<0.5	<2	<10	<2	<0.5	<0.5	<0.5
Bromoform	75-25-2	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
Bromomethane	74-83-9	ug/L	<2	<40	<40	<2	<8	<40	<8	<2	<2	<2
Carbon Disulfide	75-15-0	ug/L	<10	<200	<200	<10	<40	<200	<40	<10	<10	<10
Carbon Tetrachloride	56-23-5	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
Chlorobenzene	108-90-7	ug/L	<1	<20	<20	3.6	<4	<20	<4	<1	<1	<1
Chloroethane	75-00-3	ug/L	<2	<40	<40	5.32	12.1	1800	12.2	<2	<2	<2
Chloroform	67-66-3	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
Chloromethane	74-87-3	ug/L	<2	<40	<40	<2	<8	<40	<8	<2	<2	<2

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TABLE 1
2015 Pore Water Analytical Results

Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

			PW-10	PW-12		PW-13	PW-14	PW-15	PW-16	REF-PW-01	REF-PW-02	REF-PW-03
			PW-10-20150825	PW-12-20150826	PW-12 (DUP)-20150826	PW-13-20150826	PW-14-20150826	PW-15-20150826	PW-16-20150826	REF-PW-01-20150827	REF-PW-02-20150827	REF-PW-03-20150827
Analyte	**CAS No.**	**Units**	8/25/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015
cis-1,2-Dichloroethylene	156-59-2	ug/L	20.7	356	316	1.62	<4	<20	<4	9.87	<1	<1
cis-1,3-Dichloropropene	10061-01-5	ug/L	<0.4	<8	<8	<0.4	<1.6	<8	<1.6	<0.4	<0.4	<0.4
Dibromochloromethane	124-48-1	ug/L	<0.5	<10	<10	<0.5	<2	<10	<2	<0.5	<0.5	<0.5
Dibromomethane	74-95-3	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
Dichlorodifluoromethane	75-71-8	ug/L	<1	122	113	<1 UJ	<4 UJ	<20	<4 UJ	<1	<1	<1
Diethyl Ether	60-29-7	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
Ethyl tert-Butyl Ether (ETBE)	637-92-3	ug/L	<5	<100	<100	<5	<20	<100	<20	<5	<5	<5
Ethylbenzene	100-41-4	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
Hexachlorobutadiene	87-68-3	ug/L	<0.4	<8	<8	<0.4	<1.6	<8	<1.6	<0.4	<0.4	<0.4
Isopropyl Ether (DIPE)	108-20-3	ug/L	<10	<200	<200	<10	<40	<200	<40	<10	<10	<10
Isopropylbenzene	98-82-8	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
m/p-Xylenes	179601-23-1	ug/L	<2	<40	<40	<2	<8	<40	<8	<2	<2	<2
Methyl tert-Butyl Ether (MTBE)	1634-04-4	ug/L	<1	<20	<20	<1	<4	<20	4.71	<1	<1	<1
Methylene Chloride	75-09-2	ug/L	<1	49.2	61.9	<1	<4 U	76.8	9.25	<1	<1	<1
Naphthalene	91-20-3	ug/L	<5	<100	<100	<5	<20	<100	<20	<5	<5	<5
n-Butylbenzene	104-51-8	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
n-Propylbenzene	103-65-1	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
o-Xylene	95-47-6	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
sec-Butylbenzene	135-98-8	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
Styrene	100-42-5	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
tert-Amyl-Methyl Ether (TAME)	994-05-8	ug/L	<5	<100	<100	<5	<20	<100	<20	<5	<5	<5
tert-Butylbenzene	98-06-6	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
Tetrachloroethene	127-18-4	ug/L	19.7	<20	<20	<1	<4	<20	<4	<1	<1	<1
Tetrahydrofuran (THF)	109-99-9	ug/L	<10	<200	<200	<10	<40	<200	<40	<10	<10	<10
Toluene	108-88-3	ug/L	<1	29.2	23.4	<1	<4	<20	<4	<1	<1	<1
trans-1,2-Dichloroethylene	156-60-5	ug/L	1.98	<20	<20	<1	<4	<20	<4	<1	<1	<1
trans-1,3-Dichloropropene	10061-02-6	ug/L	<0.4	<8	<8	<0.4	<1.6	<8	<1.6	<0.4	<0.4	<0.4
Trichloroethylene	79-01-6	ug/L	18.3	21.4	<20	<1	<4	<20	<4	4.38	<1	<1
Trichlorofluoromethane	75-69-4	ug/L	<1	<20	<20	<1	<4	<20	<4	<1	<1	<1
Vinyl Chloride	75-01-4	ug/L	22.6	826	726	1.93	<4	<20	<4	3.55	<1	<1

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Table 2
2015 Surface Water Analytical Results
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

Analyte	CAS No.	Units	SW-10	SW-11	SW-12	SW-12 (DUP)	SW-13	SW-14	SW-15	SW-16	SW-17	SW-18	REF-SW-01	REF-SW-02	REF-SW-03	REF-SW-04
			SW-10-20150825	SW-11-20150825	SW-12-20150826	SW-12 (DUP)-20150826	SW-13-20150826	SW-14-20150826	SW-15-20150826	SW-16-20150826	SW-17-20150827	SW-18-20150827	REF-SW-01-20150827	REF-SW-02-20150827	REF-SW-03-20150827	REF-SW-04-20150827
			8/25/2015	8/25/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015
Hardness as calcium carbonate	STL00009	mg/L	80	76	88	104	100	88	92	84	90	88	88	84	80	32
Metals																
Antimony	7440-36-0	ug/L	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79
Arsenic	7440-38-2	ug/L	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55
Barium	7440-39-3	ug/L	65.2	59.7	70.2	67.4	79.7	63.6	66.3	64.8	64.4	60.7	60.1	67.9	62.5	59
Beryllium	7440-41-7	ug/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Cadmium	7440-43-9	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	7440-47-3	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Copper	7440-50-8	ug/L	<1.6	<1.6	<1.6	2.71	1.78	2.05	<1.6	2.3	2.44	2.48	2.74	1.6	2.31	2.2
Lead	7439-92-1	ug/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Mercury	7439-97-6	ug/L	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	0.142	<0.12	<0.12	<0.12
Nickel	7440-02-0	ug/L	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	1.27	1.42	<1.26	<1.26
Selenium	7782-49-2	ug/L	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7
Silver	7440-22-4	ug/L	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
Thallium	7440-28-0	ug/L	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2
Vanadium	7440-62-2	ug/L	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Zinc	7440-66-6	ug/L	16.3	4.68	7.77	8.33	9.32	9.21	5.66	3.56	5.57	5.18	9.17	6.53	4.12	5.02
PCBs																
Aroclor-1016	12674-11-2	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1221	11104-28-2	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1232	11141-16-5	ug/L	<0.235	<0.229	<0.233	<0.235	1.26 J	<0.233	<0.232	0.469 J	0.292	<0.235	1.25	<0.234	<0.239	<0.235
Aroclor-1242	53469-21-9	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1248	12672-29-6	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1254	11097-69-1	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1260	11096-82-5	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1262	37324-23-5	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1268	11100-14-4	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
VOCs																
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	71-55-6	ug/L	<1	<1	1.24	1.03	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	79-34-5	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/L	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	79-00-5	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	75-34-3	ug/L	<1	<1	1.4	1.51	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethylene	75-35-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	563-58-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	87-61-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	96-18-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	120-82-1	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	95-63-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane (EDB)	106-93-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	95-50-1	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	107-06-2	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	78-87-5	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	108-67-8	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	541-73-1	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	142-28-9	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

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Table 2
2015 Surface Water Analytical Results
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

			SW-10	SW-11	SW-12		SW-13	SW-14	SW-15	SW-16	SW-17	SW-18	REF-SW-01	REF-SW-02	REF-SW-03	REF-SW-04
			SW-10-20150825	SW-11-20150825	SW-12-20150826	SW-12 (DUP)-20150826	SW-13-20150826	SW-14-20150826	SW-15-20150826	SW-16-20150826	SW-17-20150827	SW-18-20150827	REF-SW-01-20150827	REF-SW-02-20150827	REF-SW-03-20150827	REF-SW-04-20150827
Analyte	**CAS No.**	**Units**	8/25/2015	8/25/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015
1,4-Dichlorobenzene	106-46-7	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dioxane	123-91-1	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
2,2-Dichloropropane	594-20-7	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Butanone (MEK)	78-93-3	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chlorotoluene	95-49-8	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	591-78-6	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Chlorotoluene	106-43-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Isopropyltoluene	99-87-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Methyl-2-Pentanone (MIBK)	108-10-1	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	67-64-1	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	71-43-2	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromobenzene	108-86-1	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	74-97-5	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	75-27-4	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	75-25-2	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	74-83-9	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon Disulfide	75-15-0	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	56-23-5	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	108-90-7	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	75-00-3	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	67-66-3	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	74-87-3	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-Dichloroethylene	156-59-2	ug/L	1.16	<1	1.59	1.64	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	10061-01-5	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Dibromochloromethane	124-48-1	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	74-95-3	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	75-71-8	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Diethyl Ether	60-29-7	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethyl tert-Butyl Ether (ETBE)	637-92-3	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	100-41-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	87-68-3	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Isopropyl Ether (DIPE)	108-20-3	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isopropylbenzene	98-82-8	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m/p-Xylenes	179601-23-1	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Methyl tert-Butyl Ether (MTBE)	1634-04-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	75-09-2	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	91-20-3	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	104-51-8	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	103-65-1	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	95-47-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	135-98-8	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	100-42-5	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Amyl-Methyl Ether (TAME)	994-05-8	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
tert-Butylbenzene	98-06-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	127-18-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran (THF)	109-99-9	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Toluene	108-88-3	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethylene	156-60-5	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

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Table 2
2015 Surface Water Analytical Results
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

			SW-10	SW-11	SW-12		SW-13	SW-14	SW-15	SW-16	SW-17	SW-18	REF-SW-01	REF-SW-02	REF-SW-03	REF-SW-04
			SW-10-20150825	SW-11-20150825	SW-12-20150826	SW-12 (DUP)-20150826	SW-13-20150826	SW-14-20150826	SW-15-20150826	SW-16-20150826	SW-17-20150827	SW-18-20150827	REF-SW-01-20150827	REF-SW-02-20150827	REF-SW-03-20150827	REF-SW-04-20150827
Analyte	**CAS No.**	**Units**	8/25/2015	8/25/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015
trans-1,3-Dichloropropene	10061-02-6	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Trichloroethylene	79-01-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	75-69-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	75-01-4	ug/L	<1	<1	1.89	1.93	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

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Table 3
2015 Sediment Analytical Results
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

			Site Locations								Reference Locations			
			SED-10	SED-12		SED-13	SED-14	SED-15	SED-16	SED-17	REF-SED-01	REF-SED-02	REF-SED-03	REF-SED-04
			SED-10-20150825	SED-12-20150826	SED-12 (DUP)-20150826	SED-13-20150827	SED-14-20150827	SED-15-20150827	SED-16-20150827	SED-17-20150827	REF-SED-01-20150827	REF-SED-02-20150827	REF-SED-03-20150827	REF-SED-04-20150827
Analyte	**CAS No.**	**Units**	8/25/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015
Fractional Organic Carbon	7440-44-0	%	17.4	9.1	9.2	8.1	3	2.6	8.7	10.8	5.3	16.5 J	1.4	4.3
Metals														
Antimony	7440-36-0	mg/Kg	1.79 J	2.34	2.27	<1.19	<0.79	2.44	1.97	1.61 J	<0.643	<1.82 UJ	<0.45	<4.45
Arsenic	7440-38-2	mg/Kg	2.51 J	11.1	8.87	3.56	3.82	7.99	7.36	7 J	3.29	7.81 J	1.74	<4.45
Barium	7440-39-3	mg/Kg	55.3 J	246 J+	164 J+	78 J+	51.6 J+	123 J+	113 J+	127 J+	40.1 J+	103 J+	16.7 J+	48.7 J+
Beryllium	7440-41-7	mg/Kg	0.18 J	0.896	0.606	0.315	0.257	0.517	0.428	0.475 J	0.23	0.551 J	0.127	<0.312
Cadmium	7440-43-9	mg/Kg	1.11 J	4.57	3.18	1.05	0.699	2.57	1.94	1.87 J	0.5	1.82 J	0.146	0.757
Chromium	7440-47-3	mg/Kg	25.6 J	167	112	29.3	24.1	91.4	71.3	46 J	25.1	47.3 J	6.65	31.5
Copper	7440-50-8	mg/Kg	58.2 J	164	153	39.9	41.3	146	110	69 J	55.9	75.3 J	17	26.1
Lead	7439-92-1	mg/Kg	83.9 J	544 J-	366 J-	88 J-	79.9 J-	427 J-	378 J-	131 J-	212 J-	144 J-	50.7 J-	60.5 J-
Mercury	7439-97-6	mg/Kg	0.368 J	2.01 J+	1.76 J+	0.213 J+	0.309 J+	1.16 J+	0.844 J+	0.495 J+	0.138 J+	0.464 J+	0.0266 J+	0.198 J+
Nickel	7440-02-0	mg/Kg	6.72 J	28.3	19.3	10.1	18.9	22.9	18.4	13.9 J	11.5	15.8 J	5.97	7.25
Selenium	7782-49-2	mg/Kg	<1.63 UJ	<1.22	<1.22	<1.19	<0.79	<1.25	<0.907	1.63 J	<0.643	<1.82 UJ	<0.45	<4.45
Silver	7440-22-4	mg/Kg	<0.817 UJ	1.14	0.721	<0.594	<0.395	<0.623	<0.453	<0.665 UJ	<0.322	<0.911 UJ	<0.225	<2.23
Thallium	7440-28-0	mg/Kg	<1.23 UJ	<0.914	<0.913	<0.891	<0.592	<0.935	<0.68	<0.998 UJ	<0.483	<1.37 UJ	<0.338	<3.34
Vanadium	7440-62-2	mg/Kg	17.8 J	68.4	47.7	20.6	16.9	35.8	26.9	25.5 J	16.6	30.4 J	12.2	16.1
Zinc	7440-66-6	mg/Kg	146 J	474 J+	323 J+	224 J+	207 J+	398 J+	335 J+	342 J+	206 J+	333 J+	73.1 J+	134 J+
PCBs														
Aroclor-1016	12674-11-2	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1221	11104-28-2	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1232	11141-16-5	mg/Kg	<1.57 UJ	768 J	963 J	<12.8	<8.18	218 J	128 J	<15.8 UJ	8.4	47.4 J	<0.974	<7.63
Aroclor-1242	53469-21-9	mg/Kg	5.42 J	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1248	12672-29-6	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1254	11097-69-1	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1260	11096-82-5	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1262	37324-23-5	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1268	11100-14-4	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
VOCs														
1,1,1,2-Tetrachloroethane	630-20-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1,1-Trichloroethane	71-55-6	mg/Kg	<0.0263 UJ	0.129	0.0952	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1,2,2-Tetrachloroethane	79-34-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	mg/Kg	0.0771 J	0.0903 J-	0.132 J-	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1,2-Trichloroethane	79-00-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1-Dichloroethane	75-34-3	mg/Kg	0.0451 J	0.0725 J-	0.0845 J-	<0.0166	0.00948	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1-Dichloroethylene	75-35-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1-Dichloropropene	563-58-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2,3-Trichlorobenzene	87-61-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2,3-Trichloropropane	96-18-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2,4-Trichlorobenzene	120-82-1	mg/Kg	<0.0263 UJ	0.101	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2,4-Trimethylbenzene	95-63-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	0.0153	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8	mg/Kg	<0.131 UJ	<7.75	<6.39	<0.0831	<0.0468	<0.0924	<0.058	<0.0968 UJ	<0.0474	<0.125 UJ	<0.0216	<0.0563
1,2-Dibromoethane (EDB)	106-93-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2-Dichlorobenzene	95-50-1	mg/Kg	0.14 J	0.381	0.32	0.274	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113

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Table 3
2015 Sediment Analytical Results
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

			Site Locations								Reference Locations			
			SED-10	SED-12		SED-13	SED-14	SED-15	SED-16	SED-17	REF-SED-01	REF-SED-02	REF-SED-03	REF-SED-04
			SED-10-20150825	SED-12-20150826	SED-12 (DUP)-20150826	SED-13-20150827	SED-14-20150827	SED-15-20150827	SED-16-20150827	SED-17-20150827	REF-SED-01-20150827	REF-SED-02-20150827	REF-SED-03-20150827	REF-SED-04-20150827
Analyte	**CAS No.**	**Units**	8/25/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015
1,2-Dichloroethane	107-06-2	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2-Dichloropropane	78-87-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,3,5-Trimethylbenzene	108-67-8	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,3-Dichlorobenzene	541-73-1	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,3-Dichloropropane	142-28-9	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,4-Dichlorobenzene	106-46-7	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,4-Dioxane	123-91-1	mg/Kg	<1.31 UJ	<77.5	<63.9	<0.831	<0.468	<0.924	<0.58	<0.968 UJ	<0.474	<1.25 UJ	<0.216	<0.563
2,2-Dichloropropane	594-20-7	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
2-Butanone (MEK)	78-93-3	mg/Kg	<0.131 UJ	<7.75	<6.39	0.177	0.167	0.312	0.153	<0.0968 UJ	<0.0474	<0.125 UJ	<0.0216	<0.0563
2-Chlorotoluene	95-49-8	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
2-Hexanone	591-78-6	mg/Kg	<0.131 UJ	<7.75	<6.39	<0.0831	<0.0468	<0.0924	<0.058	<0.0968 UJ	<0.0474	<0.125 UJ	<0.0216	<0.0563
4-Chlorotoluene	106-43-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
4-Isopropyltoluene	99-87-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
4-Methyl-2-Pentanone (MIBK)	108-10-1	mg/Kg	<0.131 UJ	<7.75	<6.39	<0.0831	<0.0468	<0.0924	<0.058	<0.0968 UJ	<0.0474	<0.125 UJ	<0.0216	<0.0563
Acetone	67-64-1	mg/Kg	<1.31 UJ	<77.5	<63.9	<0.831	0.553	1.07	<0.58	<0.968 UJ	<0.474	<1.25 UJ	<0.216	<0.563
Benzene	71-43-2	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Bromobenzene	108-86-1	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Bromochloromethane	74-97-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Bromodichloromethane	75-27-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Bromoform	75-25-2	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Bromomethane	74-83-9	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Carbon Disulfide	75-15-0	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Carbon Tetrachloride	56-23-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Chlorobenzene	108-90-7	mg/Kg	<0.0263 UJ	<1.55	<1.28	0.0527	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Chloroethane	75-00-3	mg/Kg	<0.0263 UJ	0.13 J-	0.0651 J-	0.0198 J-	0.0665 J-	1.18 J-	0.228 J-	<0.0194 UJ	<0.00948 UJ	<0.025 UJ	<0.00431 UJ	<0.0113 UJ
Chloroform	67-66-3	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Chloromethane	74-87-3	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
cis-1,2-Dichloroethylene	156-59-2	mg/Kg	0.178 J	0.469	0.398	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
cis-1,3-Dichloropropene	10061-01-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Dibromochloromethane	124-48-1	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Dibromomethane	74-95-3	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Dichlorodifluoromethane	75-71-8	mg/Kg	<0.0263 UJ	<1.55 UJ	<1.28 UJ	<0.0166 UJ	<0.00936 UJ	<0.0185 UJ	<0.0116 UJ	<0.0194 UJ	<0.00948 UJ	<0.025 UJ	<0.00431 UJ	<0.0113 UJ
Diethyl Ether	60-29-7	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Ethyl tert-Butyl Ether (ETBE)	637-92-3	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Ethylbenzene	100-41-4	mg/Kg	<0.0263 UJ	0.0311 J-	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Hexachlorobutadiene	87-68-3	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113

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Table 3
2015 Sediment Analytical Results
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

			Site Locations								Reference Locations			
			SED-10	SED-12		SED-13	SED-14	SED-15	SED-16	SED-17	REF-SED-01	REF-SED-02	REF-SED-03	REF-SED-04
			SED-10-20150825	SED-12-20150826	SED-12 (DUP)-20150826	SED-13-20150827	SED-14-20150827	SED-15-20150827	SED-16-20150827	SED-17-20150827	REF-SED-01-20150827	REF-SED-02-20150827	REF-SED-03-20150827	REF-SED-04-20150827
Analyte	**CAS No.**	**Units**	8/25/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015
Isopropyl Ether (DIPE)	108-20-3	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Isopropylbenzene	98-82-8	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
m/p-Xylenes	179601-23-1	mg/Kg	<0.0263 UJ	0.0498 J-	<1.28	<0.0166	<0.00936	<0.0185	0.0178	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Methyl tert-Butyl Ether (MTBE)	1634-04-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Methylene Chloride	75-09-2	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Naphthalene	91-20-3	mg/Kg	<0.131 UJ	<7.75	<6.39	<0.0831	<0.0468	<0.0924	<0.058	<0.0968 UJ	<0.0474	<0.125 UJ	<0.0216	<0.0563
n-Butylbenzene	104-51-8	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
n-Propylbenzene	103-65-1	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
o-Xylene	95-47-6	mg/Kg	<0.0263 UJ	0.079 J-	0.0234 J-	<0.0166	<0.00936	<0.0185	0.0285	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
sec-Butylbenzene	135-98-8	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Styrene	100-42-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
tert-Amyl-Methyl Ether (TAME)	994-05-8	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
tert-Butylbenzene	98-06-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Tetrachloroethene	127-18-4	mg/Kg	0.231 J	0.0195 J-	0.0251 J-	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Tetrahydrofuran (THF)	109-99-9	mg/Kg	<0.263 UJ	<15.5	<12.8	<0.166	0.112	<0.185	0.131	<0.194 UJ	<0.0948	<0.25 UJ	0.0561	<0.113
Toluene	108-88-3	mg/Kg	<0.0263 UJ	0.191	<1.28	<0.0166	<0.00936	0.0202	0.0128	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
trans-1,2-Dichloroethylene	156-60-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
trans-1,3-Dichloropropene	10061-02-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Trichloroethylene	79-01-6	mg/Kg	0.107 J	<1.55	0.0228 J-	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Trichlorofluoromethane	75-69-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Vinyl Chloride	75-01-4	mg/Kg	0.0457 J	<1.55	0.0171 J-	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
SVOCs														
2-Methylnaphthalene	91-57-6	mg/Kg												
Acenaphthene	83-32-9	mg/Kg												
Acenaphthylene	208-96-8	mg/Kg												
Anthracene	120-12-7	mg/Kg												
Benzo(a)anthracene	56-55-3	mg/Kg												
Benzo(a)pyrene	50-32-8	mg/Kg												
Benzo(b)fluoranthene	205-99-2	mg/Kg												
Benzo(g,h,i)perylene	191-24-2	mg/Kg												
Benzo(k)fluoranthene	207-08-9	mg/Kg												
Bis(2-ethylhexyl)phthalate	117-81-7	mg/Kg												
Carbazole	86-74-8	mg/Kg												
Chrysene	218-01-9	mg/Kg												
Dibenzofuran	132-64-9	mg/Kg												
di-n-Octylphthalate	117-84-0	mg/Kg												
Fluoranthene	206-44-0	mg/Kg												
Fluorene	86-73-7	mg/Kg												
Indeno(1,2,3-cd)pyrene	193-39-5	mg/Kg												
Phenanthrene	85-01-8	mg/Kg												
Pyrene	129-00-0	mg/Kg												

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Table 4
Local Conditions Evaluation - Pore Water
Former Lewis Chemical Corporation
0 & 12-24 Fairmount Court
Hyde Park, Massachusetts

Constituent	CAS No.	Maximum Concentration [1]				Median Concentration [1]				Criterion (a)	Criterion (b)	Criterion (c)	Summary Statistics Comparison Conclusions [2]
		$[Max]_S$	$[Max]_R$	$[Max]_S > [Max]_R$	$[Max]_S > 1.5 * [Max]_R$	$[Med]_S$	$[Med]_R$	$[Med]_S > [Med]_R$	$[Med]_S > 1.5 * [Med]_R$	$[Max]_S < [Max]_R$ and $[Med]_S < [Med]_R$?	If $[Med]_S < [Med]_R$: $[Max]_S < 1.5*[Max]_R$?	If $[Max]_S < [Max]_R$: $[Med]_S < 1.5*[Med]_R$?	
Volatile Organic Compounds													
1,1,1-Trichloroethane	71-55-6	498	--	Yes	--	2.02	--	Yes	--	No	--	--	Site higher
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	184	--	Yes	--	6.00	--	Yes	--	No	--	--	Site higher
1,1-Dichloroethane	75-34-3	447	9.57	Yes	Yes	6.64	0.50	Yes	Yes	No	--	--	Site higher
1,2-Dichlorobenzene	95-50-1	36.7	--	Yes	--	3.58	--	Yes	--	No	--	--	Site higher
Benzene	71-43-2	1.08	--	Yes	--	0.79	--	Yes	--	No	--	--	Site higher
Chlorobenzene	108-90-7	3.60	--	Yes	--	2.00	--	Yes	--	No	--	--	Site higher
Chloroethane	75-00-3	1800	--	Yes	--	12.2	--	Yes	--	No	--	--	Site higher
cis-1,2-Dichloroethylene	156-59-2	356	9.87	Yes	Yes	6.00	0.50	Yes	Yes	No	--	--	Site higher
Dichlorodifluoromethane	75-71-8	122	--	Yes	--	2.00	--	Yes	--	No	--	--	Site higher
Methyl tert-Butyl Ether (MTBE)	1634-04-4	4.71	--	Yes	--	1.25	--	Yes	--	No	--	--	Site higher
Methylene Chloride	75-09-2	76.8	--	Yes	--	5.63	--	Yes	--	No	--	--	Site higher
Tetrachloroethene	127-18-4	19.7	--	Yes	--	6.00	--	Yes	--	No	--	--	Site higher
Toluene	108-88-3	29.2	--	Yes	--	2.00	--	Yes	--	No	--	--	Site higher
trans-1,2-Dichloroethylene	156-60-5	1.98	--	Yes	--	1.24	--	Yes	--	No	--	--	Site higher
Trichloroethylene	79-01-6	21.4	4.38	Yes	Yes	6.00	0.50	Yes	Yes	No	--	--	Site higher
Vinyl Chloride	75-01-4	826	3.55	Yes	Yes	6.00	0.50	Yes	Yes	No	--	--	Site higher
Polychlorinated Biphenyls													
Aroclor-1232	11141-16-5	116	9.11	Yes	Yes	34.9	1.70	Yes	Yes	No	--	--	Site higher
Aroclor-1242	53469-21-9	2.93	1.15	Yes	Yes	0.12	0.12	No	No	No	No	--	Site higher
Aroclor-1254	11097-69-1	0.75	0.27	Yes	Yes	0.36	0.12	Yes	Yes	No	--	--	Site higher
Metals													
Barium	7440-39-3	508	234	Yes	Yes	258	98.7	Yes	Yes	No	--	--	Site higher
Chromium	7440-47-3	6.35	2.57	Yes	Yes	2.77	0.50	Yes	Yes	No	--	--	Site higher
Copper	7440-50-8	1.72	--	Yes	--	0.80	--	Yes	--	No	--	--	Site higher
Mercury	7439-97-6	0.15	--	Yes	--	0.060	--	Yes	--	No	--	--	Site higher
Nickel	7440-02-0	6.74	15.4	No	No	2.67	1.40	Yes	Yes	No	--	No	Site higher
Vanadium	7440-62-2	4.29	2.67	Yes	Yes	1.58	0.75	Yes	Yes	No	--	--	Site higher
Zinc	7440-66-6	26.6	440	No	No	1.99	7.99	No	No	Yes	--	--	Local conditions

Notes:
All concentrations are presented in units of micrograms per liter (ug/L).
$[Max]_S$ = Maximum detected concentration of constituent among samples collected from Site locations
$[Max]_R$ = Maximum detected concentration of constituent among samples collected from Reference (i.e. upstream) locations
$[Med]_S$ = Median concentration of constituent among samples collected from Site locations, including 1/2 of the laboratory reporting limit (LRL) for non-detect results, except if the LRL exceeds 2 times $[Max]_S$
$[Med]_R$ = Median concentration of constituent among samples collected from Reference locations, including 1/2 of the LRL for non-detect results, except if the LRL exceeds 2 times $[Max]_R$
-- = Not applicable. Constituent was not detected in the specified dataset, or statistic could not be calculated due to lack of data.
1. Summary statistics are based on data collected by Woodard & Curran in 2015. See Table X.
2. In accordance with MassDEP risk assessment guidance (1995), the criteria for establishing whether a constituent is considered with reference conditions is as follows:
(a) If the maximum and median values of site data are lower than the maximum and median values of reference data, then site data are consistent with reference conditions. If not, then concentrations are evaluated with respect to conditions (b) and (c) below.
(b) If the median value of site data is less than the median value of reference data, and the maximum value is not greater than 1.5 times the maximum reference concentration, then site data are considered consistence with reference conditions.
(c) If the maximum value of site data is less than the maximum value of reference data, and the median value is not greater than 1.5 times the median reference concentration, then site data are consistent with reference conditions.
(d) If Criteria (a) through (c) cannot be met, then the constituent is concluded to be higher in concentration than reference conditions.

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Table 5

Local Conditions Evaluation - Surface Water

Former Lewis Chemical Corporation

0 & 12-24 Fairmount Court

Hyde Park, Massachusetts

Constituent	CAS No.	Maximum Concentration [1]				Median Concentration [1]				Criterion (a)	Criterion (b)	Criterion (c)	Summary Statistics Comparison Conclusions [2]
		$[Max]_S$	$[Max]_R$	$[Max]_S > [Max]_R$	$[Max]_S > 1.5 * [Max]_R$	$[Med]_S$	$[Med]_R$	$[Med]_S > [Med]_R$	$[Med]_S > 1.5 * [Med]_R$	$[Max]_S < [Max]_R$ and $[Med]_S < [Med]_R$?	If $[Med]_S < [Med]_R$: $[Max]_S < 1.5*[Max]_R$?	If $[Max]_S < [Max]_R$: $[Med]_S < 1.5*[Med]_R$?	
Volatile Organic Compounds													
1,1,1-Trichloroethane	71-55-6	1.24	--	Yes	--	0.50	--	Yes	--	No	--	--	Site higher
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1.00	--	Yes	--	0.50	--	Yes	--	No	--	--	Site higher
1,1-Dichloroethane	75-34-3	1.51	--	Yes	--	0.50	--	Yes	--	No	--	--	Site higher
cis-1,2-Dichloroethylene	156-59-2	1.64	--	Yes	--	0.50	--	Yes	--	No	--	--	Site higher
Vinyl Chloride	75-01-4	1.93	--	Yes	--	0.50	--	Yes	--	No	--	--	Site higher
Polychlorinated Biphenyls													
Aroclor-1232	11141-16-5	1.26	1.25	Yes	No	0.12	0.12	No	No	No	Yes	--	Local conditions
Metals													
Barium	7440-39-3	79.7	67.9	Yes	No	64.8	61.3	Yes	No	No	--	--	Site higher
Copper	7440-50-8	2.71	2.74	No	No	2.05	2.26	No	No	Yes	--	--	Local conditions
Zinc	7440-66-6	16.3	9.17	Yes	Yes	5.66	5.78	No	No	No	No	--	Site higher

Notes:

All concentrations are presented in units of micrograms per liter (ug/L).

$[Max]_S$ = Maximum detected concentration of constituent among samples collected from Site locations

$[Max]_R$ = Maximum detected concentration of constituent among samples collected from Reference (i.e. upstream) locations

$[Med]_S$ = Median concentration of constituent among samples collected from Site locations, including 1/2 of the laboratory reporting limit (LRL) for non-detect results, except if the LRL exceeds 2 times $[Max]_S$

$[Med]_R$ = Median concentration of constituent among samples collected from Reference locations, including 1/2 of the LRL for non-detect results, except if the LRL exceeds 2 times $[Max]_R$

-- = Not applicable. Constituent was not detected in the specified dataset, or statistic could not be calculated due to lack of data.

1. Summary statistics are based on data collected by Woodard & Curran in 2015. See Table X.

2. In accordance with MassDEP risk assessment guidance (1995), the criteria for establishing whether a constituent is considered with reference conditions is as follows:

(a) If the maximum and median values of site data are lower than the maximum and median values of reference data, then site data are consistent with reference conditions. If not, then concentrations are evaluated with respect to conditions (b) and (c) below.

(b) If the median value of site data is less than the median value of reference data, and the maximum value is not greater than 1.5 times the maximum reference concentration, then site data are considered consistence with reference conditions.

(c) If the maximum value of site data is less than the maximum value of reference data, and the median value is not greater than 1.5 times the median reference concentration, then site data are consistent with reference conditions.

(d) If Criteria (a) through (c) cannot be met, then the constituent is concluded to be higher in concentration than reference conditions.

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Table 6
Local Conditions Evaluation - Sediment
Former Lewis Chemical Corporation
0 & 12-24 Fairmount Court
Hyde Park, Massachusetts

Constituent	CAS No.	Maximum Concentration [1]				Median Concentration [1]				Criterion (a)	Criterion (b)	Criterion (c)	Summary Statistics Comparison Conclusions [2]
		$[Max]_S$	$[Max]_R$	$[Max]_S > [Max]_R$	$[Max]_S > 1.5 * [Max]_R$	$[Med]_S$	$[Med]_R$	$[Med]_S > [Med]_R$	$[Med]_S > 1.5 * [Med]_R$	$[Max]_S < [Max]_R$ and $[Med]_S < [Med]_R$?	If $[Med]_S < [Med]_R$: $[Max]_S < 1.5*[Max]_R$?	If $[Max]_S < [Max]_R$: $[Med]_S < 1.5*[Med]_R$?	
Volatile Organic Compounds													
1,1,1-Trichloroethane	71-55-6	0.13	--	Yes	--	0.0093	--	Yes	--	No	--	--	Site higher
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	0.13	--	Yes	--	0.0093	--	Yes	--	No	--	--	Site higher
1,1-Dichloroethane	75-34-3	0.085	--	Yes	--	0.0095	--	Yes	--	No	--	--	Site higher
1,2,4-Trichlorobenzene	120-82-1	0.10	--	Yes	--	0.0093	--	Yes	--	No	--	--	Site higher
1,2,4-Trimethylbenzene	95-63-6	0.015	--	Yes	--	0.0095	--	Yes	--	No	--	--	Site higher
1,2-Dichlorobenzene	95-50-1	0.38	--	Yes	--	0.010	--	Yes	--	No	--	--	Site higher
2-Butanone (MEK)	78-93-3	0.31	--	Yes	--	0.16	--	Yes	--	No	--	--	Site higher
Acetone	67-64-1	1.07	--	Yes	--	0.52	--	Yes	--	No	--	--	Site higher
Chlorobenzene	108-90-7	0.053	--	Yes	--	0.0095	--	Yes	--	No	--	--	Site higher
Chloroethane	75-00-3	1.18	--	Yes	--	0.067	--	Yes	--	No	--	--	Site higher
cis-1,2-Dichloroethylene	156-59-2	0.47	--	Yes	--	0.0093	--	Yes	--	No	--	--	Site higher
Ethylbenzene	100-41-4	0.031	--	Yes	--	0.0093	--	Yes	--	No	--	--	Site higher
Tetrachloroethene	127-18-4	0.23	--	Yes	--	0.0093	--	Yes	--	No	--	--	Site higher
Tetrahydrofuran (THF)	109-99-9	0.13	0.056	Yes	Yes	0.10	0.052	Yes	Yes	No	--	--	Site higher
Toluene	108-88-3	0.19	--	Yes	--	0.013	--	Yes	--	No	--	--	Site higher
Trichloroethylene	79-01-6	0.11	--	Yes	--	0.0093	--	Yes	--	No	--	--	Site higher
Vinyl Chloride	75-01-4	0.046	--	Yes	--	0.0093	--	Yes	--	No	--	--	Site higher
Xylenes, Total	1330-20-7	0.13	--	Yes	--	0.010	--	Yes	--	No	--	--	Site higher
Polychlorinated Biphenyls													
Aroclor-1232	11141-16-5	963	47.4	Yes	Yes	7.90	6.11	Yes	No	No	--	--	Site higher
Aroclor-1242	53469-21-9	5.42	--	Yes	--	4.52	--	Yes	--	No	--	--	Site higher
Metals													
Antimony	7440-36-0	2.44	--	Yes	--	1.79	--	Yes	--	No	--	--	Site higher
Arsenic	7440-38-2	11.1	7.81	Yes	No	7.00	2.76	Yes	Yes	No	--	--	Site higher
Barium	7440-39-3	246	103	Yes	Yes	113	44.4	Yes	Yes	No	--	--	Site higher
Beryllium	7440-41-7	0.90	0.55	Yes	Yes	0.43	0.19	Yes	Yes	No	--	--	Site higher
Cadmium	7440-43-9	4.57	1.82	Yes	Yes	1.87	0.63	Yes	Yes	No	--	--	Site higher
Chromium	7440-47-3	167	47.3	Yes	Yes	46.0	28.3	Yes	Yes	No	--	--	Site higher
Copper	7440-50-8	164	75.3	Yes	Yes	69.0	41.0	Yes	Yes	No	--	--	Site higher
Lead	7439-92-1	544	212	Yes	Yes	131	102	Yes	No	No	--	--	Site higher
Mercury	7439-97-6	2.01	0.46	Yes	Yes	0.50	0.17	Yes	Yes	No	--	--	Site higher
Nickel	7440-02-0	28.3	15.8	Yes	Yes	18.4	9.38	Yes	Yes	No	--	--	Site higher
Selenium	7782-49-2	1.63	--	Yes	--	0.61	--	Yes	--	No	--	--	Site higher
Silver	7440-22-4	1.14	--	Yes	--	0.31	--	Yes	--	No	--	--	Site higher
Vanadium	7440-62-2	68.4	30.4	Yes	Yes	25.5	16.4	Yes	Yes	No	--	--	Site higher
Zinc	7440-66-6	474	333	Yes	No	335	170	Yes	Yes	No	--	--	Site higher

Notes:
All concentrations are presented in units of milligrams per kilogram (mg/kg).
$[Max]_S$ = Maximum detected concentration of constituent among samples collected from Site locations
$[Max]_R$ = Maximum detected concentration of constituent among samples collected from Reference (i.e. upstream) locations
$[Med]_S$ = Median concentration of constituent among samples collected from Site locations, including 1/2 of the laboratory reporting limit (LRL) for non-detect results, except if the LRL exceeds 2 times $[Max]_S$
$[Med]_R$ = Median concentration of constituent among samples collected from Reference locations, including 1/2 of the LRL for non-detect results, except if the LRL exceeds 2 times $[Max]_R$
-- = Not applicable. Constituent was not detected in the specified dataset, or statistic could not be calculated due to lack of data.
1. Summary statistics are based on data collected by Woodard & Curran in 2015. See Table X.
2. In accordance with MassDEP risk assessment guidance (1995), the criteria for establishing whether a constituent is considered with reference conditions is as follows:
(a) If the maximum and median values of site data are lower than the maximum and median values of reference data, then site data are consistent with reference conditions. If not, then concentrations are evaluated with respect to conditions (b) and (c) below.
(b) If the median value of site data is less than the median value of reference data, and the maximum value is not greater than 1.5 times the maximum reference concentration, then site data are considered consistence with reference conditions.
(c) If the maximum value of site data is less than the maximum value of reference data, and the median value is not greater than 1.5 times the median reference concentration, then site data are consistent with reference conditions.
(d) If Criteria (a) through (c) cannot be met, then the constituent is concluded to be higher in concentration than reference conditions.

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Table 7

Local Conditions Evaluation Summary: Pore Water

Former Lewis Chemical Corporation

0 & 12-24 Fairmount Court

Hyde Park, Massachusetts

Constituent	CAS No.	Local Conditions	Site Detection History		Chemical of Potential Concern?	Rationale for Exclusion as COPC - pore water
		Pore Water	Soil	Groundwater	Pore Water	
Volatile Organic Compounds						
1,1,1-Trichloroethane	71-55-6	S	X	X	Yes	Site concentrations higher than Reference
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	S	X	X	Yes	Site concentrations higher than Reference
1,1-Dichloroethane	75-34-3	S	X	X	Yes	Site concentrations higher than Reference
1,2-Dichlorobenzene	95-50-1	S	X	X	Yes	Site concentrations higher than Reference
Benzene	71-43-2	S	X	X	Yes	Site concentrations higher than Reference
Chlorobenzene	108-90-7	S	X	X	Yes	Site concentrations higher than Reference
Chloroethane	75-00-3	S	X	X	Yes	Site concentrations higher than Reference
cis-1,2-Dichloroethylene	156-59-2	S	X	X	Yes	Site concentrations higher than Reference
Dichlorodifluoromethane	75-71-8	S	X		No	Not detected in Site groundwater, or in sediment or surface water. Detected in only 1 of 400 Site soil samples, at a concentration of 0.016 mg/kg. Possible laboratory contaminant.
Ethylbenzene	100-41-4		X	X		
Methyl tert-Butyl Ether (MTBE)	1634-04-4	S	X	X	Yes	Site concentrations higher than Reference
Methylene Chloride	75-09-2	S	X	X	Yes	Site concentrations higher than Reference
Tetrachloroethene	127-18-4	S	X	X	Yes	Site concentrations higher than Reference
Toluene	108-88-3	S	X	X	Yes	Site concentrations higher than Reference
trans-1,2-Dichloroethylene	156-60-5	S	X	X	Yes	Site concentrations higher than Reference
Trichloroethylene	79-01-6	S	X	X	Yes	Site concentrations higher than Reference
Vinyl Chloride	75-01-4	S	X	X	Yes	Site concentrations higher than Reference
Polychlorinated Biphenyls						
Aroclor-1232	11141-16-5	S	X		No	Not detected in groundwater and at low frequency in soil; present in upstream samples; higher in reference surface water samples; presumed local conditions in sediment based on historical data.
Aroclor-1242	53469-21-9	S	X	X	No	PCBs infrequently detected in groundwater. Not detected in surface water.
Aroclor-1254	11097-69-1	S	X	X	No	PCBs infrequently detected in groundwater. Not detected in surface water.
Metals						
Barium	7440-39-3	S	X	X	Yes	Site concentrations higher than Reference
Chromium	7440-47-3	S	X		Yes	Site concentrations higher than Reference
Copper	7440-50-8	S	X		Yes	Site concentrations higher than Reference
Mercury	7439-97-6	S	X		Yes	Site concentrations higher than Reference
Nickel	7440-02-0	S	X		Yes	Site concentrations higher than Reference
Vanadium	7440-62-2	S	X		Yes	Site concentrations higher than Reference
Zinc	7440-66-6	R	X		No	Reference Concentrations higher than Site

Notes:

S = Compound was detected in samples from Site locations at concentrations higher than Reference locations.

R = Compound in Site samples is consistent with Reference concentrations.

Blank cells = Compound was not detected in that medium or no data available.

X = Compound was detected in Site media.

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Table 8

Local Conditions Evaluation Summary: Surface Water

Former Lewis Chemical Corporation

0 & 12-24 Fairmount Court

Hyde Park, Massachusetts

Constituent	CAS No.	Local Conditions Evaluation	Site Detection History		Chemical of Potential Concern?	Rationale for Exclusion as COPC - surface water
		Surface Water	Soil	Groundwater	Surface Water	
Volatile Organic Compounds						
1,1,1-Trichloroethane	71-55-6	S	X	X	Yes	Site concentrations higher than Reference
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	S	X	X	Yes	Site concentrations higher than Reference
1,1-Dichloroethane	75-34-3	S	X	X	Yes	Site concentrations higher than Reference
cis-1,2-Dichloroethylene	156-59-2	S	X	X	Yes	Site concentrations higher than Reference
Vinyl Chloride	75-01-4	S	X	X	Yes	Site concentrations higher than Reference
Polychlorinated Biphenyls						
Aroclor-1232	11141-16-5	R	X		No	Site concentrations lower than Reference
Metals						
Barium	7440-39-3	S	X	X	Yes	Site concentrations higher
Copper	7440-50-8	R	X		No	Reference concentrations higher
Zinc	7440-66-6	S	X		Yes	Site concentrations higher

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Notes:

S = Compound was detected in samples from Site locations at concentrations higher than Reference locations.

R = Compound in Site samples is consistent with Reference concentrations.

Blank cells = Compound was not detected in that medium or no data available.

X = Compound was detected in Site media.

Table 9
Local Conditions Evaluation Summary: Sediment
Former Lewis Chemical Corporation
0 & 12-24 Fairmount Court
Hyde Park, Massachusetts

Constituent	CAS No.	Local Conditions Evaluation	Historical Evaluation	Site Detection History		Chemical of Potential Concern?	Rationale for Exclusion as COPC - sediment
		Sediment	Sediment	Soil	Groundwater		
Volatile Organic Compounds							
1,1,1-Trichloroethane	71-55-6	S		X	X	Yes	Site concentrations higher than Reference
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	S		X	X	Yes	Site concentrations higher than Reference
1,1-Dichloroethane	75-34-3	S		X	X	Yes	Site concentrations higher than Reference
1,2,4-Trichlorobenzene	120-82-1	S		X	X	Yes	Site concentrations higher than Reference
1,2,4-Trimethylbenzene	95-63-6	S		X	X	Yes	Site concentrations higher than Reference
1,2-Dichlorobenzene	95-50-1	S		X	X	Yes	Site concentrations higher than Reference
2-Butanone (MEK)	78-93-3	S		X		No	Not detected in Site groundwater, or in surface or pore water. Maximum detect in sediment was 0.3 mg/kg. Detected in only 7 of 172 soil samples (4%), at a maximum concentration of 2 mg/kg. Possible laboratory contaminant.
Acetone	67-64-1	S		X	X	Yes	Site concentrations higher than Reference
Chlorobenzene	108-90-7	S		X	X	Yes	Site concentrations higher than Reference
Chloroethane	75-00-3	S		X	X	Yes	Site concentrations higher than Reference
cis-1,2-Dichloroethylene	156-59-2	S		X	X	Yes	Site concentrations higher than Reference
Ethylbenzene	100-41-4	S		X	X	Yes	Site concentrations higher than Reference
Tetrachloroethene	127-18-4	S		X	X	Yes	Site concentrations higher than Reference
Tetrahydrofuran (THF)	109-99-9	S				No	Not detected in soil or groundwater. Detected in 2 sediment samples at concentrations lower than reporting limits in some Reference samples.
Toluene	108-88-3	S		X	X	Yes	Site concentrations higher than Reference
Trichloroethylene	79-01-6	S		X	X	Yes	Site concentrations higher than Reference
Vinyl Chloride	75-01-4	S		X	X	Yes	Site concentrations higher than Reference
Xylenes, Total	1330-20-7	S		X	X	Yes	Site concentrations higher than Reference
Polychlorinated Biphenyls							
Aroclor-1232	11141-16-5	S	S	X		No	Detected in 3 Site samples; only one concentration exceeded historical concentrations. Remainder of detects are consistent with historical concentrations. Known upstream source. Reference concentratoins in surface water are higher than Site. Not detected in Site groundwater and detected in 1% of soil samples, at a maximum concentration of 10 mg/kg. However, due to on-site PCB source, conservatively retained as COPC.
Aroclor-1242	53469-21-9	S	R	X	X	No	2015 Concentrations higher along Site; however, Site concentrations are lower than historical Reference and there is a known upstream PCB source. Conservatively retained as COPC due to on-site source.
Metals							
Antimony	7440-36-0	S	R	X		No	Site concentrations consistent with/lower than historical concentrations; not detected in groundwater. One detect, 0.744 mg/kg and blank-qualified in soil.
Arsenic	7440-38-2	S	R	X	X	No	Site concentrations consistent with/lower than historical concentrations
Barium	7440-39-3	S	®	X	X	Yes	Site max/one detect much higher; remainder consistent. Detected in all media. Conservatively include.
Beryllium	7440-41-7	S	R	X		No	Site concentrations consistent with/lower than historical concentrations
Cadmium	7440-43-9	S	S	X		Yes	Site concentrations higher than current and historical reference.
Chromium	7440-47-3	S	(S)	X		Yes	USGS datapoint considerably higher, but only one detect/datapoint available. Conservatively include, since detected in Site soil and pore water.
Copper	7440-50-8	S	®	X		No	USGS max slightly lower than Site, but considerable overlap. Reference-related in surface water, and not detected in groundwater.
Lead	7439-92-1	S	S	X	X	Yes	Site concentrations higher than current and historical reference.
Mercury	7439-97-6	S	S	X		Yes	Site concentrations higher than current and historical reference.
Nickel	7440-02-0	S	R	X		No	USGS concentrations higher. Some 2015 concentrations slightly higher along Site than in Upstream, but considerable overlap.
Selenium	7782-49-2	S	S	X	X	Yes	Site concentrations higher than current and historical reference.
Silver	7440-22-4	S	S	X	X	Yes	Site concentrations higher than current and historical reference.
Vanadium	7440-62-2	S	(S)	X		Yes	Site max/one detect much higher; remainder consistent. Also detected in pore water and soil. Conservatively include.
Zinc	7440-66-6	S	(S)	X		Yes	Site max/one detect much higher; remainder consistent. Also detected in pore water, surface water and soil. Conservatively include.

Notes:
S = Compound was detected in samples from Site locations at concentrations higher than Reference locations.
R = Compound in Site samples is consistent with Reference concentrations.
Blank cells = Compound was not detected in that medium or no data available.
X = Compound was detected in Site media.

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Table 10
Comparison of Pore Water Analytical Results to Aquatic Benchmarks
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

Porewater COPC	Maximum Concentration in Pore Water	National Recommended Water Quality Criteria		Metrics for Other Aquatic Benchmarks					Notes:
		Acute	Chronic	Minimum	Maximum	Median	75th Percentile	95th Percentile	
Volatile Organic Compounds									
1,1,1-Trichloroethane	498	--	--	11	669000	389.5	2717.5	303745	Above median benchmark
1,1,2-Trichloro-1,2,2-Trifluoroethane	184	--	--	413	413	413	413	413	Below minimum benchmark
1,1-Dichloroethane	447	--	--	47	14700	818.5	5902.5	12432	Below median benchmark
1,2-Dichlorobenzene	36.7	--	--	0.7	110	14	14.9	81.74	Above median benchmark
Benzene	1.08	--	--	21	525000	130	370	311500	Below minimum benchmark
Chlorobenzene	3.6	--	--	1.3	224000	147.5	1050	109050	Below median benchmark
Chloroethane	1800	--	--	--	--	--	--	--	No benchmark available
cis-1,2-Dichloroethylene	356	--	--	590	14000	3535	8585	12885	Below minimum benchmark
Methyl tert-Butyl Ether (MTBE)	4.71	--	--	10000	11070	11070	11070	11070	Below minimum benchmark
Methylene Chloride	76.8	--	--	98.1	108000	1595	17050	78615	Below minimum benchmark
Tetrachloroethene	19.7	--	--	45	816000	120	750	326904	Below minimum benchmark
Toluene	29.2	--	--	2	245000	187.5	1677.5	124110	Below median benchmark
trans-1,2-Dichloroethylene	1.98	--	--	970	22000	970	11485	19897	Below minimum benchmark
Trichloroethylene	21.4	--	--	21	11100	296	4597.5	9372	Below median benchmark
Vinyl Chloride	826	--	--	930	5630	930	3280	5160	Below minimum benchmark
Metals									
Barium	508	--	--	3.9	220	4	4	176.8	Only 2 benchmarks available
Chromium	6.35	1440	69	--	--	--	--	--	Below NRWQC
Copper	1.72	11	7	--	--	--	--	--	Below NRWQC
Mercury	0.147	1.647	0.906	--	--	--	--	--	Below NRWQC
Nickel	6.74	372	41	--	--	--	--	--	Below NRWQC
Vanadium	4.29	--	--	12	1900	26	70.25	1238.5	Below minimum benchmark

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ug/L = micrograms per liter
NRWQC - National Recommended Water Quality Criteria

Table 11
Comparison of Surface Water Analytical Results to Aquatic Benchmarks
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

Chemical of Potential Concern	Maximum Concentration in Surface Water (ug/L)	National Recommended Water Quality Criteria (ug/L)		Metrics for Other Aquatic Benchmarks (ug/L)					Notes
		Acute	Chronic	Minimum	Maximum	Median	75th	95th	
Volatile Organic Compounds									
1,1,1-Trichloroethane	1.24	NA	NA	11	669000	389.5	2717.5	303745	Maximum below minimum benchmark
1,1,2-Trichloro-1,2,2-Trifluoroethane	1	NA	NA	413	413	413	413	413	Maximum below minimum benchmark
1,1-Dichloroethane	1.51	NA	NA	47	14700	818.5	5902.5	12432	Maximum below minimum benchmark
cis-1,2-Dichloroethylene	1.64	NA	NA	590	14000	3535	8585	12885	Maximum below minimum benchmark
Vinyl Chloride	1.93	NA	NA	930	5630	930	3280	5160	Maximum below minimum benchmark
Metals									
Barium	79.7	NA	NA	3.9	220	4	4	176.8	Only two benchmarks available; below maximum
Zinc	16.3	95	95	--	--	--	--	--	Maximum below NRWQC

ug/L = micrograms per liter
Zinc NRWQC converted to total metals using conversion factor provided in Appendix B of NRWQC.

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Table 12
Comparison of Sediment Analytical Results to Sediment Benchmarks
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

Chemical of Potential Concern	CAS	Maximum Detected Sediment Concentration (mg/kg)	Metrics for Sediment Benchmarks (mg/kg)						Notes
			Lowest Benchmark	2nd Lowest Benchmark	Highest or Only Benchmark	Median Value	75th Percentile	95th Percentile	
Volatile Organic Compounds									
1,1,1-Trichloroethane	71-55-6	0.129	0.259424588	1.8318	82.56	1.8318	42.20	74.49	Maximum below lowest benchmark
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	0.132	NA	NA	NA	NA	NA	NA	No benchmark available
1,1-Dichloroethane	75-34-3	0.0845	0.2322	NA	72.24	36.24	54.24	68.64	Maximum below lowest benchmark
1,2,4-Trichlorobenzene	120-82-1	0.101	18.06423993	NA	43.5332	30.80	37.17	42.26	Maximum below lowest benchmark
1,2,4-Trimethylbenzene	95-63-6	0.0153	NA	NA	NA	NA	NA	NA	No benchmark available
1,2-Dichlorobenzene	95-50-1	0.381	0.141764174	NA	2.5284	1.3351	1.9317	2.4091	Maximum below median
2-Butanone (MEK)	78-93-3	0.312	0.36464	46.44	232.2	46.44	139	214	Maximum below lowest benchmark
Acetone	67-64-1	1.07	0.07826	0.08514	25.8	0.0851	12.94	23.23	Maximum above median benchmark
Chlorobenzene	108-90-7	0.0527	0.07246058	2.5026	834.2	34.79	259	719	Maximum below lowest benchmark
Chloroethane	75-00-3	1.18	NA	NA	NA	NA	NA	NA	No benchmark available
cis-1,2-Dichloroethylene*	540-59-0	0.469	0.4	NA	55.04	32.042	43.541	52.7402	Maximum below median
Ethylbenzene	100-41-4	0.0311	1.505	9.454552128	1376	27.94727606	379	1177	Maximum below lowest benchmark
Tetrachloroethene	127-18-4	0.231	4.024495351	8.514	30.1	18.02	28.17	29.71	Maximum below lowest benchmark
Tetrahydrofuran (THF)	109-99-9	0.131	NA	NA	NA	NA	NA	NA	No benchmark available
Toluene	108-88-3	0.191	10.492	55.04	1118	55.04	587	1012	Maximum below lowest benchmark
Trichloroethylene	79-01-6	0.107	0.833542496	0.9632	438.6	142	323	415	Maximum below lowest benchmark
Vinyl Chloride	75-01-4	0.0457	1.7372	NA	1.7372	NA	NA	NA	Maximum below lowest benchmark
Xylenes, Total	1330-20-7	0.1288	0.217	3.7238	6364	4	3184	5728	Maximum below lowest benchmark
Metals									
Barium*	7440-39-3	246	157	NA	157	NA	NA	NA	Maximum below median
Cadmium	7440-43-9	4.57	0.596	0.99	9.6	1	3.09	8.21	Maximum above median benchmark
Chromium	7440-47-3	167	37.3	43.4	370	52.3	95.5	292	Maximum above median benchmark
Lead	7439-92-1	544	30.2	35	218	35.8	88.35	191.6	Maximum above highest benchmark
Selenium	7782-49-2	1.63	2	NA	2	NA	NA	NA	Maximum below lowest benchmark
Silver	7440-22-4	1.14	0.5	1	3.7	1	1.75	3.28	Maximum below median
Vanadium*	7440-62-2	68.4	42	NA	42	NA	NA	NA	Only one benchmark available; exceeded
Zinc	7440-66-6	474	121	123	460	124	280	445	Maximum above highest benchmark
Mercury	7439-97-6	2.01	0.13	0.15	1.06	0.177	0.3125	0.9375	Maximum above highest benchmark

"Second-highest Benchmarks" only obtained for constituents exceeding lowest benchmarks.
Benchmarks are those listed in the following source unless noted:
Oak Ridge National Laboratory (ORNL) Risk Assessment Information System (RAIS). Benchmarks obtained from the Ecological Bencmark Tool at http://rais.ornl.gov/tools/eco_search.php
See Attachment 3-2 for values and sources.

*Sources for benchmarks for constituents without values listed in RAIS:
Cis-1,2-dichloroethylene concentration reflects mixed isomers. Benchmark is from Jones, D.S. et al. 1997.
Barium benchmark is from Crommentuijn et al. 2000. Negligible concentration.
Vanadium benchmark is from Crommentuijn et al. 2000. Negligible concentration.

= maximimum detected concentration exceeds lowest benchmark only

= maximimum detected concentration exceeds second-lowest benchmark

= maximimum detected concentration exceeds highest or only benchmark

Additional source references:

Crommentuijn, D. et al. 2000. Maximum permissible and negligible concentration for metals and metalloids in the Netherlands, taking into account background concentrations. *J. Environ. Management* 60, 121-143.
Jones, D.S. et al. 1997. Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment –Associated Biota: 1997 Revision. Oak Ridge National Laboratory, ES/ER/TM-95/R4
MacDonald, D.D. et al, 2000. Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Arch. Environ. Contam. Toxicol. 39, 20-31.

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ATTACHMENT 1: HISTORICAL RIVER DATA

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Tables 1-1 and 1-2 summarize the historical dataset used in the Updated Stage I and Local Conditions Evaluation. A brief description of each dataset is provided below.

ES&M Dataset:

ES&M collected 12 sediment samples from the Neponset River during the 2002 and 2006 sampling events in areas both adjacent to and upriver of the disposal site. The collected sediment samples were analyzed for VOCs, SVOCs/PAHs, and/or metals. A summary of sediment analytical results for samples collected adjacent to the disposal site is presented as **Table 1-1**. Results indicate that SVOCs/PAHs and heavy metals were detected in most of the samples analyzed. VOCs were detected in up to five of the "disposal site" sediment samples analyzed for this group of compounds. Highest concentrations of VOCs were generally detected in samples collected near the shore of the site by Soil Hot Spot 1 (sample SED-SH; S-3) and Soil Hot Spot 2 (sample S-6).

All VOCs detected in sediment are assumed to be related to releases from the disposal site and were retained as COPCs in sediment. For the other classes of constituents detected, we evaluated concentrations of these contaminants with respect to upriver, or "local" conditions, given that the Neponset River runs throughout an industrialized area and is subject to off-disposal site sources of contamination, such as historical contamination from past industry, roadway runoff, storm water and/or facility discharges and releases from upriver hazardous waste sites. Constituents detected in sediment in the reach of river adjacent to the disposal site at concentrations similar to or lower than those detected in upriver/reference samples were deemed consistent with local conditions and therefore eliminated as COPCs. Conversely, constituents in disposal site sediment determined to be present at levels higher than those observed in upriver/reference samples were retained as COPCs.

Upstream Data: USGS and Shaw Environmental (LE Mason)

Table 1-2 presents a summary of analytical results for sediment samples collected by USGS and Shaw Environmental.

USGS Dataset: The USGS collected sediment-grab samples at 20 sites along the Neponset River. Samples BGY-100 through BGY-104 were collected upriver of the Mother Brook confluence; samples BGY-105 through BGY-133 were collected downstream of the confluence to the Walter Baker Dam in Milton, MA, located several miles downstream of the disposal site. USGS did not collect sediment samples from Mother Brook; therefore, no sediment data were collected relative to the LE Mason site. None of the USGS sediment samples was collected adjacent to the Former Lewis Chemical disposal site. USGS samples were analyzed for Aroclors, metals, organochloride pesticides and/or PAHs. Metals and PAH concentrations appear to be relatively consistent throughout the river, with occasional peaks immediately downstream of the confluence and at the Tileston and Hollingsworth (T&H) Dam and Walter Baker Dam. Organochloride pesticides were not detected in any of the sediment samples collected along this stretch of river (Breault et al., 2004).

Concentrations of total PCBs in the USGS data set range from below detection limits to 10.6 mg/kg at BGY-105, downstream of the Mother Brook confluence and upriver of the Former Lewis Chemical Corporation building. Concentrations of total PCBs generally appear to be higher in the stretch of the river between BGY-105 (located just downstream of the confluence) and the T&H Dam. Discussions with Robert Breault, USGS (2006), indicate that USGS has recently characterized sediment quality in Mother Brook (data not currently available) as well as additional points in the Lower Neponset, and that PCB concentrations are elevated in this waterway relative to the Neponset River. Furthermore, this study found that PCB congener patterns in many of the sediment samples are similar to those found by the LE Mason facility. Results from this additional study suggest that PCBs from the LE Mason disposal site have impacted sediments throughout the Neponset River from the Mother Brook confluence to Boston Harbor.

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Shaw/LE Mason Dataset

Between March and September 2000, Shaw (then IT Corporation) conducted several rounds of sediment sampling in Mother Brook upriver and adjacent to the L.E. Mason Facility. Samples collected upriver of the LE Mason facility (SD-1 through SD-3 and U-1 through U-12) indicated detectable levels of PAHs, EPH, PCBs, and metals. Concentrations of VOCs, PAHs, PCBs, EPH/VPH, and metals were also detected adjacent to the L.E. Mason Facility. PCB concentrations in soil and sediment were highly elevated adjacent to the facility, with concentrations of total PCBs up to 4,600 mg/kg (IT, 2001).

In August 2001, an Immediate Response Action (IRA) was conducted in Mother Brook by Shaw (then IT Corp.) to excavate soil and sediment adjacent to the L.E. Mason disposal site for remediation of PCBs. Impacted soil and sediment were excavated up to a maximum depth of 14 feet. The brook bed was backfilled and restored to its previous elevations; the average concentration of PCBs remaining in the top two feet of soil and sediment over the remediation area was below the target clean-up goal of 3 mg/kg. (IT Group, April 26, 2002. Immediate Response Action Completion Report Mother Brook, L.E. Mason Company; Project # 830408-2002; Table 7 and Figure 12)

Following the IRA, Shaw collected additional sediment samples (SED-1 through SED-42) along 11 transects (approximately 100 feet of waterway) in Mother Brook downstream from the L.E. Mason disposal site, between the Amtrak bridge and 50 feet upriver of the confluence of Mother Brook and the Neponset River. These sediment samples were analyzed for total PCBs. Concentrations of PCBs ranged from non-detect to 104 mg/kg at sample location SD-27 (Shaw, December 2004. Phase II/III Comprehensive disposal site Assessment and Remedial Action Plan Addendum; Tables 2 and 6, Appendix E and Figures 3, 4 and 5)). An extensive remediation of 1,800 linear feet of Mother Brook downstream of the Amtrak bridge is scheduled for the summer of 2006. (Shaw, June 30, 2005. Notice of Intent, Phase IV – Remedy Implementation Plan Regulatory Permitting Support Document).

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Attachment 1-1
Summary of Historical Site Sediment Analytical Data
Former Lewis Chemical Facility
Boston, Massachusetts

Analyte	CAS No.	Units	SED-DS 7/8/2002	SED-MC 7/8/2002	SED-SH 7/8/2002	SED-US 7/8/2002	S-01 5/30/2006	S-02 5/30/2006	S-03 5/30/2006	S-04 5/30/2006	S-06 5/30/2006	S-08 5/30/2006	S-09 5/30/2006
Metals													
Arsenic	7440-38-2	mg/Kg	4.7	4.2	12.7	9.9							
Barium	7440-39-3	mg/Kg	48.2	54.9	164	115							
Cadmium	7440-43-9	mg/Kg	0.49	0.67	3.6	2							
Chromium	7440-47-3	mg/Kg	20.8	37.6	100	79.8							
Lead	7439-92-1	mg/Kg	132	113	296	212			410	31	6.1		89
Mercury	7439-97-6	mg/Kg	0.17	0.28	1.7	2.1			0.12	<0.02	<0.06		0.09
Selenium	7782-49-2	mg/Kg	<0.57	<0.54	4.3	<0.99							
Silver	7440-22-4	mg/Kg	1	2.1	2.3	1.9			3	0.9	<0.7		<0.5
Volatile Organic Compounds													
1,1,1-Trichloroethane	71-55-6	mg/Kg	<0.008	<0.007	0.23	<0.016	<0.4	<0.2	<0.6	<0.1	0.8	<0.3	<0.4
1,1-Dichloroethane	75-34-3	mg/Kg	<0.008	<0.007	0.16	<0.016	<0.4	<0.2	0.7	<0.1	<0.4	<0.3	<0.4
1,1-Dichloroethylene	75-35-4	mg/Kg	<0.008	<0.007	0.022	<0.016	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
1,2,4-Trichlorobenzene	120-82-1	mg/Kg	<0.008	<0.007	<0.026	<0.016	<0.4	<0.2	<0.6	<0.1	0.4	<0.3	<0.4
1,2,4-Trimethylbenzene	95-63-6	mg/Kg	<0.008	0.004	0.087	0.004	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
1,2-Dichlorobenzene	95-50-1	mg/Kg	<0.008	<0.007	0.32	<0.016	<0.4	<0.2	<0.6	<0.1	6.3	<0.3	<0.4
1,2-Dichloroethane	107-06-2	mg/Kg	<0.008	<0.007	0.022	<0.016	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
1,3,5-Trimethylbenzene	108-67-8	mg/Kg	<0.008	<0.007	0.033	<0.016	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
1,4-Dichlorobenzene	106-46-7	mg/Kg	<0.008	<0.007	0.008	<0.016	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
2-Butanone (MEK)	78-93-3	mg/Kg	0.007	0.007	0.048	0.018	<2	<0.8	<3	<0.5	<2	<2	<2
4-Isopropyltoluene	99-87-6	mg/Kg	<0.008	<0.007	0.013	0.01	<0.4	<0.2	<0.6	0.2	<0.4	<0.3	<0.4
4-Methyl-2-Pentanone (MIBK)	108-10-1	mg/Kg	<0.008	<0.007	0.012	0.006	<2	<0.8	<3	<0.5	<2	<2	<2
Acetone	67-64-1	mg/Kg	0.031	0.038	0.22	0.1	<10	<4	<10	<3	<10	<8	<9
Benzene	71-43-2	mg/Kg	<0.008	<0.007	0.018	<0.016	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
Carbon Disulfide	75-15-0	mg/Kg	0.007	0.005	0.022	0.007	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
Chlorobenzene	108-90-7	mg/Kg	<0.008	<0.007	0.037	<0.016	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
Chloroethane	75-00-3	mg/Kg	<0.008	0.009	1.4	<0.016	<0.4	<0.2	22	<0.1	<0.4	<0.3	<0.4
cis-1,2-Dichloroethylene	156-59-2	mg/Kg	<0.008	<0.007	0.62	0.004	<0.4	<0.2	<0.6	<0.1	0.8	<0.3	<0.4
Ethylbenzene	100-41-4	mg/Kg	<0.008	0.002	0.13	<0.016	<0.4	<0.2	1	<0.1	<0.4	<0.3	<0.4
Methyl tert-Butyl Ether (MTBE)	1634-04-4	mg/Kg	<0.008	<0.007	<0.026	0.005	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
Methylene Chloride	75-09-2	mg/Kg	<0.008	<0.007	0.023	<0.016	<1	<0.4	<1	<0.3	<1	<0.8	<0.9
Naphthalene	91-20-3	mg/Kg	<0.008	0.41	0.014	0.004	<1	<0.4	<1	<0.3	<1	<0.8	<0.9
n-Propylbenzene	103-65-1	mg/Kg	<0.008	<0.007	0.012	<0.016	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
o-Xylene	95-47-6	mg/Kg					<0.4	<0.2	0.8	<0.1	<0.4	<0.3	<0.4

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Attachment 1-1
Summary of Historical Site Sediment Analytical Data
Former Lewis Chemical Facility
Boston, Massachusetts

Analyte	CAS No.	Units	SED-DS 7/8/2002	SED-MC 7/8/2002	SED-SH 7/8/2002	SED-US 7/8/2002	S-01 5/30/2006	S-02 5/30/2006	S-03 5/30/2006	S-04 5/30/2006	S-06 5/30/2006	S-08 5/30/2006	S-09 5/30/2006
sec-Butylbenzene	135-98-8	mg/Kg	<0.008	<0.007	0.01	<0.016	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
Tetrachloroethene	127-18-4	mg/Kg	<0.008	<0.007	0.008	<0.016	<0.4	<0.2	<0.6	<0.1	3.9	<0.3	<0.4
Toluene	108-88-3	mg/Kg	<0.008	0.006	0.83	0.049	<0.4	<0.2	8.1	<0.1	<0.4	<0.3	<0.4
trans-1,2-Dichloroethylene	156-60-5	mg/Kg	<0.008	<0.007	0.025	<0.016	<0.4	<0.2	0.6	<0.1	<0.4	<0.3	<0.4
Trichloroethylene	79-01-6	mg/Kg	<0.008	0.002	0.015	0.004	<0.4	<0.2	<0.6	<0.1	1.1	<0.3	<0.4
Trichlorofluoromethane	75-69-4	mg/Kg	0.002	<0.007	<0.026	<0.016	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
Vinyl Chloride	75-01-4	mg/Kg	<0.008	<0.007	0.15	<0.016	<0.4	<0.2	<0.6	<0.1	<0.4	<0.3	<0.4
Semivolatile Organic Compounds													
2-Methylnaphthalene	91-57-6	mg/Kg	<5.5	0.28	<2	<9.9			<2	<0.6	<2		<2
Acenaphthene	83-32-9	mg/Kg	1	0.83	<2	<9.9			<2	<0.6	<2		<2
Acenaphthylene	208-96-8	mg/Kg	<5.5	0.21	<2	<9.9			<2	<0.6	<2		<2
Anthracene	120-12-7	mg/Kg	2	1.9	0.49	<9.9			<2	<0.6	<2		<2
Benzo(a)anthracene	56-55-3	mg/Kg	4.9	4.9	2	2.2			<2	<0.6	<2		<2
Benzo(a)pyrene	50-32-8	mg/Kg	4.6	4.7	2.3	2.4			<2	<0.6	<2		<2
Benzo(b)fluoranthene	205-99-2	mg/Kg	6.5	6.4	4	4.4			<2	<0.6	<2		<2
Benzo(g,h,i)perylene	191-24-2	mg/Kg	2.1	2.2	1.4	<9.9			<2	<0.6	<2		<2
Benzo(k)fluoranthene	207-08-9	mg/Kg	2.7	2.8	1.8	1.8			<2	<0.6	<2		<2
Bis(2-ethylhexyl)phthalate	117-81-7	mg/Kg	2.2	11	9.9	7.1							
Carbazole	86-74-8	mg/Kg	1.1	0.73	0.44	<9.9							
Chrysene	218-01-9	mg/Kg	5.9	6.2	3.4	3.7			<2	<0.6	<2		<2
Dibenzofuran	132-64-9	mg/Kg	0.62	0.42	<2	<9.9			<2	<0.6	<2		<2
di-n-Octylphthalate	117-84-0	mg/Kg	<5.5	0.53	1.8	<9.9							
Fluoranthene	206-44-0	mg/Kg	11	10	4.6	5.4			3	<0.6	<2		3
Fluorene	86-73-7	mg/Kg	0.95	0.95	0.24	<9.9			<2	<0.6	<2		<2
Indeno(1,2,3-cd)pyrene	193-39-5	mg/Kg	2.2	2.2	1.5	1.4			<2	<0.6	<2		<2
Phenanthrene	85-01-8	mg/Kg	10	9.2	2.7	2.8			2	<0.6	<2		2
Pyrene	129-00-0	mg/Kg	13	13	6.4	6.4			2	<0.6	<2		2

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Notes:
mg/kg = Milligrams per kilogram
Only constituents detected at least once are presented.
< = Analyte is not detected above the laboratory reporting limit presented.

Attachment 1-2
Summary of Historical Reference Sediment Analytical Data
Former Lewis Chemical Facility
Boston, Massachusetts

Analyte	CAS No.	Units	MB-SD-03	MB-SD-04	MB-SD-08	MB-SD-09	MB-SD-108	MB-SD-108(2')	MB-SD-119BSW	MB-SD-12/13	MB-SD-14	MB-SD-15	MB-SD-16	MB-SD-23	MB-SD-25	MB-SD-25_CL	MB-SD-27
Polychlorinated Biphenyls																	
Aroclor-1016	12674-11-2	mg/kg															
Aroclor-1221	11104-28-2	mg/kg															
Aroclor-1232	11141-16-5	mg/kg	<1	<1	<1	0.33	<1	<1	<1	<1	3.2	<1	<125	<1	8.1	<1	<1
Aroclor-1242	53469-21-9	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<125	<1	<1	<1	<1
Aroclor-1248	12672-29-6	mg/kg															
Aroclor-1254	11097-69-1	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<125	1.3	<1	<1	<1
Aroclor-1260	11096-82-5	mg/kg															
Aroclor-1262	37324-23-5	mg/kg															
Aroclor-1268	11100-14-4	mg/kg															
Metals																	
Antimony	7440-36-0	mg/kg															
Arsenic	7440-38-2	mg/kg															
Barium	7440-39-3	mg/kg															
Beryllium	7440-41-7	mg/kg															
Cadmium	7440-43-9	mg/kg															
Chromium	7440-47-3	mg/kg															
Copper	7440-50-8	mg/kg															
Lead	7439-92-1	mg/kg															
Nickel	7440-02-0	mg/kg															
Silver	7440-22-4	mg/kg															
Vanadium	7440-62-2	mg/kg															
Zinc	7440-66-6	mg/kg															

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Notes:
mg/kg = Milligrams per kilogram
< = Analyte is not detected above the laboratory reporting limit presented.

Attachment 1-2
Summary of Historical Reference Sediment Analytical Data
Former Lewis Chemical Facility
Boston, Massachusetts

Analyte	CAS No.	Units	MB-SD-30	MB-SD-31	MB-SD-32	MB-SD-37	MB-SD-41	MB-SD-42_CL	MB-SD-43	MB-SD-44	MB-SD-53	MB-SD-59	MB-SD-61	MB-SD-63	MB-SD-63_CL	MB-SD-65	MB-SD-67
Polychlorinated Biphenyls																	
Aroclor-1016	12674-11-2	mg/kg															
Aroclor-1221	11104-28-2	mg/kg															
Aroclor-1232	11141-16-5	mg/kg	<20	<20	140	<1	<1	<1	4.2	<1	<1	<1	<1	3.1	<1	<1	<1
Aroclor-1242	53469-21-9	mg/kg	1800	2600	<1	<1	<1	<1	3.3	42	13	<1	<1	<1	<1	<1	<1
Aroclor-1248	12672-29-6	mg/kg															
Aroclor-1254	11097-69-1	mg/kg	<20	840	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor-1260	11096-82-5	mg/kg															
Aroclor-1262	37324-23-5	mg/kg															
Aroclor-1268	11100-14-4	mg/kg															
Metals																	
Antimony	7440-36-0	mg/kg															
Arsenic	7440-38-2	mg/kg															
Barium	7440-39-3	mg/kg															
Beryllium	7440-41-7	mg/kg															
Cadmium	7440-43-9	mg/kg															
Chromium	7440-47-3	mg/kg															
Copper	7440-50-8	mg/kg															
Lead	7439-92-1	mg/kg															
Nickel	7440-02-0	mg/kg															
Silver	7440-22-4	mg/kg															
Vanadium	7440-62-2	mg/kg															
Zinc	7440-66-6	mg/kg															

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Notes:
mg/kg = Milligrams per kilogram
< = Analyte is not detected above the laboratory reporting limit presented.

Attachment 1-2
Summary of Historical Reference Sediment Analytical Data
Former Lewis Chemical Facility
Boston, Massachusetts

Analyte	CAS No.	Units	MB-SD-69	MB-SD-77	MB-SD-79	MB-SD-80	MB-SD-82	MB-SD-89	MB-SO-09	MB-SO-18	MB-SO-19	MB-SO-21	MB-SO-23	MB-SO-25	MB-SO-27	MB-SO-31	MB-SO-31(7)
Polychlorinated Biphenyls																	
Aroclor-1016	12674-11-2	mg/kg															
Aroclor-1221	11104-28-2	mg/kg															
Aroclor-1232	11141-16-5	mg/kg	<1	<1	<1	<1	0.91	<1	<200	<57	0.47	<1	1.2	<8	1.1	0.6	<1
Aroclor-1242	53469-21-9	mg/kg	<1	<1	1.1	<1	<1	<1	490	<57	<1	<1	<1	330	<1	0.4	<1
Aroclor-1248	12672-29-6	mg/kg															
Aroclor-1254	11097-69-1	mg/kg	<1	<1	<1	<1	<1	<1	<200	<57	<1	<1	<1	<8	<1	0.1	<1
Aroclor-1260	11096-82-5	mg/kg															
Aroclor-1262	37324-23-5	mg/kg															
Aroclor-1268	11100-14-4	mg/kg															
Metals																	
Antimony	7440-36-0	mg/kg															
Arsenic	7440-38-2	mg/kg															
Barium	7440-39-3	mg/kg															
Beryllium	7440-41-7	mg/kg															
Cadmium	7440-43-9	mg/kg															
Chromium	7440-47-3	mg/kg															
Copper	7440-50-8	mg/kg															
Lead	7439-92-1	mg/kg															
Nickel	7440-02-0	mg/kg															
Silver	7440-22-4	mg/kg															
Vanadium	7440-62-2	mg/kg															
Zinc	7440-66-6	mg/kg															

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Notes:
mg/kg = Milligrams per kilogram
< = Analyte is not detected above the laboratory reporting limit presented.

Attachment 1-2
Summary of Historical Reference Sediment Analytical Data
Former Lewis Chemical Facility
Boston, Massachusetts

Analyte	CAS No.	Units	MB-SO-33	MB-SO-36	MB-SO-99	MB-TP-01	MB-TP-02	MB-TP-03(2')	MB-TP-03(4-5')	MS-SD-103SW	USGS-BGY-100	USGS-BGY-101	USGS-BGY-102	USGS-BGY-103	USGS-BGY-104	USGS-BGY-105	USGS-BGY-106	USGS-BGY-107
Polychlorinated Biphenyls																		
Aroclor-1016	12674-11-2	mg/kg									<0.17	<0.16	<0.16	<0.16	<0.1	<0.38	<0.35	<0.17
Aroclor-1221	11104-28-2	mg/kg									<0.17	<0.16	<0.16	<0.16	<0.1	<0.38	<0.35	<0.17
Aroclor-1232	11141-16-5	mg/kg	<1	4.8	2.5	<1	<1	44	1.4	<1	<0.17	<0.16	<0.16	<0.16	<0.1	<0.38	<0.35	<0.17
Aroclor-1242	53469-21-9	mg/kg	<1	7.7	<1	<1	<1	<10	0.62	<1	<0.17	<0.16	<0.16	<0.16	<0.1	6.9	5.8	2.2
Aroclor-1248	12672-29-6	mg/kg									<0.17	<0.16	<0.16	<0.16	<0.1	<0.38	<0.35	<0.17
Aroclor-1254	11097-69-1	mg/kg	<1	1.9	<1	<1	<1	<10	<0.5	<1	<0.17	<0.16	<0.16	<0.16	0.8	3.4	2.3	1.3
Aroclor-1260	11096-82-5	mg/kg									<0.17	0.31	<0.16	<0.16	0.17	0.28	0.58	0.22
Aroclor-1262	37324-23-5	mg/kg									<0.17	<0.16	<0.16	<0.16	<0.1	<0.38	<0.35	<0.17
Aroclor-1268	11100-14-4	mg/kg									<0.17	<0.16	<0.16	<0.16	<0.1	<0.38	<0.35	<0.17
Metals																		
Antimony	7440-36-0	mg/kg									<5	<5	<5	<5	<5	<5	<5	<5
Arsenic	7440-38-2	mg/kg									<3	<3	<3	<3	<3	6	6	3
Barium	7440-39-3	mg/kg									43	63	44	56	58	131	106	83
Beryllium	7440-41-7	mg/kg									<0.5	<0.5	<0.5	<0.5	0.5	0.9	0.8	0.7
Cadmium	7440-43-9	mg/kg									<1	<1	<1	<1	<1	1	1	1
Chromium	7440-47-3	mg/kg																
Copper	7440-50-8	mg/kg									9	8.8	7.7	13	34.9	115	84.7	57.4
Lead	7439-92-1	mg/kg									20	15	19	30	75	210	171	138
Nickel	7440-02-0	mg/kg									11	13	11	14	15	46	26	27
Silver	7440-22-4	mg/kg									0.3	<0.2	<0.2	0.4	0.3	1	0.9	0.6
Vanadium	7440-62-2	mg/kg									21	26	22	25	28	52	51	43
Zinc	7440-66-6	mg/kg									44.1	41.2	36.2	47.4	152	387	292	218

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Notes:
mg/kg = Milligrams per kilogram
< = Analyte is not detected above the laboratory reporting limit presented.

Attachment 1-2
Summary of Historical Reference Sediment Analytical Data
Former Lewis Chemical Facility
Boston, Massachusetts

Analyte	CAS No.	Units	USGS-BGY-112	USGS-BGY-112-D	USGS-BGY-115	USGS-BGY-116	USGS-BGY-117	USGS-BGY-118	USGS-BGY-118-D	USGS-BGY-119	USGS-BGY-121	USGS-BGY-124	USGS-BGY-133	USGS-Composited sediment-grab	USGS-M2Y-003	USGS-M2Y-004	USGS-M2Y-012
Polychlorinated Biphenyls																	
Aroclor-1016	12674-11-2	mg/kg	<0.33	<0.33	<0.17	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.1	<0.33	<0.16	<0.16
Aroclor-1221	11104-28-2	mg/kg	<0.33	<0.33	<0.17	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.1	<0.33	<0.16	<0.16
Aroclor-1232	11141-16-5	mg/kg	<0.33	<0.33	<0.17	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.1	<0.33	<0.16	<0.16
Aroclor-1242	53469-21-9	mg/kg	4.1	3.9	0.48	0.36	0.32	<0.16	<0.16	<0.16	0.32	0.16	<0.16	0.84	7.1	0.24	3.3
Aroclor-1248	12672-29-6	mg/kg	<0.33	<0.33	<0.17	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.1	<0.33	<0.16	<0.16
Aroclor-1254	11097-69-1	mg/kg	1.8	1.9	0.24	<0.16	0.21	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	0.7	2.1	<0.16	1.1
Aroclor-1260	11096-82-5	mg/kg	0.97	0.91	<0.17	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	0.1	0.84	<0.16	0.68
Aroclor-1262	37324-23-5	mg/kg	<0.33	<0.33	<0.17	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.1	<0.33	<0.16	<0.16
Aroclor-1268	11100-14-4	mg/kg	<0.33	<0.33	<0.17	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.1	<0.33	<0.16	<0.16
Metals																	
Antimony	7440-36-0	mg/kg	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	9
Arsenic	7440-38-2	mg/kg	4	<3	<3	<3	<3	<3	<3	<3	20	<3	6	10	<3	<3	<3
Barium	7440-39-3	mg/kg	92	80	71	108	51	68	63	66	123	91	150	61	89	104	147
Beryllium	7440-41-7	mg/kg	0.8	0.7	0.6	0.7	<0.5	0.5	<0.5	0.6	0.8	0.5	0.8	<0.5	0.8	0.6	0.6
Cadmium	7440-43-9	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	2	<1	<1	<1	<1
Chromium	7440-47-3	mg/kg												261			
Copper	7440-50-8	mg/kg	67.8	56.4	24	14.5	35	25.2	20.5	13.7	158	10.2	85.4	90.5	24.2	14.8	57.6
Lead	7439-92-1	mg/kg	138	135	46	15	94	55	50	30	393	23	207	355	67	19	119
Nickel	7440-02-0	mg/kg	26	23	20	19	16	17	29	17	19	15	22	24	23	36	39
Silver	7440-22-4	mg/kg	0.6	0.8	0.5	0.8	0.3	0.4	0.3	0.6	0.9	0.9	1.1	1.7	0.4	1.2	1.4
Vanadium	7440-62-2	mg/kg	43	36	50	47	29	39	29	38	35	32	39	40	40	39	58
Zinc	7440-66-6	mg/kg	224	194	72.3	62.8	123	84.5	85	79.7	329	77.4	402	185	103	88	219

Notes:
mg/kg = Milligrams per kilogram
< = Analyte is not detected above the laboratory reporting limit presented.

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ATTACHMENT 2: COMPARISON OF DATASETS - BOX AND WHISKER PLOTS

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Notes on Interpreting Box and Whisker Plots:

These plots depict the detected concentration (as indicated by an open circle, "o") or, if non-detect, a value equivalent to one-half the laboratory reporting limit (indicated by an "x") of a constituent for each sample within each dataset.

The "boxes" represent the 25th to 75th interquartile range, with the median represented as the horizontal line within the box.

The "whiskers" extend to the outermost data point falling within 1.5 times the interquartile range (i.e., the range between the 25th and 75th quartiles).

Pore water and surface water concentrations are presented in units of micrograms per liter (µg/L). Sediment concentrations are presented in units of milligrams per kilogram (mg/kg).

DRAFT

Figure 2-1. SEDIMENT: Antimony

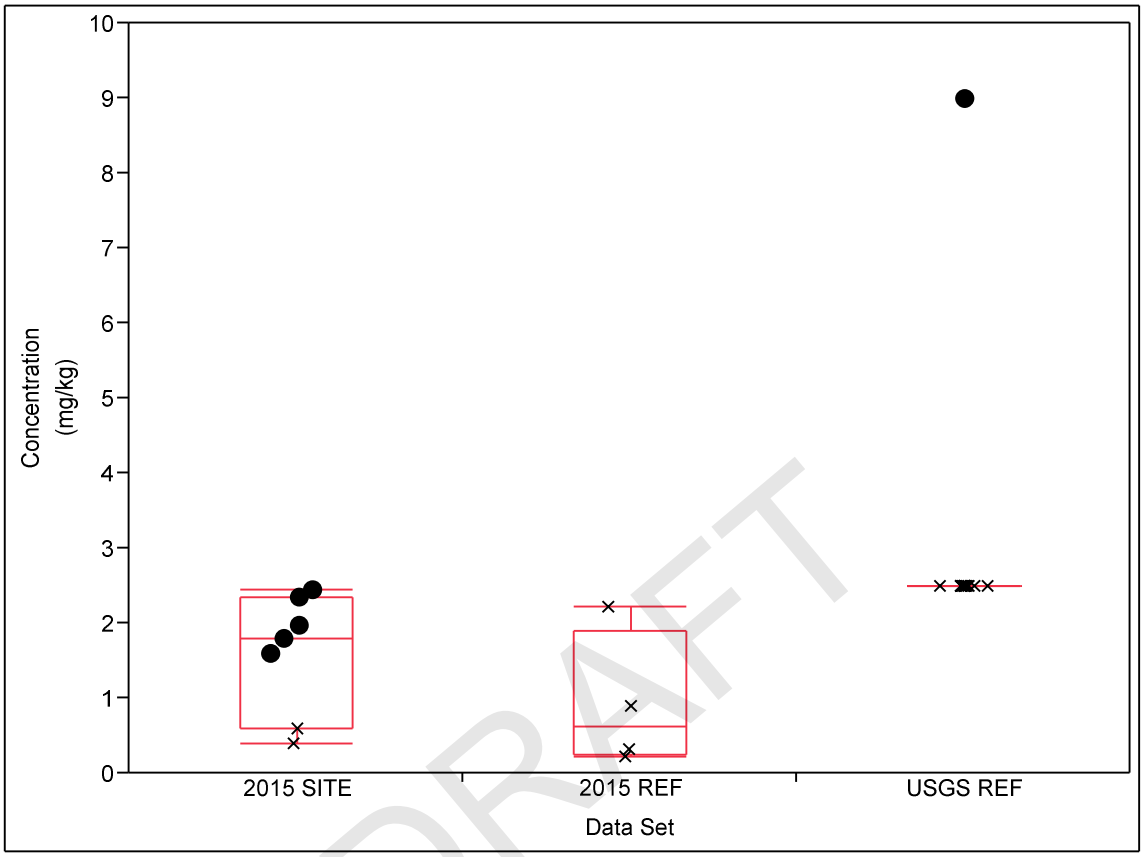

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Figure 2-2. SEDIMENT: Aroclor-1232

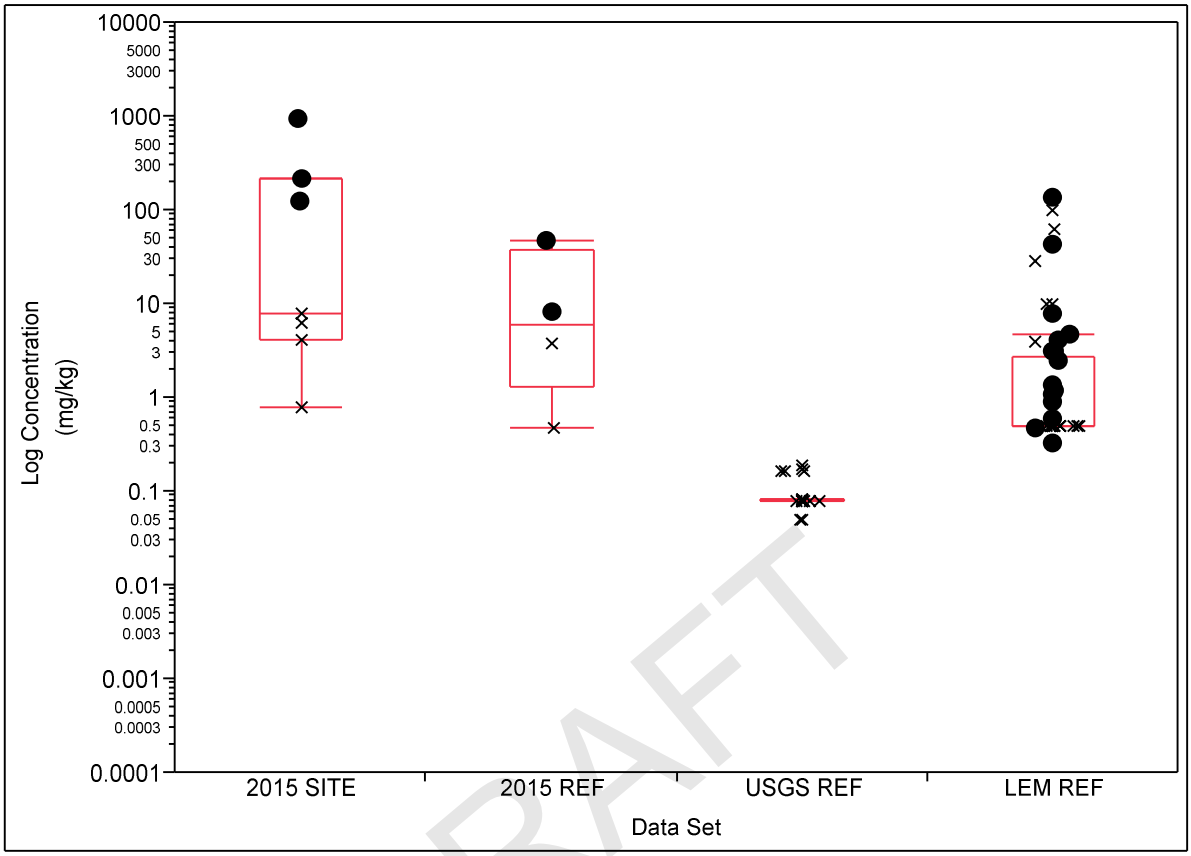

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Figure 2-3. SEDIMENT: Aroclor-1242

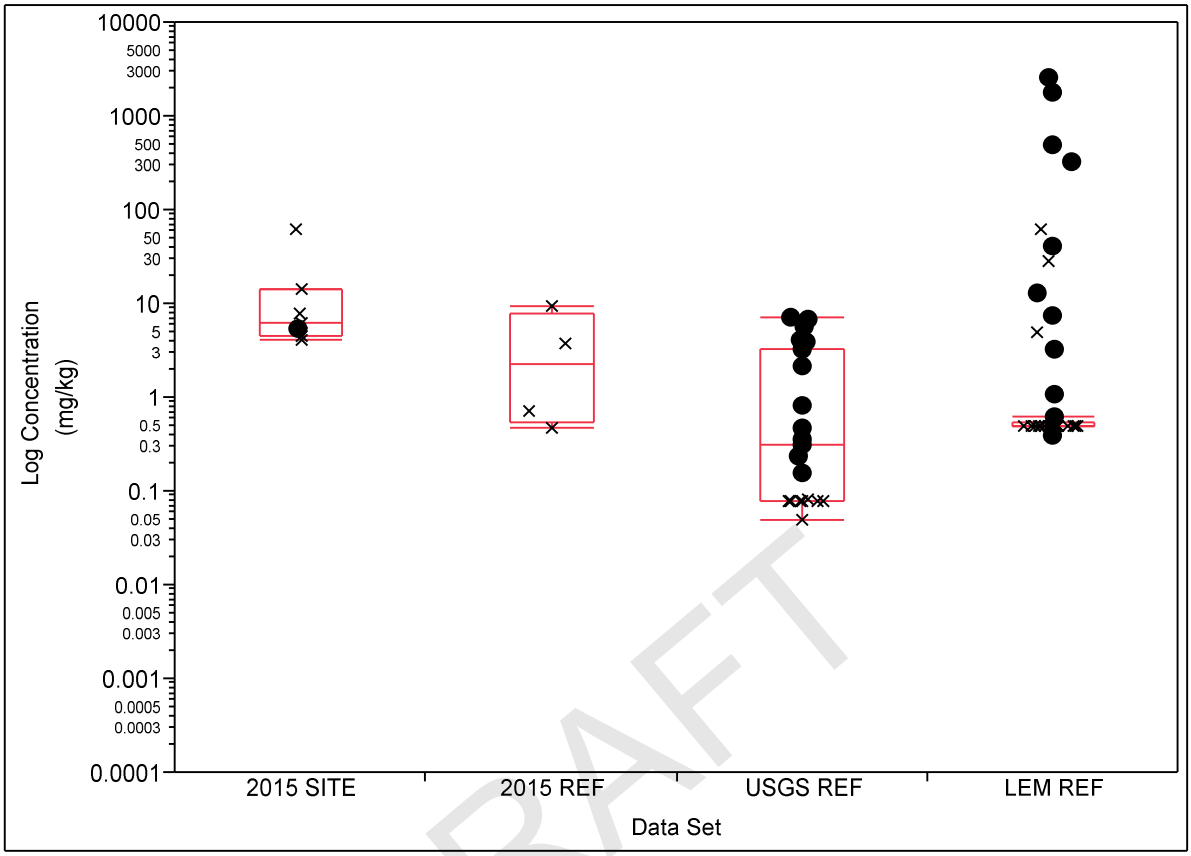

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Figure 2-4. SEDIMENT: Aroclor-1254

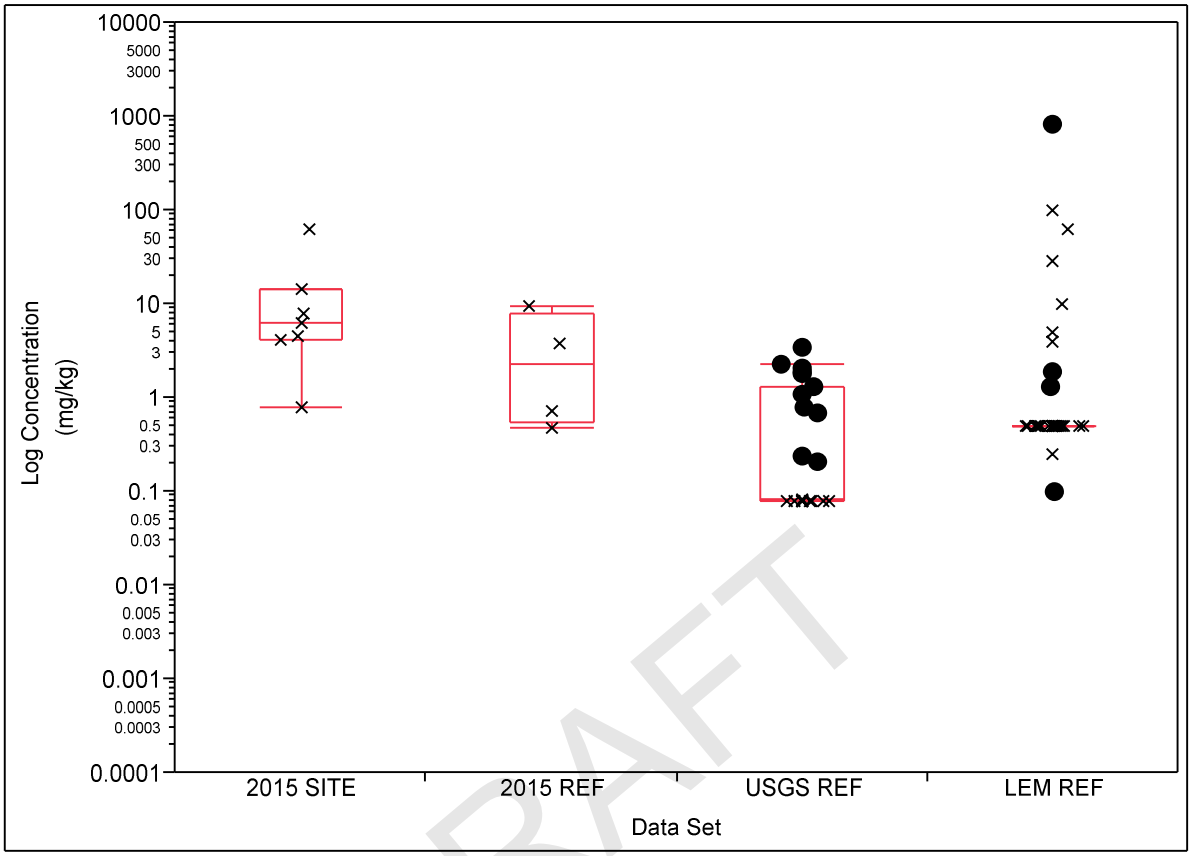

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Figure 2-5. SEDIMENT: Aroclor-1260

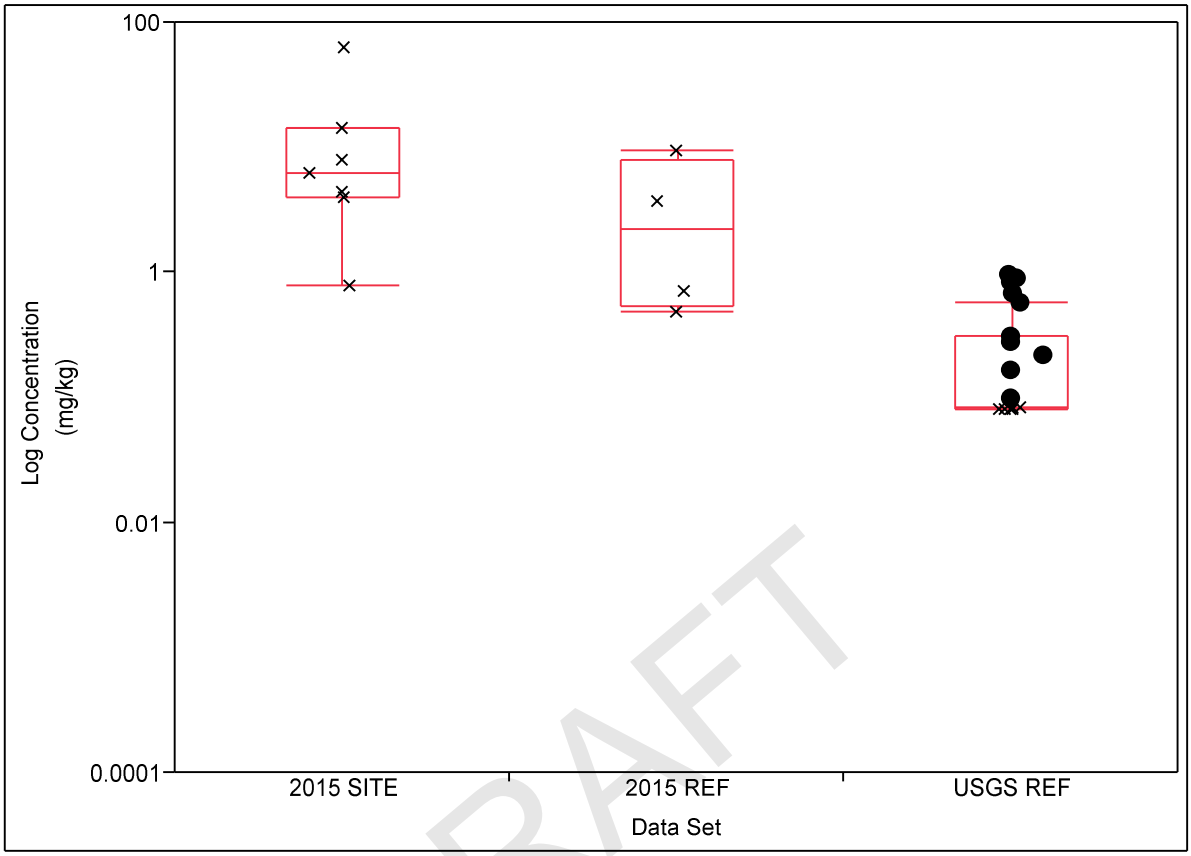

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Figure 2-6. SEDIMENT: Arsenic

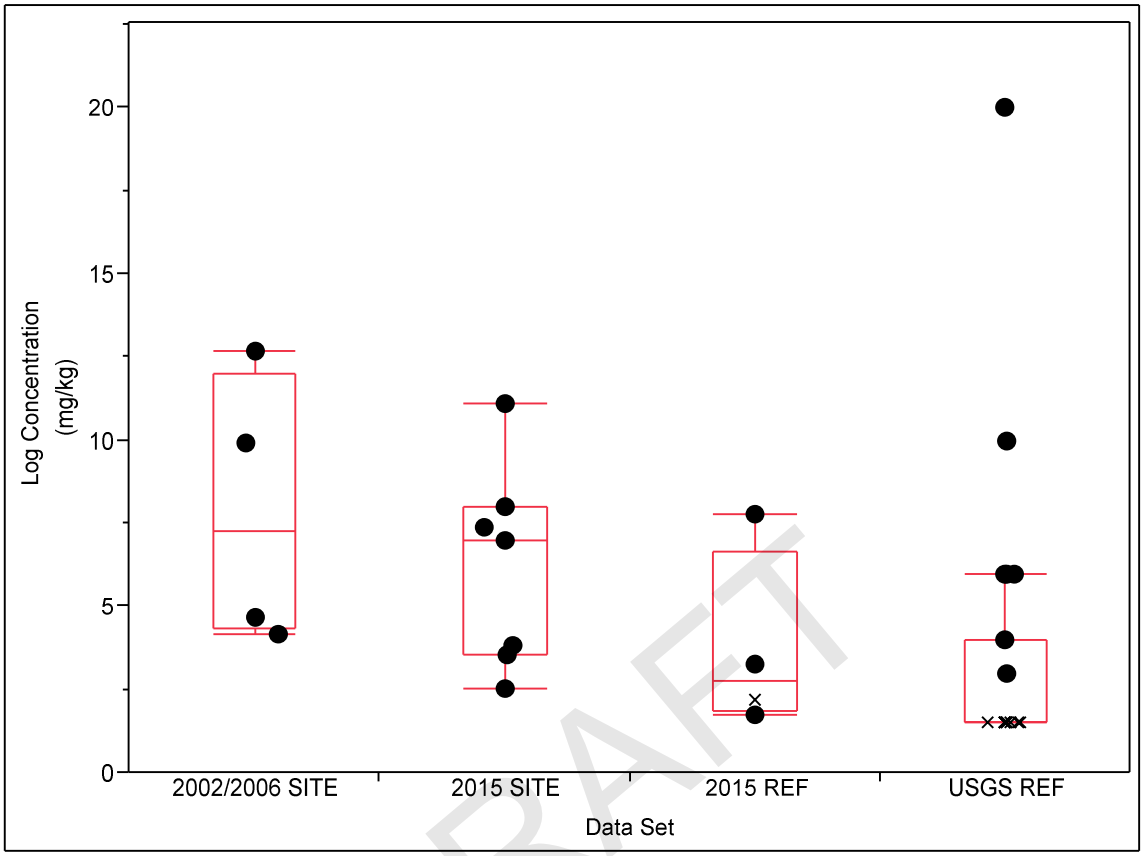

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Figure 2-7. SEDIMENT: Barium

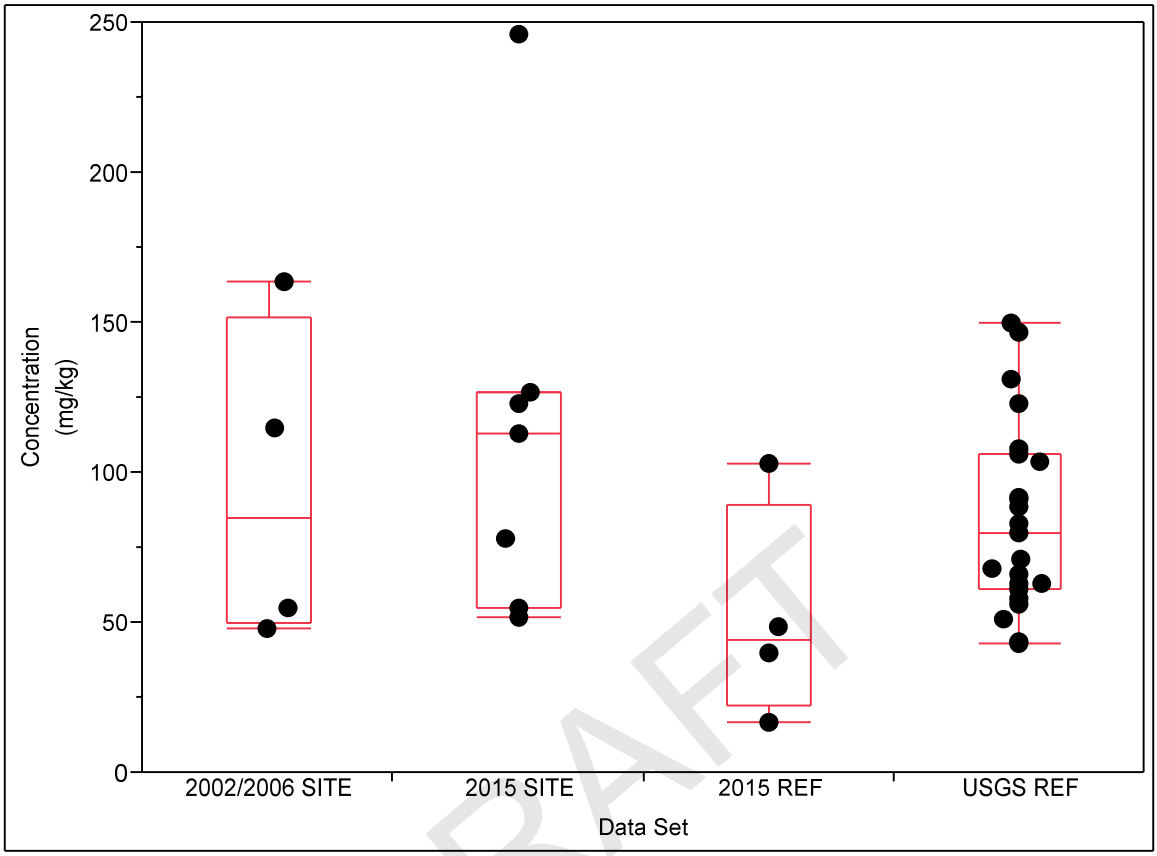

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Figure 2-8. SEDIMENT: Beryllium

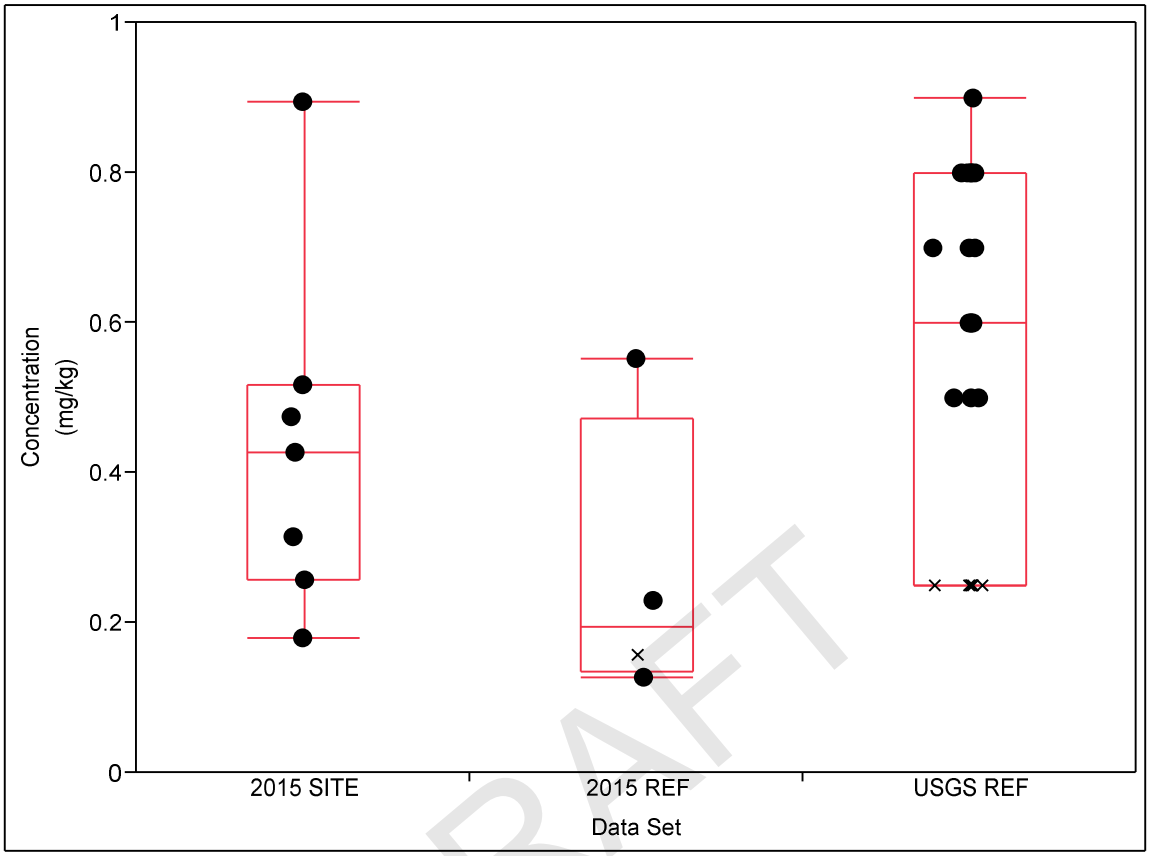

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Figure 2-9. SEDIMENT: Cadmium

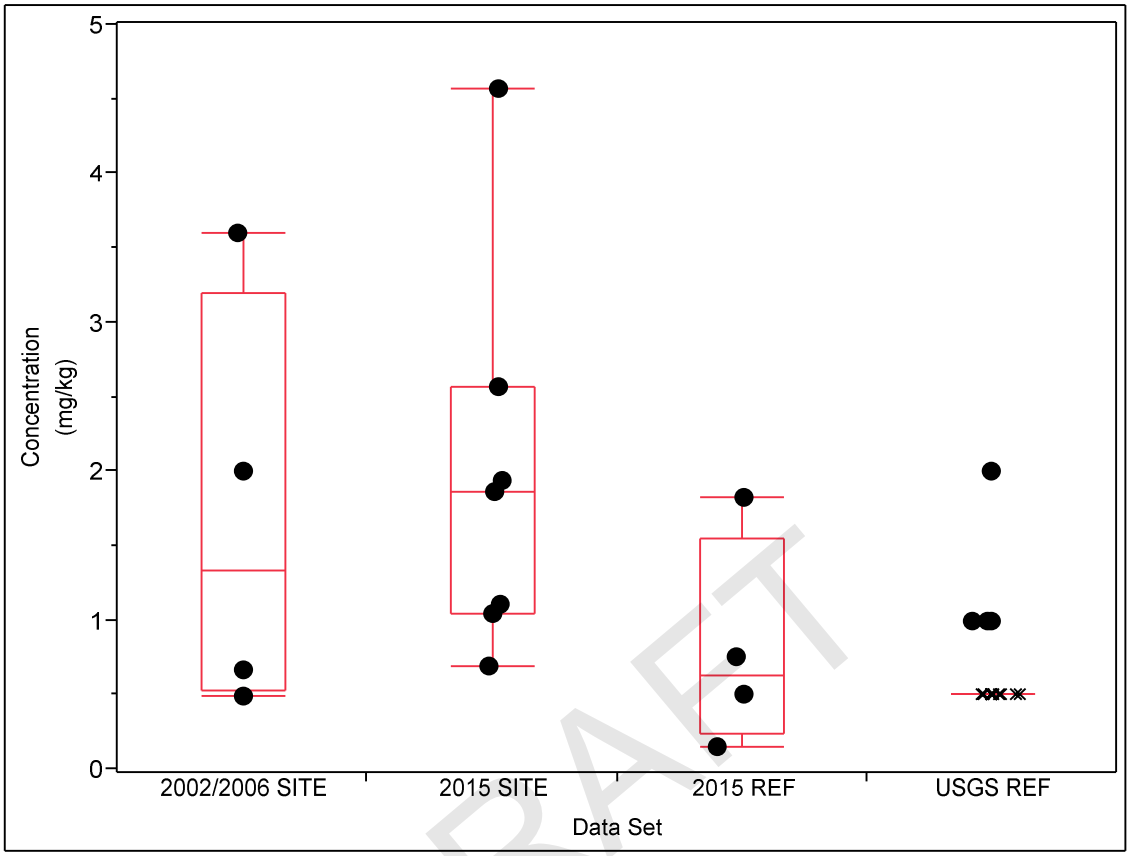

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Figure 2-10. SEDIMENT: Chromium

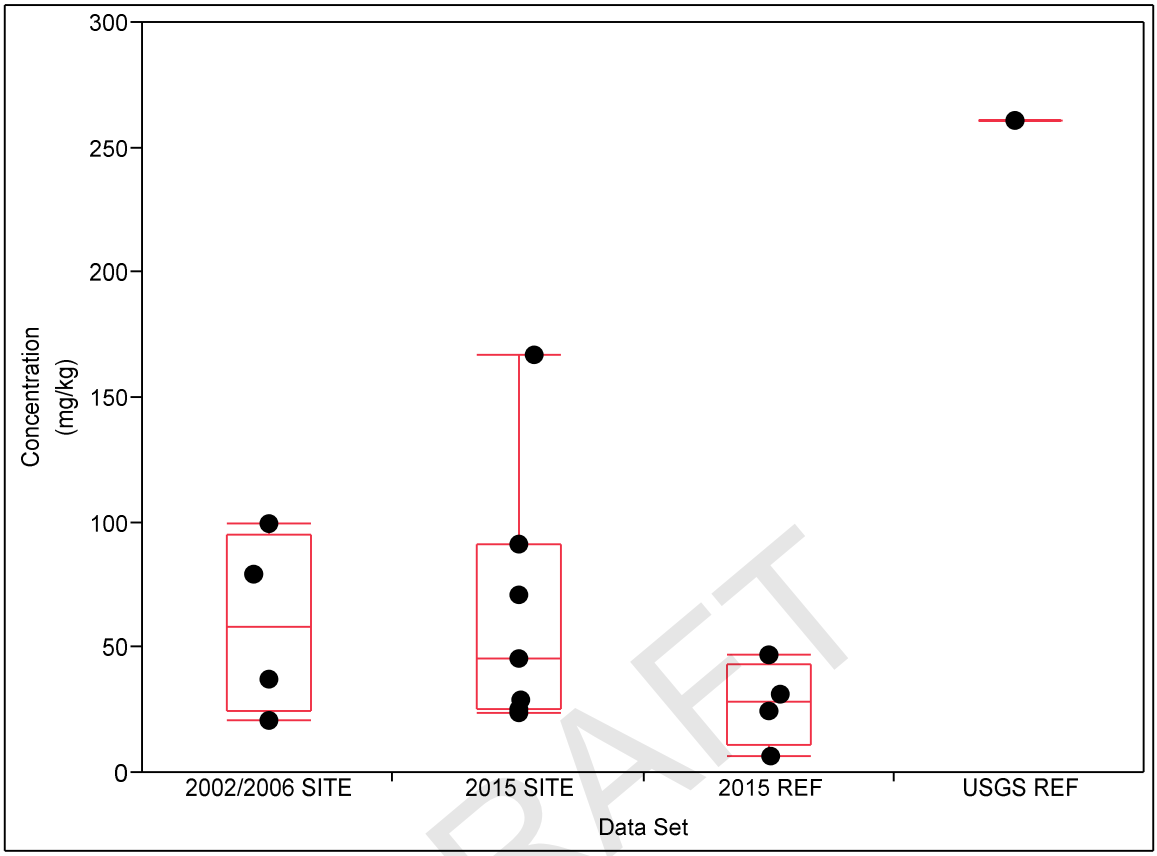

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Figure 2-11. SEDIMENT: Copper

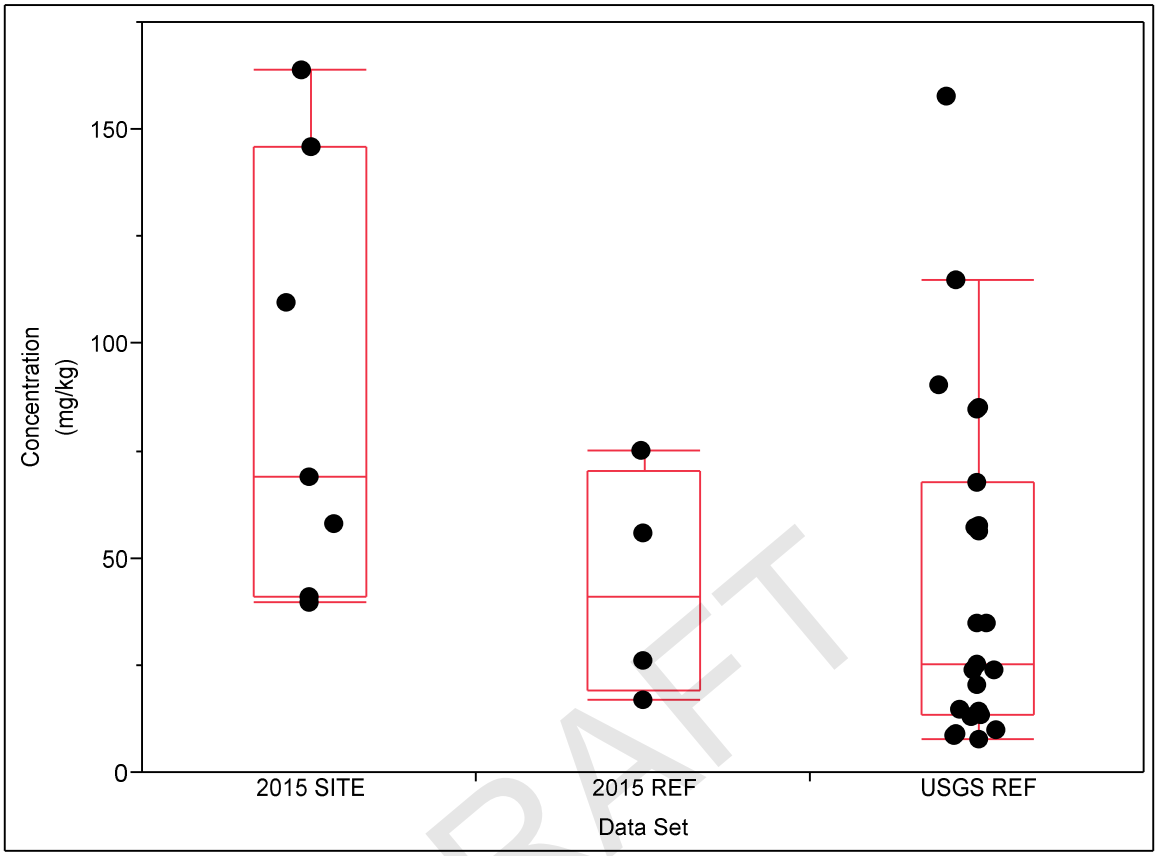

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Figure 2-12. SEDIMENT: Lead

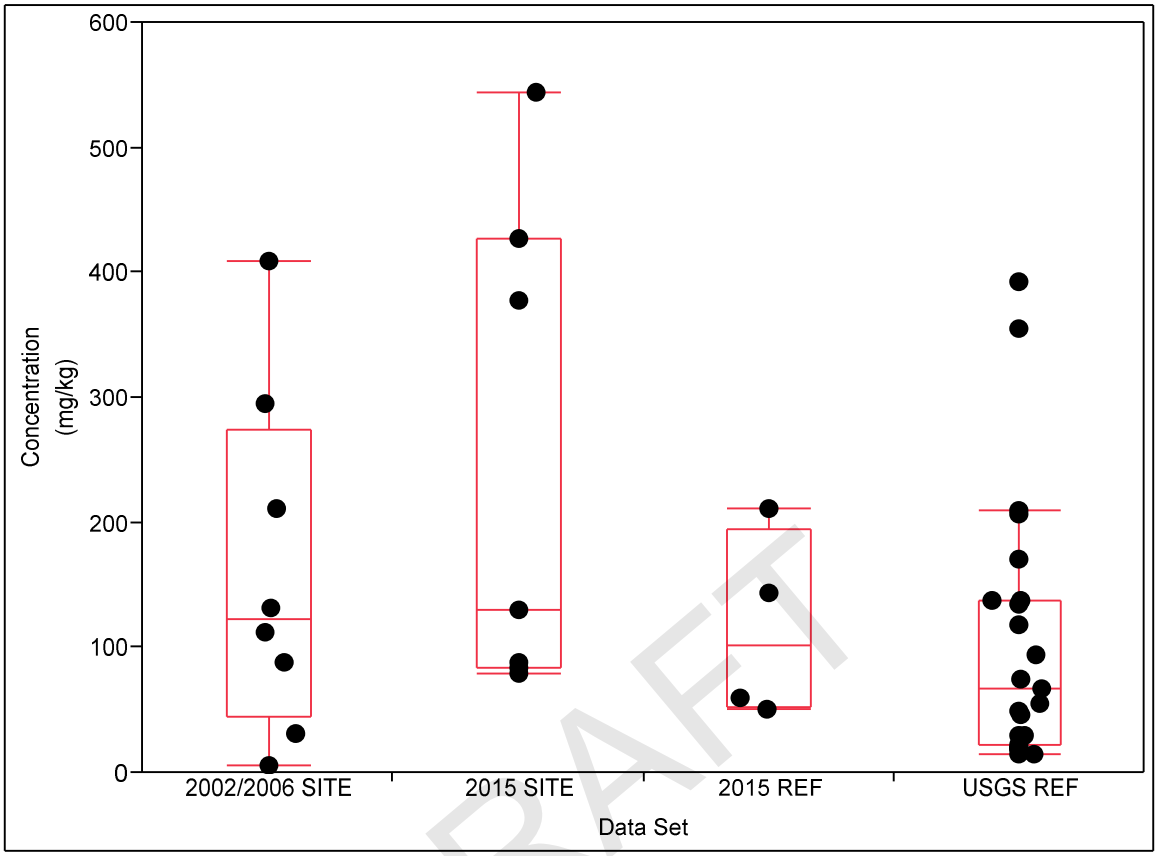

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Figure 2-13. SEDIMENT: Mercury

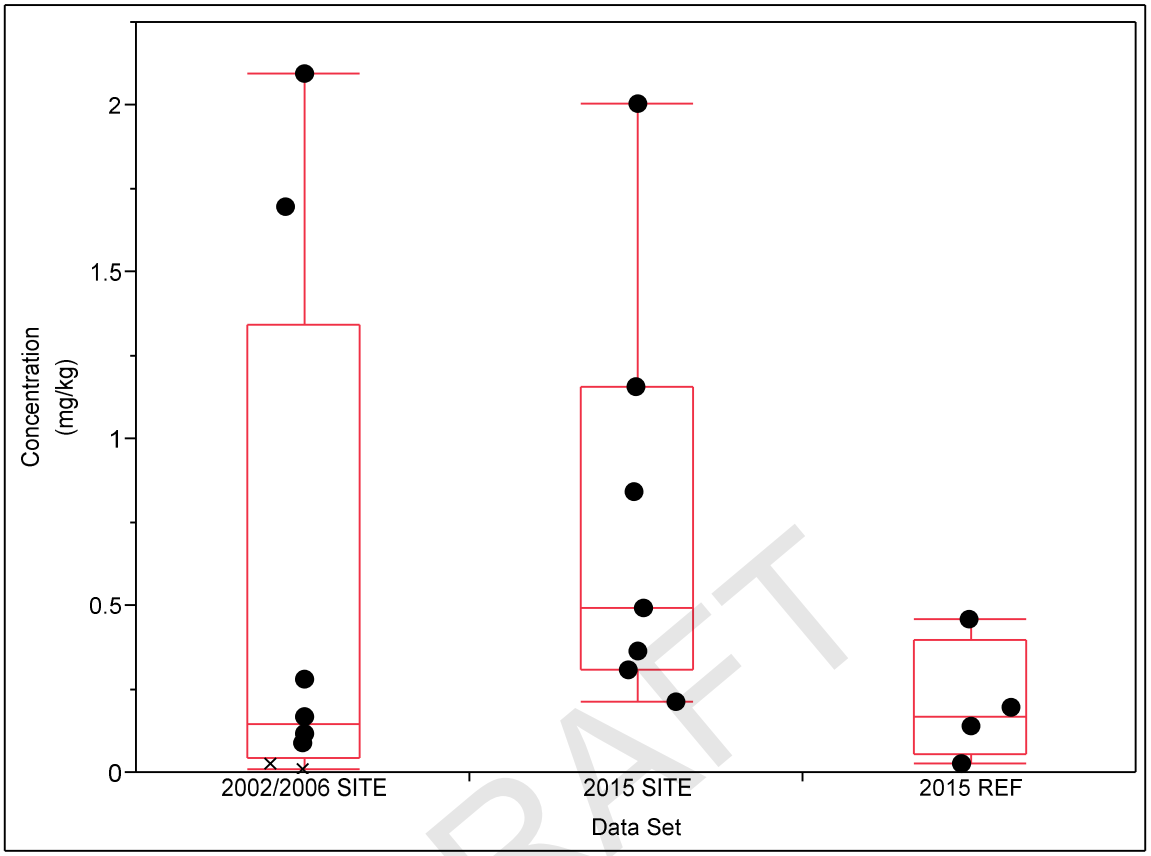

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Figure 2-14. SEDIMENT: Nickel

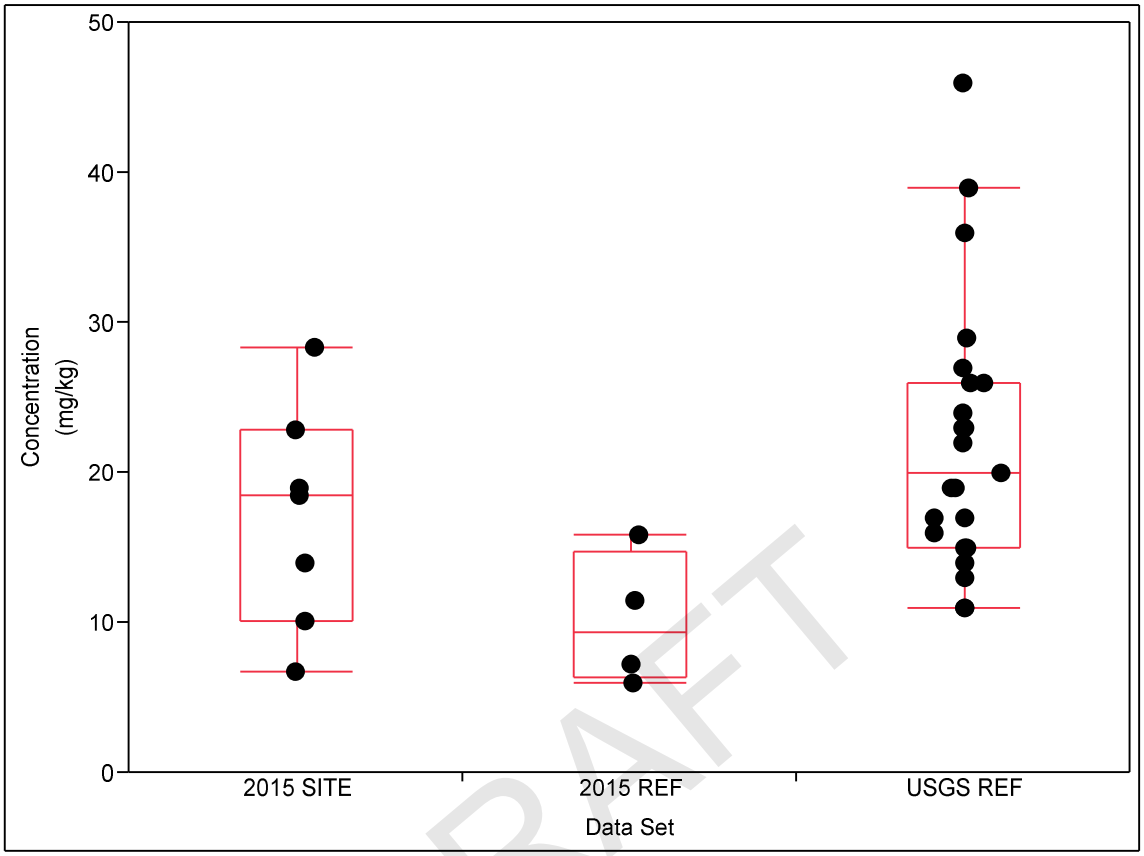

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Figure 2-15. SEDIMENT: Selenium

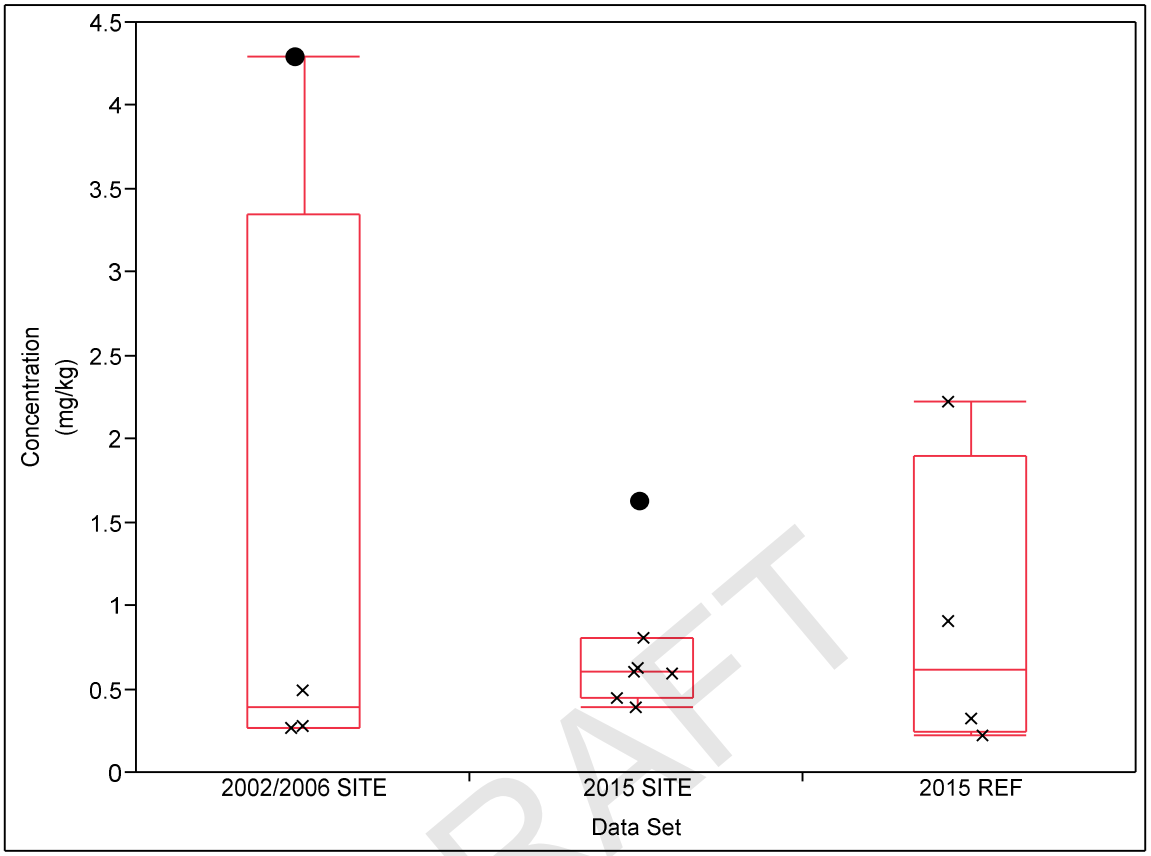

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Figure 2-16. SEDIMENT: Silver

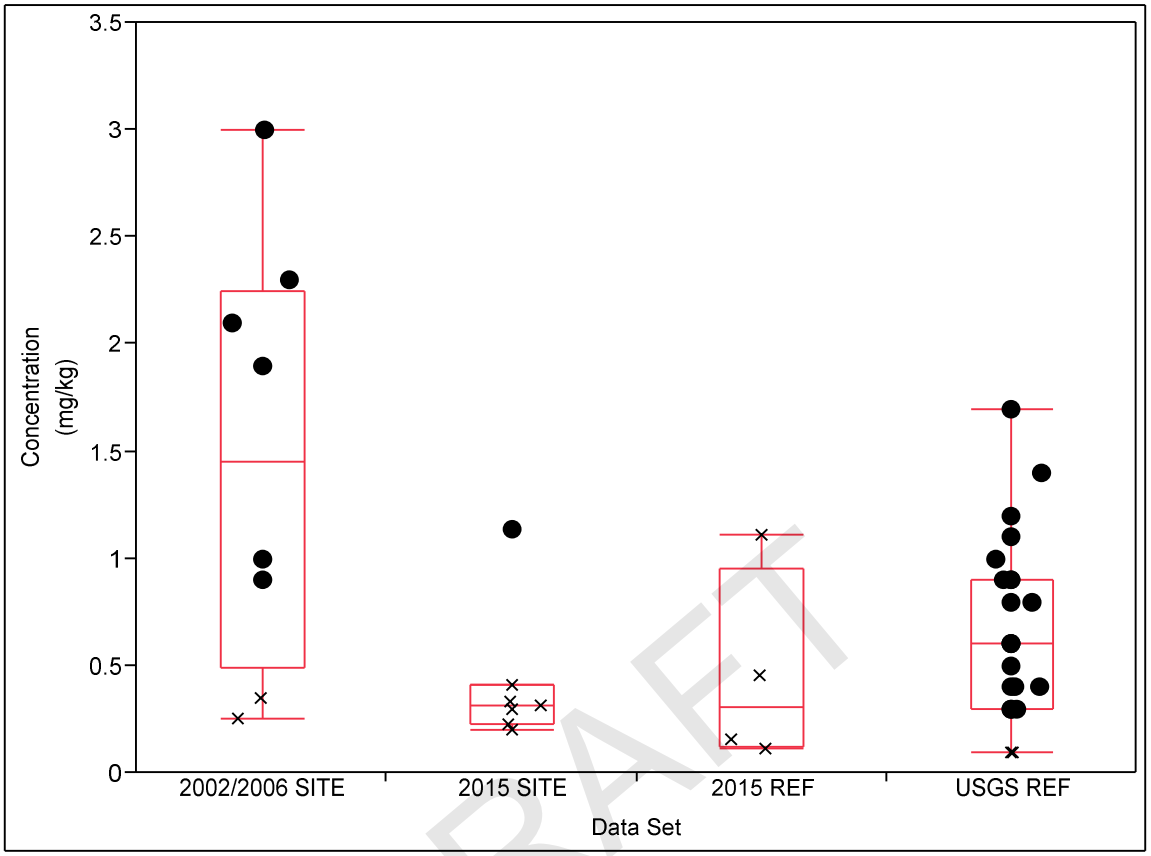

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Figure 2-17. SEDIMENT: Vanadium

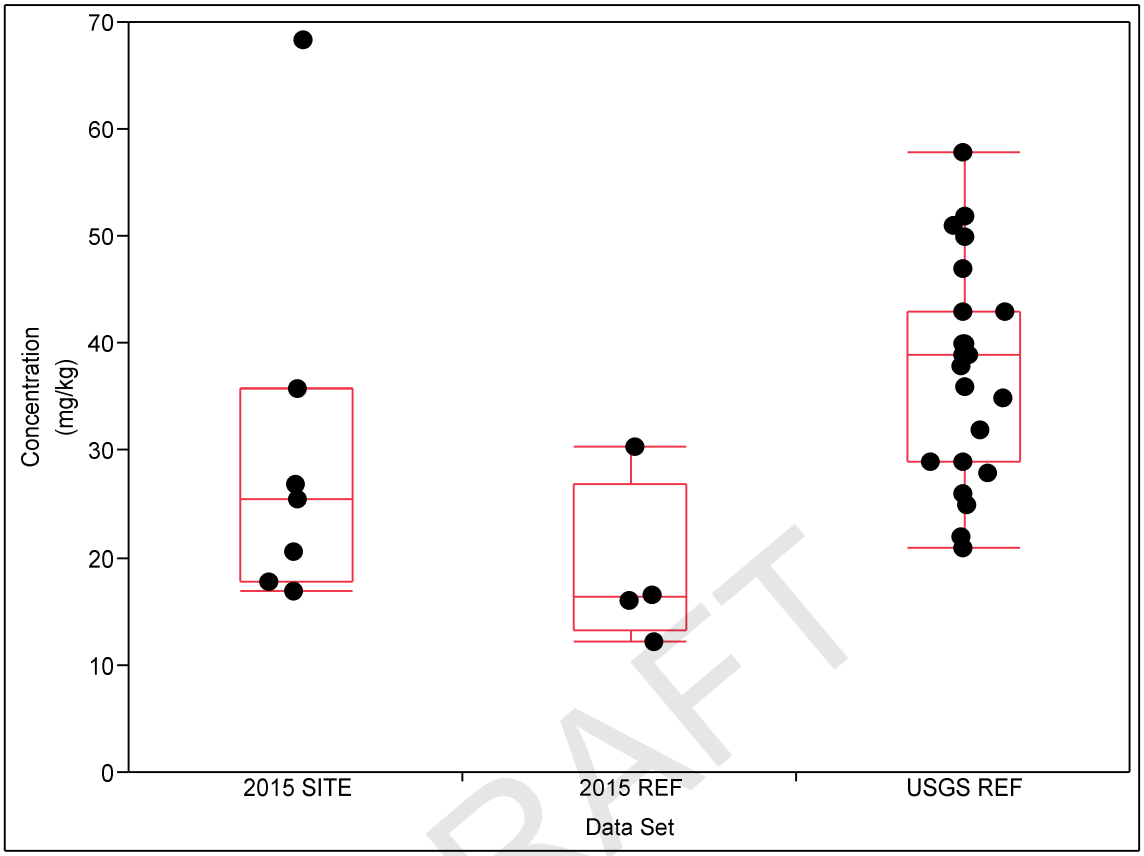

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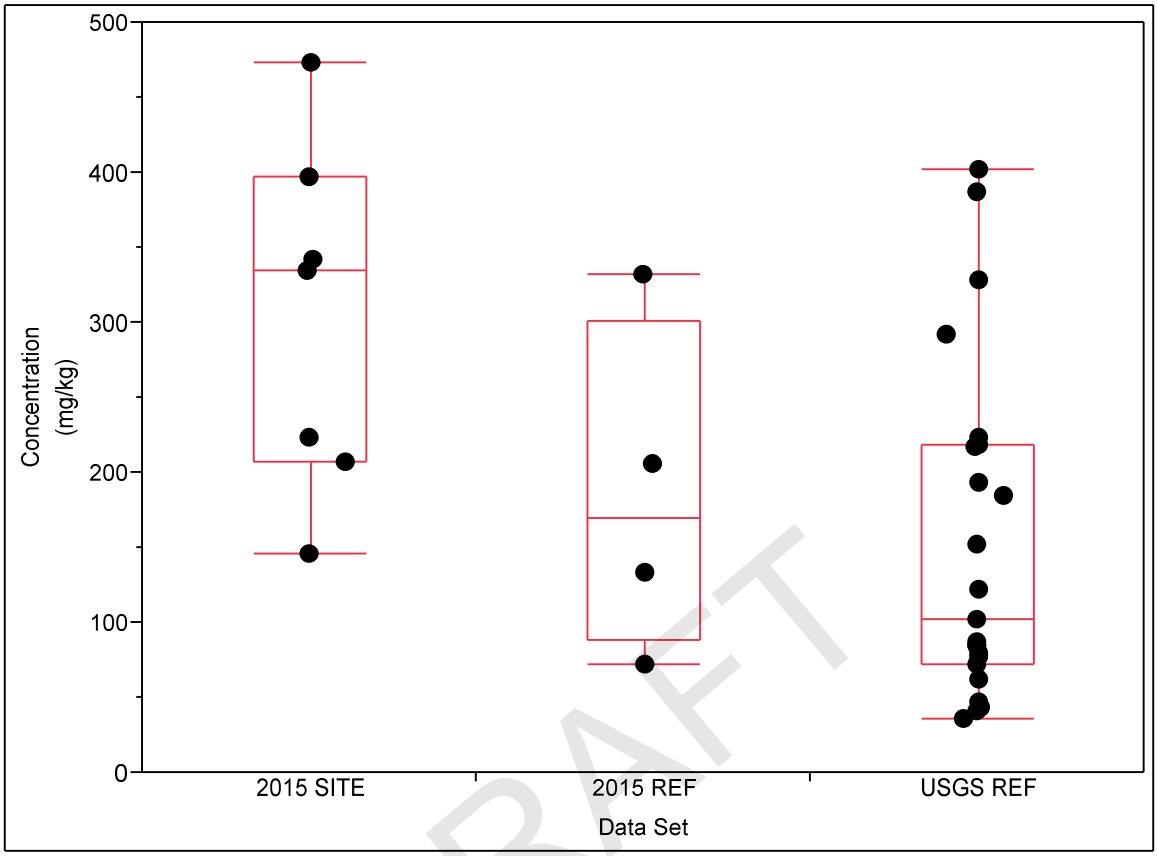
Figure 2-18. SEDIMENT: Zinc



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ATTACHMENT 3: SUMMARY OF ECOLOGICAL BENCHMARKS

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Attachment 3-1
Surface Water/Pore Water Aquatic Benchmarks
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

Analyte	CAS Number	Canadian WQG Surface Water Screening Benchmark mg/L63	EC20 Daphnids Surface Water Screening Benchmark mg/L64	EC20 Fish Surface Water Screening Benchmark mg/L65	EC20 Sensitive Species Surface Water Screening Benchmark mg/L66	EC25 Bass Population Surface Water Screening Benchmark mg/L67	LCV Aquatic Plants Surface Water Screening Benchmark mg/L70	LCV Daphnids Surface Water Screening Benchmark mg/L71	LCV Fish Surface Water Screening Benchmark mg/L72	LCV Non-Daphnid Inverts Surface Water Screening Benchmark mg/L73
Antimony (metallic)	7440-36-0		1.9	2.31		0.079	0.61	5.4	1.6	
Arsenic, Inorganic	7440-38-2	0.005	0.633	2.13	0.055	2	2.32	0.914	2.96	
Barium	7440-39-3									
Beryllium and compounds	7440-41-7		0.0038	0.148		0.021	100	0.0053	0.057	
Cadmium	7440-43-9	0.000017	0.00075	0.0018	0.000013	0.0043	0.002	0.00015	0.0017	
Chromium, Total	16065-83-1	0.0089		0.089	0.00844	0.126	0.397	0.044	0.0686	
Copper	7440-50-8	0.002	0.000205	0.005	0.00026	0.0086	0.001	0.00023	0.0038	0.00607
Lead and Compounds	7439-92-1	0.002		0.022	0.00035	0.071	0.5	0.0123	0.0189	0.0255
Mercury (elemental)	7439-97-6	0.000026	0.00087	0.00087	0.00018	0.00032	0.005	0.00096	0.00023	
Nickel	7440-02-0									
Polychlorinated Biphenyls (high risk)	1336-36-3		0.0012	0.0004		0.00063	0.000144	0.0021	0.0002	0.0008
Selenium	7782-49-2	0.001	0.025	0.04	0.0026		0.1	0.0917	0.0883	
Silver	7440-22-4	0.0001	0.00056	0.0002	0.00014	0.00032	0.03	0.0026	0.00012	
Vanadium and Compounds	7440-62-2		0.43	0.041		0.032		1.9	0.08	
Zinc (Metallic)	7440-66-6	0.03		0.047	0.021	0.08	0.03	0.0467	0.0364	5.24
VOCS										
Acetone	67-64-1			162		23.7		1.56	508	
Benzene	71-43-2	0.37		0.021		0.229	525	98		
Chlorobenzene	108-90-7	0.0013		1		0.165	224	15	1.2	
Dichlorobenzene, 1,2-	95-50-1	0.0007								
Dichlorodifluoromethane	75-71-8									
Dichloroethane, 1,1-	75-34-3			3.22		1.59			14.7	
Dichloroethylene, 1,2- (Mixed Isomers)	540-59-0			5.72					9.54	
Dichloroethylene, 1,2-trans-	156-60-5									
Ethyl Chloride	75-00-3									
Ethylbenzene	100-41-4	0.09				0.398	438	12.9	0.44	
Methyl Ethyl Ketone	78-93-3			98.8		17.8		1390	282	
Methyl tert-Butyl Ether (MTBE)	1634-04-4	10								
Methylene Chloride	75-09-2	0.0981		0.41		1.26		42.7	108	
Tetrachloroethylene	127-18-4	0.11	0.51	0.5		0.05	816	0.75	0.84	
Tetrahydrofuran	109-99-9									
Toluene	108-88-3	0.002		0.026		0.2	245	25.2	1.27	
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1									
Trichlorobenzene, 1,2,4-	120-82-1	0.024								
Trichloroethane, 1,1,1-	71-55-6	0.021	1.3	2.46		0.251	669		3.49	
Trichloroethylene	79-01-6	0.021		5.76		0.232		7.26	11.1	
Trimethylbenzene, 1,2,4-	95-63-6									
Vinyl Chloride	75-01-4									
Xylene, Mixture	1330-20-7			2.68					62.3	

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Attachment 3-1
Surface Water/Pore Water Aquatic Benchmarks
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

Analyte	NAWQC Acute Surface Water Screening Benchmark mg/L74	NAWQC Chronic Surface Water Screening Benchmark mg/L75	OSWER Ambient Water Quality Criteria mg/L76	OSWER Tier II Secondary Surface Water Screening Benchmark mg/L77	EPA R3 BTAG Freshwater Screening Benchmark mg/L85	EPA R4 Chronic Surface Water Screening Benchmark mg/L69	SW EPA R5 ESL Surface Water Screening Benchmark mg/L78	SW EPA R6 FW Surface Water Screening Benchmark mg/L79	Tier II SCV Surface Water Screening Benchmark mg/L82
Antimony (metallic)	0.088	0.03			0.03	0.16	0.08	0.692	0.03
Arsenic, Inorganic	0.34	0.15	0.19		0.005	0.19	0.148	0.19	
Barium				0.0039	0.004		0.22	0.004	0.004
Beryllium and compounds				0.0051	0.00066	0.00053	0.0036	0.0053	0.00066
Cadmium	0.002	0.0002	0.001		0.00025	0.00066	0.00015	0.0006	
Chromium, Total	1.44	0.069	0.18		0.085	0.11732	0.042	0.1008	
Copper	0.011	0.007	0.011		0.009	0.00654	0.00158	0.007	
Lead and Compounds	0.048	0.0019	0.0025		0.0025	0.00132	0.00117	0.001	
Mercury (elemental)	0.001647	0.000906	0.0013		0.000026	0.000012	0.0000013	0.0013	0.0013
Nickel	0.372	0.041							
Polychlorinated Biphenyls (high risk)		0.000014		0.00019	7.40E-05		0.00000012	0.0000013	
Selenium		0.005	0.005		0.001	0.005	0.005	0.005	
Silver	0.0024				0.0032	0.000012	0.00012	0.00011	0.00036
Vanadium and Compounds				0.019	0.02		0.012	0.02	0.02
Zinc (Metallic)	0.095	0.095	0.1		0.12	0.05891	0.0657	0.0581	
VOCS									
Acetone					1.5		1.7	202.4	1.5
Benzene				0.046	0.37	0.053	0.114	0.13	0.13
Chlorobenzene				0.13	0.0013	0.195	0.047	0.064	0.064
Dichlorobenzene, 1,2-				0.014	0.0007	0.0158	0.014	0.11	0.014
Dichlorodifluoromethane								1.96	
Dichloroethane, 1,1-				0.047	0.047		0.047	5.13	0.047
Dichloroethylene, 1,2- (Mixed Isomers)					0.59	1.35		14	0.59
Dichloroethylene, 1,2-trans-					0.97		0.97	22	
Ethyl Chloride									
Ethylbenzene				0.29	0.09	0.453	0.014	2.18	0.0073
Methyl Ethyl Ketone					14		2.2	34.8	14
Methyl tert-Butyl Ether (MTBE)					11.07			11.07	
Methylene Chloride					0.0981	1.93	0.94	22	2.2
Tetrachloroethylene				0.12	0.111	0.084	0.045	0.79	0.098
Tetrahydrofuran									
Toluene				0.13	0.002	0.175	0.253	2.9	0.0098
Trichloro-1,2,2-trifluoroethane, 1,1,2-								0.413	
Trichlorobenzene, 1,2,4-				0.11	0.024	0.0449	0.03	0.051	0.11
Trichloroethane, 1,1,1-				0.062	0.011	0.528	0.076	4.9	0.011
Trichloroethylene				0.36	0.021		0.047	1.11	0.047
Trimethylbenzene, 1,2,4-					0.033			0.077	
Vinyl Chloride					0.93		0.93	5.63	
Xylene, Mixture					0.013		0.027	1.34	0.013

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Attachment 3-2
Sediment Benchmarks
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

Analyte	CAS Number	Consensus PEC Sediment Screening Benchmark / MassDEP mg/kg29	Consensus TEC Sediment Screening Benchmark / MassDEP mg/kg30	NOAA ERL Sediment Screening Benchmark mg/kg33	NOAA ERM Sediment Screening Benchmark mg/kg34	ORNL Lowest Chronic Value Fish EqP Sediment Screening Benchmark mg/kg38	ORNL Lowest Chronic Value Daphnids Equilibrium Partitioning EqP Benchmark mg/kg37
Antimony (metallic)	7440-36-0			2	25		
Arsenic, Inorganic	7440-38-2	33	9.79*	8.2	70		
Barium	7440-39-3						
Beryllium and compounds	7440-41-7						
Cadmium	7440-43-9	4.98	0.99*	1.2	9.6		
Chromium, Total	7440-47-3	110	43.4*	81	370		
Copper	7440-50-8	150	31.6*	34	270		
Lead and Compounds	7439-92-1	130	35.8*	46.7	218		
Mercury (elemental)	7439-97-6	1.06	0.18	0.15	0.71		
Nickel	7440-02-0	48.6	22.7*	20.9	51.6		
Selenium	7782-49-2						
Silver	7440-22-4			1	3.7		
Vanadium and Compounds	7440-62-2						
Zinc (Metallic)	7440-66-6	460	121*	150	410		
Volatile Organic Compounds							
Acetone	67-64-1					25.8	0.07826
Benzene	71-43-2					--	1032
Chlorobenzene	108-90-7					67.08	834.2
Dichlorobenzene, 1,2-	95-50-1					--	--
Dichlorodifluoromethane	75-71-8					--	--
Dichloroethane, 1,1-	75-34-3					72.24	--
Dichloroethylene, 1,2- (Mixed Isomers)	540-59-0					55.04	--
Dichloroethylene, 1,2-trans-	156-60-5					55.04	--
Ethyl Chloride	75-00-3					--	--
Ethylbenzene	100-41-4					46.44	1376
Methyl Ethyl Ketone	78-93-3					46.44	232.2
Methyl tert-Butyl Ether (MTBE)	1634-04-4					--	--
Methylene Chloride	75-09-2					154.8	61.92
Tetrachloroethylene	127-18-4					80.1	27.52
Tetrahydrofuran	109-99-9					--	--
Toluene	108-88-3					55.04	1118
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1					--	--
Trichlorobenzene, 1,2,4-	120-82-1					--	--
Trichloroethane, 1,1,1-	71-55-6					82.56	--
Trichloroethylene	79-01-6					438.6	283.8
Trimethylbenzene, 1,2,4-	95-63-6					--	--
Vinyl Chloride	75-01-4					--	--
Xylene, Mixture	1330-20-7					6364	--

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Attachment 3-2
Sediment Benchmarks
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

Analyte	ORNL Lowest Chronic Value Nondaphnid InvertsEqP Sediment Screening Benchmark mg/kg39	SD EPA R4 Sediment Screening Benchmark mg/kg43	SD EPA R5 ESL Sediment Screening Benchmark mg/kg45	SD EPA R6 FW Sediment Screening Benchmark mg/kg46	EPA R3 BTAG Freshwater Sediment Screening Benchmark mg/kg86
Antimony (metallic)		12		2	2
Arsenic, Inorganic		7.24	9.79	5.9	9.8
Barium					
Beryllium and compounds					
Cadmium		1	0.99	0.596	0.99
Chromium, Total		52.3	43.4	37.3	43.4
Copper		18.7	31.6	35.7	31.6
Lead and Compounds		30.2	35.8	35	35.8
Mercury (elemental)		0.13	0.174	0.174	0.18
Nickel		15.9	22.7	18	22.7
Selenium					2.00
Silver		2	0.5	1	1.00
Vanadium and Compounds					
Zinc (Metallic)		124	121	123	121.00
Volatile Organic Compounds					
Acetone	--		0.08514		
Benzene	--		1.217502		
Chlorobenzene	--		2.5026		0.07
Dichlorobenzene, 1,2-	--		2.5284		0.14
Dichlorodifluoromethane	--				
Dichloroethane, 1,1-	--		0.2322		
Dichloroethylene, 1,2- (Mixed Isomers)	--				9.04
Dichloroethylene, 1,2-trans-	--		5.6244		9.04
Ethyl Chloride	--				
Ethylbenzene	--		1.505		9.45
Methyl Ethyl Ketone	--		0.36464		
Methyl tert-Butyl Ether (MTBE)	--				
Methylene Chloride	--		1.3674		
Tetrachloroethylene	--		8.514		4.02
Tetrahydrofuran	--				
Toluene	--		10.492		
Trichloro-1,2,2-trifluoroethane, 1,1,2-	--				
Trichlorobenzene, 1,2,4-	--		43.5332		18.06
Trichloroethane, 1,1,1-	--		1.8318		0.26
Trichloroethylene	--		0.9632		0.83
Trimethylbenzene, 1,2,4-	--				
Vinyl Chloride	--		1.7372		
Xylene, Mixture	--		3.7238		0.22

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Attachment 3-3
Calculation of Organic Carbon-Adjusted Lowest Chronic Values for Sediment
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

Chemical of Potential Concern	Default Lowest Chronic Value (mg/Kg)			Lowest Chronic Value - adjusted to FOC (mg/Kg)		
	Fish	Daphnids	Nondaphnid Invertebrates	Fish	Daphnids	Nondaphnid Invertebrates
Volatile Organic Compounds						
Acetone	3	0.0091	--	25.8	0.07826	--
Benzene	--	120	--	--	1032	--
Chlorobenzene	7.8	97	--	67.08	834.2	--
Dichlorobenzene, 1,2-	--	--	--	--	--	--
Dichlorodifluoromethane	--	--	--	--	--	--
Dichloroethane, 1,1-	8.4	--	--	72.24	--	--
Dichloroethylene, 1,2- (Mixed Isomers)	6.4	--	--	55.04	--	--
Dichloroethylene, 1,2-trans-	6.4	--	--	55.04	--	--
Ethyl Chloride	--	--	--	--	--	--
Ethylbenzene	5.4	160	--	46.44	1376	--
Methyl Ethyl Ketone	5.4	27	--	46.44	232.2	--
Methyl tert-Butyl Ether (MTBE)	--	--	--	--	--	--
Methylene Chloride	18	7.2	--	154.8	61.92	--
Tetrachloroethylene	3.5	3.2	--	30.1	27.52	--
Tetrahydrofuran	--	--	--	--	--	--
Toluene	6.4	130	--	55.04	1118	--
Trichloro-1,2,2-trifluoroethane, 1,1,2-	--	--	--	--	--	--
Trichlorobenzene, 1,2,4-	--	--	--	--	--	--
Trichloroethane, 1,1,1-	9.6	--	--	82.56	--	--
Trichloroethylene	51	33	--	438.6	283.8	--
Trimethylbenzene, 1,2,4-	--	--	--	--	--	--
Vinyl Chloride	--	--	--	--	--	--
Xylene, Mixture	740	--	--	6364	--	--

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-- = Benchmark not available.
Average Organic Carbon content of 8.6%
FOC = Fraction organic carbon, in percent
Adjusted LCV= Default LCV * FOC
mg/kg = milligrams per kilogram

Attachment 3-4
Calculation of Organic Carbon-Adjusted USEPA Region 3 Sediment Benchmarks
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

CAS#	Analyte	log K_{ow} [a]	K_{oc} [b]	Freshwater Value (ug/l) [c]	TOC % [d]	FW Sed (mg/kg) [b]
71-55-6	1,1,1-Trichloroethane	2.48	274.2332	11	8.6	0.259
79-34-5	1,1,2,2-Tetrachloroethane	2.39	223.6918	610	8.6	11.735
127-18-4	1,1,2,2-Tetrachloroethylene (PCE)	2.67	421.5897	111	8.6	4.024
79-00-5	1,1,2-Trichloroethane	2.05	103.6168	1200	8.6	10.693
79-01-6	1,1,2-Trichloroethene (TCE)	2.71	461.5407	21	8.6	0.834
92-52-4	1,1-Biphenyl	4.01	8752.054	14	8.6	10.537
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	2.13	124.1852	25	8.6	0.267
75-35-4	1,1-Dichloroethylene	2.13	124.1852	25	8.6	0.267
634-66-2	1,2,3,4-Tetrachlorobenzene	4.67	38984.32	1.8	8.6	6.035
87-61-6	1,2,3-Trichlorobenzene	4.10	10729.51	8	8.6	7.382
95-94-3	1,2,4,5-Tetrachlorobenzene	4.64	36425.04	3	8.6	9.398
120-82-1	1,2,4-Trichlorobenzene	4.01	8752.054	24	8.6	18.064
95-50-1	1,2-Dichlorobenzene	3.43	2354.887	0.7	8.6	0.142
156-60-5	1,2-Trans-Dichloroethylene	2.07	108.4152	970	8.6	9.044
541-73-1	1,3-Dichlorobenzene	3.53	2953.045	150	8.6	38.094
542-75-6	1,3-Dichloropropene (1,3-Dichloropropylene)	2.00	92.52945	0.055	8.6	0.0004
542-75-6	1,3-Dichloropropylene	2.00	92.52945	0.055	8.6	0.0004
106-46-7	1,4-Dichlorobenzene	3.42	2302.184	26	8.6	5.148
99-99-0	1-Methyl-4-nitrobenzene (4-Nitrotoluene)	2.37	213.7913	1900	8.6	34.933
58-90-2	2,3,4,6-Tetrachlorophenol	4.45	23693.54	1.2	8.6	2.445
93-72-1	2,4,5-TP (Silvex)	3.41	2250.661	30	8.6	5.807
93-76-5	2,4,5-Trichlorphenoxyacetic acid	3.31	1794.775	686	8.6	105.885
88-06-2	2,4,6-Trichlorophenol	3.70	4338.904	4.9	8.6	1.828
120-83-2	2,4-Dichlorophenol	3.08	1066.4	11	8.6	1.009
121-14-2	2,4-Dinitrotoluene	2.01	94.64769	44	8.6	0.358
95-57-8	2-Chlorophenol	2.15	129.9362	24	8.6	0.268
91-94-1	3,3'- Dichlorobenzidine	3.51	2822.344	4.5	8.6	1.092
101-55-3	4-Bromophenyl phenyl ether	5.00	82277.29	1.5	8.6	10.614
99-99-0	4-Nitrotoluene	2.37	213.7913	1900	8.6	34.933
1912-24-9	Atrazine	2.61	368.0527	1.8	8.6	0.057
86-50-0	Azinophosmethyl (Guthion)	2.75	505.2775	0.01	8.6	0.000
319-86-8	BHC, delta	3.72	4539.834	141	8.6	55.050
92-52-4	Biphenyl (1,1-Biphenyl)	4.01	8752.054	14	8.6	10.537
75-25-2	Bromoform	2.35	204.329	320	8.6	5.623
85-68-7	Butyl benzyl phthalate	4.84	57279.6	19	8.6	93.595
63-25-2	Carbaryl (Sevin)	2.36	209.0066	0.2	8.6	0.004
1563-66-2	Carbofuran	2.32	190.915	1.8	8.6	0.030
75-15-0	Carbon disulfide	2.00	92.52945	0.92	8.6	0.007
56-23-5	Carbon tetrachloride	2.73	482.9142	13.3	8.6	0.552
108-90-7	Chlorobenzene	2.86	648.1268	1.3	8.6	0.072
510-15-6	Chlorobenzilate	4.38	20221.81	7.16	8.6	12.452
2921-88-2	Chloropyrifos	5.26	148204	0.0035	8.6	0.045
98-82-8	Cumene	3.58	3306.892	2.6	8.6	0.739
333-41-5	Diazinon	3.81	5565.574	0.043	8.6	0.021
132-64-9	Dibenzofuran	4.12	11226.39	3.7	8.6	3.572
542-75-6	Dichloropropene (1,3-Dichloropropylene)	2.00	92.52945	0.055	8.6	0.000
84-66-2	Diethylphthalate	2.50	286.9327	210	8.6	5.182
84-74-2	Di-n-butyl phthalate	4.61	34033.77	19	8.6	55.611
88-85-7	Dinoseb	3.14	1221.518	0.05	8.6	0.005
115-29-7	Endosulfan (alpha and beta)	4.10	10729.51	0.02	8.6	0.018
100-41-4	Ethylbenzene	3.14	1221.518	90	8.6	9.455
86-50-0	Guthion	2.75	505.2775	0.01	8.6	0.000
319-86-8	HCH, d- (BHC, delta)	3.72	4539.834	141	8.6	55.050
67-72-1	Hexachloroethane	4.00	8556.182	12	8.6	8.830
110-54-3	Hexane	3.90	6823.073	0.58	8.6	0.340
98-82-8	Isopropylbenzene (Cumene)	3.58	3306.892	2.6	8.6	0.739
121-75-5	Malathion	2.36	209.0066	0.097	8.6	0.002
72-43-5	Methoxychlor	5.08	98609.78	0.019	8.6	0.161
108-90-7	Monochlorobenzene (Chlorobenzene)	2.86	648.1268	1.3	8.6	0.072
84-74-2	n-Butylphthalate (Di-n-butyl phthalate)	4.61	34033.77	19	8.6	55.611
86-30-6	N-Nitrosodiphenylamine	3.16	1278.086	210	8.6	23.082
56-38-2	Parathion	3.83	5823.311	0.013	8.6	0.007
608-93-5	Pentachlorobenzene	5.26	148204	6	8.6	76.473
76-01-7	Pentachloroethane	3.22	1463.996	56.4	8.6	7.101
87-86-5	Pentachlorophenol	5.09	100867.2	0.5	8.6	4.337
100-42-5	Phenylethylene	2.94	776.7835	72	8.6	4.810
298-02-2	Phorate	3.81	5565.574	3.62	8.6	1.733
100-42-5	Styrene (Phenylethylene)	2.94	776.7835	72	8.6	4.810
95-94-3	Tetrachlorobenzene (1,2,4,5-Tetrachlorobenzene)	4.64	36425.04	3	8.6	9.398
79-34-5	Tetrachloroethane (1,1,2,2-Tetrachloroethane)	2.39	223.6918	610	8.6	11.735
127-18-4	Tetrachloroethene (1,1,2,2-Tetrachloroethylene)	2.67	421.5897	111	8.6	4.024
127-18-4	Tetrachloroethylene (1,1,2,2-Tetrachloroethylene)	2.67	421.5897	111	8.6	4.024
56-23-5	Tetrachloromethane (Carbon tetrachloride)	2.73	482.9142	13.3	8.6	0.552
156-60-5	trans-1,2-Dichloroethylene (1,2-trans-Dichloroethylene)	2.07	108.4152	970	8.6	9.044
75-25-2	Tribromomethane (Bromoform)	2.35	204.329	320	8.6	5.623
79-00-5	Trichloroethane (1,1,2-Trichloroethane)	2.05	103.6168	1200	8.6	10.693
79-01-6	Trichloroethene (Trichloroethylene)	2.71	461.5407	21	8.6	0.834
79-01-6	Trichloroethylene	2.71	461.5407	21	8.6	0.834
1582-09-8	Trifluralin	5.34	177623.3	0.2	8.6	3.055
100-42-5	Vinyl benzene (Phenylethylene)	2.94	776.7835	72	8.6	4.810
75-35-4	Vinylidene chloride (1,1-Dichloroethylene)	2.13	124.1852	25	8.6	0.267
108-38-3	Xylene, m-	3.20	1399.201	1.8	8.6	0.217

[a] K_{ow} values selected from Karickhoff, S.W. and J.M. Long. Environmental Research Laboratory. U.S. EPA.1995. Internal Report on Summary of Measured, Calculated and Recommended Log Kow Values. K_{ow} values between 2 and 6 used based on U.S. EPA. 2000. Bioaccumulation Testing and Interpretation for the Purpose of Sediment Quality Assessment.

[b] Equation from U.S. EPA. 1996. Eco Update: Ecotox Thresholds. Office of Solid Waste and Emergency Response. Washington, D.C. EPA 540/F95/038.

[c] Freshwater values from Region III BTAG Freshwater Screening Benchmarks. 2004. http://www.epa.gov/reg3hwmd/risk/eco/btag/sbv/fw/screenbench.htm

[d] Site specific average organic carbon content of 8.6% used in equation.

Spreadsheet source:
Region 3, 2006
'FW Sediment TOC Table (7-2006)'
http://www2.epa.gov/risk/freshwater-sediment-screening-benchmarks

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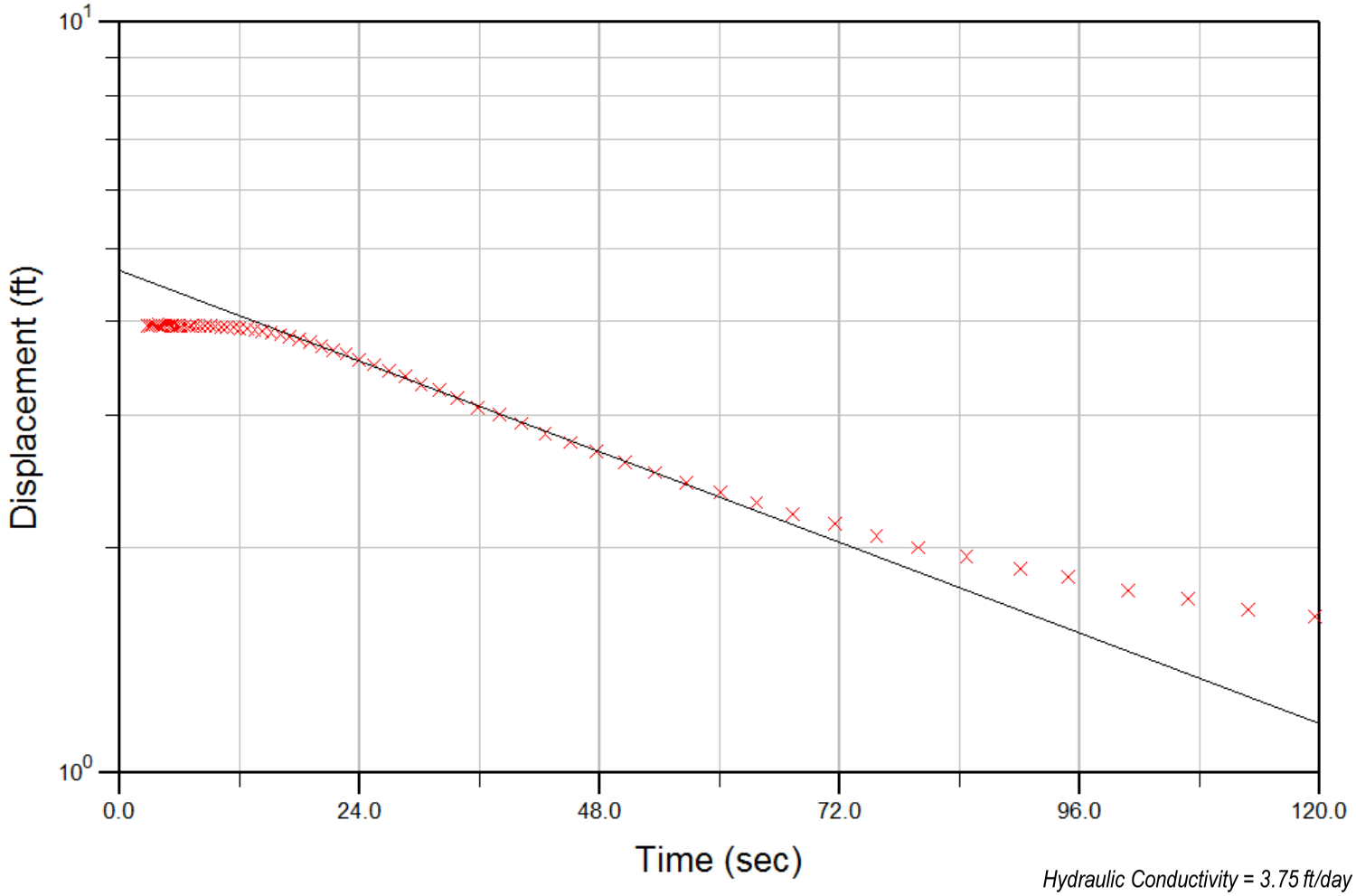
Attachment 3-5
Calculation of Organic Carbon-Adjusted USEPA Region 5 Sediment Benchmarks
Former Lewis Chemical Company
0 12-24 Fairmount Court
Hyde Park, MA

Constituent of Potential Concern	EPA Region 5 Default ESL	Site-Specific FOC	Adjusted ESL
Acetone	0.0099	8.6	0.08514
Benzene	0.14157	8.6	1.217502
Chlorobenzene	0.291	8.6	2.5026
Dichlorobenzene, 1,2-	0.294	8.6	2.5284
Dichlorodifluoromethane	NA	8.6	--
Dichloroethane, 1,1-	0.027	8.6	0.2322
Dichloroethylene, 1,2- (Mixed Isomers)	NA	8.6	--
Dichloroethylene, 1,2-trans-	0.654	8.6	5.6244
Ethyl Chloride		8.6	--
Ethylbenzene	0.175	8.6	1.505
Methyl Ethyl Ketone	0.0424	8.6	0.36464
Methyl tert-Butyl Ether (MTBE)	NA	8.6	--
Methylene Chloride	0.159	8.6	1.3674
Tetrachloroethylene	0.99	8.6	8.514
Tetrahydrofuran	NA	8.6	--
Toluene	1.22	8.6	10.492
Trichloro-1,2,2-trifluoroethane, 1,1,2-	NA	8.6	--
Trichlorobenzene, 1,2,4-	5.062	8.6	43.5332
Trichloroethane, 1,1,1-	0.213	8.6	1.8318
Trichloroethylene	0.112	8.6	0.9632
Trimethylbenzene, 1,2,4-	NA	8.6	--
Vinyl Chloride	0.202	8.6	1.7372
Xylene, Mixture	0.433	8.6	3.7238

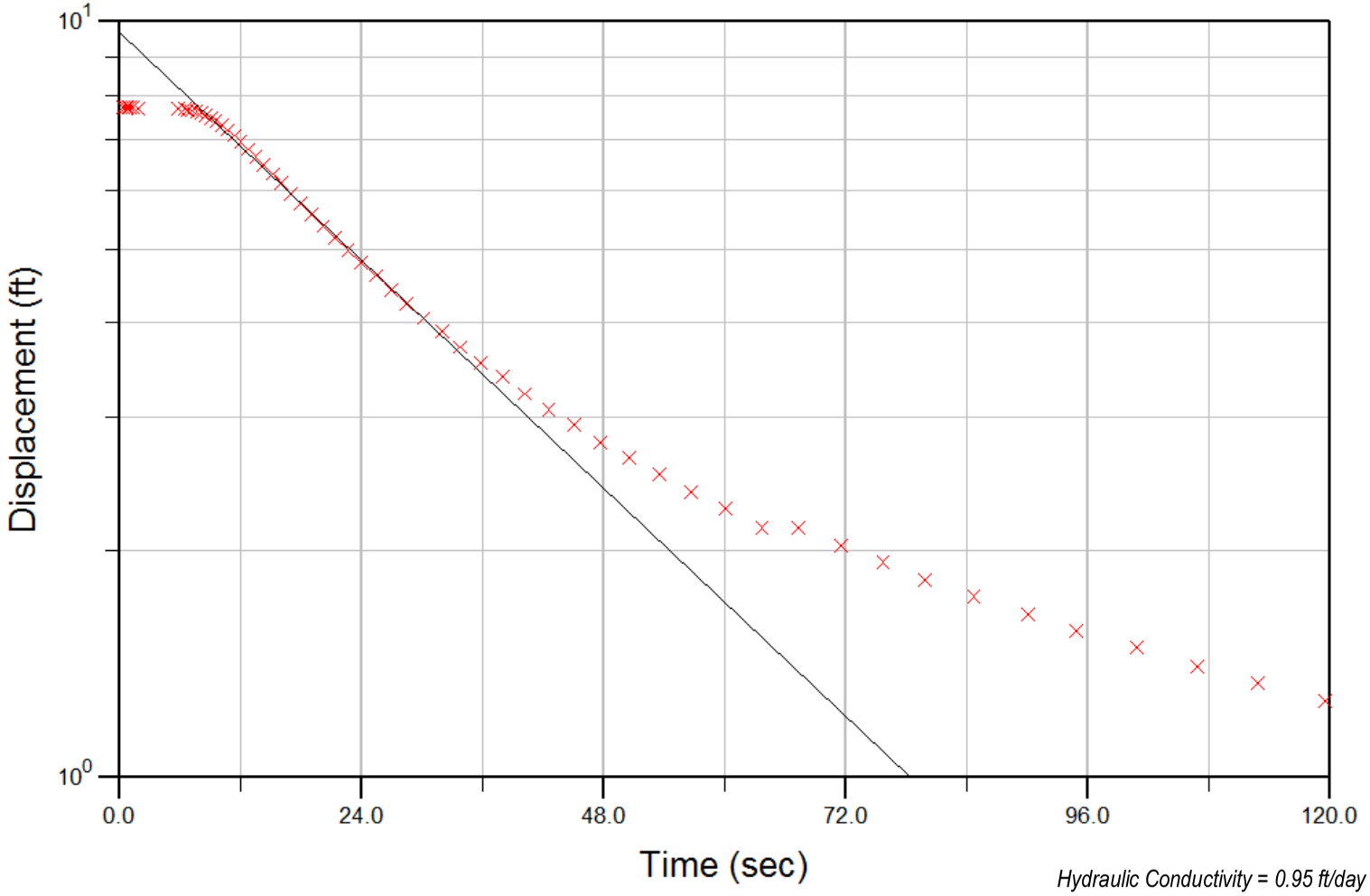
DRAFT

ESL = Ecological Screening Level for Sediment
FOC = Fraction organic carbon, in percent
Adjusted ESL = Default ESL * FOC

APPENDIX K: HYDRAULIC EVALUATION TRANSDUCER DATA



COMMITMENT & INTEGRITY DRIVE RESULTS 40 Shattuck Road, Suite 110 Andover, MA 01810 T: 866.702.6371	SLUG TEST ANALYSIS: ESM-3B-D	BOSTON DND – LEWIS CHEMICAL Boston, Massachusetts	JOB NO.: 229286.01 DATE: OCTOBER 2015 SCALE: NA
	DESIGNED BY: BVA / CHECKED BY: JH DRAWN BY: BVA	Phase III RAP	**FIGURE 9**



COMMITMENT & INTEGRITY DRIVE RESULTS 40 Shattuck Road, Suite 110 Andover, MA 01810 T: 866.702.6371	SLUG TEST ANALYSIS: ESM-6	BOSTON DND – LEWIS CHEMICAL Boston, Massachusetts	JOB NO.: 229286.01 DATE: OCTOBER 2015 SCALE: NA
	DESIGNED BY: BVA / CHECKED BY: JH DRAWN BY: BVA	Phase III RAP	**FIGURE 10**

Report Dat 7/1/2015 10:44:20 AM (Eastern Daylight Time)
Report Use baigler
Report Cor BAIGLER
Pump Test ESM-3BD_070115
Virtual Her DATALOGGER-ESM-3BD
First Data I 43:40.4
Last Data F 43:11.1

Export Tim Eastern Daylight Time
Export Inte Export By Selected Interval: 7/1/2015 9:43:40.000 AM to 7/1/2015 10:43:11.999 AM
Export Tim TimeStamps referenced to log from TROLL: 10398264 (ESM-3BD)
Export Tim Last Known Value

HERMIT Notes:

Time Stam	User Name	Note

		10398264	10398264	10398264	10125133	10125133	10125133	10406167	10406167	10406167
		Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69ft
		Pres	Temp	Depth	Pres	Temp	Depth	Pres	Temp	Depth
		PSI	C	ft	PSI	C	ft	PSI	C	ft
		LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHEMICAL
		ESM-3BD	ESM-3BD	ESM-3BD	ESM-3	ESM-3	ESM-3	CDW-5	CDW-5	CDW-5
Date and T	Elapsed Tir	ESM-3BD F	ESM-3BD F	ESM-3BD F	ESM-3BD F	ESM-3BD F	ESM-3BD F	ESM-3BD F	ESM-3BD F	ESM-3BD PUMP
43:40.4	0	23.366	12.475	53.897						
43:40.6	0.253	23.363	12.467	53.891						
43:40.9	0.5	23.365	12.486	53.895	1.797	11.667	4.145			
43:41.1	0.75	23.365	12.47	53.896	1.798	11.689	4.146			
43:41.4	1	23.366	12.466	53.897	1.799	11.697	4.149	2.562	11.988	5.91
43:41.6	1.25	23.367	12.463	53.899	1.797	11.709	4.145	2.561	11.985	5.908
43:41.9	1.5	23.364	12.491	53.892	1.798	11.716	4.147	2.563	11.968	5.911
43:42.1	1.75	23.364	12.488	53.893	1.799	11.719	4.149	2.561	11.976	5.908
43:42.4	2	23.368	12.434	53.903	1.797	11.73	4.145	2.563	12.014	5.912
43:42.6	2.25	23.368	12.484	53.902	1.798	11.731	4.147	2.561	11.993	5.908
43:42.9	2.5	23.361	12.475	53.886	1.797	11.734	4.146	2.562	11.993	5.91
43:43.1	2.753	23.348	12.487	53.857	1.795	11.737	4.141	2.562	11.99	5.911
43:43.4	3	23.338	12.469	53.832	1.796	11.74	4.143	2.561	11.998	5.907
43:43.6	3.25	23.34	12.492	53.837	1.797	11.74	4.145	2.564	11.998	5.913
43:43.9	3.5	23.335	12.488	53.827	1.795	11.743	4.141	2.562	12.008	5.909
43:44.1	3.75	23.339	12.506	53.836	1.798	11.746	4.148	2.562	11.998	5.909
43:44.4	4	23.341	12.474	53.84	1.795	11.75	4.141	2.561	11.998	5.908
43:44.6	4.25	23.332	12.476	53.818	1.798	11.75	4.147	2.561	12.018	5.908
43:44.9	4.5	23.328	12.503	53.811	1.797	11.753	4.144	2.563	12.013	5.911
43:45.1	4.75	23.317	12.496	53.784	1.798	11.753	4.146	2.563	12.031	5.912
43:45.4	5	23.311	12.489	53.771	1.795	11.758	4.141	2.562	12.007	5.909
43:45.6	5.25	23.303	12.506	53.752	1.796	11.753	4.143	2.565	12.006	5.916
43:45.9	5.5	23.296	12.518	53.735	1.797	11.756	4.146	2.563	11.986	5.913
43:46.1	5.75	23.292	12.495	53.727	1.797	11.758	4.144	2.563	11.99	5.911
43:46.4	6	23.292	12.452	53.726	1.797	11.759	4.146	2.563	12.018	5.913
43:46.7	6.36	23.277	12.481	53.693	1.797	11.763	4.145	2.56	12.002	5.905
43:47.1	6.72	23.276	12.485	53.689	1.796	11.761	4.142	2.561	12.026	5.908
43:47.5	7.14	23.269	12.488	53.673	1.798	11.75	4.147	2.564	12.019	5.913
43:47.9	7.56	23.261	12.487	53.655	1.798	11.745	4.147	2.562	12.027	5.909
43:48.4	8.01	23.251	12.528	53.633	1.795	11.742	4.142	2.562	12.005	5.909
43:48.8	8.46	23.234	12.478	53.593	1.796	11.739	4.144	2.563	11.973	5.913
43:49.4	9	23.226	12.509	53.575	1.796	11.737	4.143	2.562	11.997	5.909
43:49.8	9.48	23.225	12.463	53.573	1.796	11.731	4.143	2.564	12.006	5.914
43:50.4	10.08	23.211	12.518	53.54	1.797	11.732	4.146	2.562	12.01	5.909
43:51.1	10.74	23.191	12.515	53.495	1.796	11.729	4.143	2.559	12.02	5.903
43:51.7	11.282	23.181	12.508	53.47	1.797	11.725	4.145	2.564	12.015	5.914
43:52.3	11.94	23.167	12.494	53.438	1.797	11.724	4.145	2.56	12.008	5.906
43:53.0	12.66	23.147	12.487	53.392	1.795	11.72	4.141	2.562	12.018	5.909
43:53.8	13.44	23.126	12.5	53.343	1.797	11.72	4.145	2.561	11.998	5.908
43:54.6	14.22	23.104	12.495	53.294	1.796	11.715	4.143	2.564	11.99	5.914
43:55.5	15.108	23.099	12.478	53.281	1.797	11.717	4.145	2.561	11.995	5.908
43:56.3	15.96	23.002	12.483	53.057	1.795	11.716	4.141	2.563	12.002	5.911
43:57.3	16.92	23.097	12.528	53.277	1.795	11.713	4.141	2.563	11.997	5.912
43:58.2	17.88	22.866	12.485	52.744	1.796	11.713	4.142	2.56	11.991	5.905
43:59.3	18.96	23.044	12.484	53.155	1.797	11.711	4.146	2.563	12.007	5.913
44:00.5	20.1	22.924	12.44	52.878	1.797	11.71	4.145	2.564	11.977	5.913
44:01.7	21.3	22.895	12.505	52.812	1.797	11.709	4.144	2.563	12.031	5.911
44:02.9	22.56	22.897	12.489	52.816	1.797	11.708	4.144	2.561	11.99	5.908

44:04.2	23.88	22.754	12.487	52.485	1.797	11.705	4.146	2.562	11.984	5.909
44:05.7	25.32	22.678	12.478	52.31	1.798	11.705	4.147	2.561	12.003	5.908
44:07.2	26.82	22.653	12.489	52.253	1.798	11.703	4.147	2.562	12.004	5.909
44:08.7	28.38	22.56	12.488	52.039	1.797	11.704	4.146	2.562	11.993	5.911
44:10.4	30.06	22.59	12.479	52.108	1.795	11.704	4.141	2.56	11.987	5.906
44:12.2	31.86	22.646	12.476	52.237	1.797	11.706	4.145	2.562	12.013	5.909
44:14.3	33.902	22.579	12.501	52.083	1.8	11.726	4.152	2.561	11.98	5.906
44:16.1	35.76	22.57	12.487	52.061	1.796	11.704	4.142	2.562	12.009	5.91
44:18.2	37.86	22.471	12.512	51.833	1.798	11.701	4.147	2.562	11.951	5.909
44:20.4	40.08	22.518	12.484	51.94	1.796	11.7	4.143	2.56	11.982	5.905
44:22.8	42.48	22.471	12.46	51.833	1.796	11.699	4.143	2.561	12.038	5.906
44:25.4	45	22.413	12.47	51.7	1.796	11.698	4.143	2.563	12.02	5.911
44:28.0	47.64	22.195	12.506	51.197	1.796	11.697	4.143	2.561	11.986	5.907
44:30.9	50.52	22.349	12.478	51.552	1.795	11.694	4.142	2.564	12.008	5.914
44:33.8	53.46	22.195	12.458	51.197	1.796	11.697	4.143	2.559	11.996	5.903
44:37.0	56.64	22.108	12.472	50.996	1.797	11.693	4.144	2.562	11.993	5.909
44:40.4	60	22.162	12.485	51.12	1.795	11.692	4.14	2.562	12.034	5.909
44:44.0	63.6	22.139	12.483	51.066	1.795	11.693	4.141	2.563	12.001	5.911
44:47.6	67.2	22.032	12.476	50.82	1.797	11.692	4.146	2.56	11.986	5.906
44:51.8	71.4	22.014	12.445	50.78	1.797	11.694	4.144	2.562	11.993	5.909
44:56.0	75.6	21.978	12.468	50.697	1.797	11.692	4.145	2.562	11.976	5.909
45:00.2	79.8	21.926	12.449	50.575	1.796	11.691	4.143	2.56	11.96	5.904
45:05.0	84.6	21.863	12.466	50.431	1.796	11.689	4.142	2.563	11.978	5.911
45:10.4	90	21.784	12.489	50.248	1.796	11.69	4.142	2.563	12.002	5.913
45:15.2	94.8	21.608	12.478	49.841	1.797	11.69	4.145	2.562	12.004	5.91
45:21.2	100.8	21.629	12.452	49.891	1.798	11.689	4.146	2.562	11.973	5.91
45:27.2	106.8	21.607	12.485	49.841	1.796	11.688	4.142	2.561	11.988	5.907
45:33.2	112.8	21.554	12.481	49.718	1.798	11.688	4.147	2.564	11.99	5.913
45:39.8	119.4	21.368	12.457	49.288	1.797	11.685	4.144	2.56	11.993	5.906
45:47.0	126.6	21.455	12.484	49.49	1.797	11.684	4.144	2.561	11.995	5.907
45:54.8	134.4	21.379	12.492	49.313	1.797	11.685	4.146	2.561	11.998	5.907
46:02.6	142.2	21.259	12.459	49.038	1.799	11.685	4.15	2.563	11.995	5.911
46:11.0	150.6	21.184	12.455	48.864	1.798	11.686	4.147	2.559	11.982	5.904
46:20.0	159.6	21.129	12.451	48.738	1.796	11.68	4.142	2.561	12.002	5.907
46:29.6	169.2	21.015	12.452	48.475	1.798	11.681	4.147	2.561	11.971	5.908
46:39.2	178.8	20.955	12.475	48.337	1.798	11.684	4.146	2.561	12.011	5.907
46:50.0	189.6	20.915	12.46	48.244	1.797	11.681	4.146	2.561	11.995	5.908
47:01.4	201	20.904	12.463	48.218	1.798	11.683	4.148	2.561	12.006	5.907
47:13.4	213	20.848	12.47	48.089	1.797	11.68	4.146	2.56	11.992	5.905
47:26.0	225.6	20.669	12.421	47.676	1.797	11.679	4.146	2.558	11.976	5.901
47:39.2	238.8	20.613	12.486	47.546	1.797	11.678	4.145	2.56	11.993	5.906
47:53.6	253.2	20.644	12.47	47.619	1.797	11.677	4.144	2.56	11.976	5.904
48:08.6	268.2	20.589	12.447	47.492	1.797	11.674	4.146	2.559	11.994	5.903
48:24.2	283.8	20.499	12.465	47.284	1.798	11.677	4.148	2.558	11.996	5.901
48:41.0	300.6	20.457	12.476	47.188	1.799	11.676	4.149	2.557	11.972	5.899
48:59.0	318.6	20.397	12.458	47.048	1.798	11.68	4.148	2.557	11.979	5.897
49:17.6	337.2	20.225	12.458	46.652	1.797	11.674	4.146	2.558	12.001	5.9
49:38.0	357.6	20.279	12.437	46.777	1.792	11.677	4.135	2.558	11.999	5.901
49:59.0	378.6	20.218	12.462	46.635	1.795	11.676	4.141	2.558	11.965	5.899
50:21.2	400.8	20.157	12.451	46.495	1.797	11.676	4.144	2.555	12.006	5.895
50:45.2	424.8	20.12	12.456	46.41	1.797	11.674	4.144	2.555	11.993	5.894
51:10.4	450	20.067	12.438	46.289	1.796	11.674	4.142	2.554	11.973	5.892
51:36.8	476.4	19.921	12.453	45.952	1.797	11.673	4.146	2.556	11.979	5.897
52:05.0	504.6	19.944	12.451	46.004	1.798	11.671	4.148	2.553	11.984	5.889
52:35.0	534.6	19.931	12.453	45.974	1.798	11.671	4.146	2.553	12.003	5.889
53:06.8	566.4	19.899	12.46	45.901	1.8	11.671	4.151	2.553	11.993	5.889
53:40.4	600	19.867	12.453	45.828	1.797	11.67	4.145	2.555	11.968	5.893
54:16.4	636	19.825	12.447	45.73	1.797	11.67	4.146	2.553	11.987	5.889
54:52.4	672	19.729	12.455	45.507	1.798	11.673	4.146	2.553	11.982	5.888
55:34.4	714	19.779	12.467	45.625	1.798	11.671	4.148	2.554	11.989	5.891
56:16.4	756	19.781	12.47	45.627	1.799	11.672	4.15	2.551	11.982	5.885
56:58.4	798	19.72	12.442	45.488	1.799	11.674	4.151	2.552	12.007	5.886
57:46.4	846	19.775	12.451	45.614	1.797	11.672	4.145	2.552	11.967	5.886
58:40.4	900	19.728	12.448	45.506	1.798	11.674	4.148	2.551	11.971	5.885
59:28.4	948	19.783	12.445	45.632	1.798	11.676	4.147	2.549	11.975	5.881
00:28.4	1008.002	19.802	12.455	45.677	1.8	11.672	4.152	2.549	11.995	5.879
01:28.4	1068	19.729	12.455	45.508	1.799	11.673	4.149	2.549	11.976	5.88
02:28.4	1128	19.807	12.465	45.689	1.799	11.672	4.15	2.553	11.975	5.888
03:34.4	1194	19.767	12.456	45.595	1.801	11.673	4.155	2.55	12.001	5.883
04:46.4	1266	19.794	12.459	45.658	1.8	11.673	4.151	2.549	11.954	5.88
06:04.4	1344	19.815	12.473	45.706	1.801	11.669	4.154	2.552	11.97	5.886
07:22.4	1422	19.842	12.448	45.769	1.8	11.67	4.153	2.551	11.968	5.884
08:46.4	1506	19.866	12.476	45.825	1.801	11.67	4.154	2.553	11.968	5.888
10:16.4	1596	19.964	12.452	46.05	1.801	11.669	4.155	2.554	11.973	5.891
11:52.4	1692	20.056	12.448	46.261	1.802	11.667	4.155	2.549	11.982	5.881
13:28.4	1788	20.029	12.433	46.2	1.801	11.67	4.155	2.55	11.968	5.882

15:16.4	1896	19.963	12.441	46.048	1.802	11.667	4.156	2.554	11.967	5.891
17:10.4	2010	19.965	12.439	46.053	1.802	11.667	4.157	2.552	11.967	5.887
19:10.4	2130	19.98	12.462	46.087	1.803	11.667	4.159	2.552	11.993	5.887
21:10.4	2250	20	12.444	46.133	1.803	11.667	4.159	2.551	11.973	5.884
23:10.4	2370	20.056	12.438	46.263	1.804	11.668	4.161	2.553	11.983	5.889
25:10.4	2490	19.912	12.451	45.931	1.803	11.667	4.16	2.553	11.977	5.889
27:10.4	2610	20.055	12.453	46.259	1.805	11.668	4.164	2.554	11.982	5.89
29:10.4	2730	20.078	12.453	46.313	1.805	11.665	4.164	2.554	11.987	5.89
31:10.4	2850	20.025	12.449	46.191	1.805	11.667	4.163	2.553	11.976	5.889
33:10.4	2970	20.012	12.443	46.162	1.806	11.663	4.165	2.554	11.97	5.89
35:10.4	3090	20.1	12.465	46.364	1.806	11.667	4.165	2.553	11.96	5.889
37:10.4	3210	20.097	12.449	46.358	1.805	11.667	4.163	2.552	11.981	5.886
39:10.4	3330	20.05	12.441	46.249	1.806	11.667	4.165	2.552	11.981	5.887
41:10.4	3450	19.986	12.458	46.101	1.806	11.665	4.166	2.554	11.963	5.891

Report Dat 7/1/2015 11:18:32 AM (Eastern Daylight Time)
Report Use baigler
Report Cor BAIGLER
Pump Test ESM-3BD_070115
Virtual Her DATALOGGER-ESM-3BD
First Data I 54:43.3
Last Data F 16:32.7

Export Tim Eastern Daylight Time
Export Inte Export By Selected Interval: 7/1/2015 10:54:43.000 AM to 7/1/2015 11:16:32.999 AM
Export Tim TimeStamps referenced to log from TROLL: 10398264 (ESM-3BD)
Export Tim Last Known Value

HERMIT Notes:

Time Stam	User Name	Note

		10398264	10398264	10398264	10125133	10125133	10125133	10406167	10406167	10406167
		Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69ft
		Pres	Temp	Depth	Pres	Temp	Depth	Pres	Temp	Depth
		PSI	C	ft	PSI	C	ft	PSI	C	ft
		LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHEMICAL
		ESM-3BD	ESM-3BD	ESM-3BD	ESM-3	ESM-3	ESM-3	CDW-5	CDW-5	CDW-5
Date and T	Elapsed Tir	DATALOGG	DATALOGG	DATALOGG	DATALOGG	DATALOGG	DATALOGG	DATALOGG	DATALOGG	DATALOGGER_ESM-3BD_recove
54:43.3	0	20.005	12.444	46.145						
54:43.6	0.251	20.013	12.463	46.164						
54:43.8	0.501	20.02	12.458	46.18						
54:44.1	0.751	20.037	12.475	46.219						
54:44.3	1.001	20.061	12.481	46.273	1.809	11.665	4.172			
54:44.6	1.251	20.086	12.476	46.331	1.808	11.683	4.171			
54:44.8	1.501	20.081	12.44	46.32	1.808	11.697	4.171	2.553	11.971	5.888
54:45.1	1.751	20.095	12.47	46.352	1.807	11.704	4.169	2.554	11.968	5.891
54:45.3	2.014	20.059	12.464	46.268	1.808	11.711	4.171	2.552	11.995	5.886
54:45.6	2.251	20.072	12.503	46.3	1.809	11.72	4.173	2.554	12.001	5.89
54:45.8	2.501	19.987	12.476	46.102	1.809	11.724	4.172	2.55	11.998	5.882
54:46.1	2.751	20.05	12.499	46.247	1.809	11.73	4.173	2.552	12.007	5.888
54:46.3	3.001	20.017	12.473	46.172	1.808	11.731	4.17	2.551	11.989	5.885
54:46.6	3.251	20.035	12.5	46.214	1.809	11.736	4.172	2.553	11.997	5.888
54:46.8	3.501	20.047	12.476	46.241	1.808	11.736	4.171	2.552	11.993	5.886
54:47.1	3.751	20.041	12.473	46.228	1.807	11.741	4.169	2.553	11.995	5.888
54:47.3	4.001	20.049	12.469	46.246	1.809	11.74	4.172	2.551	11.986	5.883
54:47.6	4.251	20.057	12.485	46.265	1.808	11.743	4.17	2.554	11.99	5.892
54:47.8	4.501	20.061	12.518	46.274	1.808	11.747	4.17	2.554	11.995	5.891
54:48.1	4.751	20.061	12.482	46.274	1.808	11.75	4.169	2.554	11.991	5.89
54:48.3	5.001	20.069	12.463	46.293	1.81	11.751	4.175	2.551	12.01	5.885
54:48.6	5.251	20.075	12.485	46.306	1.808	11.752	4.172	2.551	11.98	5.885
54:48.8	5.501	20.077	12.489	46.311	1.808	11.753	4.171	2.552	11.99	5.888
54:49.1	5.751	20.101	12.507	46.367	1.808	11.756	4.171	2.552	12.014	5.887
54:49.3	6.001	20.153	12.47	46.487	1.808	11.756	4.171	2.552	12.016	5.886
54:49.7	6.361	20.105	12.485	46.375	1.808	11.755	4.172	2.551	12.012	5.885
54:50.1	6.721	20.106	12.482	46.377	1.808	11.758	4.171	2.553	12.007	5.89
54:50.5	7.141	20.117	12.493	46.404	1.808	11.761	4.172	2.551	11.998	5.884
54:50.9	7.561	20.123	12.486	46.418	1.809	11.753	4.172	2.551	12.026	5.885
54:51.4	8.026	20.14	12.522	46.456	1.808	11.746	4.17	2.552	12.024	5.887
54:51.8	8.461	20.148	12.516	46.475	1.807	11.739	4.169	2.551	12.033	5.885
54:52.3	9.001	20.157	12.489	46.496	1.809	11.736	4.173	2.552	12.017	5.886
54:52.8	9.481	20.169	12.54	46.524	1.808	11.735	4.172	2.552	11.999	5.888
54:53.4	10.086	20.178	12.494	46.545	1.808	11.725	4.17	2.551	12.038	5.884
54:54.0	10.681	20.196	12.482	46.584	1.808	11.729	4.17	2.551	11.998	5.885
54:54.6	11.281	20.21	12.496	46.617	1.808	11.724	4.171	2.551	12.007	5.885
54:55.3	11.941	20.225	12.505	46.653	1.808	11.721	4.169	2.552	12.023	5.888
54:56.0	12.66	20.238	12.492	46.682	1.808	11.723	4.17	2.551	11.998	5.884
54:56.8	13.441	20.255	12.465	46.721	1.808	11.72	4.17	2.552	12.029	5.887
54:57.6	14.221	20.272	12.496	46.76	1.808	11.719	4.171	2.554	12.024	5.891
54:58.4	15.092	20.292	12.503	46.806	1.807	11.715	4.168	2.549	12.001	5.881
54:59.3	15.961	20.302	12.457	46.83	1.808	11.713	4.17	2.55	12.03	5.882
55:00.2	16.92	20.324	12.466	46.88	1.809	11.711	4.172	2.552	12.022	5.887
55:01.2	17.88	20.353	12.533	46.946	1.81	11.708	4.175	2.554	11.994	5.891
55:02.3	18.961	20.368	12.465	46.983	1.808	11.71	4.172	2.553	12.002	5.888
55:03.4	20.101	20.392	12.465	47.037	1.809	11.706	4.173	2.554	11.988	5.891
55:04.6	21.301	20.418	12.481	47.096	1.809	11.706	4.172	2.553	11.987	5.89
55:05.9	22.561	20.447	12.496	47.164	1.809	11.706	4.172	2.55	11.991	5.882

55:07.2	23.88	20.468	12.499	47.212	1.808	11.704	4.171	2.556	11.987	5.896
55:08.7	25.321	20.493	12.501	47.271	1.81	11.701	4.175	2.552	11.982	5.887
55:10.2	26.821	20.519	12.483	47.331	1.811	11.703	4.176	2.553	11.981	5.888
55:11.7	28.38	20.551	12.481	47.405	1.809	11.699	4.172	2.551	11.995	5.885
55:13.4	30.061	20.581	12.47	47.473	1.811	11.727	4.176	2.552	11.986	5.886
55:15.2	31.86	20.612	12.466	47.545	1.81	11.704	4.175	2.551	11.977	5.884
55:17.1	33.721	20.646	12.478	47.623	1.809	11.694	4.174	2.55	11.986	5.883
55:19.1	35.761	20.681	12.481	47.705	1.809	11.698	4.173	2.549	11.976	5.88
55:21.2	37.86	20.717	12.465	47.786	1.808	11.695	4.171	2.55	12.004	5.882
55:23.4	40.08	20.754	12.47	47.874	1.81	11.698	4.175	2.547	12.02	5.875
55:25.8	42.481	20.795	12.481	47.968	1.808	11.695	4.171	2.553	11.978	5.889
55:28.3	45	20.838	12.433	48.066	1.808	11.697	4.171	2.551	11.939	5.885
55:31.0	47.641	20.882	12.462	48.168	1.808	11.694	4.171	2.549	11.974	5.881
55:33.8	50.461	20.929	12.485	48.276	1.807	11.694	4.168	2.551	12.029	5.884
55:36.8	53.461	20.93	12.457	48.279	1.808	11.694	4.171	2.55	12.007	5.882
55:40.0	56.641	20.983	12.476	48.401	1.807	11.692	4.168	2.549	12.015	5.879
55:43.3	60	21.035	12.456	48.521	1.808	11.688	4.17	2.55	11.981	5.881
55:46.9	63.6	21.093	12.465	48.654	1.809	11.693	4.172	2.55	11.971	5.883
55:50.5	67.2	21.148	12.457	48.78	1.809	11.69	4.172	2.551	11.963	5.885
55:54.7	71.4	21.206	12.484	48.916	1.81	11.69	4.174	2.553	12.004	5.889
55:58.9	75.6	21.271	12.476	49.065	1.81	11.692	4.174	2.55	11.982	5.882
56:03.1	79.8	21.33	12.455	49.202	1.809	11.688	4.173	2.553	12.004	5.888
56:07.9	84.601	21.398	12.447	49.357	1.808	11.689	4.171	2.548	12.004	5.878
56:13.3	90	21.471	12.476	49.526	1.81	11.687	4.175	2.551	12.004	5.885
56:18.1	94.8	21.534	12.456	49.672	1.809	11.687	4.173	2.55	12.006	5.881
56:24.1	100.8	21.61	12.452	49.848	1.81	11.688	4.175	2.55	11.999	5.882
56:30.1	106.8	21.686	12.483	50.022	1.808	11.684	4.171	2.552	12.012	5.886
56:36.1	112.8	21.757	12.435	50.186	1.809	11.685	4.173	2.55	12.007	5.882
56:42.7	119.4	21.835	12.452	50.366	1.809	11.682	4.172	2.552	11.99	5.885
56:49.9	126.6	21.914	12.463	50.548	1.809	11.683	4.173	2.552	12.018	5.886
56:57.7	134.4	22	12.457	50.745	1.809	11.683	4.172	2.546	11.965	5.872
57:05.5	142.2	22.079	12.453	50.928	1.809	11.68	4.172	2.55	11.976	5.881
57:13.9	150.6	22.16	12.451	51.116	1.808	11.683	4.17	2.552	11.992	5.886
57:22.9	159.6	22.243	12.447	51.308	1.809	11.683	4.172	2.55	12.002	5.882
57:32.5	169.2	22.326	12.463	51.498	1.807	11.679	4.169	2.551	11.973	5.884
57:42.1	178.8	22.407	12.469	51.686	1.808	11.679	4.17	2.552	11.976	5.887
57:52.9	189.6	22.488	12.452	51.871	1.81	11.679	4.174	2.55	12.012	5.881
58:04.3	201	22.569	12.492	52.059	1.808	11.681	4.171	2.552	12.003	5.886
58:16.3	213	22.648	12.47	52.241	1.81	11.676	4.176	2.55	11.991	5.883
58:28.9	225.6	22.724	12.457	52.417	1.809	11.678	4.172	2.55	11.979	5.883
58:42.1	238.8	22.797	12.47	52.586	1.808	11.673	4.172	2.55	11.976	5.881
58:56.5	253.2	22.866	12.444	52.744	1.809	11.677	4.172	2.551	11.971	5.885
59:11.5	268.2	22.935	12.44	52.904	1.811	11.677	4.176	2.551	11.985	5.885
59:27.1	283.8	23.001	12.464	53.056	1.809	11.676	4.173	2.553	11.971	5.889
59:43.9	300.6	23.062	12.444	53.197	1.808	11.675	4.17	2.553	11.982	5.889
00:01.9	318.6	23.114	12.481	53.316	1.808	11.676	4.172	2.553	11.98	5.888
00:20.5	337.2	23.159	12.465	53.42	1.81	11.674	4.174	2.55	11.983	5.882
00:40.9	357.6	23.198	12.456	53.51	1.81	11.673	4.174	2.551	11.968	5.884
01:01.9	378.6	23.23	12.453	53.584	1.808	11.673	4.171	2.551	11.993	5.883
01:24.1	400.8	23.254	12.447	53.639	1.809	11.668	4.172	2.552	11.976	5.886
01:48.1	424.8	23.277	12.441	53.693	1.808	11.671	4.17	2.553	11.973	5.89
02:13.3	450	23.293	12.44	53.728	1.81	11.669	4.174	2.552	12.004	5.888
02:39.7	476.4	23.302	12.446	53.749	1.811	11.67	4.178	2.553	11.994	5.89
03:07.9	504.6	23.311	12.437	53.77	1.81	11.668	4.175	2.553	11.996	5.888
03:37.9	534.6	23.319	12.426	53.789	1.809	11.671	4.172	2.554	11.995	5.891
04:09.7	566.4	23.322	12.454	53.795	1.81	11.671	4.175	2.555	11.99	5.895
04:43.3	600	23.327	12.462	53.806	1.811	11.669	4.178	2.555	11.991	5.892
05:19.3	636	23.331	12.451	53.816	1.812	11.668	4.18	2.552	11.974	5.887
05:55.3	672.001	23.336	12.464	53.829	1.811	11.671	4.177	2.556	11.974	5.896
06:37.3	714	23.336	12.453	53.828	1.81	11.665	4.175	2.556	11.96	5.895
07:19.3	756	23.334	12.425	53.823	1.811	11.667	4.177	2.557	11.994	5.898
08:01.3	798	23.334	12.441	53.824	1.81	11.667	4.174	2.556	11.993	5.895
08:49.3	846	23.303	12.451	53.752	1.81	11.666	4.175	2.557	11.97	5.898
09:43.3	900	23.322	12.449	53.796	1.811	11.669	4.178	2.558	11.98	5.899
10:31.3	948	23.326	12.443	53.806	1.811	11.666	4.178	2.557	11.975	5.898
11:31.3	1008	23.334	12.446	53.825	1.812	11.667	4.179	2.558	11.979	5.899
12:31.3	1068	23.335	12.467	53.826	1.812	11.665	4.18	2.556	11.96	5.895
13:31.3	1128	23.339	12.469	53.835	1.812	11.669	4.179	2.557	11.986	5.899
14:31.3	1188	23.337	12.448	53.831	1.811	11.666	4.178	2.557	11.995	5.898
15:31.3	1248	23.339	12.468	53.834	1.812	11.666	4.179	2.556	11.972	5.895
16:31.3	1308	23.338	12.439	53.832	1.813	11.665	4.181	2.558	11.971	5.9

Report Dat 7/1/2015 1:24:07 PM (Eastern Daylight Time)
Report Use baigler
Report Cor BAIGLER
Pump Test ESM-6_070115
Virtual Her ESM-6_pump
First Data I 41:31.7
Last Data F 23:03.2

Export Tim Eastern Daylight Time
Export Inte Export By Selected Interval: 7/1/2015 12:41:31.000 PM to 7/1/2015 1:23:03.999 PM
Export Tim TimeStamps referenced to log from TROLL: 10171278 (ESM-6)
Export Tim Last Known Value

HERMIT Notes:

Time Stam	User Name	Note

		10171278	10171278	10171278	10135569	10135569	10135569	10125133	10125133	10125133	10406167	10406167
		Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69
		Pres	Temp	Depth	Pres	Temp	Depth	Pres	Temp	Depth	Pres	Temp
		PSI	C	ft	PSI	C	ft	PSI	C	ft	PSI	C
		LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE
		ESM-6	ESM-6	ESM-6	CDW-3	CDW-3	CDW-3	G-B-1	G-B-1	G-B-1	G-A-2	G-A-2
Date and T	Elapsed Tir	ESM-6 pun	ESM-6 pun	ESM-6 pun	ESM-6 pun	ESM-6 pun	ESM-6 pun	ESM-6 pun	ESM-6 pun	ESM-6 pun	ESM-6 pun	ESM-6 pun
41:31.7	0	2.179	16.461	5.025								
41:32.0	0.251	2.178	16.486	5.025								
41:32.2	0.501	2.177	16.501	5.022	2.651	11.408	6.115					
41:32.5	0.751	2.176	16.508	5.02	2.652	11.427	6.117					
41:32.7	1.001	2.177	16.517	5.022	2.652	11.439	6.117	2.448	11.884	5.646		
41:33.0	1.251	2.176	16.523	5.02	2.653	11.448	6.119	2.449	11.902	5.649	4.406	11.654
41:33.2	1.501	2.176	16.53	5.019	2.653	11.456	6.119	2.449	11.917	5.649	4.409	11.635
41:33.5	1.751	2.177	16.531	5.021	2.652	11.463	6.118	2.448	11.926	5.647	4.405	11.643
41:33.7	2.001	2.175	16.535	5.018	2.652	11.465	6.118	2.45	11.936	5.651	4.407	11.641
41:34.0	2.251	2.177	16.542	5.021	2.65	11.471	6.113	2.448	11.942	5.646	4.407	11.666
41:34.2	2.501	2.179	16.554	5.027	2.652	11.473	6.117	2.449	11.943	5.649	4.407	11.652
41:34.5	2.755	2.177	16.555	5.021	2.652	11.478	6.116	2.449	11.949	5.649	4.407	11.688
41:34.7	3.001	2.176	16.553	5.02	2.65	11.479	6.114	2.45	11.952	5.651	4.409	11.653
41:35.0	3.251	2.176	16.551	5.019	2.651	11.483	6.114	2.449	11.957	5.649	4.407	11.677
41:35.2	3.501	2.176	16.555	5.019	2.65	11.485	6.112	2.449	11.957	5.65	4.405	11.669
41:35.5	3.751	2.175	16.554	5.018	2.652	11.487	6.118	2.447	11.962	5.645	4.409	11.65
41:35.7	4.001	2.176	16.556	5.019	2.651	11.486	6.115	2.449	11.963	5.648	4.407	11.655
41:36.0	4.251	2.177	16.555	5.02	2.651	11.49	6.114	2.449	11.967	5.649	4.404	11.674
41:36.2	4.501	2.175	16.557	5.017	2.65	11.492	6.113	2.448	11.966	5.647	4.405	11.678
41:36.5	4.751	2.177	16.56	5.021	2.651	11.493	6.115	2.449	11.965	5.649	4.41	11.65
41:36.7	5.001	2.176	16.561	5.02	2.651	11.495	6.115	2.449	11.97	5.65	4.408	11.653
41:37.0	5.251	2.175	16.56	5.018	2.651	11.495	6.114	2.448	11.974	5.646	4.409	11.662
41:37.2	5.501	2.177	16.56	5.021	2.651	11.498	6.115	2.447	11.974	5.644	4.409	11.677
41:37.5	5.751	2.175	16.563	5.017	2.65	11.499	6.112	2.447	11.973	5.644	4.408	11.666
41:37.7	6.001	2.176	16.563	5.02	2.652	11.501	6.116	2.449	11.976	5.649	4.406	11.651
41:38.1	6.361	2.176	16.555	5.019	2.651	11.5	6.115	2.448	11.98	5.647	4.409	11.675
41:38.5	6.721	2.176	16.549	5.018	2.653	11.494	6.119	2.448	11.98	5.647	4.409	11.655
41:38.9	7.141	2.175	16.543	5.016	2.65	11.489	6.112	2.447	11.98	5.645	4.407	11.662
41:39.3	7.561	2.176	16.54	5.019	2.65	11.485	6.113	2.45	11.968	5.65	4.405	11.674
41:39.7	7.981	2.175	16.537	5.016	2.651	11.482	6.115	2.447	11.962	5.643	4.409	11.655
41:40.2	8.461	2.176	16.533	5.019	2.651	11.48	6.114	2.449	11.961	5.648	4.409	11.661
41:40.7	9.001	2.174	16.53	5.015	2.652	11.475	6.117	2.447	11.956	5.644	4.409	11.681
41:41.2	9.481	2.176	16.528	5.018	2.651	11.473	6.115	2.448	11.956	5.647	4.406	11.685
41:41.8	10.081	2.175	16.525	5.018	2.652	11.469	6.116	2.448	11.95	5.647	4.406	11.69
41:42.4	10.681	2.178	16.522	5.024	2.653	11.466	6.12	2.446	11.947	5.643	4.409	11.68
41:43.1	11.349	2.178	16.519	5.023	2.653	11.466	6.119	2.446	11.944	5.642	4.405	11.666
41:43.7	11.941	2.178	16.519	5.024	2.653	11.463	6.119	2.449	11.944	5.649	4.407	11.679
41:44.5	12.721	2.172	16.514	5.01	2.651	11.459	6.116	2.449	11.941	5.648	4.409	11.635
41:45.2	13.441	2.134	16.514	4.923	2.653	11.46	6.119	2.449	11.939	5.65	4.407	11.66
41:46.0	14.221	2.112	16.512	4.872	2.652	11.456	6.116	2.449	11.937	5.648	4.407	11.666
41:46.8	15.061	2.095	16.514	4.832	2.651	11.457	6.116	2.45	11.935	5.65	4.405	11.689
41:47.7	15.961	2.078	16.508	4.794	2.653	11.456	6.119	2.449	11.935	5.65	4.408	11.65
41:48.7	16.921	2.061	16.516	4.754	2.651	11.453	6.115	2.447	11.929	5.644	4.405	11.659
41:49.6	17.881	2.05	16.509	4.728	2.651	11.452	6.115	2.448	11.93	5.646	4.409	11.659
41:50.7	18.961	2.04	16.506	4.705	2.652	11.449	6.118	2.446	11.929	5.643	4.407	11.658
41:51.8	20.101	2.019	16.508	4.657	2.652	11.448	6.118	2.447	11.927	5.644	4.405	11.668
41:53.0	21.301	1.989	16.512	4.589	2.653	11.448	6.119	2.447	11.926	5.644	4.408	11.662
41:54.3	22.561	1.964	16.509	4.531	2.652	11.447	6.118	2.447	11.926	5.645	4.407	11.674

41:55.6	23.881	1.931	16.504	4.454	2.652	11.444	6.116	2.448	11.923	5.646	4.408	11.634
41:57.1	25.321	1.896	16.506	4.373	2.651	11.447	6.116	2.448	11.922	5.647	4.407	11.655
41:58.6	26.821	1.87	16.502	4.314	2.65	11.444	6.112	2.447	11.922	5.644	4.405	11.661
42:00.1	28.381	1.848	16.539	4.262	2.65	11.442	6.114	2.447	11.92	5.644	4.407	11.655
42:01.8	30.061	1.832	16.508	4.225	2.65	11.442	6.113	2.448	11.919	5.647	4.405	11.646
42:03.6	31.861	1.818	16.503	4.192	2.65	11.44	6.114	2.447	11.917	5.645	4.404	11.661
42:05.5	33.721	1.791	16.502	4.131	2.65	11.44	6.112	2.446	11.918	5.642	4.406	11.635
42:07.5	35.761	1.758	16.501	4.054	2.65	11.442	6.114	2.446	11.916	5.643	4.404	11.624
42:09.6	37.861	1.727	16.498	3.983	2.649	11.437	6.11	2.446	11.919	5.641	4.405	11.655
42:11.8	40.094	1.702	16.496	3.925	2.649	11.439	6.111	2.447	11.915	5.644	4.407	11.671
42:14.2	42.481	1.676	16.491	3.865	2.646	11.44	6.103	2.447	11.916	5.644	4.402	11.68
42:16.7	45	1.653	16.486	3.813	2.648	11.436	6.107	2.448	11.913	5.646	4.404	11.672
42:19.4	47.641	1.633	16.483	3.767	2.648	11.438	6.108	2.447	11.914	5.644	4.404	11.646
42:22.2	50.461	1.615	16.474	3.726	2.649	11.436	6.11	2.448	11.91	5.647	4.404	11.67
42:25.2	53.461	1.597	16.464	3.684	2.649	11.435	6.111	2.45	11.912	5.651	4.404	11.66
42:28.4	56.641	1.582	16.45	3.65	2.648	11.435	6.108	2.448	11.91	5.646	4.405	11.646
42:31.7	60	1.568	16.438	3.617	2.648	11.432	6.109	2.45	11.934	5.651	4.404	11.657
42:35.3	63.601	1.56	16.423	3.599	2.647	11.432	6.106	2.446	11.913	5.643	4.405	11.638
42:38.9	67.201	1.548	16.407	3.572	2.649	11.433	6.109	2.445	11.908	5.641	4.401	11.636
42:43.1	71.401	1.535	16.405	3.54	2.647	11.431	6.105	2.445	11.908	5.641	4.405	11.644
42:47.3	75.601	1.524	16.37	3.514	2.648	11.432	6.108	2.444	11.907	5.637	4.403	11.672
42:51.5	79.801	1.513	16.348	3.49	2.645	11.431	6.101	2.444	11.907	5.638	4.402	11.64
42:56.3	84.601	1.509	16.324	3.481	2.647	11.427	6.105	2.443	11.907	5.635	4.403	11.638
43:01.7	90	1.503	16.292	3.466	2.674	11.427	6.167	2.446	11.905	5.642	4.401	11.664
43:06.5	94.801	1.517	16.267	3.5	2.648	11.426	6.108	2.447	11.903	5.644	4.405	11.646
43:12.5	100.801	1.539	16.231	3.549	2.658	11.428	6.13	2.444	11.904	5.639	4.401	11.66
43:18.5	106.801	1.55	16.2	3.575	2.651	11.428	6.116	2.445	11.903	5.639	4.4	11.66
43:24.5	112.801	1.552	16.163	3.579	2.647	11.431	6.105	2.445	11.903	5.639	4.403	11.651
43:31.1	119.4	1.558	16.125	3.593	2.647	11.431	6.105	2.443	11.903	5.635	4.403	11.657
43:38.3	126.601	1.571	16.082	3.624	2.647	11.433	6.105	2.442	11.898	5.634	4.4	11.649
43:46.1	134.405	1.576	16.036	3.635	2.644	11.438	6.1	2.442	11.899	5.634	4.4	11.637
43:53.9	142.2	1.579	15.995	3.642	2.644	11.438	6.098	2.445	11.899	5.64	4.405	11.636
44:02.3	150.601	1.581	15.941	3.646	2.648	11.442	6.107	2.443	11.897	5.635	4.397	11.655
44:11.3	159.601	1.561	15.889	3.602	2.646	11.442	6.104	2.443	11.896	5.635	4.399	11.613
44:20.9	169.2	1.53	15.838	3.529	2.645	11.442	6.1	2.443	11.899	5.635	4.401	11.624
44:30.5	178.801	1.523	15.785	3.513	2.644	11.446	6.099	2.443	11.899	5.635	4.401	11.649
44:41.3	189.602	1.509	15.732	3.481	2.645	11.448	6.101	2.442	11.897	5.632	4.4	11.627
44:52.7	201	1.499	15.676	3.458	2.646	11.451	6.103	2.441	11.893	5.632	4.399	11.627
45:04.7	213	1.498	15.614	3.456	2.642	11.453	6.094	2.441	11.894	5.631	4.397	11.643
45:17.3	225.6	1.498	15.552	3.455	2.644	11.456	6.099	2.44	11.89	5.629	4.4	11.627
45:30.5	238.801	1.495	15.495	3.449	2.643	11.455	6.097	2.439	11.892	5.627	4.401	11.65
45:44.9	253.2	1.5	15.432	3.461	2.643	11.459	6.097	2.44	11.888	5.627	4.398	11.61
45:59.9	268.2	1.503	15.376	3.466	2.643	11.459	6.097	2.44	11.889	5.627	4.396	11.627
46:15.5	283.8	1.505	15.319	3.472	2.643	11.459	6.097	2.441	11.887	5.631	4.4	11.616
46:32.3	300.6	1.503	15.254	3.467	2.643	11.462	6.096	2.44	11.888	5.627	4.397	11.636
46:50.3	318.601	1.501	15.193	3.463	2.641	11.464	6.092	2.44	11.888	5.628	4.397	11.635
47:08.9	337.2	1.502	15.136	3.465	2.642	11.463	6.094	2.439	11.889	5.625	4.395	11.616
47:29.3	357.6	1.498	15.076	3.456	2.642	11.464	6.094	2.438	11.887	5.625	4.393	11.638
47:50.3	378.6	1.502	15.023	3.464	2.64	11.466	6.09	2.438	11.884	5.623	4.396	11.644
48:12.5	400.8	1.501	14.971	3.462	2.641	11.466	6.093	2.439	11.882	5.626	4.395	11.645
48:36.5	424.8	1.5	14.918	3.46	2.641	11.467	6.092	2.438	11.885	5.623	4.395	11.655
49:01.7	450	1.503	14.865	3.466	2.641	11.465	6.092	2.438	11.887	5.623	4.395	11.629
49:28.1	476.4	1.499	14.815	3.459	2.64	11.467	6.091	2.437	11.883	5.621	4.395	11.635
49:56.3	504.6	1.497	14.763	3.452	2.642	11.469	6.093	2.442	11.905	5.633	4.394	11.621
50:26.3	534.6	1.546	14.713	3.566	2.641	11.466	6.093	2.439	11.881	5.625	4.398	11.627
50:58.1	566.4	1.568	14.664	3.617	2.643	11.466	6.095	2.44	11.881	5.629	4.396	11.646
51:31.7	600	1.499	14.615	3.458	2.641	11.469	6.091	2.436	11.88	5.618	4.394	11.641
52:07.7	636	1.479	14.574	3.411	2.641	11.468	6.093	2.438	11.88	5.625	4.395	11.646
52:43.7	672	1.477	14.544	3.407	2.639	11.466	6.087	2.436	11.879	5.619	4.393	11.643
53:25.7	714	1.476	14.494	3.404	2.64	11.466	6.09	2.438	11.879	5.623	4.396	11.638
54:07.7	756	1.476	14.451	3.404	2.64	11.468	6.09	2.438	11.875	5.623	4.394	11.638
54:49.7	798	1.475	14.41	3.401	2.64	11.469	6.089	2.436	11.872	5.619	4.395	11.646
55:37.7	846	1.475	14.364	3.403	2.639	11.466	6.088	2.437	11.873	5.622	4.396	11.635
56:31.7	900	1.478	14.316	3.408	2.639	11.467	6.087	2.438	11.872	5.623	4.395	11.637
57:19.7	948	1.477	14.28	3.408	2.64	11.464	6.089	2.437	11.872	5.621	4.394	11.62
58:19.7	1008	1.478	14.236	3.409	2.64	11.463	6.091	2.437	11.869	5.621	4.396	11.655
59:19.7	1068	1.476	14.203	3.405	2.639	11.461	6.088	2.436	11.871	5.619	4.395	11.629
00:19.7	1128	1.474	14.169	3.4	2.64	11.457	6.09	2.436	11.87	5.62	4.396	11.633
01:25.7	1194	1.475	14.131	3.402	2.637	11.458	6.082	2.436	11.87	5.618	4.392	11.612
02:37.7	1266	1.472	14.092	3.396	2.64	11.456	6.089	2.437	11.87	5.62	4.39	11.643
03:55.7	1344	1.476	14.075	3.405	2.638	11.455	6.086	2.435	11.864	5.616	4.392	11.641
05:13.7	1422	1.473	14.065	3.397	2.643	11.452	6.097	2.444	11.861	5.638	4.403	11.623
06:37.7	1506	1.472	14.045	3.396	2.638	11.45	6.085	2.435	11.862	5.616	4.394	11.624
08:07.7	1596	1.516	14.01	3.498	2.637	11.446	6.082	2.435	11.861	5.616	4.391	11.602
09:43.7	1692	1.473	13.995	3.397	2.636	11.446	6.081	2.434	11.859	5.614	4.39	11.607
11:19.7	1788	1.48	13.967	3.414	2.636	11.443	6.081	2.434	11.859	5.614	4.391	11.628

13:07.7	1896	1.483	13.935	3.421	2.636	11.443	6.08	2.433	11.857	5.613	4.389	11.641
15:01.7	2010	1.488	13.897	3.433	2.637	11.439	6.083	2.434	11.855	5.615	4.392	11.624
17:01.7	2130	1.494	13.87	3.447	2.636	11.438	6.08	2.433	11.855	5.612	4.392	11.64
19:01.7	2250	1.503	13.852	3.467	2.636	11.439	6.08	2.434	11.855	5.613	4.393	11.611
21:01.7	2370	1.51	13.843	3.484	2.636	11.435	6.081	2.436	11.851	5.619	4.389	11.621
23:01.8	2490.058	1.513	13.822	3.49	2.635	11.434	6.079	2.435	11.846	5.616	4.392	11.608

10406167	10398264	10398264	10398264
Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69ft
Depth	Pres	Temp	Depth
ft	PSI	C	ft
LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHEMICAL
G-A-2	ESM-5	ESM-5	ESM-5
ESM-6 pun	ESM-6 pun	ESM-6 pun	ESM-6 pump test
10.164			
10.17	2.845	11.822	6.562
10.161	2.845	11.832	6.563
10.166	2.845	11.828	6.563
10.165	2.843	11.841	6.559
10.165	2.846	11.829	6.564
10.165	2.847	11.849	6.567
10.17	2.848	11.834	6.57
10.165	2.846	11.824	6.564
10.162	2.845	11.831	6.563
10.169	2.845	11.845	6.563
10.165	2.846	11.852	6.564
10.159	2.844	11.864	6.561
10.162	2.846	11.858	6.565
10.172	2.846	11.886	6.566
10.167	2.847	11.856	6.567
10.17	2.847	11.864	6.566
10.17	2.848	11.869	6.568
10.168	2.845	11.85	6.563
10.164	2.847	11.87	6.567
10.17	2.846	11.87	6.564
10.169	2.846	11.853	6.564
10.166	2.847	11.856	6.567
10.161	2.848	11.864	6.569
10.169	2.847	11.854	6.566
10.17	2.847	11.85	6.567
10.169	2.846	11.858	6.564
10.164	2.847	11.868	6.566
10.163	2.846	11.887	6.564
10.171	2.845	11.848	6.562
10.162	2.844	11.854	6.561
10.165	2.849	11.875	6.572
10.17	2.845	11.839	6.562
10.165	2.846	11.847	6.565
10.165	2.844	11.853	6.561
10.161	2.846	11.857	6.565
10.167	2.844	11.836	6.56
10.16	2.846	11.831	6.565
10.17	2.845	11.86	6.563
10.165	2.846	11.831	6.565
10.161	2.845	11.85	6.562
10.168	2.845	11.838	6.562
10.166	2.845	11.853	6.562

10.167	2.846	11.844	6.564
10.165	2.844	11.837	6.561
10.162	2.846	11.842	6.565
10.164	2.845	11.841	6.563
10.161	2.845	11.852	6.563
10.158	2.844	11.845	6.56
10.163	2.846	11.844	6.565
10.158	2.843	11.844	6.558
10.161	2.845	11.825	6.562
10.166	2.844	11.845	6.561
10.154	2.846	11.854	6.565
10.159	2.846	11.862	6.564
10.158	2.846	11.828	6.565
10.159	2.845	11.831	6.564
10.158	2.845	11.846	6.562
10.16	2.845	11.839	6.563
10.158	2.843	11.846	6.559
10.16	2.844	11.847	6.561
10.152	2.843	11.845	6.559
10.162	2.844	11.826	6.56
10.155	2.842	11.838	6.556
10.154	2.841	11.837	6.553
10.157	2.841	11.872	6.553
10.152	2.843	11.83	6.558
10.161	2.844	11.836	6.56
10.153	2.842	11.847	6.557
10.15	2.842	11.84	6.556
10.156	2.843	11.822	6.557
10.157	2.841	11.85	6.553
10.15	2.843	11.845	6.557
10.15	2.842	11.831	6.555
10.16	2.84	11.827	6.55
10.142	2.841	11.824	6.553
10.147	2.838	11.816	6.547
10.152	2.84	11.832	6.551
10.151	2.84	11.843	6.55
10.149	2.841	11.83	6.553
10.147	2.838	11.831	6.547
10.143	2.84	11.817	6.55
10.149	2.84	11.829	6.55
10.151	2.836	11.816	6.543
10.146	2.837	11.835	6.543
10.141	2.837	11.816	6.545
10.149	2.836	11.813	6.543
10.143	2.839	11.836	6.547
10.142	2.836	11.826	6.541
10.138	2.836	11.821	6.541
10.134	2.836	11.803	6.541
10.139	2.835	11.824	6.539
10.137	2.832	11.824	6.534
10.139	2.834	11.817	6.538
10.138	2.836	11.836	6.542
10.138	2.833	11.836	6.536
10.136	2.832	11.825	6.533
10.144	2.835	11.81	6.539
10.139	2.835	11.834	6.541
10.135	2.834	11.836	6.537
10.138	2.833	11.82	6.535
10.132	2.833	11.804	6.535
10.14	2.833	11.807	6.534
10.135	2.835	11.806	6.539
10.137	2.832	11.798	6.532
10.141	2.835	11.821	6.539
10.138	2.832	11.814	6.532
10.135	2.833	11.808	6.534
10.14	2.832	11.807	6.533
10.137	2.832	11.811	6.533
10.139	2.831	11.831	6.53
10.131	2.83	11.802	6.528
10.126	2.831	11.797	6.531
10.13	2.831	11.811	6.53
10.156	2.826	11.805	6.518
10.135	2.83	11.801	6.528
10.128	2.831	11.812	6.529
10.127	2.828	11.807	6.523
10.13	2.83	11.816	6.527

10.124	2.829	11.811	6.526
10.132	2.826	11.794	6.52
10.131	2.828	11.813	6.523
10.133	2.828	11.809	6.524
10.123	2.827	11.792	6.522
10.131	2.829	11.8	6.525

Report Dat 7/1/2015 3:20:07 PM (Eastern Daylight Time)
Report Use baigler
Report Cor BAIGLER
Pump Test ESM-6_070115ii
Virtual Her HERMIT
First Data I 00:11.3
Last Data F 19:00.4

Export Tim Eastern Daylight Time
Export Inte Export By Selected Interval: 7/1/2015 3:00:11.000 PM to 7/1/2015 3:19:00.999 PM
Export Tim TimeStamps referenced to log from TROLL: 10125133 (ESM-6)
Export Tim Last Known Value

HERMIT Notes:

Time Stam	User Name	Note

		10125133	10125133	10125133	10135569	10135569	10135569	10406167	10406167	10406167	10398264	10398264
		Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69
		Pres	Temp	Depth	Pres	Temp	Depth	Pres	Temp	Depth	Pres	Temp
		PSI	C	ft	PSI	C	ft	PSI	C	ft	PSI	C
		LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE
		ESM-6	ESM-6	ESM-6	CDW-3	CDW-3	CDW-3	G-A-2	G-A-2	G-A-2	ESM-5	ESM-5
Date and T	Elapsed Tir	ESM-6_pur	ESM-6_pur	ESM-6_pur	ESM-6_pur	ESM-6_pur	ESM-6_pur	ESM-6_pur	ESM-6_pur	ESM-6_pur	ESM-6_pur	ESM-6_pur
00:11.7	0	1.73	16.991	3.991	2.646	11.436	6.104					
00:11.9	0.251	1.729	17.006	3.989	2.644	11.449	6.098					
00:12.2	0.501	1.732	17.02	3.995	2.645	11.456	6.102	4.398	11.602	10.144		
00:12.4	0.751	1.729	17.032	3.989	2.645	11.467	6.101	4.399	11.599	10.147		
00:12.7	1.001	1.73	17.039	3.991	2.644	11.473	6.099	4.397	11.594	10.142	2.835	11.805
00:12.9	1.251	1.73	17.044	3.99	2.644	11.478	6.1	4.398	11.607	10.145	2.837	11.79
00:13.2	1.501	1.731	17.046	3.993	2.645	11.48	6.1	4.398	11.619	10.145	2.834	11.813
00:13.4	1.751	1.731	17.051	3.992	2.644	11.484	6.098	4.399	11.636	10.147	2.839	11.773
00:13.7	2.001	1.731	17.058	3.994	2.643	11.487	6.098	4.397	11.636	10.143	2.836	11.793
00:13.9	2.251	1.732	17.06	3.996	2.645	11.49	6.101	4.399	11.635	10.147	2.836	11.785
00:14.2	2.501	1.73	17.064	3.991	2.645	11.494	6.102	4.399	11.638	10.147	2.836	11.809
00:14.4	2.751	1.731	17.064	3.993	2.643	11.494	6.097	4.399	11.638	10.147	2.836	11.813
00:14.7	3.001	1.732	17.066	3.994	2.643	11.498	6.098	4.399	11.648	10.146	2.834	11.802
00:14.9	3.251	1.732	17.071	3.996	2.643	11.497	6.097	4.4	11.608	10.149	2.836	11.797
00:15.2	3.501	1.731	17.071	3.992	2.644	11.499	6.098	4.399	11.635	10.146	2.837	11.794
00:15.4	3.751	1.732	17.077	3.995	2.644	11.502	6.099	4.4	11.63	10.148	2.836	11.811
00:15.7	4.001	1.733	17.073	3.998	2.645	11.504	6.101	4.397	11.662	10.143	2.836	11.83
00:15.9	4.251	1.732	17.074	3.996	2.644	11.502	6.098	4.396	11.645	10.141	2.837	11.831
00:16.2	4.501	1.73	17.079	3.991	2.642	11.505	6.094	4.397	11.644	10.142	2.835	11.803
00:16.4	4.751	1.732	17.081	3.994	2.643	11.508	6.097	4.4	11.663	10.149	2.836	11.822
00:16.7	5.001	1.73	17.085	3.991	2.643	11.507	6.096	4.399	11.654	10.147	2.835	11.817
00:16.9	5.251	1.731	17.083	3.993	2.643	11.509	6.096	4.397	11.655	10.143	2.836	11.825
00:17.2	5.501	1.731	17.085	3.994	2.643	11.511	6.096	4.4	11.626	10.149	2.835	11.814
00:17.4	5.751	1.731	17.085	3.993	2.643	11.509	6.097	4.398	11.649	10.146	2.836	11.806
00:17.7	6.001	1.732	17.087	3.995	2.644	11.501	6.099	4.397	11.641	10.141	2.835	11.82
00:18.0	6.361	1.731	17.077	3.992	2.644	11.501	6.099	4.398	11.647	10.144	2.835	11.817
00:18.4	6.721	1.731	17.075	3.993	2.644	11.497	6.098	4.395	11.646	10.139	2.836	11.801
00:18.8	7.141	1.73	17.068	3.991	2.644	11.493	6.098	4.399	11.622	10.146	2.836	11.828
00:19.2	7.561	1.719	17.066	3.966	2.644	11.489	6.099	4.399	11.646	10.147	2.835	11.807
00:19.6	7.981	1.722	17.064	3.972	2.644	11.489	6.098	4.397	11.642	10.144	2.835	11.795
00:20.1	8.461	1.704	17.061	3.93	2.643	11.484	6.096	4.398	11.619	10.144	2.835	11.803
00:20.7	9.001	1.687	17.055	3.891	2.643	11.481	6.097	4.397	11.627	10.142	2.836	11.851
00:21.1	9.481	1.677	17.057	3.868	2.644	11.481	6.098	4.396	11.643	10.141	2.837	11.838
00:21.7	10.081	1.666	17.053	3.843	2.645	11.475	6.102	4.397	11.635	10.143	2.836	11.796
00:22.3	10.681	1.65	17.049	3.805	2.644	11.477	6.098	4.398	11.638	10.145	2.834	11.809
00:22.9	11.281	1.639	17.051	3.781	2.644	11.476	6.098	4.398	11.626	10.145	2.834	11.825
00:23.6	11.94	1.625	17.046	3.748	2.644	11.47	6.098	4.401	11.616	10.151	2.835	11.822
00:24.3	12.661	1.622	17.047	3.741	2.648	11.469	6.108	4.396	11.652	10.139	2.834	11.825
00:25.1	13.44	1.616	17.043	3.728	2.644	11.473	6.098	4.398	11.652	10.145	2.834	11.811
00:25.9	14.221	1.607	17.043	3.706	2.645	11.47	6.101	4.398	11.64	10.144	2.835	11.799
00:26.7	15.061	1.593	17.044	3.673	2.645	11.465	6.102	4.398	11.654	10.144	2.835	11.818
00:27.6	15.961	1.578	17.044	3.641	2.645	11.461	6.101	4.398	11.643	10.144	2.835	11.808
00:28.6	16.92	1.564	17.041	3.607	2.645	11.458	6.1	4.398	11.635	10.145	2.834	11.806
00:29.5	17.88	1.548	17.041	3.571	2.644	11.459	6.099	4.397	11.652	10.143	2.838	11.809
00:30.6	18.961	1.515	17.041	3.496	2.645	11.455	6.101	4.398	11.64	10.145	2.837	11.794
00:31.8	20.101	1.484	17.039	3.422	2.643	11.455	6.096	4.398	11.616	10.146	2.836	11.819
00:33.0	21.301	1.444	17.042	3.332	2.643	11.454	6.097	4.397	11.634	10.141	2.834	11.803
00:34.2	22.561	1.41	17.042	3.251	2.645	11.454	6.1	4.397	11.612	10.141	2.836	11.824

00:35.5	23.881	1.378	17.038	3.178	2.645	11.455	6.1	4.398	11.646	10.146	2.835	11.805
00:37.0	25.321	1.346	17.036	3.104	2.644	11.451	6.098	4.396	11.644	10.14	2.835	11.801
00:38.5	26.821	1.314	17.039	3.03	2.642	11.45	6.095	4.396	11.606	10.141	2.836	11.813
00:40.0	28.38	1.285	17.038	2.965	2.641	11.451	6.092	4.397	11.614	10.142	2.836	11.786
00:41.7	30.061	1.256	17.037	2.897	2.643	11.452	6.096	4.397	11.619	10.143	2.835	11.811
00:43.5	31.861	1.227	17.038	2.831	2.64	11.45	6.089	4.398	11.615	10.144	2.833	11.794
00:45.4	33.721	1.202	17.037	2.772	2.642	11.448	6.095	4.396	11.656	10.14	2.834	11.806
00:47.4	35.761	1.18	17.038	2.722	2.641	11.45	6.092	4.394	11.625	10.135	2.833	11.8
00:49.5	37.86	1.164	17.038	2.684	2.64	11.448	6.089	4.397	11.61	10.141	2.832	11.817
00:51.7	40.08	1.14	17.037	2.63	2.641	11.448	6.091	4.397	11.653	10.142	2.835	11.811
00:54.2	42.566	1.122	17.033	2.588	2.641	11.448	6.093	4.396	11.647	10.139	2.835	11.783
00:56.7	45.001	1.108	17.039	2.555	2.642	11.446	6.094	4.396	11.595	10.14	2.833	11.817
00:59.3	47.641	1.091	17.03	2.517	2.642	11.446	6.094	4.396	11.63	10.14	2.834	11.796
01:02.1	50.461	1.08	17.026	2.492	2.639	11.455	6.088	4.396	11.621	10.139	2.835	11.781
01:05.1	53.461	1.067	17.021	2.461	2.64	11.45	6.09	4.396	11.635	10.141	2.833	11.795
01:08.3	56.64	1.055	17.029	2.435	2.64	11.449	6.091	4.398	11.663	10.145	2.835	11.79
01:11.7	60	1.044	17.014	2.408	2.641	11.446	6.091	4.393	11.614	10.134	2.834	11.803
01:15.3	63.6	1.032	16.995	2.381	2.639	11.447	6.088	4.394	11.637	10.135	2.835	11.808
01:19.1	67.421	1.026	16.993	2.366	2.64	11.444	6.09	4.396	11.643	10.14	2.831	11.801
01:23.1	71.4	1.015	16.963	2.341	2.64	11.441	6.089	4.395	11.632	10.138	2.83	11.791
01:27.3	75.6	1.021	16.947	2.354	2.639	11.441	6.088	4.393	11.627	10.133	2.833	11.796
01:31.5	79.8	1.028	16.934	2.372	2.641	11.444	6.091	4.396	11.613	10.14	2.833	11.79
01:36.3	84.6	1.044	16.912	2.408	2.641	11.441	6.091	4.395	11.629	10.137	2.832	11.775
01:41.7	90	1.052	16.892	2.426	2.64	11.441	6.089	4.395	11.613	10.138	2.833	11.795
01:46.5	94.8	1.054	16.847	2.431	2.639	11.441	6.088	4.394	11.617	10.136	2.836	11.786
01:52.5	100.801	1.063	16.822	2.451	2.639	11.44	6.087	4.395	11.624	10.137	2.835	11.789
01:58.5	106.8	1.065	16.775	2.457	2.64	11.439	6.09	4.395	11.626	10.139	2.833	11.792
02:04.5	112.8	1.07	16.738	2.468	2.64	11.433	6.089	4.4	11.628	10.149	2.833	11.792
02:11.1	119.4	1.073	16.717	2.474	2.64	11.437	6.09	4.392	11.627	10.131	2.833	11.781
02:18.3	126.6	1.072	16.658	2.472	2.639	11.431	6.088	4.393	11.632	10.134	2.832	11.772
02:26.1	134.4	1.077	16.6	2.484	2.639	11.435	6.087	4.394	11.612	10.136	2.831	11.781
02:34.1	142.488	1.053	16.568	2.428	2.639	11.433	6.087	4.394	11.611	10.135	2.832	11.792
02:42.3	150.6	1.022	16.504	2.357	2.635	11.431	6.078	4.393	11.606	10.133	2.831	11.799
02:51.3	159.6	1.005	16.443	2.318	2.636	11.431	6.081	4.394	11.605	10.136	2.83	11.784
03:00.9	169.2	0.995	16.384	2.294	2.636	11.431	6.08	4.393	11.614	10.132	2.831	11.771
03:10.5	178.8	0.994	16.327	2.293	2.634	11.43	6.075	4.388	11.581	10.121	2.83	11.77
03:21.3	189.6	0.989	16.264	2.281	2.635	11.428	6.078	4.388	11.621	10.121	2.827	11.791
03:32.7	201	0.987	16.202	2.276	2.635	11.428	6.078	4.39	11.582	10.127	2.828	11.803
03:44.7	213	0.988	16.138	2.278	2.638	11.428	6.084	4.39	11.589	10.126	2.828	11.767
03:57.3	225.6	0.989	16.07	2.28	2.634	11.427	6.076	4.388	11.621	10.123	2.823	11.776
04:10.5	238.8	0.987	16.009	2.278	2.633	11.425	6.072	4.389	11.576	10.124	2.825	11.798
04:24.9	253.2	0.983	15.943	2.269	2.63	11.426	6.067	4.388	11.623	10.121	2.828	11.79
04:39.9	268.203	0.984	15.876	2.27	2.634	11.426	6.075	4.386	11.619	10.118	2.825	11.792
04:55.5	283.8	0.983	15.811	2.268	2.635	11.426	6.079	4.388	11.621	10.122	2.823	11.801
05:12.3	300.6	0.985	15.755	2.273	2.651	11.426	6.114	4.389	11.608	10.124	2.825	11.773
05:30.3	318.602	1.003	15.691	2.314	2.634	11.425	6.076	4.389	11.613	10.125	2.824	11.796
05:48.9	337.2	1.056	15.632	2.436	2.634	11.424	6.075	4.388	11.58	10.121	2.828	11.78
06:09.3	357.6	1.063	15.572	2.451	2.632	11.424	6.07	4.39	11.582	10.126	2.826	11.75
06:30.3	378.6	1.065	15.515	2.456	2.632	11.422	6.072	4.385	11.617	10.114	2.824	11.774
06:52.5	400.8	0.997	15.463	2.299	2.637	11.423	6.082	4.391	11.619	10.128	2.825	11.786
07:16.5	424.802	0.981	15.421	2.263	2.636	11.422	6.08	4.388	11.616	10.122	2.826	11.772
07:41.7	450	0.984	15.371	2.271	2.636	11.423	6.08	4.39	11.633	10.126	2.827	11.787
08:08.1	476.4	0.979	15.333	2.259	2.635	11.425	6.079	4.387	11.616	10.12	2.828	11.781
08:36.3	504.6	0.976	15.28	2.251	2.631	11.422	6.07	4.386	11.618	10.116	2.827	11.785
09:06.3	534.6	0.937	15.23	2.162	2.629	11.421	6.064	4.387	11.607	10.119	2.825	11.778
09:38.1	566.4	0.991	15.182	2.286	2.627	11.422	6.059	4.383	11.593	10.109	2.821	11.798
10:11.7	600	1.002	15.129	2.311	2.631	11.422	6.069	4.385	11.63	10.114	2.822	11.759
10:47.7	636	0.867	15.091	2.001	2.625	11.419	6.055	4.384	11.615	10.112	2.821	11.782
11:23.7	672	0.911	15.055	2.101	2.632	11.417	6.071	4.386	11.599	10.117	2.824	11.776
12:05.7	714	0.939	14.998	2.167	2.631	11.42	6.069	4.385	11.616	10.116	2.822	11.772
12:47.7	756	0.82	14.958	1.89	2.629	11.417	6.064	4.382	11.613	10.107	2.822	11.77
13:29.7	798	0.823	14.922	1.898	2.63	11.418	6.067	4.38	11.583	10.103	2.82	11.775
14:17.7	846	0.786	14.874	1.814	2.63	11.419	6.067	4.384	11.641	10.113	2.821	11.778
15:11.7	900	0.753	14.82	1.737	2.63	11.418	6.067	4.383	11.598	10.111	2.817	11.784
15:59.7	948	0.71	14.781	1.638	2.632	11.416	6.071	4.387	11.65	10.119	2.817	11.778
16:59.7	1008	0.674	14.747	1.554	2.629	11.416	6.064	4.384	11.595	10.112	2.82	11.767
17:59.7	1068	0.608	14.699	1.402	2.627	11.417	6.06	4.387	11.607	10.119	2.819	11.787
18:59.7	1128	0.581	14.658	1.34	2.628	11.415	6.063	4.383	11.619	10.109	2.817	11.792

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Report Dat 7/1/2015 1:37:22 PM (Eastern Daylight Time)
Report Use baigler
Report Cor BAIGLER
Pump Test ESM-6_070115
Virtual Her ESM-6_pump
First Data I 28:51.0
Last Data F 36:22.5

Export Tim Eastern Daylight Time
Export Inte Export By Selected Interval: 7/1/2015 1:28:50.000 PM to 7/1/2015 1:36:22.999 PM
Export Tim TimeStamps referenced to log from TROLL: 10171278 (ESM-6)
Export Tim Last Known Value

HERMIT Notes:

Time Stam	User Name	Note

		10171278	10171278	10171278	10135569	10135569	10135569	10125133	10125133	10125133	10406167	10406167
		Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69
		Pres	Temp	Depth	Pres	Temp	Depth	Pres	Temp	Depth	Pres	Temp
		PSI	C	ft	PSI	C	ft	PSI	C	ft	PSI	C
		LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE
		ESM-6	ESM-6	ESM-6	CDW-3	CDW-3	CDW-3	G-B-1	G-B-1	G-B-1	G-A-2	G-A-2
Date and T	Elapsed Tir	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec
28:51.0	0	1.529	13.773	3.528								
28:51.2	0.251	1.532	13.793	3.534								
28:51.5	0.501	1.53	13.809	3.53	2.635	11.431	6.078					
28:51.7	0.751	1.534	13.819	3.539	2.636	11.449	6.08	2.435	11.843	5.616		
28:52.0	1.012	1.532	13.828	3.534	2.635	11.465	6.079	2.434	11.863	5.615		
28:52.2	1.251	1.532	13.833	3.534	2.635	11.473	6.079	2.436	11.874	5.619	4.39	11.619
28:52.5	1.501	1.529	13.838	3.526	2.635	11.483	6.079	2.435	11.886	5.616	4.39	11.635
28:52.7	1.751	1.53	13.845	3.53	2.635	11.485	6.079	2.435	11.893	5.616	4.39	11.655
28:53.0	2.019	1.529	13.844	3.526	2.636	11.489	6.08	2.434	11.897	5.614	4.39	11.613
28:53.2	2.251	1.532	13.848	3.534	2.636	11.495	6.079	2.433	11.902	5.613	4.389	11.604
28:53.5	2.501	1.529	13.849	3.528	2.636	11.498	6.081	2.434	11.908	5.615	4.39	11.631
28:53.7	2.751	1.532	13.852	3.534	2.633	11.502	6.074	2.435	11.913	5.616	4.389	11.644
28:54.0	3.001	1.53	13.856	3.529	2.634	11.505	6.077	2.434	11.913	5.615	4.39	11.633
28:54.2	3.251	1.533	13.858	3.536	2.636	11.506	6.08	2.435	11.918	5.618	4.387	11.658
28:54.5	3.556	1.532	13.88	3.535	2.635	11.507	6.079	2.433	11.919	5.613	4.39	11.638
28:54.8	3.775	1.535	13.871	3.54	2.634	11.511	6.076	2.434	11.925	5.615	4.39	11.633
28:55.0	4.001	1.55	13.875	3.576	2.634	11.514	6.077	2.434	11.925	5.614	4.389	11.642
28:55.2	4.251	1.569	13.875	3.619	2.632	11.515	6.071	2.432	11.926	5.61	4.39	11.66
28:55.5	4.501	1.582	13.873	3.648	2.633	11.517	6.074	2.434	11.926	5.614	4.389	11.672
28:55.7	4.751	1.601	13.872	3.692	2.633	11.517	6.073	2.433	11.931	5.612	4.389	11.671
28:56.0	5.001	1.626	13.872	3.752	2.633	11.519	6.073	2.433	11.935	5.613	4.389	11.66
28:56.2	5.251	1.655	13.875	3.818	2.632	11.522	6.07	2.433	11.931	5.613	4.39	11.641
28:56.5	5.501	1.685	13.872	3.886	2.632	11.521	6.07	2.435	11.934	5.616	4.389	11.662
28:56.7	5.751	1.713	13.873	3.951	2.632	11.522	6.071	2.432	11.939	5.611	4.389	11.63
28:57.0	6.001	1.741	13.875	4.015	2.632	11.523	6.072	2.43	11.936	5.606	4.391	11.655
28:57.3	6.361	1.778	13.862	4.102	2.633	11.527	6.073	2.433	11.938	5.613	4.39	11.66
28:57.7	6.721	1.814	13.857	4.185	2.634	11.517	6.075	2.434	11.937	5.615	4.388	11.655
28:58.1	7.152	1.858	13.854	4.287	2.635	11.513	6.077	2.433	11.93	5.612	4.391	11.682
28:58.5	7.561	1.897	13.843	4.376	2.636	11.507	6.079	2.434	11.926	5.614	4.39	11.645
28:59.0	7.981	1.941	13.845	4.478	2.635	11.506	6.078	2.433	11.922	5.612	4.391	11.641
28:59.4	8.461	1.979	13.843	4.564	2.633	11.505	6.073	2.434	11.916	5.613	4.389	11.656
29:00.0	9.001	2.018	13.837	4.655	2.634	11.499	6.075	2.433	11.916	5.612	4.39	11.664
29:00.5	9.481	2.054	13.836	4.738	2.634	11.495	6.076	2.433	11.914	5.612	4.389	11.658
29:01.1	10.081	2.084	13.831	4.806	2.635	11.496	6.078	2.432	11.908	5.61	4.39	11.669
29:01.7	10.681	2.102	13.83	4.848	2.636	11.49	6.081	2.433	11.909	5.612	4.391	11.652
29:02.3	11.281	2.107	13.831	4.86	2.635	11.486	6.078	2.433	11.905	5.613	4.39	11.649
29:02.9	11.941	2.112	13.823	4.872	2.636	11.485	6.081	2.434	11.9	5.615	4.39	11.643
29:03.6	12.661	2.11	13.82	4.867	2.636	11.485	6.08	2.434	11.904	5.615	4.392	11.646
29:04.4	13.441	2.114	13.819	4.876	2.636	11.482	6.081	2.434	11.896	5.614	4.391	11.651
29:05.2	14.221	2.116	13.826	4.881	2.637	11.479	6.082	2.433	11.894	5.612	4.391	11.663
29:06.0	15.061	2.119	13.817	4.887	2.635	11.479	6.079	2.435	11.891	5.616	4.39	11.644
29:06.9	15.961	2.121	13.815	4.893	2.636	11.477	6.08	2.432	11.892	5.611	4.393	11.605
29:07.9	16.921	2.122	13.816	4.895	2.637	11.475	6.082	2.434	11.891	5.615	4.39	11.633
29:08.9	17.881	2.124	13.812	4.899	2.638	11.473	6.085	2.433	11.888	5.612	4.392	11.643
29:09.9	18.961	2.122	13.81	4.896	2.637	11.476	6.082	2.435	11.89	5.617	4.391	11.642
29:11.1	20.101	2.129	13.806	4.911	2.637	11.474	6.082	2.434	11.884	5.615	4.392	11.645
29:12.3	21.301	2.13	13.805	4.913	2.637	11.473	6.083	2.433	11.886	5.613	4.393	11.645
29:13.5	22.561	2.134	13.807	4.922	2.638	11.47	6.085	2.433	11.882	5.613	4.393	11.594

29:14.9	23.881	2.136	13.808	4.927	2.638	11.471	6.084	2.434	11.885	5.614	4.392	11.637
29:16.3	25.321	2.138	13.804	4.93	2.639	11.468	6.086	2.436	11.88	5.619	4.389	11.638
29:17.8	26.821	2.138	13.798	4.933	2.639	11.468	6.086	2.434	11.879	5.615	4.391	11.633
29:19.4	28.381	2.142	13.801	4.94	2.641	11.467	6.092	2.436	11.878	5.618	4.39	11.639
29:21.0	30.061	2.142	13.804	4.94	2.64	11.466	6.091	2.436	11.88	5.62	4.393	11.633
29:22.8	31.861	2.141	13.799	4.939	2.639	11.464	6.087	2.435	11.878	5.617	4.394	11.637
29:24.7	33.721	2.141	13.799	4.938	2.638	11.461	6.086	2.437	11.879	5.62	4.395	11.637
29:26.7	35.761	2.144	13.798	4.946	2.638	11.463	6.086	2.436	11.877	5.618	4.391	11.635
29:28.8	37.861	2.145	13.798	4.949	2.64	11.462	6.089	2.436	11.875	5.619	4.393	11.658
29:31.1	40.081	2.146	13.795	4.95	2.64	11.459	6.089	2.437	11.875	5.621	4.392	11.62
29:33.5	42.481	2.148	13.79	4.956	2.641	11.458	6.092	2.436	11.873	5.618	4.394	11.627
29:36.0	45	2.146	13.791	4.95	2.641	11.462	6.092	2.438	11.873	5.624	4.395	11.649
29:38.6	47.641	2.149	13.791	4.956	2.643	11.459	6.095	2.436	11.871	5.619	4.394	11.624
29:41.4	50.461	2.148	13.791	4.955	2.64	11.457	6.091	2.437	11.871	5.621	4.396	11.62
29:44.4	53.461	2.149	13.79	4.956	2.64	11.457	6.089	2.437	11.871	5.622	4.398	11.637
29:47.6	56.641	2.148	13.786	4.955	2.646	11.457	6.104	2.439	11.87	5.626	4.395	11.613
29:51.0	60	2.149	13.787	4.957	2.646	11.456	6.103	2.438	11.867	5.624	4.395	11.621
29:54.6	63.601	2.149	13.783	4.957	2.642	11.456	6.094	2.439	11.869	5.626	4.395	11.648
29:58.2	67.2	2.148	13.786	4.954	2.642	11.456	6.094	2.439	11.866	5.625	4.394	11.625
30:02.4	71.401	2.15	13.784	4.96	2.642	11.457	6.095	2.439	11.867	5.626	4.397	11.647
30:06.6	75.601	2.152	13.778	4.965	2.642	11.455	6.095	2.438	11.867	5.623	4.396	11.635
30:10.8	79.8	2.15	13.778	4.959	2.642	11.454	6.093	2.44	11.866	5.627	4.397	11.634
30:15.6	84.601	2.151	13.776	4.961	2.645	11.452	6.101	2.436	11.862	5.62	4.397	11.633
30:21.0	90	2.151	13.77	4.963	2.646	11.452	6.102	2.438	11.864	5.625	4.398	11.619
30:25.8	94.8	2.151	13.77	4.962	2.646	11.448	6.102	2.44	11.864	5.629	4.401	11.618
30:31.8	100.8	2.15	13.769	4.96	2.647	11.449	6.106	2.441	11.862	5.63	4.401	11.61
30:37.8	106.8	2.151	13.763	4.962	2.645	11.447	6.101	2.441	11.86	5.63	4.397	11.626
30:43.8	112.8	2.151	13.76	4.961	2.645	11.445	6.102	2.441	11.86	5.63	4.398	11.616
30:50.4	119.4	2.152	13.76	4.964	2.648	11.447	6.107	2.44	11.859	5.628	4.4	11.624
30:57.6	126.612	2.152	13.754	4.963	2.646	11.448	6.103	2.44	11.858	5.628	4.399	11.641
31:05.4	134.4	2.152	13.752	4.963	2.645	11.446	6.102	2.439	11.859	5.625	4.396	11.627
31:13.2	142.2	2.152	13.747	4.964	2.644	11.447	6.099	2.438	11.855	5.625	4.395	11.624
31:21.6	150.601	2.153	13.748	4.966	2.645	11.443	6.101	2.44	11.855	5.627	4.399	11.591
31:30.6	159.601	2.152	13.74	4.964	2.646	11.443	6.103	2.437	11.855	5.621	4.398	11.644
31:40.2	169.2	2.154	13.741	4.967	2.645	11.442	6.1	2.44	11.853	5.629	4.401	11.636
31:49.8	178.8	2.152	13.736	4.965	2.645	11.442	6.1	2.44	11.852	5.627	4.397	11.626
32:00.6	189.6	2.153	13.732	4.966	2.645	11.442	6.101	2.441	11.854	5.629	4.401	11.62
32:12.0	201.001	2.152	13.728	4.963	2.644	11.442	6.098	2.438	11.85	5.623	4.398	11.651
32:24.0	213	2.154	13.725	4.969	2.647	11.439	6.106	2.44	11.848	5.627	4.399	11.634
32:36.6	225.6	2.151	13.72	4.962	2.646	11.439	6.104	2.441	11.848	5.63	4.398	11.602
32:49.8	238.803	2.153	13.72	4.966	2.645	11.437	6.101	2.443	11.865	5.634	4.401	11.62
33:04.2	253.2	2.154	13.716	4.968	2.648	11.44	6.108	2.442	11.848	5.633	4.398	11.628
33:19.2	268.2	2.153	13.713	4.967	2.647	11.436	6.106	2.442	11.849	5.632	4.4	11.642
33:34.8	283.8	2.153	13.71	4.965	2.649	11.436	6.111	2.441	11.847	5.631	4.401	11.611
33:51.6	300.6	2.155	13.709	4.97	2.648	11.437	6.108	2.442	11.844	5.633	4.4	11.607
34:09.6	318.6	2.155	13.711	4.972	2.647	11.437	6.106	2.442	11.844	5.633	4.4	11.632
34:28.2	337.2	2.155	13.716	4.971	2.646	11.435	6.105	2.44	11.844	5.628	4.4	11.638
34:48.6	357.6	2.155	13.724	4.971	2.645	11.434	6.102	2.439	11.843	5.626	4.401	11.608
35:09.6	378.6	2.156	13.73	4.973	2.647	11.434	6.105	2.441	11.844	5.631	4.399	11.611
35:31.8	400.853	2.156	13.743	4.973	2.648	11.433	6.109	2.442	11.843	5.633	4.402	11.632
35:55.8	424.8	2.156	13.76	4.972	2.648	11.433	6.108	2.441	11.841	5.631	4.402	11.625
36:21.0	450	2.154	13.778	4.968	2.646	11.433	6.103	2.441	11.843	5.63	4.398	11.61

10406167	10398264	10398264	10398264
Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69ft
Depth	Pres	Temp	Depth
ft	PSI	C	ft
LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHEMICAL
G-A-2	ESM-5	ESM-5	ESM-5
ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_recovery
10.126			
10.127	2.826	11.829	6.52
10.127	2.827	11.812	6.522
10.127	2.828	11.806	6.524
10.123	2.826	11.803	6.519
10.127	2.828	11.829	6.523
10.123	2.827	11.814	6.521
10.126	2.827	11.83	6.521
10.119	2.828	11.829	6.524
10.127	2.83	11.806	6.529
10.125	2.829	11.828	6.524
10.125	2.829	11.832	6.525
10.126	2.828	11.841	6.523
10.125	2.827	11.826	6.522
10.125	2.828	11.834	6.523
10.123	2.828	11.806	6.522
10.127	2.827	11.834	6.52
10.123	2.827	11.835	6.521
10.125	2.827	11.822	6.521
10.127	2.827	11.823	6.521
10.127	2.827	11.845	6.521
10.121	2.827	11.826	6.521
10.127	2.829	11.836	6.525
10.126	2.829	11.856	6.525
10.13	2.828	11.83	6.523
10.125	2.828	11.836	6.523
10.127	2.828	11.822	6.522
10.124	2.828	11.827	6.524
10.126	2.826	11.828	6.518
10.129	2.828	11.844	6.522
10.126	2.829	11.812	6.525
10.127	2.828	11.845	6.523
10.13	2.827	11.832	6.52
10.129	2.825	11.848	6.517
10.128	2.827	11.83	6.521
10.126	2.827	11.825	6.522
10.132	2.827	11.818	6.522
10.126	2.827	11.815	6.521
10.131	2.826	11.806	6.519
10.129	2.826	11.82	6.519
10.131	2.825	11.85	6.517
10.133	2.826	11.816	6.519
10.133	2.827	11.834	6.52

10.131	2.828	11.836	6.522
10.124	2.828	11.775	6.524
10.129	2.829	11.825	6.527
10.127	2.828	11.809	6.523
10.133	2.829	11.833	6.526
10.135	2.831	11.807	6.529
10.137	2.829	11.816	6.525
10.128	2.828	11.805	6.524
10.133	2.829	11.811	6.526
10.132	2.828	11.822	6.524
10.136	2.829	11.796	6.525
10.138	2.828	11.806	6.524
10.135	2.83	11.825	6.527
10.14	2.829	11.787	6.526
10.145	2.83	11.822	6.528
10.138	2.83	11.815	6.528
10.139	2.831	11.817	6.531
10.138	2.831	11.797	6.53
10.136	2.831	11.795	6.531
10.143	2.831	11.796	6.53
10.141	2.831	11.812	6.53
10.142	2.831	11.809	6.529
10.143	2.83	11.773	6.528
10.146	2.833	11.786	6.535
10.151	2.832	11.809	6.533
10.151	2.835	11.822	6.539
10.142	2.835	11.811	6.538
10.145	2.836	11.81	6.541
10.149	2.835	11.815	6.539
10.148	2.835	11.813	6.54
10.141	2.833	11.792	6.535
10.137	2.834	11.806	6.537
10.146	2.831	11.801	6.53
10.145	2.834	11.807	6.538
10.151	2.834	11.818	6.538
10.142	2.836	11.828	6.543
10.152	2.836	11.826	6.541
10.145	2.834	11.795	6.538
10.146	2.835	11.806	6.54
10.145	2.837	11.807	6.543
10.151	2.836	11.779	6.541
10.146	2.835	11.818	6.54
10.15	2.837	11.806	6.543
10.152	2.836	11.811	6.541
10.149	2.839	11.796	6.548
10.149	2.838	11.811	6.546
10.15	2.838	11.791	6.546
10.151	2.838	11.815	6.547
10.147	2.838	11.8	6.547
10.154	2.837	11.796	6.543
10.155	2.838	11.795	6.546
10.144	2.838	11.795	6.546

Report Dat 7/1/2015 3:36:32 PM (Eastern Daylight Time)
Report Use baigler
Report Cor BAIGLER
Pump Test ESM-6_070115ii
Virtual Her HERMIT
First Data I 28:54.3
Last Data F 35:36.2

Export Tim Eastern Daylight Time
Export Inte Export By Selected Interval: 7/1/2015 3:28:54.000 PM to 7/1/2015 3:35:36.999 PM
Export Tim TimeStamps referenced to log from TROLL: 10125133 (ESM-6)
Export Tim Last Known Value

HERMIT Notes:

Time Stam	User Name	Note

		10125133	10125133	10125133	10135569	10135569	10135569	10406167	10406167	10406167	10398264	10398264
		Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69
		Pres	Temp	Depth	Pres	Temp	Depth	Pres	Temp	Depth	Pres	Temp
		PSI	C	ft	PSI	C	ft	PSI	C	ft	PSI	C
		LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE
		ESM-6	ESM-6	ESM-6	CDW-3	CDW-3	CDW-3	G-A-2	G-A-2	G-A-2	ESM-5	ESM-5
Date and T	Elapsed Tir	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec	ESM-6_rec
28:54.3	0	0.493	14.354	1.138								
28:54.5	0.251	0.493	14.374	1.138								
28:54.8	0.501	0.492	14.391	1.134	2.626	11.426	6.058					
28:55.0	0.751	0.489	14.401	1.129	2.625	11.45	6.056					
28:55.3	1.001	0.489	14.406	1.128	2.625	11.46	6.056	4.379	11.621	10.1		
28:55.5	1.251	0.487	14.415	1.124	2.625	11.47	6.054	4.379	11.629	10.101	2.815	11.811
28:55.8	1.501	0.494	14.415	1.14	2.625	11.479	6.055	4.38	11.628	10.104	2.817	11.779
28:56.0	1.751	0.491	14.424	1.133	2.626	11.486	6.057	4.38	11.613	10.102	2.817	11.817
28:56.3	2.001	0.494	14.424	1.14	2.624	11.486	6.053	4.379	11.649	10.1	2.816	11.798
28:56.5	2.251	0.495	14.427	1.141	2.623	11.494	6.05	4.38	11.645	10.104	2.816	11.805
28:56.8	2.501	0.493	14.43	1.137	2.624	11.498	6.052	4.379	11.646	10.101	2.818	11.819
28:57.0	2.751	0.495	14.431	1.142	2.625	11.498	6.056	4.382	11.644	10.108	2.818	11.804
28:57.3	3.001	0.521	14.434	1.202	2.624	11.501	6.053	4.38	11.669	10.103	2.818	11.819
28:57.5	3.251	0.518	14.436	1.195	2.624	11.507	6.052	4.379	11.633	10.102	2.817	11.814
28:57.8	3.501	0.533	14.44	1.23	2.626	11.507	6.057	4.38	11.649	10.104	2.815	11.81
28:58.0	3.751	0.553	14.441	1.276	2.625	11.509	6.056	4.379	11.63	10.1	2.817	11.839
28:58.3	4.001	0.58	14.442	1.337	2.625	11.51	6.055	4.378	11.641	10.099	2.817	11.831
28:58.5	4.251	0.602	14.444	1.388	2.623	11.513	6.051	4.378	11.676	10.099	2.816	11.788
28:58.8	4.501	0.62	14.444	1.43	2.625	11.514	6.055	4.379	11.632	10.101	2.817	11.811
28:59.0	4.751	0.64	14.446	1.477	2.625	11.515	6.056	4.38	11.649	10.102	2.818	11.84
28:59.3	5.001	0.658	14.443	1.517	2.624	11.518	6.052	4.378	11.641	10.098	2.816	11.81
28:59.5	5.253	0.684	14.462	1.578	2.623	11.518	6.051	4.379	11.667	10.101	2.815	11.834
28:59.8	5.536	0.699	14.462	1.613	2.624	11.519	6.052	4.379	11.624	10.1	2.818	11.813
29:00.0	5.756	0.714	14.459	1.647	2.625	11.521	6.055	4.379	11.624	10.1	2.818	11.812
29:00.3	6.001	0.738	14.449	1.702	2.623	11.522	6.051	4.378	11.688	10.098	2.819	11.831
29:00.6	6.361	0.756	14.449	1.745	2.625	11.525	6.055	4.381	11.633	10.105	2.818	11.839
29:01.1	6.808	0.788	14.435	1.818	2.625	11.514	6.056	4.382	11.66	10.109	2.817	11.828
29:01.4	7.141	0.81	14.436	1.869	2.626	11.511	6.057	4.381	11.646	10.106	2.818	11.824
29:01.8	7.56	0.839	14.43	1.936	2.626	11.506	6.057	4.379	11.653	10.101	2.818	11.82
29:02.3	7.98	0.863	14.43	1.991	2.626	11.501	6.057	4.383	11.682	10.11	2.818	11.82
29:02.7	8.461	0.895	14.422	2.064	2.626	11.5	6.056	4.378	11.678	10.1	2.817	11.825
29:03.3	9	0.93	14.416	2.144	2.626	11.496	6.057	4.383	11.644	10.109	2.817	11.819
29:03.8	9.48	0.956	14.417	2.205	2.627	11.492	6.059	4.379	11.677	10.101	2.816	11.824
29:04.4	10.081	0.992	14.412	2.287	2.625	11.492	6.055	4.381	11.661	10.106	2.819	11.82
29:05.0	10.681	1.023	14.412	2.359	2.626	11.488	6.058	4.378	11.651	10.099	2.816	11.825
29:05.6	11.281	1.054	14.409	2.431	2.625	11.485	6.056	4.382	11.657	10.107	2.819	11.82
29:06.2	11.94	1.086	14.406	2.506	2.626	11.484	6.057	4.38	11.633	10.103	2.819	11.824
29:06.9	12.66	1.123	14.4	2.59	2.625	11.482	6.056	4.381	11.666	10.106	2.817	11.814
29:07.7	13.44	1.159	14.398	2.674	2.627	11.48	6.06	4.382	11.642	10.108	2.819	11.804
29:08.5	14.22	1.192	14.394	2.749	2.625	11.478	6.054	4.381	11.649	10.105	2.817	11.822
29:09.3	15.06	1.227	14.394	2.829	2.626	11.477	6.057	4.381	11.64	10.106	2.819	11.805
29:10.3	16.027	1.263	14.391	2.914	2.628	11.473	6.061	4.384	11.662	10.112	2.816	11.803
29:11.2	16.92	1.298	14.387	2.994	2.628	11.474	6.061	4.381	11.641	10.106	2.817	11.807
29:12.2	17.88	1.327	14.385	3.061	2.627	11.472	6.06	4.385	11.638	10.115	2.817	11.831
29:13.2	18.96	1.365	14.381	3.148	2.628	11.47	6.062	4.381	11.653	10.107	2.817	11.828
29:14.4	20.101	1.399	14.377	3.228	2.629	11.469	6.064	4.382	11.616	10.108	2.819	11.819
29:15.6	21.3	1.426	14.376	3.289	2.632	11.467	6.07	4.384	11.646	10.113	2.818	11.809
29:16.8	22.56	1.458	14.372	3.362	2.631	11.466	6.07	4.385	11.645	10.115	2.817	11.804

29:18.2	23.88	1.485	14.366	3.424	2.632	11.467	6.072	4.386	11.633	10.117	2.818	11.8
29:19.6	25.321	1.513	14.363	3.489	2.632	11.463	6.07	4.386	11.628	10.117	2.818	11.823
29:21.1	26.821	1.536	14.36	3.543	2.633	11.461	6.074	4.387	11.63	10.119	2.819	11.817
29:22.7	28.461	1.564	14.355	3.607	2.634	11.463	6.076	4.387	11.621	10.12	2.817	11.806
29:24.3	30.06	1.58	14.352	3.645	2.636	11.464	6.08	4.387	11.658	10.12	2.817	11.811
29:26.1	31.86	1.603	14.345	3.698	2.635	11.46	6.077	4.388	11.625	10.123	2.819	11.816
29:28.0	33.722	1.618	14.342	3.733	2.636	11.458	6.081	4.391	11.628	10.129	2.82	11.819
29:30.0	35.773	1.634	14.336	3.769	2.636	11.456	6.08	4.387	11.656	10.118	2.821	11.806
29:32.1	37.86	1.646	14.329	3.797	2.638	11.458	6.085	4.391	11.649	10.128	2.819	11.806
29:34.4	40.08	1.659	14.325	3.827	2.637	11.456	6.083	4.387	11.652	10.119	2.819	11.811
29:36.8	42.481	1.669	14.317	3.85	2.637	11.456	6.083	4.39	11.638	10.127	2.82	11.799
29:39.3	45	1.676	14.311	3.866	2.639	11.455	6.087	4.387	11.617	10.12	2.821	11.831
29:41.9	47.64	1.683	14.304	3.883	2.637	11.452	6.082	4.384	11.638	10.113	2.823	11.809
29:44.7	50.461	1.69	14.296	3.897	2.637	11.455	6.082	4.395	11.635	10.137	2.821	11.797
29:47.7	53.46	1.692	14.286	3.902	2.637	11.453	6.083	4.387	11.641	10.119	2.823	11.789
29:50.9	56.64	1.695	14.28	3.91	2.637	11.451	6.082	4.388	11.677	10.122	2.822	11.798
29:54.3	60	1.696	14.273	3.912	2.639	11.449	6.086	4.391	11.611	10.129	2.82	11.799
29:57.9	63.6	1.698	14.264	3.918	2.638	11.448	6.085	4.39	11.643	10.126	2.819	11.805
30:01.5	67.2	1.701	14.253	3.922	2.639	11.448	6.087	4.388	11.63	10.122	2.82	11.782
30:05.7	71.4	1.702	14.242	3.927	2.638	11.448	6.086	4.39	11.644	10.126	2.823	11.798
30:09.9	75.6	1.701	14.233	3.925	2.639	11.444	6.086	4.388	11.625	10.122	2.821	11.808
30:14.1	79.8	1.701	14.222	3.923	2.639	11.446	6.088	4.39	11.666	10.126	2.823	11.797
30:18.9	84.6	1.703	14.214	3.929	2.636	11.444	6.081	4.388	11.613	10.121	2.823	11.806
30:24.3	90	1.703	14.203	3.928	2.637	11.441	6.083	4.39	11.625	10.125	2.822	11.778
30:29.1	94.8	1.701	14.193	3.924	2.636	11.441	6.081	4.388	11.611	10.123	2.818	11.843
30:35.1	100.8	1.704	14.18	3.93	2.635	11.439	6.078	4.388	11.638	10.121	2.822	11.812
30:41.1	106.8	1.701	14.165	3.923	2.637	11.441	6.084	4.39	11.6	10.126	2.821	11.788
30:47.1	112.803	1.703	14.154	3.928	2.637	11.439	6.084	4.39	11.614	10.126	2.824	11.804
30:53.7	119.4	1.704	14.147	3.93	2.638	11.44	6.085	4.389	11.612	10.125	2.821	11.812
31:00.9	126.6	1.705	14.134	3.934	2.639	11.436	6.088	4.394	11.635	10.135	2.822	11.8
31:08.7	134.4	1.706	14.124	3.935	2.64	11.433	6.089	4.393	11.648	10.134	2.823	11.81
31:16.5	142.2	1.708	14.113	3.939	2.64	11.433	6.091	4.393	11.661	10.132	2.829	11.817
31:24.9	150.6	1.708	14.1	3.94	2.641	11.433	6.092	4.394	11.612	10.136	2.825	11.794
31:33.9	159.6	1.707	14.093	3.937	2.643	11.43	6.095	4.392	11.609	10.13	2.828	11.805
31:43.5	169.2	1.707	14.085	3.937	2.642	11.432	6.094	4.395	11.644	10.137	2.829	11.808
31:53.1	178.8	1.71	14.076	3.943	2.644	11.429	6.099	4.394	11.608	10.135	2.828	11.789
32:03.9	189.6	1.708	14.069	3.939	2.646	11.43	6.102	4.397	11.624	10.141	2.831	11.786
32:15.3	201	1.708	14.067	3.941	2.644	11.428	6.098	4.396	11.616	10.14	2.83	11.783
32:27.3	213	1.707	14.061	3.937	2.642	11.43	6.094	4.393	11.584	10.133	2.83	11.795
32:39.9	225.6	1.702	14.059	3.925	2.639	11.425	6.087	4.392	11.614	10.131	2.828	11.771
32:53.1	238.8	1.696	14.061	3.911	2.64	11.424	6.089	4.383	11.63	10.11	2.821	11.789
33:07.5	253.2	1.702	14.064	3.925	2.631	11.425	6.069	4.383	11.619	10.109	2.818	11.766
33:22.5	268.2	1.706	14.072	3.935	2.633	11.426	6.074	4.384	11.623	10.113	2.823	11.796
33:38.1	283.8	1.708	14.077	3.94	2.638	11.423	6.084	4.392	11.615	10.132	2.828	11.781
33:54.9	300.6	1.708	14.092	3.94	2.643	11.424	6.098	4.397	11.621	10.142	2.828	11.776
34:12.9	318.602	1.711	14.13	3.946	2.645	11.421	6.1	4.398	11.594	10.144	2.831	11.773
34:31.5	337.2	1.708	14.136	3.939	2.644	11.422	6.099	4.394	11.635	10.135	2.831	11.784
34:51.9	357.6	1.703	14.169	3.928	2.643	11.422	6.097	4.394	11.63	10.135	2.833	11.727
35:12.9	378.6	1.711	14.208	3.946	2.649	11.422	6.111	4.413	11.613	10.179	2.833	11.782
35:35.1	400.8	1.71	14.262	3.945	2.647	11.417	6.105	4.398	11.616	10.145	2.833	11.796

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Pres(G) 69ft
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Report Dat 6/30/2015 8:52:44 AM (Eastern Daylight Time)
Report Use baigler
Report Cor BAIGLER
Pump Test ESM-3BD_063015
Virtual Her ESM-3BD TEST
First Data I 19:27.2
Last Data F 51:04.5

Export Tim Eastern Daylight Time
Export Inte Export By Selected Interval: 6/30/2015 8:19:27.000 AM to 6/30/2015 8:51:04.999 AM
Export Tim TimeStamps referenced to log from TROLL: 10398264 (ESM-3BD)
Export Tim Last Known Value

HERMIT Notes:

Time Stam	User Name	Note

		10398264	10398264	10398264	10125133	10125133	10125133	10406167	10406167	10406167
		Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69ft
		Pres	Temp	Depth	Pres	Temp	Depth	Pres	Temp	Depth
		PSI	C	ft	PSI	C	ft	PSI	C	ft
		LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHEMICAL
		ESM-3BD	ESM-3BD	ESM-3BD	ESM-3	ESM-3	ESM-3	CDW-5	CDW-5	CDW-5
Date and T	Elapsed Tir	PUMP TES	PUMP TES	PUMP TES	PUMP TES	PUMP TES	PUMP TES	PUMP TES	PUMP TES	PUMP TEST
19:27.2	0	25.573	12.455	58.987						
19:27.4	0.25	25.567	12.459	58.975						
19:27.7	0.5	25.558	12.473	58.954						
19:27.9	0.75	25.552	12.461	58.94						
19:28.2	1	25.55	12.471	58.935						
19:28.4	1.25	25.546	12.474	58.926	0.932	12.185	2.15			
19:28.7	1.5	25.541	12.476	58.914	0.931	12.206	2.147	2.147	12.095	4.952
19:28.9	1.75	25.536	12.465	58.903	0.932	12.215	2.15	2.148	12.075	4.954
19:29.2	2	25.531	12.456	58.892	0.932	12.226	2.15	2.148	12.096	4.955
19:29.4	2.25	25.529	12.474	58.887	0.931	12.233	2.149	2.146	12.077	4.951
19:29.7	2.5	25.526	12.473	58.88	0.934	12.24	2.154	2.148	12.077	4.955
19:29.9	2.75	25.522	12.472	58.871	0.932	12.245	2.15	2.148	12.092	4.954
19:30.2	3	25.518	12.469	58.861	0.932	12.248	2.15	2.15	12.065	4.96
19:30.4	3.25	25.513	12.463	58.851	0.931	12.253	2.148	2.147	12.096	4.953
19:30.7	3.5	25.512	12.482	58.848	0.932	12.253	2.15	2.147	12.084	4.953
19:30.9	3.75	25.506	12.489	58.834	0.932	12.257	2.149	2.149	12.121	4.956
19:31.2	4	25.502	12.484	58.825	0.93	12.261	2.144	2.147	12.106	4.952
19:31.4	4.25	25.499	12.492	58.818	0.932	12.264	2.149	2.148	12.098	4.954
19:31.7	4.5	25.498	12.486	58.814	0.932	12.263	2.151	2.148	12.105	4.954
19:31.9	4.75	25.494	12.495	58.805	0.931	12.266	2.148	2.146	12.097	4.951
19:32.2	5	25.49	12.476	58.798	0.932	12.268	2.149	2.149	12.067	4.957
19:32.4	5.25	25.483	12.484	58.782	0.931	12.269	2.148	2.148	12.101	4.956
19:32.7	5.5	25.48	12.477	58.774	0.932	12.271	2.15	2.149	12.102	4.958
19:32.9	5.75	25.478	12.497	58.769	0.93	12.275	2.146	2.146	12.098	4.95
19:33.2	6	25.473	12.508	58.757	0.931	12.272	2.148	2.15	12.118	4.959
19:33.5	6.36	25.465	12.498	58.739	0.932	12.277	2.149	2.146	12.081	4.95
19:33.9	6.72	25.457	12.46	58.721	0.93	12.277	2.145	2.147	12.112	4.952
19:34.3	7.14	25.45	12.487	58.704	0.93	12.278	2.146	2.148	12.102	4.954
19:34.7	7.56	25.437	12.481	58.674	0.93	12.271	2.145	2.149	12.117	4.957
19:35.1	7.98	25.427	12.484	58.652	0.931	12.268	2.147	2.148	12.101	4.954
19:35.6	8.46	25.427	12.456	58.651	0.93	12.262	2.146	2.148	12.097	4.955
19:36.2	9	25.415	12.483	58.623	0.932	12.257	2.15	2.148	12.099	4.954
19:36.6	9.48	25.404	12.475	58.598	0.929	12.252	2.144	2.147	12.09	4.953
19:37.2	10.08	25.39	12.478	58.565	0.932	12.246	2.149	2.147	12.107	4.951
19:37.8	10.68	25.372	12.494	58.525	0.93	12.25	2.146	2.148	12.101	4.956
19:38.4	11.28	25.361	12.493	58.5	0.932	12.241	2.149	2.147	12.095	4.953
19:39.1	11.94	25.354	12.467	58.483	0.931	12.24	2.148	2.147	12.054	4.954
19:39.8	12.66	25.335	12.459	58.439	0.932	12.24	2.15	2.146	12.098	4.951
19:40.6	13.44	25.312	12.476	58.386	0.932	12.238	2.15	2.148	12.1	4.955
19:41.4	14.22	25.296	12.467	58.349	0.931	12.236	2.147	2.149	12.103	4.957
19:42.2	15.06	25.282	12.496	58.317	0.933	12.234	2.151	2.149	12.09	4.957
19:43.1	15.96	25.264	12.465	58.275	0.93	12.231	2.146	2.146	12.097	4.951
19:44.1	16.92	25.252	12.473	58.248	0.931	12.23	2.148	2.15	12.09	4.959
19:45.0	17.88	25.221	12.469	58.176	0.93	12.229	2.146	2.149	12.085	4.956
19:46.1	18.96	25.133	12.476	57.974	0.931	12.227	2.148	2.147	12.078	4.953
19:47.3	20.1	25.097	12.466	57.89	0.931	12.225	2.148	2.149	12.124	4.958
19:48.5	21.3	25.104	12.467	57.906	0.931	12.222	2.148	2.148	12.078	4.955
19:49.7	22.56	25.128	12.462	57.963	0.931	12.223	2.147	2.148	12.113	4.955

19:51.0	23.88	25.1	12.463	57.896	0.931	12.224	2.146	2.148	12.121	4.956
19:52.5	25.32	25.126	12.461	57.958	0.931	12.22	2.148	2.149	12.095	4.956
19:54.0	26.82	25.044	12.47	57.768	0.931	12.219	2.149	2.149	12.079	4.957
19:55.5	28.38	25.003	12.457	57.672	0.931	12.218	2.148	2.149	12.102	4.957
19:57.2	30.06	24.883	12.465	57.396	0.933	12.22	2.152	2.149	12.069	4.957
19:59.0	31.86	24.968	12.465	57.594	0.932	12.217	2.15	2.146	12.09	4.951
20:00.9	33.72	24.983	12.478	57.627	0.929	12.213	2.142	2.148	12.067	4.954
20:02.9	35.76	24.779	12.475	57.158	0.93	12.214	2.146	2.148	12.102	4.954
20:05.0	37.86	24.867	12.453	57.36	0.932	12.215	2.151	2.147	12.1	4.953
20:07.3	40.108	24.712	12.485	57.003	0.931	12.213	2.148	2.149	12.056	4.957
20:09.6	42.48	24.659	12.511	56.881	0.931	12.214	2.148	2.148	12.081	4.954
20:12.2	45	24.728	12.475	57.04	0.931	12.211	2.148	2.146	12.076	4.95
20:14.8	47.64	24.614	12.476	56.776	0.931	12.21	2.147	2.147	12.088	4.953
20:17.6	50.46	24.547	12.442	56.621	0.931	12.21	2.148	2.147	12.106	4.953
20:20.6	53.462	24.489	12.485	56.489	0.932	12.21	2.149	2.147	12.075	4.952
20:23.8	56.64	24.457	12.477	56.414	0.932	12.206	2.149	2.147	12.081	4.952
20:27.2	60	24.503	12.451	56.521	0.931	12.207	2.147	2.146	12.076	4.95
20:30.8	63.6	24.33	12.469	56.121	0.93	12.208	2.144	2.148	12.062	4.955
20:34.4	67.2	24.256	12.47	55.95	0.931	12.204	2.148	2.146	12.068	4.95
20:38.6	71.4	24.171	12.462	55.755	0.931	12.203	2.148	2.145	12.064	4.948
20:42.8	75.6	24.211	12.47	55.846	0.931	12.205	2.148	2.148	12.039	4.954
20:47.0	79.8	24.081	12.458	55.547	0.93	12.201	2.146	2.146	12.079	4.949
20:51.8	84.6	24.136	12.437	55.674	0.931	12.199	2.147	2.147	12.075	4.952
20:57.2	90	23.918	12.459	55.171	0.93	12.199	2.144	2.146	12.071	4.951
21:02.0	94.8	23.894	12.461	55.116	0.931	12.198	2.146	2.147	12.09	4.953
21:08.0	100.8	23.763	12.454	54.812	0.932	12.196	2.15	2.149	12.076	4.956
21:14.0	106.8	23.69	12.45	54.646	0.931	12.2	2.148	2.149	12.076	4.957
21:20.0	112.8	23.618	12.462	54.478	0.932	12.197	2.149	2.147	12.073	4.952
21:26.6	119.4	23.673	12.451	54.606	0.932	12.194	2.149	2.148	12.052	4.954
21:33.8	126.6	23.489	12.442	54.182	0.932	12.197	2.15	2.149	12.077	4.956
21:41.6	134.4	23.374	12.443	53.916	0.931	12.191	2.148	2.148	12.084	4.956
21:49.4	142.2	23.355	12.467	53.872	0.932	12.194	2.149	2.149	12.041	4.957
21:57.8	150.6	23.214	12.468	53.547	0.933	12.189	2.151	2.148	12.042	4.954
22:06.8	159.6	23.125	12.457	53.342	0.931	12.189	2.147	2.148	12.061	4.954
22:16.4	169.2	23.085	12.473	53.25	0.931	12.189	2.148	2.148	12.062	4.954
22:26.0	178.8	22.968	12.465	52.979	0.93	12.189	2.146	2.148	12.053	4.956
22:36.8	189.6	22.859	12.465	52.727	0.931	12.187	2.148	2.147	12.059	4.952
22:48.2	201	22.83	12.459	52.66	0.93	12.185	2.144	2.148	12.051	4.955
23:00.2	213	22.751	12.454	52.478	0.931	12.186	2.147	2.147	12.053	4.953
23:12.8	225.6	22.668	12.447	52.288	0.93	12.185	2.145	2.145	12.051	4.947
23:26.0	238.8	22.542	12.461	51.997	0.931	12.181	2.147	2.148	12.056	4.954
23:40.4	253.2	22.47	12.439	51.831	0.932	12.178	2.15	2.146	12.076	4.951
23:55.4	268.2	22.343	12.464	51.538	0.931	12.178	2.147	2.149	12.07	4.957
24:11.0	283.8	22.281	12.426	51.395	0.932	12.175	2.15	2.18	12.074	5.028
24:27.8	300.6	22.251	12.462	51.326	0.932	12.176	2.15	2.144	12.056	4.946
24:45.8	318.6	22.184	12.457	51.17	0.933	12.177	2.152	2.143	12.083	4.943
25:04.4	337.2	22.091	12.454	50.956	0.932	12.174	2.149	2.147	12.061	4.953
25:24.8	357.6	22.126	12.45	51.037	0.931	12.177	2.149	2.144	12.059	4.946
25:45.8	378.6	22.014	12.472	50.778	0.932	12.173	2.149	2.146	12.067	4.951
26:08.0	400.8	21.948	12.441	50.627	0.932	12.17	2.149	2.147	12.045	4.953
26:32.0	424.8	21.914	12.451	50.549	0.932	12.172	2.15	2.146	12.051	4.95
26:57.2	450	21.952	12.47	50.636	0.932	12.17	2.15	2.145	12.056	4.948
27:23.6	476.4	21.916	12.447	50.553	0.932	12.166	2.149	2.146	12.042	4.949
27:51.8	504.6	21.922	12.439	50.566	0.932	12.162	2.149	2.147	12.031	4.951
28:21.8	534.6	21.941	12.458	50.611	0.931	12.162	2.148	2.144	12.053	4.946
28:53.6	566.4	21.864	12.457	50.433	0.931	12.16	2.148	2.146	12.051	4.95
29:27.2	600	21.896	12.456	50.507	0.932	12.158	2.15	2.144	12.029	4.945
30:03.2	636	21.923	12.445	50.569	0.932	12.155	2.15	2.144	12.043	4.946
30:39.2	672	21.568	12.445	49.75	0.93	12.153	2.145	2.145	12.021	4.948
31:21.2	714	21.558	12.445	49.728	0.932	12.15	2.15	2.144	12.059	4.945
32:03.2	756	21.672	12.444	49.99	0.93	12.151	2.145	2.143	12.052	4.943
32:45.2	798	21.824	12.438	50.339	0.93	12.15	2.145	2.144	12.052	4.945
33:33.2	846	21.903	12.452	50.522	0.93	12.145	2.145	2.132	12.02	4.917
34:27.2	900	21.838	12.43	50.374	0.93	12.143	2.145	2.142	12.053	4.942
35:15.2	948	21.955	12.464	50.643	0.929	12.143	2.144	2.141	12.037	4.939
36:15.2	1008	22.316	12.455	51.475	0.929	12.144	2.144	2.142	12.059	4.941
37:15.2	1068	23.019	12.456	53.097	0.929	12.142	2.143	2.141	12.07	4.939
38:15.2	1128	23.599	12.448	54.434	0.929	12.141	2.144	2.139	12.056	4.933
39:21.2	1194	24.132	12.429	55.665	0.93	12.141	2.144	2.14	12.056	4.937
40:33.2	1266	24.581	12.426	56.7	0.928	12.141	2.141	2.139	12.061	4.935
41:51.2	1344	24.948	12.447	57.546	0.928	12.141	2.142	2.141	12.052	4.939
43:09.2	1422	25.198	12.433	58.122	0.928	12.141	2.142	2.139	12.048	4.935
44:33.2	1506	25.045	12.437	57.771	0.928	12.139	2.141	2.141	12.044	4.938
46:03.2	1596	25.273	12.449	58.297	0.926	12.137	2.135	2.143	12.053	4.942
47:39.2	1692	25.415	12.459	58.623	0.927	12.136	2.138	2.142	12.054	4.94
49:15.2	1788	25.49	12.451	58.797	0.927	12.136	2.138	2.14	12.051	4.936

51:03.2	1896	25.727	12.472	59.343	0.926	12.135	2.137	2.145	12.041	4.947

Report Dat 6/30/2015 9:15:30 AM (Eastern Daylight Time)
Report Use baigler
Report Cor BAIGLER
Pump Test ESM-3BD_063015
Virtual Her ESM-3BD TEST
First Data I 57:45.3
Last Data F 14:34.0

Export Tim Eastern Daylight Time
Export Inte Export By Selected Interval: 6/30/2015 8:57:45.000 AM to 6/30/2015 9:14:34.999 AM
Export Tim TimeStamps referenced to log from TROLL: 10398264 (ESM-3BD)
Export Tim Last Known Value

HERMIT Notes:

Time Stam	User Name	Note

		10398264	10398264	10398264	10125133	10125133	10125133	10406167	10406167	10406167
		Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69	Pres(G) 69ft
		Pres	Temp	Depth	Pres	Temp	Depth	Pres	Temp	Depth
		PSI	C	ft	PSI	C	ft	PSI	C	ft
		LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHE	LEWIS CHEMICAL
		ESM-3BD	ESM-3BD	ESM-3BD	ESM-3	ESM-3	ESM-3	CDW-5	CDW-5	CDW-5
Date and T	Elapsed Tir	ESM-3BD F	ESM-3BD F	ESM-3BD F	ESM-3BD F	ESM-3BD F	ESM-3BD F	ESM-3BD F	ESM-3BD F	ESM-3BD PUMP TEST 2
57:45.3	0	25.629	12.458	59.118						
57:45.6	0.251	25.631	12.441	59.123						
57:45.8	0.501	25.628	12.465	59.115	0.925	12.124	2.134			
57:46.1	0.751	25.63	12.467	59.119	0.926	12.143	2.136	2.141	12.042	4.938
57:46.3	1.001	25.629	12.481	59.117	0.928	12.157	2.14	2.141	12.05	4.938
57:46.6	1.251	25.632	12.457	59.123	0.927	12.166	2.139	2.142	12.046	4.942
57:46.8	1.501	25.627	12.47	59.113	0.928	12.176	2.142	2.142	12.057	4.941
57:47.1	1.751	25.628	12.475	59.116	0.926	12.181	2.137	2.142	12.081	4.94
57:47.3	2.001	25.63	12.476	59.119	0.927	12.185	2.139	2.14	12.084	4.937
57:47.6	2.251	25.629	12.503	59.118	0.927	12.192	2.137	2.142	12.052	4.941
57:47.8	2.501	25.629	12.478	59.117	0.926	12.196	2.136	2.141	12.082	4.94
57:48.1	2.751	25.627	12.487	59.113	0.927	12.197	2.139	2.142	12.08	4.942
57:48.3	3.001	25.569	12.503	58.98	0.926	12.2	2.137	2.142	12.04	4.942
57:48.6	3.251	25.577	12.479	58.997	0.927	12.202	2.138	2.144	12.07	4.945
57:48.8	3.501	25.618	12.467	59.092	0.928	12.206	2.14	2.141	12.095	4.939
57:49.1	3.751	25.656	12.481	59.18	0.928	12.207	2.141	2.143	12.077	4.943
57:49.3	4.001	25.633	12.473	59.126	0.926	12.208	2.135	2.142	12.053	4.94
57:49.6	4.251	25.601	12.481	59.053	0.928	12.214	2.14	2.141	12.07	4.94
57:49.8	4.501	25.562	12.465	58.963	0.927	12.21	2.137	2.142	12.055	4.941
57:50.1	4.751	25.536	12.463	58.903	0.925	12.215	2.134	2.143	12.089	4.943
57:50.3	5.001	25.544	12.484	58.922	0.925	12.215	2.135	2.141	12.119	4.939
57:50.6	5.251	25.561	12.485	58.961	0.927	12.216	2.139	2.143	12.09	4.943
57:50.8	5.501	25.598	12.484	59.046	0.926	12.217	2.137	2.141	12.098	4.94
57:51.1	5.751	25.593	12.466	59.035	0.926	12.219	2.136	2.143	12.087	4.942
57:51.3	6.001	25.557	12.464	58.952	0.927	12.219	2.139	2.143	12.067	4.944
57:51.7	6.361	25.499	12.492	58.819	0.927	12.224	2.139	2.141	12.076	4.938
57:52.0	6.721	25.526	12.495	58.88	0.927	12.214	2.137	2.143	12.055	4.944
57:52.4	7.141	25.481	12.461	58.776	0.928	12.208	2.14	2.144	12.072	4.945
57:52.9	7.561	25.472	12.489	58.755	0.924	12.207	2.132	2.143	12.097	4.944
57:53.3	7.981	25.503	12.48	58.827	0.926	12.199	2.137	2.144	12.095	4.946
57:53.8	8.461	25.444	12.483	58.691	0.926	12.2	2.135	2.141	12.095	4.938
57:54.3	9.001	25.419	12.491	58.632	0.925	12.195	2.134	2.144	12.081	4.945
57:54.8	9.481	25.481	12.478	58.776	0.925	12.191	2.135	2.143	12.076	4.942
57:55.4	10.081	25.438	12.487	58.677	0.924	12.189	2.131	2.143	12.107	4.942
57:56.0	10.681	25.439	12.471	58.679	0.926	12.187	2.135	2.143	12.065	4.943
57:56.6	11.281	25.41	12.481	58.613	0.923	12.183	2.13	2.141	12.087	4.938
57:57.2	11.941	25.412	12.478	58.617	0.924	12.183	2.132	2.142	12.08	4.941
57:58.0	12.661	25.364	12.463	58.506	0.926	12.181	2.137	2.142	12.056	4.94
57:58.7	13.441	25.368	12.458	58.515	0.927	12.179	2.138	2.143	12.079	4.942
57:59.5	14.221	25.374	12.469	58.53	0.926	12.176	2.136	2.143	12.067	4.944
58:00.4	15.061	25.298	12.496	58.355	0.925	12.175	2.135	2.142	12.059	4.942
58:01.3	15.961	25.293	12.46	58.342	0.926	12.173	2.137	2.142	12.095	4.94
58:02.2	16.921	25.29	12.475	58.337	0.926	12.171	2.136	2.143	12.065	4.942
58:03.2	17.881	25.304	12.473	58.367	0.927	12.171	2.139	2.142	12.067	4.941
58:04.3	18.961	25.229	12.477	58.195	0.927	12.168	2.138	2.142	12.066	4.94
58:05.4	20.101	25.25	12.472	58.242	0.926	12.17	2.135	2.143	12.054	4.943
58:06.6	21.301	25.221	12.463	58.176	0.927	12.166	2.138	2.144	12.071	4.946
58:07.9	22.561	25.163	12.465	58.042	0.926	12.167	2.137	2.142	12.062	4.941

58:09.2	23.881	25.155	12.478	58.023	0.925	12.165	2.134	2.144	12.078	4.945
58:10.6	25.321	25.139	12.474	57.988	0.926	12.162	2.137	2.142	12.062	4.94
58:12.1	26.821	25.054	12.481	57.791	0.925	12.163	2.133	2.143	12.066	4.944
58:13.7	28.381	25.067	12.445	57.821	0.926	12.161	2.136	2.141	12.073	4.939
58:15.4	30.061	25.032	12.45	57.739	0.927	12.159	2.137	2.144	12.06	4.946
58:17.2	31.861	24.957	12.48	57.567	0.926	12.162	2.137	2.143	12.079	4.944
58:19.0	33.721	24.919	12.451	57.479	0.925	12.158	2.135	2.145	12.065	4.948
58:21.1	35.761	24.905	12.455	57.447	0.927	12.155	2.137	2.144	12.085	4.945
58:23.2	37.861	24.837	12.466	57.29	0.926	12.159	2.136	2.142	12.062	4.942
58:25.4	40.081	24.854	12.514	57.331	0.927	12.158	2.138	2.142	12.066	4.942
58:27.8	42.481	24.797	12.445	57.199	0.926	12.157	2.136	2.142	12.079	4.942
58:30.3	45	24.745	12.455	57.077	0.926	12.156	2.136	2.142	12.068	4.941
58:32.9	47.641	24.784	12.43	57.168	0.926	12.154	2.136	2.142	12.054	4.94
58:35.8	50.461	24.616	12.453	56.782	0.926	12.156	2.136	2.145	12.056	4.947
58:38.8	53.461	24.552	12.492	56.634	0.926	12.152	2.136	2.142	12.073	4.94
58:41.9	56.641	24.605	12.46	56.755	0.925	12.152	2.133	2.141	12.073	4.938
58:45.3	60	24.468	12.478	56.439	0.926	12.152	2.136	2.141	12.056	4.939
58:48.9	63.601	24.387	12.47	56.251	0.924	12.15	2.131	2.142	12.04	4.94
58:52.5	67.2	24.39	12.465	56.26	0.927	12.151	2.138	2.142	12.08	4.941
58:56.7	71.401	24.362	12.465	56.196	0.925	12.147	2.133	2.142	12.067	4.941
59:00.9	75.601	24.343	12.459	56.15	0.925	12.149	2.133	2.141	12.042	4.939
59:05.1	79.801	24.293	12.46	56.036	0.926	12.149	2.137	2.144	12.034	4.945
59:09.9	84.601	24.193	12.443	55.805	0.926	12.149	2.137	2.143	12.07	4.942
59:15.3	90	24.123	12.453	55.644	0.925	12.143	2.134	2.142	12.075	4.94
59:20.1	94.801	24.111	12.461	55.616	0.926	12.145	2.137	2.144	12.06	4.947
59:26.1	100.801	24.034	12.453	55.437	0.925	12.144	2.134	2.14	12.058	4.937
59:32.1	106.801	23.978	12.473	55.31	0.925	12.145	2.135	2.142	12.065	4.94
59:38.1	112.801	23.959	12.445	55.265	0.926	12.143	2.136	2.141	12.026	4.94
59:44.7	119.4	23.879	12.469	55.08	0.926	12.143	2.136	2.143	12.056	4.942
59:51.9	126.601	23.801	12.475	54.902	0.926	12.142	2.137	2.143	12.062	4.943
59:59.7	134.4	23.783	12.46	54.86	0.926	12.14	2.137	2.143	12.058	4.943
00:07.5	142.2	23.681	12.451	54.623	0.926	12.136	2.135	2.144	12.053	4.946
00:15.9	150.601	23.695	12.473	54.655	0.926	12.137	2.136	2.139	12.056	4.934
00:24.9	159.601	23.601	12.461	54.441	0.926	12.139	2.136	2.144	12.041	4.944
00:34.5	169.2	23.581	12.46	54.394	0.926	12.135	2.137	2.141	12.059	4.938
00:44.1	178.801	23.512	12.453	54.235	0.925	12.137	2.133	2.14	12.064	4.936
00:54.9	189.6	23.579	12.445	54.389	0.926	12.135	2.135	2.144	12.043	4.944
01:06.3	201	23.525	12.453	54.264	0.925	12.133	2.134	2.141	12.031	4.938
01:18.3	213	23.571	12.459	54.371	0.927	12.134	2.139	2.142	12.02	4.941
01:30.9	225.6	23.433	12.459	54.051	0.925	12.133	2.133	2.142	12.033	4.941
01:44.1	238.801	23.447	12.463	54.085	0.924	12.13	2.13	2.142	12.038	4.941
01:58.5	253.2	23.451	12.437	54.093	0.925	12.129	2.133	2.143	12.041	4.943
02:13.5	268.2	23.402	12.458	53.981	0.926	12.129	2.137	2.143	12.033	4.943
02:29.1	283.8	23.414	12.453	54.009	0.927	12.13	2.139	2.145	12.037	4.947
02:45.9	300.6	23.318	12.434	53.787	0.927	12.128	2.138	2.14	12.033	4.937
03:03.9	318.6	23.287	12.468	53.716	0.927	12.127	2.138	2.142	12.038	4.941
03:22.5	337.2	23.351	12.435	53.863	0.925	12.127	2.134	2.141	12.01	4.94
03:42.9	357.6	23.304	12.476	53.755	0.926	12.129	2.135	2.141	12.015	4.938
04:03.9	378.6	23.309	12.444	53.766	0.926	12.128	2.137	2.141	12.066	4.938
04:26.1	400.8	23.249	12.448	53.628	0.925	12.13	2.135	2.141	12.04	4.938
04:50.1	424.8	23.476	12.444	54.152	0.925	12.131	2.134	2.141	12.051	4.939
05:15.3	450	23.757	12.439	54.8	0.925	12.129	2.135	2.139	12.025	4.935
05:41.7	476.4	24.021	12.445	55.407	0.926	12.126	2.136	2.14	12.046	4.937
06:09.9	504.6	24.273	12.46	55.989	0.927	12.126	2.138	2.138	12.033	4.931
06:39.9	534.6	24.502	12.463	56.517	0.924	12.125	2.132	2.142	12.027	4.941
07:11.7	566.4	24.715	12.448	57.01	0.925	12.125	2.134	2.142	12.047	4.94
07:45.3	600	24.906	12.484	57.449	0.927	12.121	2.137	2.14	12.054	4.937
08:21.3	636	25.067	12.448	57.821	0.927	12.12	2.139	2.14	12.028	4.937
08:57.3	672	25.201	12.442	58.131	0.926	12.12	2.135	2.14	12.084	4.936
09:39.3	714	25.323	12.434	58.411	0.926	12.119	2.135	2.139	12.078	4.933
10:21.3	756	25.415	12.453	58.623	0.926	12.12	2.136	2.137	12.082	4.93
11:03.3	798	25.479	12.465	58.772	0.926	12.114	2.136	2.141	12.078	4.938
11:51.3	846	25.53	12.432	58.889	0.925	12.116	2.134	2.141	12.118	4.939
12:45.3	900	25.567	12.449	58.976	0.925	12.116	2.134	2.141	12.109	4.938
13:33.3	948	25.588	12.456	59.024	0.925	12.112	2.135	2.142	12.122	4.941
14:33.3	1008	25.602	12.438	59.055	0.926	12.114	2.137	2.139	12.109	4.935

APPENDIX L: HAZARDOUS WASTE MANIFESTS

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved, OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MP6176353880
2. Page 1 of 1
3. Emergency Response Phone: (877) 818-0087
4. Manifest Tracking Number: 000998937 VES

5. Generator's Name and Mailing Address: CITY OF BOSTON DND, 26 COURT STREET #9, BOSTON, MA 02108
Generator's Site Address (if different than mailing address): CITY OF BOSTON DND, ~~SAME~~ 24 12-24 FAIRMOUNT COURT, HYDE PARK, MA 02136
Generator's Phone: 617 635-0103

6. Transporter 1 Company Name: VEOLIA ES TECHNICAL SOLUTIONS — U.S. EPA ID Number: NJD080631369

7. Transporter 2 Company Name: FREEHOLD CARTAGE INC — U.S. EPA ID Number: NJD054126164

8. Designated Facility Name and Site Address: VEOLIA ES TECHNICAL SOLUTIONS L.L.C., 1 EDEN LANE, FLANDERS, NJ 07836 — U.S. EPA ID Number: NJD980536593
Facility's Phone: 973 347-7111

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. NA3082, HAZARDOUS WASTE, LIQUID, n.o.s., (VINYL CHLORIDE), 9, III, RQ (D043)	2	DM	364 ~~164~~	K	F001	D043	
						F002	PCB2	
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information: ADDENDUM ATTACHED FOR ADDITIONAL TSCA INFORMATION - ER Service Contracted by VESTS -|- 1) ERG:171 W:793743 A:PTA793743 GROUNDWATER W/ PCB'S

O.O.S. Date 07/24/2015

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Allison Roche (on behalf of Boston DND) — Signature: [signature] — Month 7 Day 24 Year 15

16. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: DOUG HOFER — Signature: [signature] — Month 7 Day 24 Year 15
Transporter 2 Printed/Typed Name: David Wanick — Signature: [signature] — Month 8 Day 5 Year 15

18. Discrepancy
18a. Discrepancy Indication Space: ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H141 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Nick Carter — Signature: [signature] — Month 8 Day 5 Year 15

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY — MATERIALS

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

APPENDIX M: PUBLIC NOTIFICATION DOCUMENTATION

COMMITMENT & INTEGRITY
DRIVE RESULTS

40 Shattuck Road, Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

December XX, 2015

Mayor Martin J. Walsh
Boston City Hall
1 City Hall Square
Boston, Massachusetts 02109

Re: Notice of Availability of the Phase III Remedial Action Plan
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Mayor Walsh:

This letter is being sent to you at the request of the City of Boston Department of Neighborhood Development to fulfill the public notification requirements established by the Massachusetts Contingency Plan (MCP - 310 CMR 40.0000). In accordance with the public notification requirements of the MCP, we are notifying you that a Final Phase III Remedial Action Plan (RAP) has been prepared for the above-referenced disposal site. Please find a summary of findings, a statement of conclusions, and a disposal site map enclosed with this letter.

A complete copy of the Phase III RAP will be submitted to the Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office (NERO) located at 205B Lowell Street in Wilmington, Massachusetts after December XX, 2015 and may be available for review on the MassDEP file viewer website (http://public.dep.state.ma.us/wsc_viewer/main.aspx). If it is not available on the MassDEP website, please contact the MassDEP NERO to schedule a file review.

If you have any questions regarding this notification, please feel free to contact me at (978) 482-7871.

Sincerely,

WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

226332.01

Enclosures: Phase III RAP Summary of Findings and Statement of Conclusions
Aerial Photograph with updated Disposal Site Boundary and Monitoring Well Locations

cc: James Smith – City of Boston, Department or Neighborhood Development
Dr. Huy Nguyen, Interim Executive Director – Boston Public Health Commission
MassDEP – Northeast Regional Office

DRAFT

ENCLOSURES: **BWSC122**

PHASE II & PHASE III SUMMARY OF FINDINGS AND STATEMENT OF CONCLUSIONS

SITE PLAN

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Andover, Massachusetts 01810
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T 978.557.8150
F 978.557.7948

PHASE III RAP
SUMMARY OF FINDINGS AND STATEMENT OF CONCLUSIONS
FORMER LEWIS CHEMICAL FACILITY

BACKGROUND

Woodard & Curran prepared a Phase III Remedial Action Plan (Phase III RAP) to identify and evaluate remedial alternatives for the former Lewis Chemical facility located in Hyde Park, Boston, Massachusetts. The Phase III RAP was prepared at the request of the City of Boston Department of Neighborhood Development (Boston DND) and in general accordance with the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). The purpose of the Phase III RAP was to evaluate and select a remedial action alternative (RAA) or combination of RAAs for the releases of oil and hazardous materials (OHM) at the former Lewis Chemical facility.

The Massachusetts Department of Environmental Protection (MassDEP) issued several Release Tracking Numbers (RTNs) including 3-1616, 3-31548, and 3-31697 for historical releases of hazardous materials. The original RTN 3-1616 is currently Tier Classified as a Tier II Disposal Site. The RTN associated with the release of lead in soils on the Department of Conservation and Recreation (DCR) property (RTN 3-31697) was retracted and linked with the primary RTN associated with the DCR property (RTN 3-31548) on October 30, 2015. A new RTN, 3-33111 was issued by MassDEP upon discovery of light non-aqueous phase liquid (LNAPL) in one monitoring well at the Property. The new RTN as well as RTN 3-31548 are being linked with the original RTN (3-1616) with the submittal of this Phase III RAP.

The Phase II Comprehensive Site Assessment (CSA) report identified that concentrations of volatile organic compounds (VOCs), metals, and PCBs (i.e., constituents of concern; COCs) are present in soils, groundwater (overburden and bedrock), sediment, and surface water and pose a significant risk of harm to human health, public welfare, and the environment. Therefore, a conclusion of No Significant Risk (NSR) of harm to the environment as defined by the MCP could not be supported and a Phase III evaluation is required and presented herein. In addition, supplemental data were collected to 1) re-evaluate historical analytical data; 2) conduct bench-scale feasibility evaluations, and 3) conduct pilot tests for certain remedial action alternatives (RAAs).

RESULTS OF THE SUPPLEMENTAL INVESTIGATIONS AND PILOT TESTS FOR THE PHASE III RAP

The results of collecting the supplemental data indicated the following:

- LNAPL is present in a limited aerial extent and less than ½-inch;
- 1,4-dioxane is present but at very low concentrations below historical laboratory reporting limits;
- chlorinated solvents such as PCE, TCE, 1,1,1-TCA, and associated daughter products can be calculated under the carbon peaks and represented under the total C_5-C_8 aliphatic hydrocarbon range; therefore, historical data overestimated concentrations of C_5-C_8 aliphatic hydrocarbons at the disposal site;
- historical PCB groundwater analytical data were not accurate due to sediment and high turbidity in the samples; therefore, PCBs are not a COC in groundwater;
- Natural attenuation processes are occurring in groundwater;
- A significant amount of oxidant and catalyst would be necessary to implement in-situ chemical oxidation;
- PCBs in sediment and pore water of the Neponset River were determined to not be related to the former Lewis Chemical Facility;
- Surface water in the Neponset River is not a media of concern based on background samples and evaluation;

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- VOCs in pore water and sediment will need to be addressed by the RAAs; however, metals will still require further investigation to determine whether the metals are site-related or a background condition;
- Soil vapor extraction was an effective RAA for vadose zone soil;
- Groundwater extraction and treatment will not be an effective RAA;
- The disposal site boundary was updated

SUMMARY OF THE SELECTED RAAs/STRATEGY

The selected remedial strategy for the overburden soil and groundwater, LNAPL, bedrock groundwater, and pore water is a combination of RAAs that will lead to a condition of No Significant Risk and a Permanent Solution for the disposal site. Please note that surface water was ruled out as a media of concern and sediment will require further investigation for metals relative to background concentrations. Therefore, the strategy does not contemplate RAAs for sediment at this time. Implementation of an AUL with these alternatives will be required should COPC concentrations not achieve or approach background. It is believed that the selected remedial strategy (#1) will achieve the site-specific remedial goals. The RAAs included in strategy #1 are as follows:

- **Overburden Soil, LNAPL, Groundwater, and Pore Water** – In-Situ Thermal Remediation, soil excavation with stabilization, and AUL.
- **Bedrock** – MNA and AUL.

These RAAs were selected based on their implementability, effectiveness and reliability in reaching a Permanent Solution, as well as the costs, risks, benefits and timing involved with implementing each alternative. A Permanent Solution will be achieved upon completion of the RAAs, when the disposal site RAOs are attained, COPC concentrations are below risk-based cleanup levels and a condition of No Significant Risk of harm to human health, public welfare, and the environment is achieved.

COMPLETION STATEMENT

This Phase III RAP was prepared in general accordance with the MCP and meets the Phase III RAP performance standards summarized in the MCP. RAAs, which are reasonably likely to achieve a Permanent Solution, were evaluated in the Phase III RAP. Pre-design investigations will be completed to refine the scope and design of the RAAs prior to preparing the Phase IV Remedy Implementation Plan. Woodard & Curran anticipates that the selected remedial strategy will eventually achieve a condition of No Significant Risk to human health, safety, public welfare, and the environment via the excavation and stabilization of soil, in-situ thermal remediation of VOCs and LNAPL in the overburden, MNA in bedrock groundwater, and implementation of an AUL.

Legend

Site Features

- Approximate Fence Line
- Tax Parcel
- Updated Disposal Site Boundart
- Overburden Groundwater Contour (Dashed Where Inferred)

Locations

- Monitoring Well
- Bedrock Monitoring Well
- Piezometer
- Groundwater Flow Direction

WALNUT ST (2171)
MAPLE ST (22744)
27 WALNUT ST (2174)
31 MAPLE ST (2173)
40 WALNUT ST (2122)
WALNUT ST (2221)
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY FAIRMOUNT COMMUTER RAIL LINE
WALNUT ST (10022402)
New Disposal Site Boundary
ESM-7 83.76
G-B-3 83.61
ESM-8 87.78
ESM-8B
ESM-13
ESM-10 NM
ESM-14A NM
12 FAIRMOUNT CT (10531)
G-A-2 83.62
CDW-2 NS
G-D-3 83.70
ESM-1 84.81
G-E-2 83.80
ESM-15 83.66
G-B-1 83.61
G-C-1 83.61
CDW-3 NS
PZ-9S NM
PZ-9D NM
PZ-8D NM
PZ-8S NM
ESM-6 83.47
ESM-5B
ESM-5 83.60
G-D-1 83.66
ESM-16 NM
ESM-12 85.86
ESM-9 NM
OW-1 NM
ESM-4 83.57
CDW-4B NM
PZ-02D NM
PZ-02S NM
ESM-2 84.45
ESM-11 NM
ESM-3 83.88
CDW-5 NS
ESM-3B
PZ-01D NM
PZ-01S NM
PZ-03S NM
PZ-03D NM
FAIRMOUNT AV (10529)
FAIRMOUNT AV (10535)
FAIRMOUNT CT (10531)
FAIRMOUNT AVE
NEPONSET RIVER FLOW
PZ-07 NM
NEPONSET RIVER (11038)
PZ-06 NM
PZ-05 NM
PZ-04 NM
735 TRUMAN HW (10537)
731 TRUMAN HW (10539)
731 TRUMAN HW (10539)
733 TRUMAN HW (10538)
727 TRUMAN HW (10536)
691 TRUMAN HW (10535-1)
(11037)

0 20 40 80 Feet

Notes:
1. Orthophotography provided by USGS, 2013.
2. See city of Boston Assessor's Plan Ward #18, Block #199, Lot #10598 and #10601 for site reference. Site is known as #12 and #0 Fairmount Court.
3. See S.C.R.D. Book 8338, pg 650, and LC 38601 for site property line information
4. Parcel lines and road lines from MassGIS and City of Boston. Accessed July 14, 2015.
5. Monitoring locations, fence line, river bank georeferenced from Figure 2 of Phase II CSA report, April 22, 2015.
6. Groundwater contours are based on water levels of overburden wells measured on June 29, 2015 prior to the start of the hydraulic evaluation. Measured groundwater elevations used to create groundwater contours are provided underneath the corresponding measurement location.
NM indicates that a groundwater elevation was not measured
NS indicates that no survey data is available.

FORMER LEWIS CHEMICAL FACILITY
CITY OF BOSTON DND

Monitoring Well Locations & Groundwater Contour Plan - June 29, 2015

FIGURE 2

WOODARD &CURRAN

SCALE: 1 " = 20 '	DOC: Figure_2- GWContourPlan.mxd
DATE: NOVEMBER 2015	PROJECT #: 229286.01
DRAWN BY: SMO	SOURCE: USGS

Date Saved: 11/4/2015 By: Sidney Mong Path: N:\Projects\229286 Boston Port of Opportunity\Design\01 EWVS-15-01\CAD_GRAPHICS\MXD\2015-11 Phase II Figure 2 GWContourPlan.mxd

COMMITMENT & INTEGRITY
DRIVE RESULTS

40 Shattuck Road
Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

November 19, 2015

Sent via Certified Mail

Ian Cooke
Neponset River Watershed Association
2173 Washington Street
Canton, MA 02021

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Ian Cooke:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

electronically at:

http://dnd.cityofboston.gov/#page/LewisChemical

in paper form at:

Adult Section Librarian
Hyde Park Branch - Boston Public Library
35 Harvard Avenue, Hyde Park, MA 02136
(617) 361-2524

The comment period will be 20 calendar days from the date of this letter or by December 9, 2015.

If you have questions or comments concerning the Phase III RAP, please send them to the City of Boston Department of Neighborhood Development by mail or email to:

James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

DRAFT

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40 Shattuck Road
Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

Comments received within 20 calendar days of this letter will be addressed and incorporated into the Final Phase III RAP anticipated to be submitted to MassDEP by the end of December 2015.

Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

COMMITMENT & INTEGRITY
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Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

November 19, 2015

Sent via Certified Mail

Carly Rocklen
NRWA
6 Arborough Road, Apt#1
Roslindale, MA 02131

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Carly Rocklen:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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Adult Section Librarian
Hyde Park Branch - Boston Public Library
35 Harvard Avenue, Hyde Park, MA 02136
(617) 361-2524

The comment period will be 20 calendar days from the date of this letter or by December 9, 2015.

If you have questions or comments concerning the Phase III RAP, please send them to the City of Boston Department of Neighborhood Development by mail or email to:

James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

DRAFT

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Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

Comments received within 20 calendar days of this letter will be addressed and incorporated into the Final Phase III RAP anticipated to be submitted to MassDEP by the end of December 2015.

Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

COMMITMENT & INTEGRITY
DRIVE RESULTS

40 Shattuck Road
Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

November 19, 2015

Sent via Certified Mail

Barbara Baxter
1003 Hyde Park Ave
Hyde Park, MA 02136

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Barbara Baxter:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

electronically at:

http://dnd.cityofboston.gov/#page/LewisChemical

in paper form at:

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Hyde Park Branch - Boston Public Library
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(617) 361-2524

The comment period will be 20 calendar days from the date of this letter or by December 9, 2015.

If you have questions or comments concerning the Phase III RAP, please send them to the City of Boston Department of Neighborhood Development by mail or email to:

James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

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Comments received within 20 calendar days of this letter will be addressed and incorporated into the Final Phase III RAP anticipated to be submitted to MassDEP by the end of December 2015.

Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

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November 19, 2015

Sent via Certified Mail

Diana Kelly
28 Army Street
Randolph, MA 02368

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Diana Kelly:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

electronically at:

http://dnd.cityofboston.gov/#page/LewisChemical

in paper form at:

Adult Section Librarian
Hyde Park Branch - Boston Public Library
35 Harvard Avenue, Hyde Park, MA 02136
(617) 361-2524

The comment period will be 20 calendar days from the date of this letter or by December 9, 2015.

If you have questions or comments concerning the Phase III RAP, please send them to the City of Boston Department of Neighborhood Development by mail or email to:

James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

DRAFT

COMMITMENT & INTEGRITY
DRIVE RESULTS

40 Shattuck Road
Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

Comments received within 20 calendar days of this letter will be addressed and incorporated into the Final Phase III RAP anticipated to be submitted to MassDEP by the end of December 2015.

Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

COMMITMENT & INTEGRITY
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November 19, 2015

Sent via Certified Mail

Victor Carrara
41 Clifford St
Hyde Park, MA 02136

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Victor Carrara:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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Sincerely,
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Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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T 866.702.6371
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November 19, 2015

Sent via Certified Mail

Robert Vance
98 Warren Ave
Hyde Park, MA 02136

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Robert Vance:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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November 19, 2015

Sent via Certified Mail

Pat Alvarez
SW Boston CDC
11 Fairmount Ave.
Hyde Park MA 02136

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Pat Alvarez:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

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Andover, Massachusetts 01810
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T 866.702.6371
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November 19, 2015 *Sent via Certified Mail*

Jay Paget
593 Metropolitan St.
Hyde Park, MA 02136

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Jay Paget:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
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james.smith@boston.gov

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

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Andover, Massachusetts 01810
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November 19, 2015

Sent via Certified Mail

M. Pat Tierney
38 Milton Ave
Hyde Park, MA 02136

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear M. Pat Tierney:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

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November 19, 2015

Sent via Certified Mail

Clyde Cartwright
18 Elm Street
Hyde Park, MA 02136

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Clyde Cartwright:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

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Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

November 19, 2015

Sent via Certified Mail

Stanley Parton
22 Wingate Road
Hyde Park, MA 02136

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Stanley Parton:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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November 19, 2015

Sent via Certified Mail

Robert J. Boushell
59 Granite Ave
Dorchester, MA 02124

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Robert J. Boushell:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

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T 866.702.6371
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November 19, 2015

Sent via Certified Mail

Thomas Palmer
79 Blue Hill Terrace St
Milton, MA 02186

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Thomas Palmer:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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November 19, 2015

Sent via Certified Mail

Stephanie Yesner
94 Jamaica Street
Jamaica Plain, MA 02130

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Stephanie Yesner:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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November 19, 2015

Sent via Certified Mail

Rita Walsh
92 Beacon Street
Hyde Park, MA 02136

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Rita Walsh:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

COMMITMENT & INTEGRITY
DRIVE RESULTS

40 Shattuck Road
Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

November 19, 2015

Sent via Certified Mail

Martha McDonough
26 Clifford Street
Reedville, MA 02137

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Martha McDonough:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

electronically at:

http://dnd.cityofboston.gov/#page/LewisChemical

in paper form at:

Adult Section Librarian
Hyde Park Branch - Boston Public Library
35 Harvard Avenue, Hyde Park, MA 02136
(617) 361-2524

The comment period will be 20 calendar days from the date of this letter or by December 9, 2015.

If you have questions or comments concerning the Phase III RAP, please send them to the City of Boston Department of Neighborhood Development by mail or email to:

James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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November 19, 2015

Sent via Certified Mail

David McNulty
City of Boston
Mayor's Office of Neighborhood Services
City Hall, Room 708
One City Hall Square
Boston, MA 02201

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear David McNulty:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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Andover, Massachusetts 01810
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T 978.557.8150
F 978.557.7948

November 19, 2015

Sent via Certified Mail

Jack Tracy
Environmental Health Dept
Boston Public Health Comm
1010 Mass Ave.
Boston, MA 02118

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Jack Tracy:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

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Suite 110
Andover, Massachusetts 01810
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T 866.702.6371
T 978.557.8150
F 978.557.7948

November 19, 2015

Sent via Certified Mail

Stephanie Kruel
City of Boston, The Environment Dept
City Hall, Room 805
One City Hall Square
Boston, MA 02201

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Stephanie Kruel:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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F 978.557.7948

November 19, 2015

Sent via Certified Mail

State Representative Angelo Scaccia
State House, Rm. 33
Boston, MA 02133

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Representative Scaccia:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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November 19, 2015

Sent via Certified Mail

Senator Michael Rush
State House, Rm. 511C
Boston, MA 02133

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Senator Rush:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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T 866.702.6371
T 978.557.8150
F 978.557.7948

November 19, 2015

Sent via Certified Mail

Congressman Michael Capuano
110 First St
Cambridge, MA 02141

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Congressman Capuano:

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James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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Suite 110
Andover, Massachusetts 01810
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T 866.702.6371
T 978.557.8150
F 978.557.7948

November 19, 2015

Sent via Certified Mail

Timothy McCarthy
Boston City Councilor
1 City Hall Plaza, 5th Floor
Boston, MA 02201

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Timothy McCarthy:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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cc: James Smith, Boston Department of Neighborhood Development

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Andover, Massachusetts 01810
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T 978.557.8150
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November 19, 2015

Sent via Certified Mail

Kathy Castagna
USEPA Region 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Kathy Castagna:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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Andover, Massachusetts 01810
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T 978.557.8150
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November 19, 2015 *Sent via Certified Mail*

Rob Lowell
Department of Conservation and Recreation
251 Causeway Street, Suite 600
Boston, MA 02114-2104

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Rob Lowell:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
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WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

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cc: James Smith, Boston Department of Neighborhood Development

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November 19, 2015

Sent via Certified Mail

Karen Stromberg
MA DEP Public Involvement
MassDEP/NERO/BWSC/PS
One Winter Street - 7th Floor
Boston, MA 02108

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Karen Stromberg:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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T 866.702.6371
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November 19, 2015

Sent via Certified Mail

Joanne Fagan
MassDEP Regional Brownfields
MassDEP Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Joanne Fagan:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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35 Harvard Avenue, Hyde Park, MA 02136
(617) 361-2524

The comment period will be 20 calendar days from the date of this letter or by December 9, 2015.

If you have questions or comments concerning the Phase III RAP, please send them to the City of Boston Department of Neighborhood Development by mail or email to:

James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

DRAFT

COMMITMENT & INTEGRITY
DRIVE RESULTS

40 Shattuck Road
Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

Comments received within 20 calendar days of this letter will be addressed and incorporated into the Final Phase III RAP anticipated to be submitted to MassDEP by the end of December 2015.

Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

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www.woodardcurran.com

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T 978.557.8150
F 978.557.7948

November 19, 2015

Sent via Certified Mail

Chris Pyott
MassDEP Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Chris Pyott:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

electronically at:

http://dnd.cityofboston.gov/#page/LewisChemical

in paper form at:

Adult Section Librarian
Hyde Park Branch - Boston Public Library
35 Harvard Avenue, Hyde Park, MA 02136
(617) 361-2524

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

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F 978.557.7948

November 19, 2015

Sent via Certified Mail

Sheila Dillon
Director DND-REMS
Boston Department of Neighborthood Development
Real Estate Mgmt. & Sales Div.
26 Court St., 9 Floor
Boston, MA 02108

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Sheila Dillon:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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(617) 361-2524

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If you have questions or comments concerning the Phase III RAP, please send them to the City of Boston Department of Neighborhood Development by mail or email to:

James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

DRAFT

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

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T 978.557.8150
F 978.557.7948

November 19, 2015

Sent via Certified Mail

James Smith
Senior Project Manager Environmental DND-REMS
Boston Department of Neighborthood Development
Real Estate Mgmt. & Sales Div.
26 Court St., 9 Floor
Boston, MA 02108

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear James Smith:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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If you have questions or comments concerning the Phase III RAP, please send them to the City of Boston Department of Neighborhood Development by mail or email to:

James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

DRAFT

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

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Suite 110
Andover, Massachusetts 01810
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T 978.557.8150
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November 19, 2015

Sent via Certified Mail

Reay Pannesi
Senior Project Manager Real Estate DND-REMS
Boston Department of Neighborthood Development
Real Estate Mmt. & Sales Div.
26 Court St., 9 Floor
Boston, MA 02108

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Reay Pannesi:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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If you have questions or comments concerning the Phase III RAP, please send them to the City of Boston Department of Neighborhood Development by mail or email to:

James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

DRAFT

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

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Suite 110
Andover, Massachusetts 01810
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T 866.702.6371
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November 19, 2015

Sent via Certified Mail

Irene Walczak
Fairmount Hill Neighborhood Association

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Irene Walczak:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

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T 866.702.6371
T 978.557.8150
F 978.557.7948

November 19, 2015

Sent via Certified Mail

Donald Wright
DND Deputy Director
Boston Department of Neighborthood Development
Real Estate Mgmt. & Sales Div.
26 Court St., 9 Floor
Boston, MA 02108

Re: Notice of Report Availability
Draft Phase III Remedial Action Plan for Public Comment
Former Lewis Chemical Facility
12-24 Fairmount Court, Hyde Park, MA
MassDEP RTNs 3-1616, 3-31548, 3-31697, and 3-33111

Dear Donald Wright:

This letter is being sent to you on behalf of the City of Boston Department of Neighborhood Development to provide notice that the *Draft* Phase III Remedial Action Plan (RAP) for the Former Lewis Chemical facility located at 12-24 Fairmount Court, in Hyde Park (the former Facility) is available for your review and comment. In accordance with the public notification requirements described in the May 16, 2005 Public Involvement Plan (PIP), this notice is being sent to those individuals and public representatives who requested to be placed on the PIP Mailing List and are interested in the activities at the former Facility. A complete copy of the D*raft* Phase III RAP is available for review at the following locations:

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James Smith
Senior Project Manager, Environmental
Real Estate Management and Sales
Department of Neighborhood Development
26 Court Street, 9th Floor
Boston, MA 02108
james.smith@boston.gov

DRAFT

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Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal

229286.01

cc: James Smith, Boston Department of Neighborhood Development

DRAFT

COMMITMENT & INTEGRITY
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40 Shattuck Road
Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

September 24, 2015 *delivered via electronic mail*

Robert Lowell
Massachusetts Department of Conservation & Recreation
251 Causeway Street, Suite 600
Boston, MA 02114-2104

Re: Notice of Environmental Sampling
Release Tracking Number (RTN) 3-1616
12-24 Fairmount Court, Hyde Park, Boston, Massachusetts

Dear Mr. Lowell:

Massachusetts regulations require that results of environmental analyses be provided to an owner of a property where samples were collected as part of response actions conducted in accordance with the Massachusetts Contingency Plan. Analytical results from the recent semi-annual groundwater sampling event have been validated and are available for your review. The laboratory reports and a copy of the MassDEP transmittal form (BWSC123) are included with this letter that was transmitted via email.

Please note that public involvement opportunities are available under 310 CMR 40.1403(9) and 40.1404. Additional information about the public involvement regulations that require this notice and a description of such public involvement activities may be reviewed at the following web address http://www.mass.gov/eea/agencies/massdep/cleanup/.

If you would like additional information regarding this notice, you may contact me at (978) 482-7871.

Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal/Geographic Manager

229286.01

Attachments: BWSC123 Form
Laboratory Analytical Reports

cc: James Smith, Boston Department of Neighborhood Development
Brian Miller, CDW Consultants

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 1616

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 12-24 Fairmount Court

City/Town: Boston Zip Code: 02136

B. This notice is being provided to the following party:

1. Name: Mass. Department of Conservation & Recreation
2. Street Address: 251 Causeway Street, Suite 600

City/Town: Boston Zip Code: 02114

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 12-24 Fairmount Court

City/Town: Boston Zip Code: 02136

2. MCP phase of work during which the sampling will be/has been conducted:

☐ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☑ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Temporary Solution Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☐ commercial ☑ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Groundwater samples collected from 16 locations as part of the July 2015 sampling activities.

E. Contact information related to the party providing this notice:

Contact Name: Jarrod Yoder of Woodard & Curran
Street Address: 40 Shattuck Road, Suite 110
City/Town: Andover Zip Code: 01810
Telephone: (978) 482-7871 Email: jyoder@woodardcurran.com

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 1616

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/eea/agencies/massdep/cleanup. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://public.dep.state.ma.us/SearchableSites2/Search.aspx to view site-specific files on-line or http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Jarrod Yoder
Woodard & Curran
40 Shattuck Road
Suite 110
Andover, MA 01810

PO Number: None
Job ID: 33711
Date Received: 7/21/15

Project: Lewis Chemical 229286.01

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

JSylvester (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 8/11/2015
Total number of pages: 59

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Lewis Chemical 229286.01

Lab ID: 33711

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
ESM-1	Water	7/20/2015 13:40	33711-001	
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-14	Water	7/20/2015 15:05	33711-002	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
G-C-1	Water	7/20/2015 8:25	33711-003	
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
CDW-3	Water	7/20/2015 9:15	33711-004	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
				EPH in water by MADEP Method
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
PZ-01D	Water	7/20/2015 11:00	33711-005	
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
PZ-08D	Water	7/20/2015 10:30	33711-006	
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
PZ-02D	Water	7/17/2015 15:30	33711-007	
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
ESM-14 Dissolved	Water	7/20/2015 15:05	33711-008	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
CDW-3 Dissolved	Water	7/20/2015 9:15	33711-009	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
Trip Blank	Water	7/20/2015 0:00	33711-010	
				Low level 1,4-dioxane in water by 8260 SIM
Trip Blank	Water	7/20/2015 0:00	33711-011	
				VOCs in water by 8260

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-001
Sample ID: ESM-1
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 13:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
chloromethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
vinyl chloride	**12**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
bromomethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
chloroethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
trichlorofluoromethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
diethyl ether	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
acetone	< 50	50	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1-dichloroethene	< 5	5	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
methylene chloride	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
carbon disulfide	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
methyl t-butyl ether (MTBE)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
trans-1,2-dichloroethene	**12**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
isopropyl ether (DIPE)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1-dichloroethane	**360**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
t-butanol (TBA)	< 150	150	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
2-butanone (MEK)	< 50	50	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
2,2-dichloropropane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
cis-1,2-dichloroethene	**1600**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
chloroform	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
bromochloromethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1,1-trichloroethane	**660**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1-dichloropropene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
t-amyl-methyl ether (TAME)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
carbon tetrachloride	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2-dichloroethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
benzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
trichloroethene	**96**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2-dichloropropane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
bromodichloromethane	< 3.0	3.0	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,4-dioxane	< 250	250	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
dibromomethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 50	50	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
cis-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
toluene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
trans-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
2-hexanone	< 50	50	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1,2-trichloroethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,3-dichloropropane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
tetrachloroethene	**34**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-001

Sample ID: ESM-1

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 13:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2-dibromoethane (EDB)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
chlorobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1,1,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
ethylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
m&p-xylenes	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
o-xylene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
styrene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
bromoform	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
isopropylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1,2,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2,3-trichloropropane	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
n-propylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
bromobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,3,5-trimethylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
2-chlorotoluene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
4-chlorotoluene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
tert-butylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2,4-trimethylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
sec-butylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,3-dichlorobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
4-isopropyltoluene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,4-dichlorobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2-dichlorobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
n-butylbenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2,4-trichlorobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
hexachlorobutadiene	< 2.5	2.5	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
naphthalene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,2,3-trichlorobenzene	< 10	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**34**	10	ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**101**	78-114	%	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
toluene-D8 SUR	**101**	88-110	%	5	LMM		1501943	7/24/15	23:17	SW5030C8260C
4-bromofluorobenzene SUR	**93**	86-115	%	5	LMM		1501943	7/24/15	23:17	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-002
Sample ID: ESM-14
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 15:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1-dichloroethane	**4**	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
cis-1,2-dichloroethene	**8**	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1,1-trichloroethane	**4**	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
trichloroethene	**32**	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
tetrachloroethene	**22**	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-002

Sample ID: ESM-14

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 15:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**5**	2	ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**87**	78-114	%	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
toluene-D8 SUR	**94**	88-110	%	1	LMM		1502032	7/29/15	18:02	SW5030C8260C
4-bromofluorobenzene SUR	**96**	86-115	%	1	LMM		1502032	7/29/15	18:02	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-003

Sample ID: G-C-1

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 8:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
chloromethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
vinyl chloride	**430**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
bromomethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
chloroethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
trichlorofluoromethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
diethyl ether	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
acetone	< 50	50	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1-dichloroethene	**15**	5	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
methylene chloride	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
carbon disulfide	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
methyl t-butyl ether (MTBE)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
trans-1,2-dichloroethene	**39**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
isopropyl ether (DIPE)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1-dichloroethane	**260**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
t-butanol (TBA)	< 150	150	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
2-butanone (MEK)	< 50	50	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
2,2-dichloropropane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
cis-1,2-dichloroethene	**870**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
chloroform	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
bromochloromethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1,1-trichloroethane	**260**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1-dichloropropene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
t-amyl-methyl ether (TAME)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
carbon tetrachloride	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2-dichloroethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
benzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
trichloroethene	**200**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2-dichloropropane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
bromodichloromethane	< 3.0	3.0	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,4-dioxane	< 250	250	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
dibromomethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 50	50	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
cis-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
toluene	**19**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
trans-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
2-hexanone	< 50	50	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1,2-trichloroethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,3-dichloropropane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
tetrachloroethene	**36**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-003
Sample ID: G-C-1
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 8:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2-dibromoethane (EDB)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
chlorobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1,1,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
ethylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
m&p-xylenes	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
o-xylene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
styrene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
bromoform	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
isopropylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1,2,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2,3-trichloropropane	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
n-propylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
bromobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,3,5-trimethylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
2-chlorotoluene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
4-chlorotoluene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
tert-butylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2,4-trimethylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
sec-butylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,3-dichlorobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
4-isopropyltoluene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,4-dichlorobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2-dichlorobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
n-butylbenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2,4-trichlorobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
hexachlorobutadiene	< 2.5	2.5	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
naphthalene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,2,3-trichlorobenzene	< 10	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**71**	10	ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
toluene-D8 SUR	**94**	88-110	%	5	LMM		1502032	7/29/15	18:33	SW5030C8260C
4-bromofluorobenzene SUR	**93**	86-115	%	5	LMM		1502032	7/29/15	18:33	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-004
Sample ID: CDW-3
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
chloromethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
vinyl chloride	**400**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
bromomethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
chloroethane	**28**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
trichlorofluoromethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
diethyl ether	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
acetone	< 100	100	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1-dichloroethene	**1000**	10	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
methylene chloride	**33**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
carbon disulfide	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
methyl t-butyl ether (MTBE)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
trans-1,2-dichloroethene	**620**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
isopropyl ether (DIPE)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1-dichloroethane	**1100**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
t-butanol (TBA)	< 300	300	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
2-butanone (MEK)	< 100	100	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
2,2-dichloropropane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
cis-1,2-dichloroethene	**28000**	800	ug/L	400	LMM		1501970	7/28/15	23:29	SW5030C8260C
chloroform	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
bromochloromethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
tetrahydrofuran (THF)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1,1-trichloroethane	**100000**	800	ug/L	400	LMM		1501970	7/28/15	23:29	SW5030C8260C
1,1-dichloropropene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
t-amyl-methyl ether (TAME)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
carbon tetrachloride	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2-dichloroethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
benzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
trichloroethene	**23000**	800	ug/L	400	LMM		1501970	7/28/15	23:29	SW5030C8260C
1,2-dichloropropane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
bromodichloromethane	< 6.0	6.0	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,4-dioxane	< 500	500	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
dibromomethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 100	100	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
cis-1,3-dichloropropene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
toluene	**1600**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
trans-1,3-dichloropropene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
2-hexanone	< 100	100	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1,2-trichloroethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,3-dichloropropane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
tetrachloroethene	**1200**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-004

Sample ID: CDW-3

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2-dibromoethane (EDB)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
chlorobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1,1,2-tetrachloroethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
ethylbenzene	**64**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
m&p-xylenes	**120**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
o-xylene	**43**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
styrene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
bromoform	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
isopropylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1,2,2-tetrachloroethane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2,3-trichloropropane	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
n-propylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
bromobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,3,5-trimethylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
2-chlorotoluene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
4-chlorotoluene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
tert-butylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2,4-trimethylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
sec-butylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,3-dichlorobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
4-isopropyltoluene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,4-dichlorobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2-dichlorobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
n-butylbenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2,4-trichlorobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
hexachlorobutadiene	< 5.0	5.0	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
naphthalene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,2,3-trichlorobenzene	< 20	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**2100**	20	ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**99**	78-114	%	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
toluene-D8 SUR	**98**	88-110	%	10	LMM		1501970	7/27/15	21:58	SW5030C8260C
4-bromofluorobenzene SUR	**96**	86-115	%	10	LMM		1501970	7/27/15	21:58	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-005
Sample ID: PZ-01D
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
vinyl chloride	**37**	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
acetone	**25**	10	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1-dichloroethane	**24**	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
cis-1,2-dichloroethene	**44**	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1,1-trichloroethane	**9**	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2-dichloroethane	**3**	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-005
Sample ID: PZ-01D
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**6**	2	ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
toluene-D8 SUR	**97**	88-110	%	1	LMM		1502018	7/28/15	17:18	SW5030C8260C
4-bromofluorobenzene SUR	**91**	86-115	%	1	LMM		1502018	7/28/15	17:18	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-006

Sample ID: PZ-08D

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
vinyl chloride	**18**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
chloroethane	**12**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
trans-1,2-dichloroethene	**10**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1-dichloroethane	**41**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
cis-1,2-dichloroethene	**83**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1,1-trichloroethane	**29**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2-dichloroethane	**4**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
trichloroethene	**2**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-006
Sample ID: PZ-08D
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**7**	2	ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
toluene-D8 SUR	**95**	88-110	%	1	LMM		1502018	7/28/15	20:24	SW5030C8260C
4-bromofluorobenzene SUR	**94**	86-115	%	1	LMM		1502018	7/28/15	20:24	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-007
Sample ID: PZ-02D
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/17/15 15:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
chloromethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
vinyl chloride	**320**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
bromomethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
chloroethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
trichlorofluoromethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
diethyl ether	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
acetone	< 1000	1000	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1-dichloroethene	**250**	100	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
methylene chloride	**460**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
carbon disulfide	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
methyl t-butyl ether (MTBE)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
trans-1,2-dichloroethene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
isopropyl ether (DIPE)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1-dichloroethane	**1700**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
t-butanol (TBA)	< 3000	3000	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
2-butanone (MEK)	< 1000	1000	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
2,2-dichloropropane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
cis-1,2-dichloroethene	**19000**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
chloroform	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
bromochloromethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
tetrahydrofuran (THF)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1,1-trichloroethane	**9200**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1-dichloropropene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
t-amyl-methyl ether (TAME)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
carbon tetrachloride	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2-dichloroethane	**1800**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
benzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
trichloroethene	**710**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2-dichloropropane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
bromodichloromethane	< 60	60	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,4-dioxane	< 5000	5000	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
dibromomethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 1000	1000	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
cis-1,3-dichloropropene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
toluene	**10000**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
trans-1,3-dichloropropene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
2-hexanone	< 1000	1000	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1,2-trichloroethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,3-dichloropropane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
tetrachloroethene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-007
Sample ID: PZ-02D
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/17/15 15:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2-dibromoethane (EDB)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
chlorobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1,1,2-tetrachloroethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
ethylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
m&p-xylenes	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
o-xylene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
styrene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
bromoform	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
isopropylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1,2,2-tetrachloroethane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2,3-trichloropropane	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
n-propylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
bromobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,3,5-trimethylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
2-chlorotoluene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
4-chlorotoluene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
tert-butylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2,4-trimethylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
sec-butylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,3-dichlorobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
4-isopropyltoluene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,4-dichlorobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2-dichlorobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
n-butylbenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2,4-trichlorobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
hexachlorobutadiene	< 50	50	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
naphthalene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,2,3-trichlorobenzene	< 200	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**760**	200	ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**92**	78-114	%	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
toluene-D8 SUR	**93**	88-110	%	100	LMM		1502032	7/30/15	0:15	SW5030C8260C
4-bromofluorobenzene SUR	**90**	86-115	%	100	LMM		1502032	7/30/15	0:15	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-011

Sample ID: Trip Blank

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-011
Sample ID: Trip Blank
Matrix: Water
Received on ice at 6˚C, in satisfactory condition.
Sampled: 7/20/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 2	2	ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**98**	78-114	%	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
toluene-D8 SUR	**107**	88-110	%	1	LMM		1501943	7/24/15	17:41	SW5030C8260C
4-bromofluorobenzene SUR	**96**	86-115	%	1	LMM		1501943	7/24/15	17:41	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-004

Sample ID: CDW-3

Matrix: Water

Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 0.25	0.25	ug/L	1	LMM		1501964	7/27/15	14:45	modSW8260C

Sample#: 33711-007

Sample ID: PZ-02D

Matrix: Water

Sampled: 7/17/15 15:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 0.25	0.25	ug/L	1	LMM		1501964	7/27/15	15:50	modSW8260C

Sample#: 33711-010

Sample ID: Trip Blank

Matrix: Water

Sampled: 7/20/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 0.25	0.25	ug/L	1	LMM		1501946	7/24/15	15:15	modSW8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-004

Sample ID: CDW-3

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	**34000**	10000	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
Unadjusted C9-C12 Aliphatics	< 10000	10000	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
methyl t-butyl ether (MTBE)	< 200	200	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
benzene	< 100	100	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
toluene	**1400**	200	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
ethylbenzene	< 200	200	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
m&p-xylenes	< 200	200	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
o-xylene	< 200	200	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
naphthalene	< 500	500	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
C5-C8 Aliphatics	**33000**	10000	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
C9-C12 Aliphatics	< 10000	10000	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
C9-C10 Aromatics	< 10000	10000	ug/L	100	LMM		1502017	7/29/15	14:28	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**84**	70-130	%	100	LMM		1502017	7/29/15	14:28	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**96**	70-130	%	100	LMM		1502017	7/29/15	14:28	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-007

Sample ID: PZ-02D

Matrix: Water

Received on ice at 6˚C, in satisfactory condition.

Sampled: 7/17/15 15:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	**28000**	5000	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
Unadjusted C9-C12 Aliphatics	< 5000	5000	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
methyl t-butyl ether (MTBE)	< 100	100	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
benzene	**56**	50	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
toluene	**11000**	100	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
ethylbenzene	**100**	100	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
m&p-xylenes	**170**	100	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
o-xylene	< 100	100	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
naphthalene	< 250	250	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
C5-C8 Aliphatics	**17000**	5000	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
C9-C12 Aliphatics	< 5000	5000	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
C9-C10 Aromatics	< 5000	5000	ug/L	50	LMM		1502017	7/29/15	15:30	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**84**	70-130	%	50	LMM		1502017	7/29/15	15:30	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**96**	70-130	%	50	LMM		1502017	7/29/15	15:30	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-002

Sample ID: ESM-14

Matrix: Water

Sampled: 7/20/15 15:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
PCB-1221	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
PCB-1232	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
PCB-1242	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
PCB-1248	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
PCB-1254	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
PCB-1260	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**84**	30-150	%	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A
decachlorobiphenyl SUR	**31**	30-150	%	1	AM	7/24/15	8044	8/1/15	18:05	SW3510C8082A

Sample#: 33711-004

Sample ID: CDW-3

Matrix: Water

Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
PCB-1221	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
PCB-1232	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
PCB-1242	**1.7**	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
PCB-1248	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
PCB-1254	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
PCB-1260	< 0.3	0.3	ug/L	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**81**	30-150	%	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A
decachlorobiphenyl SUR	**24** *	30-150	%	1	AM	7/24/15	8044	8/1/15	18:35	SW3510C8082A

**** The surrogate showed recovery outside the acceptance limits as a result of an obvious matrix interference.***

Project ID: Lewis Chemical 229286.01

Job ID: 33711

Sample#: 33711-008

Sample ID: ESM-14 Dissolved

Matrix: Water

Sampled: 7/20/15 15:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
PCB-1221	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
PCB-1232	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
PCB-1242	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
PCB-1248	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
PCB-1254	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
PCB-1260	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**80**	30-150	%	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A
decachlorobiphenyl SUR	**46**	30-150	%	1	JLZ	7/24/15	8044	7/28/15	16:09	SW3510C8082A

Sample#: 33711-009

Sample ID: CDW-3 Dissolved

Matrix: Water

Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
PCB-1221	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
PCB-1232	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
PCB-1242	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
PCB-1248	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
PCB-1254	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
PCB-1260	< 0.3	0.3	ug/L	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**77**	30-150	%	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A
decachlorobiphenyl SUR	**48**	30-150	%	1	JLZ	7/24/15	8044	7/28/15	16:40	SW3510C8082A

Project ID: Lewis Chemical 229286.01
Job ID: 33711
Sample#: 33711-004
Sample ID: CDW-3
Matrix: Water
Sampled: 7/20/15 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**1.4**	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/22/15	8033	7/22/15	20:52	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/22/15	8033	7/23/15	8:07	MA EPH
C9-C18 Aliphatics	< 100	100	ug/L	1	AM	7/22/15	8033	7/22/15	18:04	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/22/15	8033	7/22/15	18:04	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/22/15	8033	7/23/15	8:07	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**45**	40-140	%	1	AM	7/22/15	8033	7/22/15	18:04	MA EPH
o-terphenyl SUR	**47**	40-140	%	1	AM	7/22/15	8033	7/23/15	8:07	MA EPH
2-fluorobiphenyl SUR	**71**	40-140	%	1	AM	7/22/15	8033	7/23/15	8:07	MA EPH
2-bromonaphthalene SUR	**72**	40-140	%	1	AM	7/22/15	8033	7/23/15	8:07	MA EPH

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 229286.01

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **33711**

Matrices: Groundwater/Surface Water ☑ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☑	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☑	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☑	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☑	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☑ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

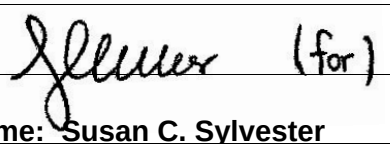
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☐ No*☑

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☑ No*☐

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:  **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 8/11/15**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 33711

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 6 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.
The samples for congeners analysis were received on hold. The report was finalized without the congeners being analyzed at the customer's request.

Calibration

PCB: Quantification is quadratic.
See the included table for a list of compounds quantitated by quadratic equation.

Method Blank

No exceptions noted.

Surrogate Recoveries

PCB: The surrogate, decachlorobiphenyl in the sample 33711-004 showed recovery outside the acceptance limits as a result of an obvious matrix interference. It is suspected that the large concentration of chlorinated solvents interfered with the extraction process.

Laboratory Control Sample Results

VOC: The LCS/D1501970 did not meet the acceptance criteria for dichlorodifluoromethane. This compound is known to be problematic in the method. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.
VOC: The LCS/D1502018 did not meet the acceptance criteria for dichlorodifluoromethane, carbon disulfide, and 1,4-dioxane. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.
VOC: The LCS/D1502032 did not meet the acceptance criteria for dichlorodifluoromethane, chloromethane, carbon disulfide, and 1,4-dioxane. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

VOC: The compound, hexachloroethane, was evaluated in the VOC analysis as a tentatively identified compound (TIC), as requested by the customer.
VPH: The C5-C8 aliphatic range will include concentrations from chlorinated solvents as well as hydrocarbons when large concentrations of chlorinated solvents are present in the sample.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question G: The CAM protocol reporting limits were not achieved for this project due to dilutions necessary for sample analysis. Box G is "No."
Question H: See surrogate section above. Box H is "No."

Quantitation by Quadratic Equation
Lab # 33711

Quantitation of the following compounds was based on a quadratic equation

dichlorodifluoromethane
Bromomethane
Acetone
Carbon disulfide
tetrahydrofuran (THF)
Carbon tetrachloride
1,2-Dichloroethane
Bromodichloromethane
2-Hexanone
cis-1,3-dichloropropene
trans-1,3-Dichloropropene
Dibromochloromethane
1,1,1,2-Tetrachloroethane
Bromoform
bromobenzene
1,2-dibromo-3-chloropropane (DBCP)
hexachlorobutadiene

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA VPH	BLK1502017	Unadjusted C5-C8 Aliphatics		<	100	ug/L						
		Unadjusted C9-C12 Aliphatics		<	100	ug/L						
		methyl t-butyl ether (MTBE)		<	2	ug/L						
		benzene		<	1	ug/L						
		toluene		<	2	ug/L						
		ethylbenzene		<	2	ug/L						
		m&p-xylenes		<	2	ug/L						
		o-xylene		<	2	ug/L						
		naphthalene		<	5	ug/L						
		C5-C8 Aliphatics		<	100	ug/L						
		C9-C12 Aliphatics		<	100	ug/L						
		C9-C10 Aromatics		<	100	ug/L						
		2,5-dibromotoluene as Aromatic SUR			88	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			101	%			70	130		
MA VPH	LCS1502017	Unadjusted C5-C8 Aliphatics			680	ug/L	600	113	70	130		
		Unadjusted C9-C12 Aliphatics			990	ug/L	800	124	70	130		
		methyl t-butyl ether (MTBE)			80	ug/L	100	80	70	130		
		benzene			90	ug/L	100	90	70	130		
		toluene			91	ug/L	100	91	70	130		
		ethylbenzene			91	ug/L	100	91	70	130		
		m&p-xylenes			190	ug/L	200	93	70	130		
		o-xylene			91	ug/L	100	91	70	130		
		naphthalene			87	ug/L	100	87	70	130		
		C5-C8 Aliphatics			300	ug/L	300	100	70	130		
		C9-C12 Aliphatics			290	ug/L	300	96	70	130		
		C9-C10 Aromatics			86	ug/L	100	86	70	130		
		2,5-dibromotoluene as Aromatic SUR			84	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			95	%			70	130		
MA VPH	LCSD1502017	Unadjusted C5-C8 Aliphatics			680	ug/L	600	113	70	130	0	25
		Unadjusted C9-C12 Aliphatics			990	ug/L	800	123	70	130	0	25
		methyl t-butyl ether (MTBE)			80	ug/L	100	80	70	130	0	25
		benzene			91	ug/L	100	91	70	130	0	25
		toluene			91	ug/L	100	91	70	130	0	25
		ethylbenzene			92	ug/L	100	92	70	130	0	25
		m&p-xylenes			190	ug/L	200	93	70	130	0	25
		o-xylene			92	ug/L	100	92	70	130	0	25
		naphthalene			89	ug/L	100	89	70	130	3	25
		C5-C8 Aliphatics			300	ug/L	300	99	70	130	1	25
		C9-C12 Aliphatics			280	ug/L	300	94	70	130	2	25
		C9-C10 Aromatics			86	ug/L	100	86	70	130	0	25
		2,5-dibromotoluene as Aromatic SUR			85	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			98	%			70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
modSW8260C	BLK1501946	1,4-dioxane		<	0.25	ug/L						
modSW8260C	BLK1501964	1,4-dioxane		<	0.25	ug/L						
modSW8260C	LCS1501964	1,4-dioxane			7.8	ug/L	8	97	70	130		
modSW8260C	LCSD1501964	1,4-dioxane			8.2	ug/L	8	103	70	130	6	20

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1501943	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1501943	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			96	%			78	114		
		toluene-D8 SUR			101	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501943	dichlorodifluoromethane			16	ug/L	20	80	70	130		
		chloromethane			22	ug/L	20	109	70	130		
		vinyl chloride			18	ug/L	20	90	70	130		
		bromomethane			22	ug/L	20	108	70	130		
		chloroethane			21	ug/L	20	103	70	130		
		trichlorofluoromethane			21	ug/L	20	103	70	130		
		diethyl ether			20	ug/L	20	99	70	130		
		acetone		<	50	ug/L	20	129				
		1,1-dichloroethene			18	ug/L	20	91	70	130		
		methylene chloride			18	ug/L	20	90	70	130		
		carbon disulfide			15	ug/L	20	77	70	130		
		methyl t-butyl ether (MTBE)			20	ug/L	20	101	70	130		
		trans-1,2-dichloroethene			19	ug/L	20	96	70	130		
		isopropyl ether (DIPE)			20	ug/L	20	101	70	130		
		ethyl t-butyl ether (ETBE)			20	ug/L	20	100	70	130		
		1,1-dichloroethane			18	ug/L	20	88	70	130		
		t-butanol (TBA)			100	ug/L	100	104	70	130		
		2-butanone (MEK)			22	ug/L	20	109	70	130		
		2,2-dichloropropane			17	ug/L	20	84	70	130		
		cis-1,2-dichloroethene			18	ug/L	20	92	70	130		
		chloroform			19	ug/L	20	93	70	130		
		bromochloromethane			19	ug/L	20	95	70	130		
		tetrahydrofuran (THF)			23	ug/L	20	116	70	130		
		1,1,1-trichloroethane			20	ug/L	20	102	70	130		
		1,1-dichloropropene			17	ug/L	20	87	70	130		
		t-amyl-methyl ether (TAME)			19	ug/L	20	95	70	130		
		carbon tetrachloride			18	ug/L	20	89	70	130		
		1,2-dichloroethane			20	ug/L	20	101	70	130		
		benzene			20	ug/L	20	102	70	130		
		trichloroethene			21	ug/L	20	104	70	130		
		1,2-dichloropropane			19	ug/L	20	97	70	130		
		bromodichloromethane			19	ug/L	20	96	70	130		
		1,4-dioxane		<	50	ug/L	40	110	70	130		
		dibromomethane			18	ug/L	20	91	70	130		
		4-methyl-2-pentanone (MIBK)			20	ug/L	20	102	70	130		
		cis-1,3-dichloropropene			18	ug/L	20	92	70	130		
		toluene			19	ug/L	20	93	70	130		
		trans-1,3-dichloropropene			19	ug/L	20	93	70	130		
		2-hexanone			22	ug/L	20	112	70	130		
		1,1,2-trichloroethane			19	ug/L	20	96	70	130		
		1,3-dichloropropane			18	ug/L	20	91	70	130		
		tetrachloroethene			20	ug/L	20	98	70	130		
		dibromochloromethane			16	ug/L	20	80	70	130		
		1,2-dibromoethane (EDB)			18	ug/L	20	88	70	130		
		chlorobenzene			18	ug/L	20	89	70	130		
		1,1,1,2-tetrachloroethane			18	ug/L	20	89	70	130		
		ethylbenzene			19	ug/L	20	94	70	130		
		m&p-xylenes			38	ug/L	40	96	70	130		
		o-xylene			20	ug/L	20	100	70	130		
		styrene			20	ug/L	20	101	70	130		
		bromoform			17	ug/L	20	84	70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501943	isopropylbenzene		20	ug/L	20	99	70	130		
		1,1,2,2-tetrachloroethane		19	ug/L	20	94	70	130		
		1,2,3-trichloropropane		18	ug/L	20	90	70	130		
		n-propylbenzene		17	ug/L	20	86	70	130		
		bromobenzene		18	ug/L	20	88	70	130		
		1,3,5-trimethylbenzene		18	ug/L	20	92	70	130		
		2-chlorotoluene		17	ug/L	20	85	70	130		
		4-chlorotoluene		17	ug/L	20	86	70	130		
		tert-butylbenzene		18	ug/L	20	88	70	130		
		1,2,4-trimethylbenzene		18	ug/L	20	90	70	130		
		sec-butylbenzene		17	ug/L	20	86	70	130		
		1,3-dichlorobenzene		19	ug/L	20	95	70	130		
		4-isopropyltoluene		16	ug/L	20	82	70	130		
		1,4-dichlorobenzene		17	ug/L	20	85	70	130		
		1,2-dichlorobenzene		17	ug/L	20	85	70	130		
		n-butylbenzene		17	ug/L	20	84	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		16	ug/L	20	79	70	130		
		1,2,4-trichlorobenzene		19	ug/L	20	95	70	130		
		hexachlorobutadiene		18	ug/L	20	90	70	130		
		naphthalene		21	ug/L	20	104	70	130		
		1,2,3-trichlorobenzene		20	ug/L	20	102	70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		21	ug/L	20	105	70	130		
		dibromofluoromethane SUR		104	%			78	114		
		toluene-D8 SUR		106	%			88	110		
		4-bromofluorobenzene SUR		107	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501943	dichlorodifluoromethane			15	ug/L	20	77	70	130	5	20
		chloromethane			20	ug/L	20	99	70	130	9	20
		vinyl chloride			17	ug/L	20	86	70	130	4	20
		bromomethane			23	ug/L	20	114	70	130	5	20
		chloroethane			20	ug/L	20	99	70	130	3	20
		trichlorofluoromethane			20	ug/L	20	101	70	130	2	20
		diethyl ether			20	ug/L	20	100	70	130	1	20
		acetone		<	50	ug/L	20	114			12	20
		1,1-dichloroethene			18	ug/L	20	89	70	130	2	20
		methylene chloride			18	ug/L	20	92	70	130	2	20
		carbon disulfide			16	ug/L	20	80	70	130	4	20
		methyl t-butyl ether (MTBE)			20	ug/L	20	101	70	130	1	20
		trans-1,2-dichloroethene			19	ug/L	20	97	70	130	1	20
		isopropyl ether (DIPE)			20	ug/L	20	100	70	130	1	20
		ethyl t-butyl ether (ETBE)			20	ug/L	20	98	70	130	2	20
		1,1-dichloroethane			18	ug/L	20	88	70	130	0	20
		t-butanol (TBA)			96	ug/L	100	96	70	130	8	20
		2-butanone (MEK)			22	ug/L	20	108	70	130	1	20
		2,2-dichloropropane			16	ug/L	20	82	70	130	2	20
		cis-1,2-dichloroethene			19	ug/L	20	93	70	130	1	20
		chloroform			19	ug/L	20	93	70	130	1	20
		bromochloromethane			19	ug/L	20	93	70	130	2	20
		tetrahydrofuran (THF)			22	ug/L	20	110	70	130	5	20
		1,1,1-trichloroethane			20	ug/L	20	102	70	130	0	20
		1,1-dichloropropene			17	ug/L	20	83	70	130	5	20
		t-amyl-methyl ether (TAME)			19	ug/L	20	95	70	130	1	20
		carbon tetrachloride			18	ug/L	20	90	70	130	2	20
		1,2-dichloroethane			20	ug/L	20	102	70	130	1	20
		benzene			20	ug/L	20	101	70	130	2	20
		trichloroethene			20	ug/L	20	102	70	130	2	20
		1,2-dichloropropane			19	ug/L	20	94	70	130	3	20
		bromodichloromethane			20	ug/L	20	100	70	130	3	20
		1,4-dioxane		<	50	ug/L	40	114	70	130	3	20
		dibromomethane			18	ug/L	20	92	70	130	1	20
		4-methyl-2-pentanone (MIBK)			21	ug/L	20	104	70	130	2	20
		cis-1,3-dichloropropene			19	ug/L	20	95	70	130	3	20
		toluene			19	ug/L	20	93	70	130	0	20
		trans-1,3-dichloropropene			19	ug/L	20	95	70	130	2	20
		2-hexanone			21	ug/L	20	106	70	130	6	20
		1,1,2-trichloroethane			19	ug/L	20	93	70	130	2	20
		1,3-dichloropropane			18	ug/L	20	90	70	130	1	20
		tetrachloroethene			19	ug/L	20	94	70	130	4	20
		dibromochloromethane			16	ug/L	20	81	70	130	1	20
		1,2-dibromoethane (EDB)			17	ug/L	20	85	70	130	3	20
		chlorobenzene			17	ug/L	20	86	70	130	3	20
		1,1,1,2-tetrachloroethane			18	ug/L	20	90	70	130	0	20
		ethylbenzene			18	ug/L	20	92	70	130	3	20
		m&p-xylenes			37	ug/L	40	93	70	130	3	20
		o-xylene			19	ug/L	20	97	70	130	3	20
		styrene			19	ug/L	20	97	70	130	4	20
		bromoform			17	ug/L	20	85	70	130	2	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501943	isopropylbenzene		19	ug/L	20	95	70	130	4	20
		1,1,2,2-tetrachloroethane		19	ug/L	20	95	70	130	2	20
		1,2,3-trichloropropane		18	ug/L	20	90	70	130	0	20
		n-propylbenzene		18	ug/L	20	88	70	130	2	20
		bromobenzene		18	ug/L	20	90	70	130	2	20
		1,3,5-trimethylbenzene		19	ug/L	20	93	70	130	1	20
		2-chlorotoluene		17	ug/L	20	87	70	130	2	20
		4-chlorotoluene		17	ug/L	20	87	70	130	0	20
		tert-butylbenzene		18	ug/L	20	91	70	130	3	20
		1,2,4-trimethylbenzene		18	ug/L	20	90	70	130	0	20
		sec-butylbenzene		17	ug/L	20	87	70	130	0	20
		1,3-dichlorobenzene		19	ug/L	20	95	70	130	0	20
		4-isopropyltoluene		16	ug/L	20	82	70	130	1	20
		1,4-dichlorobenzene		17	ug/L	20	86	70	130	1	20
		1,2-dichlorobenzene		18	ug/L	20	88	70	130	3	20
		n-butylbenzene		17	ug/L	20	85	70	130	2	20
		1,2-dibromo-3-chloropropane (DBCP)		17	ug/L	20	83	70	130	5	20
		1,2,4-trichlorobenzene		19	ug/L	20	97	70	130	2	20
		hexachlorobutadiene		18	ug/L	20	90	70	130	0	20
		naphthalene		21	ug/L	20	105	70	130	0	20
		1,2,3-trichlorobenzene		21	ug/L	20	103	70	130	1	20
		1,1,2-trichloro-1,2,2-trifluoroethane		20	ug/L	20	102	70	130	2	20
		dibromofluoromethane SUR		100	%			78	114		
		toluene-D8 SUR		101	%			88	110		
		4-bromofluorobenzene SUR		102	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1501970	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1501970	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			95	%			78	114		
		toluene-D8 SUR			99	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1501970	dichlorodifluoromethane			13	ug/L	20	65	*	70	130		
		chloromethane			16	ug/L	20	79		70	130		
		vinyl chloride			15	ug/L	20	73		70	130		
		bromomethane			14	ug/L	20	71		70	130		
		chloroethane			17	ug/L	20	85		70	130		
		trichlorofluoromethane			17	ug/L	20	87		70	130		
		diethyl ether			17	ug/L	20	86		70	130		
		acetone		<	50	ug/L	20	96					
		1,1-dichloroethene			16	ug/L	20	78		70	130		
		methylene chloride			15	ug/L	20	77		70	130		
		carbon disulfide			14	ug/L	20	72		70	130		
		methyl t-butyl ether (MTBE)			17	ug/L	20	85		70	130		
		trans-1,2-dichloroethene			17	ug/L	20	83		70	130		
		isopropyl ether (DIPE)			17	ug/L	20	86		70	130		
		ethyl t-butyl ether (ETBE)			17	ug/L	20	84		70	130		
		1,1-dichloroethane			15	ug/L	20	75		70	130		
		t-butanol (TBA)			80	ug/L	100	80		70	130		
		2-butanone (MEK)			17	ug/L	20	84		70	130		
		2,2-dichloropropane			15	ug/L	20	73		70	130		
		cis-1,2-dichloroethene			16	ug/L	20	78		70	130		
		chloroform			17	ug/L	20	83		70	130		
		bromochloromethane			16	ug/L	20	79		70	130		
		tetrahydrofuran (THF)			18	ug/L	20	88		70	130		
		1,1,1-trichloroethane			18	ug/L	20	88		70	130		
		1,1-dichloropropene			15	ug/L	20	75		70	130		
		t-amyl-methyl ether (TAME)			16	ug/L	20	82		70	130		
		carbon tetrachloride			16	ug/L	20	79		70	130		
		1,2-dichloroethane			17	ug/L	20	87		70	130		
		benzene			18	ug/L	20	88		70	130		
		trichloroethene			18	ug/L	20	91		70	130		
		1,2-dichloropropane			17	ug/L	20	83		70	130		
		bromodichloromethane			17	ug/L	20	87		70	130		
		1,4-dioxane		<	50	ug/L	40	91		70	130		
		dibromomethane			17	ug/L	20	85		70	130		
		4-methyl-2-pentanone (MIBK)			18	ug/L	20	90		70	130		
		cis-1,3-dichloropropene			16	ug/L	20	82		70	130		
		toluene			16	ug/L	20	82		70	130		
		trans-1,3-dichloropropene			16	ug/L	20	81		70	130		
		2-hexanone			18	ug/L	20	91		70	130		
		1,1,2-trichloroethane			17	ug/L	20	83		70	130		
		1,3-dichloropropane			18	ug/L	20	88		70	130		
		tetrachloroethene			19	ug/L	20	95		70	130		
		dibromochloromethane			16	ug/L	20	82		70	130		
		1,2-dibromoethane (EDB)			17	ug/L	20	84		70	130		
		chlorobenzene			17	ug/L	20	86		70	130		
		1,1,1,2-tetrachloroethane			17	ug/L	20	86		70	130		
		ethylbenzene			19	ug/L	20	94		70	130		
		m&p-xylenes			37	ug/L	40	93		70	130		
		o-xylene			19	ug/L	20	95		70	130		
		styrene			20	ug/L	20	98		70	130		
		bromoform			18	ug/L	20	88		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501970	isopropylbenzene		19	ug/L	20	96	70	130		
		1,1,2,2-tetrachloroethane		21	ug/L	20	104	70	130		
		1,2,3-trichloropropane		20	ug/L	20	102	70	130		
		n-propylbenzene		20	ug/L	20	98	70	130		
		bromobenzene		19	ug/L	20	97	70	130		
		1,3,5-trimethylbenzene		21	ug/L	20	105	70	130		
		2-chlorotoluene		19	ug/L	20	97	70	130		
		4-chlorotoluene		19	ug/L	20	96	70	130		
		tert-butylbenzene		20	ug/L	20	100	70	130		
		1,2,4-trimethylbenzene		21	ug/L	20	104	70	130		
		sec-butylbenzene		19	ug/L	20	96	70	130		
		1,3-dichlorobenzene		21	ug/L	20	103	70	130		
		4-isopropyltoluene		18	ug/L	20	91	70	130		
		1,4-dichlorobenzene		19	ug/L	20	95	70	130		
		1,2-dichlorobenzene		19	ug/L	20	94	70	130		
		n-butylbenzene		19	ug/L	20	93	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		19	ug/L	20	93	70	130		
		1,2,4-trichlorobenzene		20	ug/L	20	101	70	130		
		hexachlorobutadiene		19	ug/L	20	94	70	130		
		naphthalene		22	ug/L	20	109	70	130		
		1,2,3-trichlorobenzene		21	ug/L	20	104	70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		18	ug/L	20	88	70	130		
		dibromofluoromethane SUR		100	%			78	114		
		toluene-D8 SUR		98	%			88	110		
		4-bromofluorobenzene SUR		93	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501970	dichlorodifluoromethane			13	ug/L	20	65	*	70	130	0	20
		chloromethane			15	ug/L	20	77		70	130	3	20
		vinyl chloride			14	ug/L	20	72		70	130	2	20
		bromomethane			16	ug/L	20	81		70	130	13	20
		chloroethane			17	ug/L	20	83		70	130	2	20
		trichlorofluoromethane			17	ug/L	20	85		70	130	3	20
		diethyl ether			17	ug/L	20	84		70	130	2	20
		acetone		<	50	ug/L	20	98				3	20
		1,1-dichloroethene			15	ug/L	20	75		70	130	3	20
		methylene chloride			15	ug/L	20	76		70	130	2	20
		carbon disulfide			15	ug/L	20	73		70	130	1	20
		methyl t-butyl ether (MTBE)			17	ug/L	20	83		70	130	3	20
		trans-1,2-dichloroethene			16	ug/L	20	81		70	130	2	20
		isopropyl ether (DIPE)			17	ug/L	20	86		70	130	0	20
		ethyl t-butyl ether (ETBE)			17	ug/L	20	83		70	130	1	20
		1,1-dichloroethane			15	ug/L	20	75		70	130	1	20
		t-butanol (TBA)			80	ug/L	100	81		70	130	1	20
		2-butanone (MEK)			18	ug/L	20	90		70	130	6	20
		2,2-dichloropropane			14	ug/L	20	71		70	130	3	20
		cis-1,2-dichloroethene			16	ug/L	20	79		70	130	1	20
		chloroform			16	ug/L	20	78		70	130	5	20
		bromochloromethane			15	ug/L	20	76		70	130	3	20
		tetrahydrofuran (THF)			17	ug/L	20	87		70	130	1	20
		1,1,1-trichloroethane			17	ug/L	20	86		70	130	2	20
		1,1-dichloropropene			14	ug/L	20	72		70	130	3	20
		t-amyl-methyl ether (TAME)			16	ug/L	20	80		70	130	2	20
		carbon tetrachloride			15	ug/L	20	77		70	130	2	20
		1,2-dichloroethane			17	ug/L	20	87		70	130	1	20
		benzene			17	ug/L	20	85		70	130	4	20
		trichloroethene			18	ug/L	20	88		70	130	3	20
		1,2-dichloropropane			16	ug/L	20	81		70	130	2	20
		bromodichloromethane			17	ug/L	20	86		70	130	1	20
		1,4-dioxane		<	50	ug/L	40	93		70	130	3	20
		dibromomethane			15	ug/L	20	77		70	130	10	20
		4-methyl-2-pentanone (MIBK)			18	ug/L	20	92		70	130	2	20
		cis-1,3-dichloropropene			16	ug/L	20	80		70	130	1	20
		toluene			16	ug/L	20	79		70	130	4	20
		trans-1,3-dichloropropene			16	ug/L	20	81		70	130	0	20
		2-hexanone			18	ug/L	20	89		70	130	3	20
		1,1,2-trichloroethane			16	ug/L	20	80		70	130	4	20
		1,3-dichloropropane			17	ug/L	20	86		70	130	2	20
		tetrachloroethene			18	ug/L	20	90		70	130	5	20
		dibromochloromethane			16	ug/L	20	80		70	130	2	20
		1,2-dibromoethane (EDB)			16	ug/L	20	82		70	130	1	20
		chlorobenzene			16	ug/L	20	82		70	130	4	20
		1,1,1,2-tetrachloroethane			17	ug/L	20	85		70	130	2	20
		ethylbenzene			18	ug/L	20	89		70	130	5	20
		m&p-xylenes			36	ug/L	40	90		70	130	4	20
		o-xylene			18	ug/L	20	92		70	130	4	20
		styrene			19	ug/L	20	96		70	130	2	20
		bromoform			17	ug/L	20	86		70	130	2	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501970	isopropylbenzene		18	ug/L	20	92	70	130	4	20
		1,1,2,2-tetrachloroethane		19	ug/L	20	97	70	130	7	20
		1,2,3-trichloropropane		19	ug/L	20	94	70	130	8	20
		n-propylbenzene		18	ug/L	20	91	70	130	7	20
		bromobenzene		18	ug/L	20	91	70	130	6	20
		1,3,5-trimethylbenzene		20	ug/L	20	98	70	130	7	20
		2-chlorotoluene		18	ug/L	20	92	70	130	5	20
		4-chlorotoluene		18	ug/L	20	91	70	130	6	20
		tert-butylbenzene		19	ug/L	20	94	70	130	7	20
		1,2,4-trimethylbenzene		19	ug/L	20	97	70	130	7	20
		sec-butylbenzene		18	ug/L	20	90	70	130	6	20
		1,3-dichlorobenzene		20	ug/L	20	98	70	130	6	20
		4-isopropyltoluene		17	ug/L	20	85	70	130	7	20
		1,4-dichlorobenzene		18	ug/L	20	91	70	130	4	20
		1,2-dichlorobenzene		18	ug/L	20	89	70	130	6	20
		n-butylbenzene		17	ug/L	20	87	70	130	7	20
		1,2-dibromo-3-chloropropane (DBCP)		19	ug/L	20	93	70	130	1	20
		1,2,4-trichlorobenzene		20	ug/L	20	99	70	130	2	20
		hexachlorobutadiene		19	ug/L	20	95	70	130	1	20
		naphthalene		21	ug/L	20	106	70	130	2	20
		1,2,3-trichlorobenzene		22	ug/L	20	109	70	130	4	20
		1,1,2-trichloro-1,2,2-trifluoroethane		17	ug/L	20	86	70	130	3	20
		dibromofluoromethane SUR		100	%			78	114		
		toluene-D8 SUR		95	%			88	110		
		4-bromofluorobenzene SUR		96	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1502018	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1502018	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			98	%			78	114		
		toluene-D8 SUR			96	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1502018	dichlorodifluoromethane			13	ug/L	20	65	*	70	130		
		chloromethane			15	ug/L	20	76		70	130		
		vinyl chloride			14	ug/L	20	72		70	130		
		bromomethane			17	ug/L	20	85		70	130		
		chloroethane			17	ug/L	20	86		70	130		
		trichlorofluoromethane			17	ug/L	20	83		70	130		
		diethyl ether			18	ug/L	20	88		70	130		
		acetone		<	50	ug/L	20	98					
		1,1-dichloroethene			15	ug/L	20	75		70	130		
		methylene chloride			15	ug/L	20	76		70	130		
		carbon disulfide			13	ug/L	20	66	*	70	130		
		methyl t-butyl ether (MTBE)			17	ug/L	20	85		70	130		
		trans-1,2-dichloroethene			16	ug/L	20	80		70	130		
		isopropyl ether (DIPE)			17	ug/L	20	85		70	130		
		ethyl t-butyl ether (ETBE)			16	ug/L	20	82		70	130		
		1,1-dichloroethane			15	ug/L	20	76		70	130		
		t-butanol (TBA)			75	ug/L	100	75		70	130		
		2-butanone (MEK)			18	ug/L	20	92		70	130		
		2,2-dichloropropane			14	ug/L	20	72		70	130		
		cis-1,2-dichloroethene			16	ug/L	20	79		70	130		
		chloroform			16	ug/L	20	78		70	130		
		bromochloromethane			16	ug/L	20	78		70	130		
		tetrahydrofuran (THF)			19	ug/L	20	96		70	130		
		1,1,1-trichloroethane			17	ug/L	20	84		70	130		
		1,1-dichloropropene			15	ug/L	20	75		70	130		
		t-amyl-methyl ether (TAME)			16	ug/L	20	80		70	130		
		carbon tetrachloride			15	ug/L	20	75		70	130		
		1,2-dichloroethane			17	ug/L	20	87		70	130		
		benzene			17	ug/L	20	86		70	130		
		trichloroethene			17	ug/L	20	85		70	130		
		1,2-dichloropropane			16	ug/L	20	80		70	130		
		bromodichloromethane			17	ug/L	20	83		70	130		
		1,4-dioxane		<	50	ug/L	40	64	*	70	130		
		dibromomethane			16	ug/L	20	79		70	130		
		4-methyl-2-pentanone (MIBK)			18	ug/L	20	92		70	130		
		cis-1,3-dichloropropene			16	ug/L	20	78		70	130		
		toluene			16	ug/L	20	79		70	130		
		trans-1,3-dichloropropene			16	ug/L	20	79		70	130		
		2-hexanone			18	ug/L	20	92		70	130		
		1,1,2-trichloroethane			17	ug/L	20	83		70	130		
		1,3-dichloropropane			18	ug/L	20	89		70	130		
		tetrachloroethene			18	ug/L	20	90		70	130		
		dibromochloromethane			15	ug/L	20	76		70	130		
		1,2-dibromoethane (EDB)			16	ug/L	20	81		70	130		
		chlorobenzene			16	ug/L	20	81		70	130		
		1,1,1,2-tetrachloroethane			16	ug/L	20	81		70	130		
		ethylbenzene			18	ug/L	20	90		70	130		
		m&p-xylenes			36	ug/L	40	89		70	130		
		o-xylene			18	ug/L	20	91		70	130		
		styrene			19	ug/L	20	94		70	130		
		bromoform			16	ug/L	20	81		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1502018	isopropylbenzene		18	ug/L	20	92	70	130		
		1,1,2,2-tetrachloroethane		20	ug/L	20	101	70	130		
		1,2,3-trichloropropane		20	ug/L	20	101	70	130		
		n-propylbenzene		18	ug/L	20	91	70	130		
		bromobenzene		18	ug/L	20	89	70	130		
		1,3,5-trimethylbenzene		19	ug/L	20	97	70	130		
		2-chlorotoluene		18	ug/L	20	91	70	130		
		4-chlorotoluene		18	ug/L	20	90	70	130		
		tert-butylbenzene		19	ug/L	20	93	70	130		
		1,2,4-trimethylbenzene		19	ug/L	20	95	70	130		
		sec-butylbenzene		18	ug/L	20	90	70	130		
		1,3-dichlorobenzene		20	ug/L	20	98	70	130		
		4-isopropyltoluene		17	ug/L	20	85	70	130		
		1,4-dichlorobenzene		18	ug/L	20	90	70	130		
		1,2-dichlorobenzene		18	ug/L	20	89	70	130		
		n-butylbenzene		18	ug/L	20	89	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		18	ug/L	20	90	70	130		
		1,2,4-trichlorobenzene		20	ug/L	20	100	70	130		
		hexachlorobutadiene		18	ug/L	20	90	70	130		
		naphthalene		22	ug/L	20	108	70	130		
		1,2,3-trichlorobenzene		21	ug/L	20	106	70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		17	ug/L	20	84	70	130		
		dibromofluoromethane SUR		98	%			78	114		
		toluene-D8 SUR		99	%			88	110		
		4-bromofluorobenzene SUR		93	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCSD1502018	dichlorodifluoromethane			13	ug/L	20	66	*	70	130	3	20
		chloromethane			15	ug/L	20	75		70	130	1	20
		vinyl chloride			15	ug/L	20	74		70	130	3	20
		bromomethane			19	ug/L	20	97		70	130	14	20
		chloroethane			17	ug/L	20	85		70	130	2	20
		trichlorofluoromethane			17	ug/L	20	86		70	130	3	20
		diethyl ether			17	ug/L	20	87		70	130	0	20
		acetone		<	50	ug/L	20	99				1	20
		1,1-dichloroethene			15	ug/L	20	76		70	130	2	20
		methylene chloride			15	ug/L	20	77		70	130	1	20
		carbon disulfide			14	ug/L	20	71		70	130	7	20
		methyl t-butyl ether (MTBE)			17	ug/L	20	84		70	130	1	20
		trans-1,2-dichloroethene			17	ug/L	20	85		70	130	6	20
		isopropyl ether (DIPE)			18	ug/L	20	88		70	130	3	20
		ethyl t-butyl ether (ETBE)			17	ug/L	20	83		70	130	1	20
		1,1-dichloroethane			15	ug/L	20	76		70	130	0	20
		t-butanol (TBA)			70	ug/L	100	70		70	130	7	20
		2-butanone (MEK)			17	ug/L	20	86		70	130	6	20
		2,2-dichloropropane			15	ug/L	20	73		70	130	2	20
		cis-1,2-dichloroethene			16	ug/L	20	79		70	130	0	20
		chloroform			16	ug/L	20	80		70	130	3	20
		bromochloromethane			16	ug/L	20	79		70	130	1	20
		tetrahydrofuran (THF)			18	ug/L	20	91		70	130	5	20
		1,1,1-trichloroethane			18	ug/L	20	88		70	130	5	20
		1,1-dichloropropene			15	ug/L	20	76		70	130	1	20
		t-amyl-methyl ether (TAME)			16	ug/L	20	81		70	130	1	20
		carbon tetrachloride			16	ug/L	20	78		70	130	3	20
		1,2-dichloroethane			18	ug/L	20	88		70	130	1	20
		benzene			17	ug/L	20	87		70	130	1	20
		trichloroethene			18	ug/L	20	90		70	130	5	20
		1,2-dichloropropane			17	ug/L	20	83		70	130	3	20
		bromodichloromethane			17	ug/L	20	87		70	130	5	20
		1,4-dioxane		<	50	ug/L	40	68	*	70	130	6	20
		dibromomethane			16	ug/L	20	79		70	130	1	20
		4-methyl-2-pentanone (MIBK)			18	ug/L	20	89		70	130	3	20
		cis-1,3-dichloropropene			16	ug/L	20	80		70	130	3	20
		toluene			16	ug/L	20	80		70	130	1	20
		trans-1,3-dichloropropene			16	ug/L	20	80		70	130	1	20
		2-hexanone			18	ug/L	20	88		70	130	5	20
		1,1,2-trichloroethane			16	ug/L	20	82		70	130	1	20
		1,3-dichloropropane			18	ug/L	20	89		70	130	0	20
		tetrachloroethene			19	ug/L	20	95		70	130	6	20
		dibromochloromethane			16	ug/L	20	78		70	130	3	20
		1,2-dibromoethane (EDB)			17	ug/L	20	85		70	130	5	20
		chlorobenzene			17	ug/L	20	87		70	130	6	20
		1,1,1,2-tetrachloroethane			18	ug/L	20	88		70	130	8	20
		ethylbenzene			19	ug/L	20	94		70	130	4	20
		m&p-xylenes			38	ug/L	40	94		70	130	5	20
		o-xylene			19	ug/L	20	96		70	130	6	20
		styrene			20	ug/L	20	99		70	130	5	20
		bromoform			17	ug/L	20	85		70	130	6	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1502018	isopropylbenzene		19	ug/L	20	97	70	130	6	20
		1,1,2,2-tetrachloroethane		20	ug/L	20	98	70	130	3	20
		1,2,3-trichloropropane		19	ug/L	20	96	70	130	5	20
		n-propylbenzene		19	ug/L	20	94	70	130	3	20
		bromobenzene		19	ug/L	20	94	70	130	5	20
		1,3,5-trimethylbenzene		20	ug/L	20	98	70	130	2	20
		2-chlorotoluene		18	ug/L	20	92	70	130	1	20
		4-chlorotoluene		18	ug/L	20	92	70	130	2	20
		tert-butylbenzene		19	ug/L	20	96	70	130	3	20
		1,2,4-trimethylbenzene		20	ug/L	20	98	70	130	3	20
		sec-butylbenzene		18	ug/L	20	92	70	130	2	20
		1,3-dichlorobenzene		20	ug/L	20	98	70	130	0	20
		4-isopropyltoluene		17	ug/L	20	87	70	130	3	20
		1,4-dichlorobenzene		18	ug/L	20	91	70	130	1	20
		1,2-dichlorobenzene		18	ug/L	20	89	70	130	1	20
		n-butylbenzene		18	ug/L	20	91	70	130	1	20
		1,2-dibromo-3-chloropropane (DBCP)		18	ug/L	20	89	70	130	2	20
		1,2,4-trichlorobenzene		20	ug/L	20	100	70	130	0	20
		hexachlorobutadiene		19	ug/L	20	96	70	130	7	20
		naphthalene		21	ug/L	20	104	70	130	4	20
		1,2,3-trichlorobenzene		22	ug/L	20	108	70	130	1	20
		1,1,2-trichloro-1,2,2-trifluoroethane		18	ug/L	20	88	70	130	4	20
		dibromofluoromethane SUR		98	%			78	114		
		toluene-D8 SUR		96	%			88	110		
		4-bromofluorobenzene SUR		99	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1502032	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1502032	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			96	%			78	114		
		toluene-D8 SUR			95	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1502032	dichlorodifluoromethane			13	ug/L	20	63	*	70	130		
		chloromethane			14	ug/L	20	68	*	70	130		
		vinyl chloride			14	ug/L	20	71		70	130		
		bromomethane			13	ug/L	20	64	*	70	130		
		chloroethane			17	ug/L	20	87		70	130		
		trichlorofluoromethane			17	ug/L	20	83		70	130		
		diethyl ether			17	ug/L	20	86		70	130		
		acetone		<	50	ug/L	20	106					
		1,1-dichloroethene			15	ug/L	20	77		70	130		
		methylene chloride			16	ug/L	20	78		70	130		
		carbon disulfide			13	ug/L	20	65	*	70	130		
		methyl t-butyl ether (MTBE)			17	ug/L	20	86		70	130		
		trans-1,2-dichloroethene			16	ug/L	20	82		70	130		
		isopropyl ether (DIPE)			17	ug/L	20	86		70	130		
		ethyl t-butyl ether (ETBE)			17	ug/L	20	83		70	130		
		1,1-dichloroethane			15	ug/L	20	75		70	130		
		t-butanol (TBA)			81	ug/L	100	81		70	130		
		2-butanone (MEK)			18	ug/L	20	92		70	130		
		2,2-dichloropropane			14	ug/L	20	72		70	130		
		cis-1,2-dichloroethene			16	ug/L	20	79		70	130		
		chloroform			16	ug/L	20	78		70	130		
		bromochloromethane			16	ug/L	20	79		70	130		
		tetrahydrofuran (THF)			18	ug/L	20	92		70	130		
		1,1,1-trichloroethane			17	ug/L	20	84		70	130		
		1,1-dichloropropene			15	ug/L	20	73		70	130		
		t-amyl-methyl ether (TAME)			16	ug/L	20	82		70	130		
		carbon tetrachloride			15	ug/L	20	75		70	130		
		1,2-dichloroethane			17	ug/L	20	87		70	130		
		benzene			17	ug/L	20	86		70	130		
		trichloroethene			19	ug/L	20	97		70	130		
		1,2-dichloropropane			16	ug/L	20	82		70	130		
		bromodichloromethane			17	ug/L	20	83		70	130		
		1,4-dioxane		<	50	ug/L	40	76		70	130		
		dibromomethane			16	ug/L	20	78		70	130		
		4-methyl-2-pentanone (MIBK)			19	ug/L	20	95		70	130		
		cis-1,3-dichloropropene			16	ug/L	20	80		70	130		
		toluene			16	ug/L	20	80		70	130		
		trans-1,3-dichloropropene			16	ug/L	20	80		70	130		
		2-hexanone			19	ug/L	20	94		70	130		
		1,1,2-trichloroethane			16	ug/L	20	81		70	130		
		1,3-dichloropropane			18	ug/L	20	90		70	130		
		tetrachloroethene			19	ug/L	20	93		70	130		
		dibromochloromethane			16	ug/L	20	79		70	130		
		1,2-dibromoethane (EDB)			17	ug/L	20	87		70	130		
		chlorobenzene			17	ug/L	20	85		70	130		
		1,1,1,2-tetrachloroethane			18	ug/L	20	88		70	130		
		ethylbenzene			18	ug/L	20	92		70	130		
		m&p-xylenes			37	ug/L	40	92		70	130		
		o-xylene			19	ug/L	20	97		70	130		
		styrene			20	ug/L	20	100		70	130		
		bromoform			17	ug/L	20	87		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1502032	isopropylbenzene		19	ug/L	20	97	70	130		
		1,1,2,2-tetrachloroethane		17	ug/L	20	86	70	130		
		1,2,3-trichloropropane		21	ug/L	20	107	70	130		
		n-propylbenzene		19	ug/L	20	94	70	130		
		bromobenzene		19	ug/L	20	94	70	130		
		1,3,5-trimethylbenzene		20	ug/L	20	100	70	130		
		2-chlorotoluene		19	ug/L	20	94	70	130		
		4-chlorotoluene		19	ug/L	20	93	70	130		
		tert-butylbenzene		20	ug/L	20	98	70	130		
		1,2,4-trimethylbenzene		20	ug/L	20	99	70	130		
		sec-butylbenzene		19	ug/L	20	93	70	130		
		1,3-dichlorobenzene		20	ug/L	20	102	70	130		
		4-isopropyltoluene		18	ug/L	20	89	70	130		
		1,4-dichlorobenzene		19	ug/L	20	93	70	130		
		1,2-dichlorobenzene		19	ug/L	20	94	70	130		
		n-butylbenzene		18	ug/L	20	92	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		18	ug/L	20	90	70	130		
		1,2,4-trichlorobenzene		21	ug/L	20	104	70	130		
		hexachlorobutadiene		19	ug/L	20	97	70	130		
		naphthalene		23	ug/L	20	113	70	130		
		1,2,3-trichlorobenzene		22	ug/L	20	109	70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		17	ug/L	20	87	70	130		
		dibromofluoromethane SUR		94	%			78	114		
		toluene-D8 SUR		95	%			88	110		
		4-bromofluorobenzene SUR		105	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD		RPD Limit
SW5030C8260C	LCSD1502032	dichlorodifluoromethane			12	ug/L	20	62	*	70	130	2		20
		chloromethane			13	ug/L	20	67	*	70	130	1		20
		vinyl chloride			14	ug/L	20	70		70	130	1		20
		bromomethane			19	ug/L	20	96		70	130	40	*	20
		chloroethane			16	ug/L	20	82		70	130	5		20
		trichlorofluoromethane			17	ug/L	20	85		70	130	3		20
		diethyl ether			17	ug/L	20	86		70	130	1		20
		acetone		<	50	ug/L	20	109				3		20
		1,1-dichloroethene			15	ug/L	20	74		70	130	4		20
		methylene chloride			15	ug/L	20	77		70	130	1		20
		carbon disulfide			14	ug/L	20	68	*	70	130	4		20
		methyl t-butyl ether (MTBE)			17	ug/L	20	87		70	130	1		20
		trans-1,2-dichloroethene			17	ug/L	20	83		70	130	2		20
		isopropyl ether (DIPE)			17	ug/L	20	87		70	130	1		20
		ethyl t-butyl ether (ETBE)			17	ug/L	20	85		70	130	2		20
		1,1-dichloroethane			15	ug/L	20	75		70	130	1		20
		t-butanol (TBA)			78	ug/L	100	78		70	130	3		20
		2-butanone (MEK)			18	ug/L	20	92		70	130	1		20
		2,2-dichloropropane			14	ug/L	20	72		70	130	1		20
		cis-1,2-dichloroethene			16	ug/L	20	78		70	130	1		20
		chloroform			16	ug/L	20	80		70	130	2		20
		bromochloromethane			16	ug/L	20	78		70	130	2		20
		tetrahydrofuran (THF)			19	ug/L	20	93		70	130	1		20
		1,1,1-trichloroethane			17	ug/L	20	84		70	130	0		20
		1,1-dichloropropene			14	ug/L	20	72		70	130	2		20
		t-amyl-methyl ether (TAME)			16	ug/L	20	82		70	130	0		20
		carbon tetrachloride			15	ug/L	20	77		70	130	2		20
		1,2-dichloroethane			17	ug/L	20	87		70	130	0		20
		benzene			17	ug/L	20	85		70	130	0		20
		trichloroethene			20	ug/L	20	101		70	130	4		20
		1,2-dichloropropane			17	ug/L	20	83		70	130	1		20
		bromodichloromethane			17	ug/L	20	86		70	130	4		20
		1,4-dioxane		<	50	ug/L	40	69	*	70	130	10		20
		dibromomethane			16	ug/L	20	79		70	130	1		20
		4-methyl-2-pentanone (MIBK)			18	ug/L	20	90		70	130	5		20
		cis-1,3-dichloropropene			16	ug/L	20	81		70	130	0		20
		toluene			16	ug/L	20	80		70	130	0		20
		trans-1,3-dichloropropene			16	ug/L	20	82		70	130	2		20
		2-hexanone			19	ug/L	20	93		70	130	1		20
		1,1,2-trichloroethane			16	ug/L	20	81		70	130	1		20
		1,3-dichloropropane			18	ug/L	20	89		70	130	1		20
		tetrachloroethene			18	ug/L	20	89		70	130	5		20
		dibromochloromethane			16	ug/L	20	81		70	130	3		20
		1,2-dibromoethane (EDB)			17	ug/L	20	83		70	130	4		20
		chlorobenzene			17	ug/L	20	84		70	130	1		20
		1,1,1,2-tetrachloroethane			17	ug/L	20	85		70	130	3		20
		ethylbenzene			18	ug/L	20	89		70	130	4		20
		m&p-xylenes			36	ug/L	40	89		70	130	3		20
		o-xylene			19	ug/L	20	96		70	130	1		20
		styrene			20	ug/L	20	98		70	130	2		20
		bromoform			17	ug/L	20	86		70	130	1		20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1502032	isopropylbenzene		19	ug/L	20	93	70	130	4	20
		1,1,2,2-tetrachloroethane		17	ug/L	20	84	70	130	3	20
		1,2,3-trichloropropane		20	ug/L	20	99	70	130	7	20
		n-propylbenzene		19	ug/L	20	93	70	130	1	20
		bromobenzene		19	ug/L	20	96	70	130	2	20
		1,3,5-trimethylbenzene		20	ug/L	20	99	70	130	0	20
		2-chlorotoluene		18	ug/L	20	92	70	130	1	20
		4-chlorotoluene		19	ug/L	20	93	70	130	1	20
		tert-butylbenzene		19	ug/L	20	95	70	130	3	20
		1,2,4-trimethylbenzene		20	ug/L	20	98	70	130	1	20
		sec-butylbenzene		18	ug/L	20	92	70	130	1	20
		1,3-dichlorobenzene		20	ug/L	20	101	70	130	1	20
		4-isopropyltoluene		18	ug/L	20	88	70	130	1	20
		1,4-dichlorobenzene		19	ug/L	20	94	70	130	1	20
		1,2-dichlorobenzene		18	ug/L	20	92	70	130	2	20
		n-butylbenzene		18	ug/L	20	91	70	130	1	20
		1,2-dibromo-3-chloropropane (DBCP)		19	ug/L	20	95	70	130	5	20
		1,2,4-trichlorobenzene		21	ug/L	20	103	70	130	1	20
		hexachlorobutadiene		18	ug/L	20	92	70	130	6	20
		naphthalene		22	ug/L	20	111	70	130	1	20
		1,2,3-trichlorobenzene		22	ug/L	20	111	70	130	2	20
		1,1,2-trichloro-1,2,2-trifluoroethane		18	ug/L	20	88	70	130	1	20
		dibromofluoromethane SUR		100	%			78	114		
		toluene-D8 SUR		99	%			88	110		
		4-bromofluorobenzene SUR		99	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA EPH	BLK8033	naphthalene		<	0.5	ug/L						
		2-methylnaphthalene		<	0.5	ug/L						
		phenanthrene		<	0.5	ug/L						
		acenaphthene		<	0.5	ug/L						
		acenaphthylene		<	0.5	ug/L						
		fluorene		<	0.5	ug/L						
		anthracene		<	0.5	ug/L						
		fluoranthene		<	0.5	ug/L						
		pyrene		<	0.5	ug/L						
		benzo(a)anthracene		<	0.5	ug/L						
		chrysene		<	0.5	ug/L						
		benzo(b)fluoranthene		<	0.5	ug/L						
		benzo(k)fluoranthene		<	0.5	ug/L						
		benzo(a)pyrene		<	0.2	ug/L						
		indeno(1,2,3-cd)pyrene		<	0.5	ug/L						
		dibenzo(a,h)anthracene		<	0.5	ug/L						
		benzo(g,h,i)perylene		<	0.5	ug/L						
		Unadjusted C11-C22 Aromatics		<	100	ug/L						
		C9-C18 Aliphatics		<	100	ug/L						
		C19-C36 Aliphatics		<	100	ug/L						
		C11-C22 Aromatics		<	100	ug/L						
		1-chloro-octadecane SUR			47	%			40	140		
		o-terphenyl SUR			44	%			40	140		
		2-fluorobiphenyl SUR			69	%			40	140		
		2-bromonaphthalene SUR			68	%			40	140		
MA EPH	LCS8033	naphthalene			31	ug/L	60	51	40	140		
		2-methylnaphthalene			35	ug/L	60	58	40	140		
		phenanthrene			44	ug/L	60	73	40	140		
		acenaphthene			35	ug/L	60	58	40	140		
		acenaphthylene			37	ug/L	60	62	40	140		
		fluorene			39	ug/L	60	65	40	140		
		anthracene			38	ug/L	60	63	40	140		
		fluoranthene			44	ug/L	60	74	40	140		
		pyrene			46	ug/L	60	76	40	140		
		benzo(a)anthracene			45	ug/L	60	75	40	140		
		chrysene			49	ug/L	60	82	40	140		
		benzo(b)fluoranthene			45	ug/L	60	75	40	140		
		benzo(k)fluoranthene			45	ug/L	60	75	40	140		
		benzo(a)pyrene			46	ug/L	60	76	40	140		
		indeno(1,2,3-cd)pyrene			40	ug/L	60	66	40	140		
		dibenzo(a,h)anthracene			48	ug/L	60	80	40	140		
		benzo(g,h,i)perylene			48	ug/L	60	79	40	140		
		Unadjusted C11-C22 Aromatics			700	ug/L	1020	68	40	140		
		C9-C18 Aliphatics			200	ug/L	360	55	40	140		
		C19-C36 Aliphatics			380	ug/L	480	79	40	140		
		C11-C22 Aromatics		<	100	ug/L						
		1-chloro-octadecane SUR			48	%			40	140		
		o-terphenyl SUR			50	%			40	140		
		2-fluorobiphenyl SUR			78	%			40	140		
		2-bromonaphthalene SUR			80	%			40	140		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA EPH	LCSD8033	naphthalene			36	ug/L	60	60	40	140	16	25
		2-methylnaphthalene			41	ug/L	60	69	40	140	17	25
		phenanthrene			49	ug/L	60	82	40	140	12	25
		acenaphthene			40	ug/L	60	67	40	140	14	25
		acenaphthylene			43	ug/L	60	72	40	140	16	25
		fluorene			45	ug/L	60	74	40	140	13	25
		anthracene			42	ug/L	60	71	40	140	12	25
		fluoranthene			49	ug/L	60	82	40	140	10	25
		pyrene			53	ug/L	60	88	40	140	14	25
		benzo(a)anthracene			49	ug/L	60	81	40	140	8	25
		chrysene			54	ug/L	60	89	40	140	9	25
		benzo(b)fluoranthene			47	ug/L	60	78	40	140	5	25
		benzo(k)fluoranthene			52	ug/L	60	87	40	140	14	25
		benzo(a)pyrene			50	ug/L	60	83	40	140	9	25
		indeno(1,2,3-cd)pyrene			44	ug/L	60	74	40	140	11	25
		dibenzo(a,h)anthracene			53	ug/L	60	89	40	140	10	25
		benzo(g,h,i)perylene			53	ug/L	60	88	40	140	10	25
		Unadjusted C11-C22 Aromatics			710	ug/L	1020	69	40	140	1	25
		C9-C18 Aliphatics			210	ug/L	360	60	40	140	7	25
		C19-C36 Aliphatics			400	ug/L	480	84	40	140	6	25
		C11-C22 Aromatics		<	100	ug/L						
		1-chloro-octadecane SUR			52	%			40	140		
		o-terphenyl SUR			51	%			40	140		
		2-fluorobiphenyl SUR			73	%			40	140		
		2-bromonaphthalene SUR			76	%			40	140		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3510C8082A	BLK8044	PCB-1016		<	0.30	ug/L						
		PCB-1221		<	0.30	ug/L						
		PCB-1232		<	0.30	ug/L						
		PCB-1242		<	0.30	ug/L						
		PCB-1248		<	0.30	ug/L						
		PCB-1254		<	0.30	ug/L						
		PCB-1260		<	0.30	ug/L						
		tetrachloro-m-xylene SUR			65	%			30	150		
		decachlorobiphenyl SUR			63	%			30	150		
SW3510C8082A	LCS8044	PCB-1016			0.9	ug/L	1	86	40	140		
		PCB-1221		<	0.3	ug/L						
		PCB-1232		<	0.3	ug/L						
		PCB-1242		<	0.3	ug/L						
		PCB-1248		<	0.3	ug/L						
		PCB-1254		<	0.3	ug/L						
		PCB-1260			1.0	ug/L	1	97	40	140		
		tetrachloro-m-xylene SUR			86	%			30	150		
		decachlorobiphenyl SUR			42	%			30	150		
SW3510C8082A	LCSD8044	PCB-1016			0.9	ug/L	1	85	40	140	1	20
		PCB-1221		<	0.3	ug/L						
		PCB-1232		<	0.3	ug/L						
		PCB-1242		<	0.3	ug/L						
		PCB-1248		<	0.3	ug/L						
		PCB-1254		<	0.3	ug/L						
		PCB-1260			0.8	ug/L	1	85	40	140	13	20
		tetrachloro-m-xylene SUR			78	%			30	150		
		decachlorobiphenyl SUR			34	%			30	150		

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33711

Company Name: Woodard + Curran
Company Address: 40 Shattuck Rd #110, Andover, MA
Report To: Jarrod Yoder
Phone #: 978-557-8150
Invoice to Email: JYoder@woodardcurran.com
☐ Hard Copy Invoice Required

Project Name: Lewis Chemical
Project #: 229286.01
Project Location: NH (MA) ME VT NY Other
Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER
Reporting Limits: QAPP GW-1 S-1 EPA DW Other
Quote #204 Rate Schedule ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	VOC 8260	VPH MADEP	EPH MADEP	8082 PCB	Grab (G) or Composite (C)
33711-01	ESM-1	2	X			X					7/20/15	1340	AR	2				G
-02	ESM-14	6	X			X					7/20/15	1505	AR	2			2	G
-03	G-C-1	2	X			X					7/20/15	0825	AR	2				G
-04	CDW-3	12	X			X					7/20/15	0915	AR	2	4	2	2	G
-05	PZ-01D	1	X			X					7/20/15	1100	AR	1				G
-06	PZ-08D	2	X			X					7/20/15	1030	AR	2				G
-07	PZ-02D	4	X			X					7/17/15	1530	AR	2	2			G
-10	Trip Blank (4)																	
-11	Trip Blank (VOC)																	

Total + dissolved

8082 Total + dissolved PCB - Congeners (ON HOLD)

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) X
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS PCB Congeners samples ON HOLD. Please provide WIC GIS key EDD.

REPORTING INSTRUCTIONS X PDF (e-mail address)
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE X YES ☐ NO
TEMPERATURE 6 °C

CUSTODY RECORD
QSD-01 Revision 01/09/15

	Date	Time
Relinquished by Sampler:	7/21/15	1215
Relinquished by:	7/21/15	16:14
Relinquished by:		

	Date	Time
Received by:	7/21/15	12:15
Received by:		
Received by Laboratory:	7/21/15	16:14

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Jarrod Yoder
Woodard & Curran
40 Shattuck Road
Suite 110
Andover, MA 01810

PO Number: None
Job ID: 33653
Date Received: 7/16/15

Project: Lewis Chemical 229286.01

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

SS (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 8/11/2015
Total number of pages: 73

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Lewis Chemical 229286.01

Lab ID: 33653

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
ESM-6	Water	7/16/2015 13:20	33653-001	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-6 Dissolved	Water	7/16/2015 13:20	33653-002	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
ESM-3	Water	7/16/2015 13:45	33653-003	
				EPH in water by MADEP Method
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
Trip Blank-1	Water	7/14/2015 0:00	33653-004	
				Low level 1,4-dioxane in water by 8260 SIM
Trip Blank-2	Water	7/14/2015 0:00	33653-005	
				VOCs in water by 8260
ESM-3B-S	Water	7/16/2015 16:40	33653-006	
				EPH in water by MADEP Method
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
ESM-3B-D	Water	7/17/2015 11:30	33653-007	
				EPH in water by MADEP Method
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
ESM-5	Water	7/16/2015 15:35	33653-008	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
				EPH in water by MADEP Method
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
ESM-5B	Water	7/17/2015 10:20	33653-009	
				EPH in water by MADEP Method
				VOCs in water by 8260
				Low level 1,4-dioxane in water by 8260 SIM
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method
ESM-9	Water	7/17/2015 7:45	33653-010	
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-13	Water	7/17/2015 9:35	33653-011	
				EPH in water by MADEP Method
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)
				VPH in water by MA DEP Method

Absolute Resource associates

Project ID: Lewis Chemical 229286.01

Lab ID: 33653

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
ESM-5 Dissolved	Water	7/16/2015 15:35	33653-012	
				PCBs in water by 8082
				8082 PCBs Congeners NOAA/RIM list
Trip Blank	Water	7/14/2015 0:00	33653-013	
				VOCs in water by 8260
ESM-7	Water	7/16/2015 11:30	33653-014	
				VOCs in water by 8260
				Volatile Tentatively Identified Compounds (TICs)

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-001

Sample ID: ESM-6

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 13:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
chloromethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
vinyl chloride	**31**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
bromomethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
chloroethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
trichlorofluoromethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
diethyl ether	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
acetone	< 50	50	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1-dichloroethene	**17**	5	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
methylene chloride	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
carbon disulfide	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
methyl t-butyl ether (MTBE)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
trans-1,2-dichloroethene	**31**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
isopropyl ether (DIPE)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1-dichloroethane	**80**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
t-butanol (TBA)	< 150	150	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
2-butanone (MEK)	< 50	50	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
2,2-dichloropropane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
cis-1,2-dichloroethene	**2800**	40	ug/L	20	LMM		1501855	7/21/15	19:21	SW5030C8260C
chloroform	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
bromochloromethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1,1-trichloroethane	**1600**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1-dichloropropene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
t-amyl-methyl ether (TAME)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
carbon tetrachloride	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2-dichloroethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
benzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
trichloroethene	**1200**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2-dichloropropane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
bromodichloromethane	< 3.0	3.0	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,4-dioxane	< 250	250	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
dibromomethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 50	50	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
cis-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
toluene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
trans-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
2-hexanone	< 50	50	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1,2-trichloroethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,3-dichloropropane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
tetrachloroethene	**770**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-001

Sample ID: ESM-6

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 13:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2-dibromoethane (EDB)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
chlorobenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1,1,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
ethylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
m&p-xylenes	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
o-xylene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
styrene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
bromoform	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
isopropylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1,2,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2,3-trichloropropane	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
n-propylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
bromobenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,3,5-trimethylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
2-chlorotoluene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
4-chlorotoluene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
tert-butylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2,4-trimethylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
sec-butylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,3-dichlorobenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
4-isopropyltoluene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,4-dichlorobenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2-dichlorobenzene	**16**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
n-butylbenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2,4-trichlorobenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
hexachlorobutadiene	< 2.5	2.5	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
naphthalene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,2,3-trichlorobenzene	< 10	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**340**	10	ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**98**	78-114	%	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
toluene-D8 SUR	**98**	88-110	%	5	LMM		1501855	7/17/15	21:00	SW5030C8260C
4-bromofluorobenzene SUR	**98**	86-115	%	5	LMM		1501855	7/17/15	21:00	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-003

Sample ID: ESM-3

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
chloromethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
vinyl chloride	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
bromomethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
chloroethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
trichlorofluoromethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
diethyl ether	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
acetone	< 2000	2000	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1-dichloroethene	**380**	200	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
methylene chloride	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
carbon disulfide	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
methyl t-butyl ether (MTBE)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
trans-1,2-dichloroethene	**680**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
isopropyl ether (DIPE)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1-dichloroethane	**2200**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
t-butanol (TBA)	< 6000	6000	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
2-butanone (MEK)	< 2000	2000	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
2,2-dichloropropane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
cis-1,2-dichloroethene	**90000**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
chloroform	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
bromochloromethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
tetrahydrofuran (THF)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1,1-trichloroethane	**26000**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1-dichloropropene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
t-amyl-methyl ether (TAME)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
carbon tetrachloride	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2-dichloroethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
benzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
trichloroethene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2-dichloropropane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
bromodichloromethane	< 120	120	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,4-dioxane	< 10000	10000	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
dibromomethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 2000	2000	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
cis-1,3-dichloropropene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
toluene	**16000**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
trans-1,3-dichloropropene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
2-hexanone	< 2000	2000	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1,2-trichloroethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,3-dichloropropane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
tetrachloroethene	**430**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-003

Sample ID: ESM-3

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2-dibromoethane (EDB)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
chlorobenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1,1,2-tetrachloroethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
ethylbenzene	**530**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
m&p-xylenes	**1300**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
o-xylene	**490**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
styrene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
bromoform	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
isopropylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1,2,2-tetrachloroethane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2,3-trichloropropane	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
n-propylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
bromobenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,3,5-trimethylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
2-chlorotoluene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
4-chlorotoluene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
tert-butylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2,4-trimethylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
sec-butylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,3-dichlorobenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
4-isopropyltoluene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,4-dichlorobenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2-dichlorobenzene	**450**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
n-butylbenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2,4-trichlorobenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
hexachlorobutadiene	< 100	100	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
naphthalene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,2,3-trichlorobenzene	< 400	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**3400**	400	ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**98**	78-114	%	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
toluene-D8 SUR	**100**	88-110	%	200	LMM		1501855	7/17/15	23:40	SW5030C8260C
4-bromofluorobenzene SUR	**93**	86-115	%	200	LMM		1501855	7/17/15	23:40	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-005

Sample ID: Trip Blank-2

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/14/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-005

Sample ID: Trip Blank-2

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/14/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM		1501855	7/17/15	15:20	SW5030C8260C
4-bromofluorobenzene SUR	**94**	86-115	%	1	LMM		1501855	7/17/15	15:20	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-006
Sample ID: ESM-3B-S
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
chloromethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
vinyl chloride	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
bromomethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
chloroethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
trichlorofluoromethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
diethyl ether	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
acetone	< 200	200	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1-dichloroethene	**400**	20	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
methylene chloride	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
carbon disulfide	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
methyl t-butyl ether (MTBE)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
trans-1,2-dichloroethene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
isopropyl ether (DIPE)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1-dichloroethane	**41**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
t-butanol (TBA)	< 600	600	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
2-butanone (MEK)	< 200	200	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
2,2-dichloropropane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
cis-1,2-dichloroethene	**210**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
chloroform	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
bromochloromethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
tetrahydrofuran (THF)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1,1-trichloroethane	**1700**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1-dichloropropene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
t-amyl-methyl ether (TAME)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
carbon tetrachloride	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2-dichloroethane	**68**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
benzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
trichloroethene	**6000**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2-dichloropropane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
bromodichloromethane	< 12	12	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,4-dioxane	< 1000	1000	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
dibromomethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 200	200	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
cis-1,3-dichloropropene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
toluene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
trans-1,3-dichloropropene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
2-hexanone	< 200	200	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1,2-trichloroethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,3-dichloropropane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
tetrachloroethene	**2900**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-006

Sample ID: ESM-3B-S

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2-dibromoethane (EDB)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
chlorobenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1,1,2-tetrachloroethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
ethylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
m&p-xylenes	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
o-xylene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
styrene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
bromoform	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
isopropylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1,2,2-tetrachloroethane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2,3-trichloropropane	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
n-propylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
bromobenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,3,5-trimethylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
2-chlorotoluene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
4-chlorotoluene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
tert-butylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2,4-trimethylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
sec-butylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,3-dichlorobenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
4-isopropyltoluene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,4-dichlorobenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2-dichlorobenzene	**42**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
n-butylbenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2,4-trichlorobenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
hexachlorobutadiene	< 10	10	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
naphthalene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,2,3-trichlorobenzene	< 40	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**1200**	40	ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**93**	78-114	%	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
toluene-D8 SUR	**100**	88-110	%	20	LMM		1501897	7/21/15	19:52	SW5030C8260C
4-bromofluorobenzene SUR	**97**	86-115	%	20	LMM		1501897	7/21/15	19:52	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-007
Sample ID: ESM-3B-D
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
chloromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
vinyl chloride	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
bromomethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
chloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
trichlorofluoromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
diethyl ether	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
acetone	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1-dichloroethene	**5200**	200	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
methylene chloride	**12000**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
carbon disulfide	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
methyl t-butyl ether (MTBE)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
trans-1,2-dichloroethene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
isopropyl ether (DIPE)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1-dichloroethane	**660**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
t-butanol (TBA)	< 6000	6000	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
2-butanone (MEK)	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
2,2-dichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
cis-1,2-dichloroethene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
chloroform	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
bromochloromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
tetrahydrofuran (THF)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1,1-trichloroethane	**18000**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1-dichloropropene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
t-amyl-methyl ether (TAME)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
carbon tetrachloride	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2-dichloroethane	**1800**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
benzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
trichloroethene	**68000**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2-dichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
bromodichloromethane	< 120	120	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,4-dioxane	< 10000	10000	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
dibromomethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
cis-1,3-dichloropropene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
toluene	**1600**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
trans-1,3-dichloropropene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
2-hexanone	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1,2-trichloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,3-dichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
tetrachloroethene	**12000**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-007
Sample ID: ESM-3B-D
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2-dibromoethane (EDB)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
chlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1,1,2-tetrachloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
ethylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
m&p-xylenes	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
o-xylene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
styrene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
bromoform	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
isopropylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1,2,2-tetrachloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2,3-trichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
n-propylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
bromobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,3,5-trimethylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
2-chlorotoluene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
4-chlorotoluene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
tert-butylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2,4-trimethylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
sec-butylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,3-dichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
4-isopropyltoluene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,4-dichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2-dichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
n-butylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2,4-trichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
hexachlorobutadiene	< 100	100	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
naphthalene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,2,3-trichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**5900**	400	ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**94**	78-114	%	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
toluene-D8 SUR	**103**	88-110	%	200	LMM		1501897	7/21/15	20:54	SW5030C8260C
4-bromofluorobenzene SUR	**98**	86-115	%	200	LMM		1501897	7/21/15	20:54	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-008
Sample ID: ESM-5
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
chloromethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
vinyl chloride	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
bromomethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
chloroethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
trichlorofluoromethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
diethyl ether	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
acetone	< 4000	4000	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1-dichloroethene	**1700**	400	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
methylene chloride	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
carbon disulfide	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
methyl t-butyl ether (MTBE)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
trans-1,2-dichloroethene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
isopropyl ether (DIPE)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1-dichloroethane	**2300**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
t-butanol (TBA)	< 12000	12000	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
2-butanone (MEK)	< 4000	4000	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
2,2-dichloropropane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
cis-1,2-dichloroethene	**95000**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
chloroform	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
bromochloromethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
tetrahydrofuran (THF)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1,1-trichloroethane	**130000**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1-dichloropropene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
t-amyl-methyl ether (TAME)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
carbon tetrachloride	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2-dichloroethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
benzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
trichloroethene	**130000**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2-dichloropropane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
bromodichloromethane	< 240	240	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,4-dioxane	< 20000	20000	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
dibromomethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 4000	4000	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
cis-1,3-dichloropropene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
toluene	**31000**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
trans-1,3-dichloropropene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
2-hexanone	< 4000	4000	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1,2-trichloroethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,3-dichloropropane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
tetrachloroethene	**18000**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-008

Sample ID: ESM-5

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2-dibromoethane (EDB)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
chlorobenzene	**2900**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1,1,2-tetrachloroethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
ethylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
m&p-xylenes	**990**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
o-xylene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
styrene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
bromoform	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
isopropylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1,2,2-tetrachloroethane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2,3-trichloropropane	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
n-propylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
bromobenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,3,5-trimethylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
2-chlorotoluene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
4-chlorotoluene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
tert-butylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2,4-trimethylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
sec-butylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,3-dichlorobenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
4-isopropyltoluene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,4-dichlorobenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2-dichlorobenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
n-butylbenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2,4-trichlorobenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
hexachlorobutadiene	< 200	200	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
naphthalene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,2,3-trichlorobenzene	< 800	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**6300**	800	ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**99**	78-114	%	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
toluene-D8 SUR	**103**	88-110	%	400	LMM		1501897	7/21/15	21:26	SW5030C8260C
4-bromofluorobenzene SUR	**98**	86-115	%	400	LMM		1501897	7/21/15	21:26	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-009

Sample ID: ESM-5B

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
chloromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
vinyl chloride	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
bromomethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
chloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
trichlorofluoromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
diethyl ether	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
acetone	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1-dichloroethene	**3300**	200	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
methylene chloride	**950**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
carbon disulfide	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
methyl t-butyl ether (MTBE)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
trans-1,2-dichloroethene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
isopropyl ether (DIPE)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1-dichloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
t-butanol (TBA)	< 6000	6000	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
2-butanone (MEK)	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
2,2-dichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
cis-1,2-dichloroethene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
chloroform	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
bromochloromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
tetrahydrofuran (THF)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1,1-trichloroethane	**27000**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1-dichloropropene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
t-amyl-methyl ether (TAME)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
carbon tetrachloride	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2-dichloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
benzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
trichloroethene	**34000**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2-dichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
bromodichloromethane	< 120	120	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,4-dioxane	< 10000	10000	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
dibromomethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
cis-1,3-dichloropropene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
toluene	**520**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
trans-1,3-dichloropropene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
2-hexanone	< 2000	2000	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1,2-trichloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,3-dichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
tetrachloroethene	**14000**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-009
Sample ID: ESM-5B
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2-dibromoethane (EDB)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
chlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1,1,2-tetrachloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
ethylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
m&p-xylenes	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
o-xylene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
styrene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
bromoform	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
isopropylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1,2,2-tetrachloroethane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2,3-trichloropropane	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
n-propylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
bromobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,3,5-trimethylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
2-chlorotoluene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
4-chlorotoluene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
tert-butylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2,4-trimethylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
sec-butylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,3-dichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
4-isopropyltoluene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,4-dichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2-dichlorobenzene	**1100**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
n-butylbenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2,4-trichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
hexachlorobutadiene	< 100	100	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
naphthalene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,2,3-trichlorobenzene	< 400	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**14000**	400	ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**90**	78-114	%	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
toluene-D8 SUR	**98**	88-110	%	200	LMM		1501897	7/21/15	20:24	SW5030C8260C
4-bromofluorobenzene SUR	**91**	86-115	%	200	LMM		1501897	7/21/15	20:24	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-010
Sample ID: ESM-9
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/17/15 7:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
chloromethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
vinyl chloride	**340**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
bromomethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
chloroethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
trichlorofluoromethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
diethyl ether	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
acetone	< 50	50	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1-dichloroethene	**39**	5	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
methylene chloride	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
carbon disulfide	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
methyl t-butyl ether (MTBE)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
trans-1,2-dichloroethene	**87**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
isopropyl ether (DIPE)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1-dichloroethane	**640**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
t-butanol (TBA)	< 150	150	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
2-butanone (MEK)	< 50	50	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
2,2-dichloropropane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
cis-1,2-dichloroethene	**4100**	40	ug/L	20	LMM		1501897	7/23/15	20:31	SW5030C8260C
chloroform	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
bromochloromethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1,1-trichloroethane	**3500**	40	ug/L	20	LMM		1501897	7/23/15	20:31	SW5030C8260C
1,1-dichloropropene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
t-amyl-methyl ether (TAME)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
carbon tetrachloride	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2-dichloroethane	**42**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
benzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
trichloroethene	**510**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2-dichloropropane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
bromodichloromethane	< 3.0	3.0	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,4-dioxane	< 250	250	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
dibromomethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 50	50	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
cis-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
toluene	**36**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
trans-1,3-dichloropropene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
2-hexanone	< 50	50	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1,2-trichloroethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,3-dichloropropane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
tetrachloroethene	**420**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-010
Sample ID: ESM-9
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/17/15 7:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2-dibromoethane (EDB)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
chlorobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1,1,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
ethylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
m&p-xylenes	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
o-xylene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
styrene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
bromoform	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
isopropylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1,2,2-tetrachloroethane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2,3-trichloropropane	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
n-propylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
bromobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,3,5-trimethylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
2-chlorotoluene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
4-chlorotoluene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
tert-butylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2,4-trimethylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
sec-butylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,3-dichlorobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
4-isopropyltoluene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,4-dichlorobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2-dichlorobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
n-butylbenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2,4-trichlorobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
hexachlorobutadiene	< 2.5	2.5	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
naphthalene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,2,3-trichlorobenzene	< 10	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**480**	10	ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
toluene-D8 SUR	**98**	88-110	%	5	LMM		1501897	7/21/15	18:50	SW5030C8260C
4-bromofluorobenzene SUR	**98**	86-115	%	5	LMM		1501897	7/21/15	18:50	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-011

Sample ID: ESM-13

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1-dichloroethane	**4**	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
cis-1,2-dichloroethene	**29**	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1,1-trichloroethane	**5**	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
trichloroethene	**38**	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
tetrachloroethene	**45**	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-011

Sample ID: ESM-13

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**18**	2	ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**97**	78-114	%	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
toluene-D8 SUR	**103**	88-110	%	1	LMM		1501900	7/23/15	19:59	SW5030C8260C
4-bromofluorobenzene SUR	**99**	86-115	%	1	LMM		1501900	7/23/15	19:59	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-013
Sample ID: Trip Blank
Matrix: Water
Received on ice at 5˚C, in satisfactory condition.
Sampled: 7/14/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-013

Sample ID: Trip Blank

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/14/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 2	2	ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**92**	78-114	%	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
toluene-D8 SUR	**99**	88-110	%	1	LMM		1501897	7/21/15	12:45	SW5030C8260C
4-bromofluorobenzene SUR	**96**	86-115	%	1	LMM		1501897	7/21/15	12:45	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-014

Sample ID: ESM-7

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
diethyl ether	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
acetone	< 10	10	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
methylene chloride	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1-dichloroethane	**14**	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
cis-1,2-dichloroethene	**43**	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
tetrahydrofuran (THF)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1,1-trichloroethane	**25**	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
trichloroethene	**39**	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
tetrachloroethene	**20**	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-014

Sample ID: ESM-7

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dibromochloromethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
naphthalene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 2	2	ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
hexachloroethane (as TIC)	**ND**		ug/L	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
toluene-D8 SUR	**96**	88-110	%	1	LMM		1501855	7/17/15	18:25	SW5030C8260C
4-bromofluorobenzene SUR	**90**	86-115	%	1	LMM		1501855	7/17/15	18:25	SW5030C8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653

Sample#: 33653-003
Sample ID: ESM-3
Matrix: Water
Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 2.5	2.5	ug/L	10	LMM		1501918	7/23/15	18:22	modSW8260C

Note: Dilution was necessary due to the presence of non-target compound(s).

Sample#: 33653-004
Sample ID: Trip Blank-1
Matrix: Water
Sampled: 7/14/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 0.25	0.25	ug/L	1	LMM		1501918	7/23/15	14:21	modSW8260C

Sample#: 33653-006
Sample ID: ESM-3B-S
Matrix: Water
Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 0.25	0.25	ug/L	1	LMM		1501918	7/23/15	14:54	modSW8260C

Sample#: 33653-007
Sample ID: ESM-3B-D
Matrix: Water
Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 1.2	1.2	ug/L	5	LMM		1501918	7/23/15	17:11	modSW8260C

Note: Dilution was necessary due to the presence of non-target compound(s).

Sample#: 33653-008
Sample ID: ESM-5
Matrix: Water
Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	**55**	5.0	ug/L	20	LMM		1501918	7/23/15	19:32	modSW8260C

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-009
Sample ID: ESM-5B
Matrix: Water
Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,4-dioxane	< 1.2	1.2	ug/L	5	LMM		1501918	7/23/15	16:01	modSW8260C

Note: Dilution was necessary due to the presence of non-target compound(s).

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-003

Sample ID: ESM-3

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	**60000**	20000	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
Unadjusted C9-C12 Aliphatics	< 20000	20000	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
methyl t-butyl ether (MTBE)	< 400	400	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
benzene	< 200	200	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
toluene	**12000**	400	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
ethylbenzene	< 400	400	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
m&p-xylenes	**790**	400	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
o-xylene	< 400	400	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
naphthalene	< 1000	1000	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
C5-C8 Aliphatics	**47000**	20000	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
C9-C12 Aliphatics	< 20000	20000	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
C9-C10 Aromatics	< 20000	20000	ug/L	200	LMM		1501919	7/23/15	20:55	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**95**	70-130	%	200	LMM		1501919	7/23/15	20:55	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**107**	70-130	%	200	LMM		1501919	7/23/15	20:55	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-006

Sample ID: ESM-3B-S

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	< 2000	2000	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
Unadjusted C9-C12 Aliphatics	< 2000	2000	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
methyl t-butyl ether (MTBE)	< 40	40	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
benzene	< 20	20	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
toluene	< 40	40	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
ethylbenzene	< 40	40	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
m&p-xylenes	< 40	40	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
o-xylene	< 40	40	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
naphthalene	< 100	100	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
C5-C8 Aliphatics	< 2000	2000	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
C9-C12 Aliphatics	< 2000	2000	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
C9-C10 Aromatics	< 2000	2000	ug/L	20	LMM		1501919	7/23/15	17:55	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**95**	70-130	%	20	LMM		1501919	7/23/15	17:55	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**106**	70-130	%	20	LMM		1501919	7/23/15	17:55	MA VPH

Note: Dilution was necessary due to the presence of non-target compounds.

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-007

Sample ID: ESM-3B-D

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	**23000**	10000	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
Unadjusted C9-C12 Aliphatics	< 10000	10000	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
methyl t-butyl ether (MTBE)	< 200	200	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
benzene	< 100	100	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
toluene	**1100**	200	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
ethylbenzene	< 200	200	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
m&p-xylenes	< 200	200	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
o-xylene	< 200	200	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
naphthalene	< 500	500	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
C5-C8 Aliphatics	**22000**	10000	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
C9-C12 Aliphatics	< 10000	10000	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
C9-C10 Aromatics	< 10000	10000	ug/L	100	LMM		1501953	7/24/15	22:47	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**94**	70-130	%	100	LMM		1501953	7/24/15	22:47	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**106**	70-130	%	100	LMM		1501953	7/24/15	22:47	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-008

Sample ID: ESM-5

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	**130000**	50000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
Unadjusted C9-C12 Aliphatics	< 50000	50000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
methyl t-butyl ether (MTBE)	< 1000	1000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
benzene	< 500	500	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
toluene	**22000**	1000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
ethylbenzene	**2900**	1000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
m&p-xylenes	< 1000	1000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
o-xylene	< 1000	1000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
naphthalene	< 2500	2500	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
C5-C8 Aliphatics	**100000**	50000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
C9-C12 Aliphatics	< 50000	50000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
C9-C10 Aromatics	< 50000	50000	ug/L	500	LMM		1501919	7/23/15	21:55	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**94**	70-130	%	500	LMM		1501919	7/23/15	21:55	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**106**	70-130	%	500	LMM		1501919	7/23/15	21:55	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-009

Sample ID: ESM-5B

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	**20000**	5000	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
Unadjusted C9-C12 Aliphatics	< 5000	5000	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
methyl t-butyl ether (MTBE)	< 100	100	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
benzene	< 50	50	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
toluene	**380**	100	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
ethylbenzene	**140**	100	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
m&p-xylenes	**170**	100	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
o-xylene	< 100	100	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
naphthalene	< 250	250	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
C5-C8 Aliphatics	**19000**	5000	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
C9-C12 Aliphatics	< 5000	5000	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
C9-C10 Aromatics	< 5000	5000	ug/L	50	LMM		1501953	7/24/15	21:44	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**95**	70-130	%	50	LMM		1501953	7/24/15	21:44	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**110**	70-130	%	50	LMM		1501953	7/24/15	21:44	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-011

Sample ID: ESM-13

Matrix: Water

Received on ice at 5˚C, in satisfactory condition.

Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Unadjusted C5-C8 Aliphatics	< 100	100	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
Unadjusted C9-C12 Aliphatics	< 100	100	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
benzene	< 1	1	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
toluene	< 2	2	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
ethylbenzene	< 2	2	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
m&p-xylenes	< 2	2	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
o-xylene	< 2	2	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
naphthalene	< 5	5	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
C5-C8 Aliphatics	< 100	100	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
C9-C12 Aliphatics	< 100	100	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
C9-C10 Aromatics	< 100	100	ug/L	1	LMM		1501919	7/23/15	15:49	MA VPH
Surrogate Recovery		**Limits**								
2,5-dibromotoluene as Aromatic SUR	**91**	70-130	%	1	LMM		1501919	7/23/15	15:49	MA VPH
2,5-dibromotoluene as Aliphatic SUR	**102**	70-130	%	1	LMM		1501919	7/23/15	15:49	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Lewis Chemical 229286.01

Job ID: 33653

Sample#: 33653-001

Sample ID: ESM-6

Matrix: Water

Sampled: 7/16/15 13:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
PCB-1221	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
PCB-1232	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
PCB-1242	**1.2**	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
PCB-1248	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
PCB-1254	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
PCB-1260	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**88**	30-150	%	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A
decachlorobiphenyl SUR	**44**	30-150	%	1	AM	7/24/15	8044	8/1/15	16:33	SW3510C8082A

Sample#: 33653-002

Sample ID: ESM-6 Dissolved

Matrix: Water

Sampled: 7/16/15 13:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
PCB-1221	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
PCB-1232	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
PCB-1242	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
PCB-1248	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
PCB-1254	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
PCB-1260	< 0.25	0.25	ug/L	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**75**	30-150	%	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A
decachlorobiphenyl SUR	**41**	30-150	%	1	JLZ	7/24/15	8044	7/27/15	19:21	SW3510C8082A

Project ID: Lewis Chemical 229286.01
Job ID: 33653

Sample#: 33653-008
Sample ID: ESM-5
Matrix: Water
Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 5.0	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
PCB-1221	< 5.0	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
PCB-1232	< 5.0	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
PCB-1242	**28**	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
PCB-1248	< 5.0	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
PCB-1254	< 5.0	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
PCB-1260	< 5.0	5.0	ug/L	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**DOR**	30-150	%	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A
decachlorobiphenyl SUR	**DOR**	30-150	%	20	AM	7/24/15	8044	8/1/15	17:04	SW3510C8082A

DOR = Diluted out of calibration range.

Sample#: 33653-012
Sample ID: ESM-5 Dissolved
Matrix: Water
Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
PCB-1221	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
PCB-1232	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
PCB-1242	**1.3**	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
PCB-1248	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
PCB-1254	**0.80**	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
PCB-1260	< 0.25	0.25	ug/L	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**79**	30-150	%	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A
decachlorobiphenyl SUR	**31**	30-150	%	1	AM	7/24/15	8044	8/1/15	17:34	SW3510C8082A

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-003
Sample ID: ESM-3
Matrix: Water
Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**9.3**	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	11:27	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	5:32	MA EPH
C9-C18 Aliphatics	**110**	100	ug/L	1	AM	7/21/15	8033	7/22/15	16:13	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	16:13	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	5:32	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**26** *	40-140	%	1	AM	7/21/15	8033	7/22/15	16:13	MA EPH
o-terphenyl SUR	**25** *	40-140	%	1	AM	7/21/15	8033	7/23/15	5:32	MA EPH
2-fluorobiphenyl SUR	**68**	40-140	%	1	AM	7/21/15	8033	7/23/15	5:32	MA EPH
2-bromonaphthalene SUR	**65**	40-140	%	1	AM	7/21/15	8033	7/23/15	5:32	MA EPH

**** The surrogate showed recovery outside the acceptance limits as a result of an obvious matrix interference.***

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-006
Sample ID: ESM-3B-S
Matrix: Water
Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**0.8**	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:04	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	5:57	MA EPH
C9-C18 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	16:31	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	16:31	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	5:57	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**51**	40-140	%	1	AM	7/21/15	8033	7/22/15	16:31	MA EPH
o-terphenyl SUR	**51**	40-140	%	1	AM	7/21/15	8033	7/23/15	5:57	MA EPH
2-fluorobiphenyl SUR	**69**	40-140	%	1	AM	7/21/15	8033	7/23/15	5:57	MA EPH
2-bromonaphthalene SUR	**71**	40-140	%	1	AM	7/21/15	8033	7/23/15	5:57	MA EPH

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-007
Sample ID: ESM-3B-D
Matrix: Water
Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**4.2**	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	12:41	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	6:23	MA EPH
C9-C18 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	16:50	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	16:50	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	6:23	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**44**	40-140	%	1	AM	7/21/15	8033	7/22/15	16:50	MA EPH
o-terphenyl SUR	**44**	40-140	%	1	AM	7/21/15	8033	7/23/15	6:23	MA EPH
2-fluorobiphenyl SUR	**70**	40-140	%	1	AM	7/21/15	8033	7/23/15	6:23	MA EPH
2-bromonaphthalene SUR	**71**	40-140	%	1	AM	7/21/15	8033	7/23/15	6:23	MA EPH

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-008
Sample ID: ESM-5
Matrix: Water
Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**5.8**	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
2-methylnaphthalene	**0.5**	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:19	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	6:49	MA EPH
C9-C18 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	17:09	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	17:09	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	6:49	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**36** *	40-140	%	1	AM	7/21/15	8033	7/22/15	17:09	MA EPH
o-terphenyl SUR	**36** *	40-140	%	1	AM	7/21/15	8033	7/23/15	6:49	MA EPH
2-fluorobiphenyl SUR	**73**	40-140	%	1	AM	7/21/15	8033	7/23/15	6:49	MA EPH
2-bromonaphthalene SUR	**75**	40-140	%	1	AM	7/21/15	8033	7/23/15	6:49	MA EPH

**** The surrogate showed recovery outside the acceptance limits as a result of an obvious matrix interference.***

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-009
Sample ID: ESM-5B
Matrix: Water
Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**2.7**	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	13:56	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	7:15	MA EPH
C9-C18 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	17:27	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	17:27	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	7:15	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**45**	40-140	%	1	AM	7/21/15	8033	7/22/15	17:27	MA EPH
o-terphenyl SUR	**48**	40-140	%	1	AM	7/21/15	8033	7/23/15	7:15	MA EPH
2-fluorobiphenyl SUR	**71**	40-140	%	1	AM	7/21/15	8033	7/23/15	7:15	MA EPH
2-bromonaphthalene SUR	**72**	40-140	%	1	AM	7/21/15	8033	7/23/15	7:15	MA EPH

Project ID: Lewis Chemical 229286.01
Job ID: 33653
Sample#: 33653-011
Sample ID: ESM-13
Matrix: Water
Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
phenanthrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
acenaphthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
fluorene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
chrysene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	7/21/15	8033	7/22/15	14:33	MA EPH
Unadjusted C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	7:41	MA EPH
C9-C18 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	17:45	MA EPH
C19-C36 Aliphatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/22/15	17:45	MA EPH
C11-C22 Aromatics	< 100	100	ug/L	1	AM	7/21/15	8033	7/23/15	7:41	MA EPH
Surrogate Recovery		**Limits**								
1-chloro-octadecane SUR	**44**	40-140	%	1	AM	7/21/15	8033	7/22/15	17:45	MA EPH
o-terphenyl SUR	**42**	40-140	%	1	AM	7/21/15	8033	7/23/15	7:41	MA EPH
2-fluorobiphenyl SUR	**71**	40-140	%	1	AM	7/21/15	8033	7/23/15	7:41	MA EPH
2-bromonaphthalene SUR	**73**	40-140	%	1	AM	7/21/15	8033	7/23/15	7:41	MA EPH

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 229286.01

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **33653**

Matrices: Groundwater/Surface Water ☑ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☑	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☑	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☑	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☑	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☑ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☐ No*☑

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☑ No*☐

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: (for) **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 8/11/15**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 33653

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 5 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

The samples for congeners analysis were received on hold. The report was finalized without the congeners being analyzed at the customer's request.

Calibration

PCB: Quantification is quadratic.

See the included table for a list of compounds quantitated by quadratic equation.

Method Blank

No exceptions noted.

Surrogate Recoveries

No exceptions noted.

EPH: The extraction surrogates in the samples 33653-003 and -008 showed recoveries outside the acceptance limits as a result of an obvious matrix interference. It is suspected that the large concentration of chlorinated solvents interfered with the extraction and fractionation process.

PCB: The surrogates were diluted out of the calibration range in the following sample: 33653-008.

Laboratory Control Sample Results

VOC: The relative percent difference between the LCS and LCSD1501855 was outside the acceptance criteria for bromomethane. The percent recovery for this analyte in each QC parameter was within the acceptance criteria. No impact to the data suspected.

VOC: The LCS/D1501900 did not meet the acceptance criteria for bromomethane, chloroethane, t-butanol (TBA), 2-butanone (MEK), tetrahydrofuran (THF), 1,4-dioxane, 4-methyl-2-pentanone (MIBK), 2-hexanone, and naphthalene. These compounds showed high recovery. There is no impact to the data as these analytes were not detected in the associated samples.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

Low Level 1,4-dioxane: Sample dilution was required for 33653-003, -007, and -009 due to the presence of non-target compounds.

VOC: The compound, hexachloroethane, was evaluated in the VOC analysis as a tentatively identified compound (TIC), as requested by the customer.

VPH: The C5-C8 aliphatic range will include concentrations from chlorinated solvents as well as hydrocarbons when large concentrations of chlorinated solvents are present in the sample. Sample 33653-006 required dilution due to non-target compounds.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.

Question G: The CAM protocol reporting limits were not achieved for this project due to dilutions necessary for sample analysis. Box G is "No."

Question H: See surrogate section above. Box H is "No."

Quantitation by Quadratic Equation
Lab # 33653

Quantitation of the following compounds was based on a quadratic equation

dichlorodifluoromethane
Bromomethane
Acetone
Carbon disulfide
tetrahydrofuran (THF)
Carbon tetrachloride
1,2-Dichloroethane
Bromodichloromethane
2-Hexanone
cis-1,3-dichloropropene
trans-1,3-Dichloropropene
Dibromochloromethane
1,1,1,2-Tetrachloroethane
Bromoform
bromobenzene
1,2-dibromo-3-chloropropane (DBCP)
hexachlorobutadiene

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA VPH	BLK1501919	Unadjusted C5-C8 Aliphatics		<	100	ug/L						
		Unadjusted C9-C12 Aliphatics		<	100	ug/L						
		methyl t-butyl ether (MTBE)		<	2	ug/L						
		benzene		<	1	ug/L						
		toluene		<	2	ug/L						
		ethylbenzene		<	2	ug/L						
		m&p-xylenes		<	2	ug/L						
		o-xylene		<	2	ug/L						
		naphthalene		<	5	ug/L						
		C5-C8 Aliphatics		<	100	ug/L						
		C9-C12 Aliphatics		<	100	ug/L						
		C9-C10 Aromatics		<	100	ug/L						
		2,5-dibromotoluene as Aromatic SUR			94	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			105	%			70	130		
MA VPH	LCS1501919	Unadjusted C5-C8 Aliphatics			700	ug/L	600	117	70	130		
		Unadjusted C9-C12 Aliphatics			980	ug/L	800	123	70	130		
		methyl t-butyl ether (MTBE)			96	ug/L	100	96	70	130		
		benzene			94	ug/L	100	94	70	130		
		toluene			95	ug/L	100	95	70	130		
		ethylbenzene			95	ug/L	100	95	70	130		
		m&p-xylenes			190	ug/L	200	96	70	130		
		o-xylene			95	ug/L	100	95	70	130		
		naphthalene			100	ug/L	100	102	70	130		
		C5-C8 Aliphatics			300	ug/L	300	100	70	130		
		C9-C12 Aliphatics			270	ug/L	300	90	70	130		
		C9-C10 Aromatics			86	ug/L	100	86	70	130		
		2,5-dibromotoluene as Aromatic SUR			97	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			109	%			70	130		
MA VPH	LCSD1501919	Unadjusted C5-C8 Aliphatics			710	ug/L	600	118	70	130	1	25
		Unadjusted C9-C12 Aliphatics			1000	ug/L	800	125	70	130	2	25
		methyl t-butyl ether (MTBE)			97	ug/L	100	97	70	130	1	25
		benzene			94	ug/L	100	94	70	130	0	25
		toluene			95	ug/L	100	95	70	130	0	25
		ethylbenzene			95	ug/L	100	95	70	130	0	25
		m&p-xylenes			190	ug/L	200	97	70	130	0	25
		o-xylene			95	ug/L	100	95	70	130	0	25
		naphthalene			100	ug/L	100	104	70	130	2	25
		C5-C8 Aliphatics			310	ug/L	300	103	70	130	3	25
		C9-C12 Aliphatics			280	ug/L	300	94	70	130	5	25
		C9-C10 Aromatics			87	ug/L	100	87	70	130	1	25
		2,5-dibromotoluene as Aromatic SUR			98	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			109	%			70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA VPH	BLK1501953	Unadjusted C5-C8 Aliphatics		<	100	ug/L						
		Unadjusted C9-C12 Aliphatics		<	100	ug/L						
		methyl t-butyl ether (MTBE)		<	2	ug/L						
		benzene		<	1	ug/L						
		toluene		<	2	ug/L						
		ethylbenzene		<	2	ug/L						
		m&p-xylenes		<	2	ug/L						
		o-xylene		<	2	ug/L						
		naphthalene		<	5	ug/L						
		C5-C8 Aliphatics		<	100	ug/L						
		C9-C12 Aliphatics		<	100	ug/L						
		C9-C10 Aromatics		<	100	ug/L						
		2,5-dibromotoluene as Aromatic SUR			101	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			112	%			70	130		
MA VPH	LCS1501953	Unadjusted C5-C8 Aliphatics			680	ug/L	600	114	70	130		
		Unadjusted C9-C12 Aliphatics			980	ug/L	800	123	70	130		
		methyl t-butyl ether (MTBE)			86	ug/L	100	86	70	130		
		benzene			92	ug/L	100	92	70	130		
		toluene			92	ug/L	100	92	70	130		
		ethylbenzene			93	ug/L	100	93	70	130		
		m&p-xylenes			190	ug/L	200	95	70	130		
		o-xylene			93	ug/L	100	93	70	130		
		naphthalene			90	ug/L	100	90	70	130		
		C5-C8 Aliphatics			300	ug/L	300	99	70	130		
		C9-C12 Aliphatics			280	ug/L	300	92	70	130		
		C9-C10 Aromatics			93	ug/L	100	93	70	130		
		2,5-dibromotoluene as Aromatic SUR			95	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			107	%			70	130		
MA VPH	LCSD1501953	Unadjusted C5-C8 Aliphatics			690	ug/L	600	114	70	130	1	25
		Unadjusted C9-C12 Aliphatics			990	ug/L	800	123	70	130	0	25
		methyl t-butyl ether (MTBE)			86	ug/L	100	86	70	130	0	25
		benzene			92	ug/L	100	92	70	130	0	25
		toluene			92	ug/L	100	92	70	130	0	25
		ethylbenzene			93	ug/L	100	93	70	130	0	25
		m&p-xylenes			190	ug/L	200	95	70	130	0	25
		o-xylene			93	ug/L	100	93	70	130	0	25
		naphthalene			92	ug/L	100	92	70	130	2	25
		C5-C8 Aliphatics			300	ug/L	300	100	70	130	1	25
		C9-C12 Aliphatics			280	ug/L	300	93	70	130	1	25
		C9-C10 Aromatics			91	ug/L	100	91	70	130	2	25
		2,5-dibromotoluene as Aromatic SUR			97	%			70	130		
		2,5-dibromotoluene as Aliphatic SUR			108	%			70	130		
modSW8260C	BLK1501918	1,4-dioxane		<	0.25	ug/L						
modSW8260C	LCS1501918	1,4-dioxane			7.8	ug/L	8	98	70	130		
modSW8260C	LCSD1501918	1,4-dioxane			8.1	ug/L	8	101	70	130	3	20

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1501855	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1501855	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			98	%			78	114		
		toluene-D8 SUR			101	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501855	dichlorodifluoromethane			15	ug/L	20	75	70	130		
		chloromethane			15	ug/L	20	73	70	130		
		vinyl chloride			16	ug/L	20	82	70	130		
		bromomethane			18	ug/L	20	90	70	130		
		chloroethane			19	ug/L	20	96	70	130		
		trichlorofluoromethane			19	ug/L	20	96	70	130		
		diethyl ether			20	ug/L	20	101	70	130		
		acetone		<	50	ug/L	20	122				
		1,1-dichloroethene			17	ug/L	20	87	70	130		
		methylene chloride			17	ug/L	20	87	70	130		
		carbon disulfide			17	ug/L	20	85	70	130		
		methyl t-butyl ether (MTBE)			20	ug/L	20	99	70	130		
		trans-1,2-dichloroethene			19	ug/L	20	93	70	130		
		isopropyl ether (DIPE)			19	ug/L	20	96	70	130		
		ethyl t-butyl ether (ETBE)			19	ug/L	20	94	70	130		
		1,1-dichloroethane			17	ug/L	20	85	70	130		
		t-butanol (TBA)			100	ug/L	100	104	70	130		
		2-butanone (MEK)			22	ug/L	20	108	70	130		
		2,2-dichloropropane			17	ug/L	20	87	70	130		
		cis-1,2-dichloroethene			18	ug/L	20	90	70	130		
		chloroform			18	ug/L	20	88	70	130		
		bromochloromethane			17	ug/L	20	86	70	130		
		tetrahydrofuran (THF)			24	ug/L	20	118	70	130		
		1,1,1-trichloroethane			20	ug/L	20	98	70	130		
		1,1-dichloropropene			17	ug/L	20	84	70	130		
		t-amyl-methyl ether (TAME)			19	ug/L	20	93	70	130		
		carbon tetrachloride			18	ug/L	20	88	70	130		
		1,2-dichloroethane			20	ug/L	20	99	70	130		
		benzene			19	ug/L	20	97	70	130		
		trichloroethene			19	ug/L	20	97	70	130		
		1,2-dichloropropane			18	ug/L	20	92	70	130		
		bromodichloromethane			20	ug/L	20	98	70	130		
		1,4-dioxane		<	50	ug/L	40	98	70	130		
		dibromomethane			18	ug/L	20	89	70	130		
		4-methyl-2-pentanone (MIBK)			23	ug/L	20	114	70	130		
		cis-1,3-dichloropropene			19	ug/L	20	93	70	130		
		toluene			18	ug/L	20	91	70	130		
		trans-1,3-dichloropropene			18	ug/L	20	92	70	130		
		2-hexanone			23	ug/L	20	115	70	130		
		1,1,2-trichloroethane			18	ug/L	20	92	70	130		
		1,3-dichloropropane			19	ug/L	20	93	70	130		
		tetrachloroethene			19	ug/L	20	93	70	130		
		dibromochloromethane			17	ug/L	20	87	70	130		
		1,2-dibromoethane (EDB)			18	ug/L	20	88	70	130		
		chlorobenzene			17	ug/L	20	86	70	130		
		1,1,1,2-tetrachloroethane			18	ug/L	20	88	70	130		
		ethylbenzene			19	ug/L	20	94	70	130		
		m&p-xylenes			38	ug/L	40	96	70	130		
		o-xylene			19	ug/L	20	97	70	130		
		styrene			20	ug/L	20	102	70	130		
		bromoform			19	ug/L	20	94	70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501855	isopropylbenzene		20	ug/L	20	98	70	130		
		1,1,2,2-tetrachloroethane		22	ug/L	20	108	70	130		
		1,2,3-trichloropropane		22	ug/L	20	110	70	130		
		n-propylbenzene		19	ug/L	20	97	70	130		
		bromobenzene		19	ug/L	20	94	70	130		
		1,3,5-trimethylbenzene		21	ug/L	20	104	70	130		
		2-chlorotoluene		19	ug/L	20	97	70	130		
		4-chlorotoluene		19	ug/L	20	97	70	130		
		tert-butylbenzene		20	ug/L	20	99	70	130		
		1,2,4-trimethylbenzene		20	ug/L	20	102	70	130		
		sec-butylbenzene		19	ug/L	20	95	70	130		
		1,3-dichlorobenzene		20	ug/L	20	101	70	130		
		4-isopropyltoluene		18	ug/L	20	90	70	130		
		1,4-dichlorobenzene		18	ug/L	20	92	70	130		
		1,2-dichlorobenzene		19	ug/L	20	93	70	130		
		n-butylbenzene		19	ug/L	20	96	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		22	ug/L	20	110	70	130		
		1,2,4-trichlorobenzene		21	ug/L	20	106	70	130		
		hexachlorobutadiene		20	ug/L	20	101	70	130		
		naphthalene		24	ug/L	20	122	70	130		
		1,2,3-trichlorobenzene		23	ug/L	20	114	70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		19	ug/L	20	97	70	130		
		dibromofluoromethane SUR		97	%			78	114		
		toluene-D8 SUR		100	%			88	110		
		4-bromofluorobenzene SUR		98	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD		RPD Limit
SW5030C8260C	LCSD1501855	dichlorodifluoromethane			15	ug/L	20	77	70	130	2		20
		chloromethane			15	ug/L	20	75	70	130	4		20
		vinyl chloride			16	ug/L	20	81	70	130	0		20
		bromomethane			23	ug/L	20	113	70	130	23	*	20
		chloroethane			20	ug/L	20	98	70	130	1		20
		trichlorofluoromethane			20	ug/L	20	98	70	130	2		20
		diethyl ether			20	ug/L	20	101	70	130	0		20
		acetone		<	50	ug/L	20	125			2		20
		1,1-dichloroethene			18	ug/L	20	88	70	130	1		20
		methylene chloride			18	ug/L	20	89	70	130	2		20
		carbon disulfide			18	ug/L	20	90	70	130	5		20
		methyl t-butyl ether (MTBE)			20	ug/L	20	100	70	130	1		20
		trans-1,2-dichloroethene			19	ug/L	20	93	70	130	0		20
		isopropyl ether (DIPE)			20	ug/L	20	99	70	130	3		20
		ethyl t-butyl ether (ETBE)			19	ug/L	20	97	70	130	3		20
		1,1-dichloroethane			17	ug/L	20	87	70	130	2		20
		t-butanol (TBA)			110	ug/L	100	105	70	130	1		20
		2-butanone (MEK)			21	ug/L	20	103	70	130	5		20
		2,2-dichloropropane			18	ug/L	20	90	70	130	4		20
		cis-1,2-dichloroethene			19	ug/L	20	93	70	130	3		20
		chloroform			18	ug/L	20	92	70	130	4		20
		bromochloromethane			18	ug/L	20	89	70	130	3		20
		tetrahydrofuran (THF)			22	ug/L	20	109	70	130	8		20
		1,1,1-trichloroethane			21	ug/L	20	103	70	130	5		20
		1,1-dichloropropene			17	ug/L	20	84	70	130	0		20
		t-amyl-methyl ether (TAME)			19	ug/L	20	95	70	130	2		20
		carbon tetrachloride			18	ug/L	20	89	70	130	1		20
		1,2-dichloroethane			20	ug/L	20	101	70	130	2		20
		benzene			20	ug/L	20	99	70	130	2		20
		trichloroethene			20	ug/L	20	99	70	130	2		20
		1,2-dichloropropane			19	ug/L	20	93	70	130	2		20
		bromodichloromethane			21	ug/L	20	103	70	130	5		20
		1,4-dioxane		<	50	ug/L	40	97	70	130	2		20
		dibromomethane			18	ug/L	20	90	70	130	1		20
		4-methyl-2-pentanone (MIBK)			22	ug/L	20	109	70	130	5		20
		cis-1,3-dichloropropene			19	ug/L	20	95	70	130	3		20
		toluene			18	ug/L	20	92	70	130	1		20
		trans-1,3-dichloropropene			20	ug/L	20	98	70	130	5		20
		2-hexanone			21	ug/L	20	106	70	130	8		20
		1,1,2-trichloroethane			19	ug/L	20	94	70	130	1		20
		1,3-dichloropropane			20	ug/L	20	98	70	130	5		20
		tetrachloroethene			20	ug/L	20	101	70	130	9		20
		dibromochloromethane			19	ug/L	20	93	70	130	7		20
		1,2-dibromoethane (EDB)			19	ug/L	20	93	70	130	7		20
		chlorobenzene			18	ug/L	20	92	70	130	7		20
		1,1,1,2-tetrachloroethane			20	ug/L	20	99	70	130	11		20
		ethylbenzene			20	ug/L	20	101	70	130	7		20
		m&p-xylenes			41	ug/L	40	102	70	130	6		20
		o-xylene			21	ug/L	20	105	70	130	7		20
		styrene			21	ug/L	20	106	70	130	4		20
		bromoform			20	ug/L	20	101	70	130	7		20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501855	isopropylbenzene		21	ug/L	20	104	70	130	7	20
		1,1,2,2-tetrachloroethane		21	ug/L	20	105	70	130	3	20
		1,2,3-trichloropropane		20	ug/L	20	101	70	130	9	20
		n-propylbenzene		19	ug/L	20	96	70	130	1	20
		bromobenzene		19	ug/L	20	96	70	130	2	20
		1,3,5-trimethylbenzene		21	ug/L	20	103	70	130	1	20
		2-chlorotoluene		19	ug/L	20	96	70	130	1	20
		4-chlorotoluene		20	ug/L	20	98	70	130	1	20
		tert-butylbenzene		20	ug/L	20	99	70	130	0	20
		1,2,4-trimethylbenzene		20	ug/L	20	101	70	130	1	20
		sec-butylbenzene		19	ug/L	20	95	70	130	0	20
		1,3-dichlorobenzene		21	ug/L	20	103	70	130	2	20
		4-isopropyltoluene		18	ug/L	20	90	70	130	0	20
		1,4-dichlorobenzene		19	ug/L	20	94	70	130	2	20
		1,2-dichlorobenzene		19	ug/L	20	94	70	130	1	20
		n-butylbenzene		19	ug/L	20	96	70	130	0	20
		1,2-dibromo-3-chloropropane (DBCP)		21	ug/L	20	106	70	130	4	20
		1,2,4-trichlorobenzene		21	ug/L	20	105	70	130	1	20
		hexachlorobutadiene		20	ug/L	20	99	70	130	2	20
		naphthalene		24	ug/L	20	118	70	130	3	20
		1,2,3-trichlorobenzene		23	ug/L	20	117	70	130	2	20
		1,1,2-trichloro-1,2,2-trifluoroethane		20	ug/L	20	102	70	130	4	20
		dibromofluoromethane SUR		99	%			78	114		
		toluene-D8 SUR		101	%			88	110		
		4-bromofluorobenzene SUR		105	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1501897	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1501897	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			99	%			78	114		
		toluene-D8 SUR			98	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501897	dichlorodifluoromethane			16	ug/L	20	80	70	130		
		chloromethane			19	ug/L	20	93	70	130		
		vinyl chloride			18	ug/L	20	89	70	130		
		bromomethane			20	ug/L	20	99	70	130		
		chloroethane			20	ug/L	20	101	70	130		
		trichlorofluoromethane			20	ug/L	20	98	70	130		
		diethyl ether			20	ug/L	20	102	70	130		
		acetone		<	50	ug/L	20	113				
		1,1-dichloroethene			18	ug/L	20	91	70	130		
		methylene chloride			19	ug/L	20	93	70	130		
		carbon disulfide			16	ug/L	20	78	70	130		
		methyl t-butyl ether (MTBE)			20	ug/L	20	99	70	130		
		trans-1,2-dichloroethene			19	ug/L	20	95	70	130		
		isopropyl ether (DIPE)			20	ug/L	20	100	70	130		
		ethyl t-butyl ether (ETBE)			19	ug/L	20	97	70	130		
		1,1-dichloroethane			18	ug/L	20	89	70	130		
		t-butanol (TBA)			95	ug/L	100	95	70	130		
		2-butanone (MEK)			22	ug/L	20	108	70	130		
		2,2-dichloropropane			18	ug/L	20	88	70	130		
		cis-1,2-dichloroethene			19	ug/L	20	94	70	130		
		chloroform			19	ug/L	20	94	70	130		
		bromochloromethane			18	ug/L	20	90	70	130		
		tetrahydrofuran (THF)			23	ug/L	20	114	70	130		
		1,1,1-trichloroethane			21	ug/L	20	104	70	130		
		1,1-dichloropropene			17	ug/L	20	87	70	130		
		t-amyl-methyl ether (TAME)			19	ug/L	20	96	70	130		
		carbon tetrachloride			18	ug/L	20	92	70	130		
		1,2-dichloroethane			21	ug/L	20	105	70	130		
		benzene			21	ug/L	20	103	70	130		
		trichloroethene			22	ug/L	20	109	70	130		
		1,2-dichloropropane			19	ug/L	20	96	70	130		
		bromodichloromethane			20	ug/L	20	101	70	130		
		1,4-dioxane		<	50	ug/L	40	100	70	130		
		dibromomethane			18	ug/L	20	92	70	130		
		4-methyl-2-pentanone (MIBK)			21	ug/L	20	107	70	130		
		cis-1,3-dichloropropene			19	ug/L	20	95	70	130		
		toluene			19	ug/L	20	95	70	130		
		trans-1,3-dichloropropene			19	ug/L	20	96	70	130		
		2-hexanone			23	ug/L	20	113	70	130		
		1,1,2-trichloroethane			19	ug/L	20	96	70	130		
		1,3-dichloropropane			19	ug/L	20	94	70	130		
		tetrachloroethene			20	ug/L	20	99	70	130		
		dibromochloromethane			16	ug/L	20	81	70	130		
		1,2-dibromoethane (EDB)			17	ug/L	20	87	70	130		
		chlorobenzene			18	ug/L	20	89	70	130		
		1,1,1,2-tetrachloroethane			18	ug/L	20	90	70	130		
		ethylbenzene			20	ug/L	20	98	70	130		
		m&p-xylenes			39	ug/L	40	98	70	130		
		o-xylene			20	ug/L	20	101	70	130		
		styrene			21	ug/L	20	104	70	130		
		bromoform			16	ug/L	20	82	70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1501897	isopropylbenzene		20	ug/L	20	102	70	130		
		1,1,2,2-tetrachloroethane		21	ug/L	20	104	70	130		
		1,2,3-trichloropropane		21	ug/L	20	103	70	130		
		n-propylbenzene		20	ug/L	20	99	70	130		
		bromobenzene		19	ug/L	20	96	70	130		
		1,3,5-trimethylbenzene		21	ug/L	20	103	70	130		
		2-chlorotoluene		20	ug/L	20	99	70	130		
		4-chlorotoluene		20	ug/L	20	99	70	130		
		tert-butylbenzene		20	ug/L	20	102	70	130		
		1,2,4-trimethylbenzene		20	ug/L	20	101	70	130		
		sec-butylbenzene		19	ug/L	20	97	70	130		
		1,3-dichlorobenzene		21	ug/L	20	103	70	130		
		4-isopropyltoluene		18	ug/L	20	92	70	130		
		1,4-dichlorobenzene		19	ug/L	20	93	70	130		
		1,2-dichlorobenzene		19	ug/L	20	94	70	130		
		n-butylbenzene		19	ug/L	20	96	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		19	ug/L	20	95	70	130		
		1,2,4-trichlorobenzene		21	ug/L	20	103	70	130		
		hexachlorobutadiene		18	ug/L	20	92	70	130		
		naphthalene		22	ug/L	20	111	70	130		
		1,2,3-trichlorobenzene		23	ug/L	20	113	70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		20	ug/L	20	102	70	130		
		dibromofluoromethane SUR		97	%			78	114		
		toluene-D8 SUR		100	%			88	110		
		4-bromofluorobenzene SUR		100	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501897	dichlorodifluoromethane			16	ug/L	20	79	70	130	1	20
		chloromethane			18	ug/L	20	90	70	130	4	20
		vinyl chloride			18	ug/L	20	88	70	130	1	20
		bromomethane			21	ug/L	20	104	70	130	5	20
		chloroethane			20	ug/L	20	100	70	130	0	20
		trichlorofluoromethane			20	ug/L	20	99	70	130	2	20
		diethyl ether			20	ug/L	20	99	70	130	3	20
		acetone		<	50	ug/L	20	116			3	20
		1,1-dichloroethene			18	ug/L	20	92	70	130	1	20
		methylene chloride			18	ug/L	20	92	70	130	1	20
		carbon disulfide			17	ug/L	20	83	70	130	7	20
		methyl t-butyl ether (MTBE)			20	ug/L	20	98	70	130	0	20
		trans-1,2-dichloroethene			19	ug/L	20	95	70	130	1	20
		isopropyl ether (DIPE)			20	ug/L	20	99	70	130	0	20
		ethyl t-butyl ether (ETBE)			20	ug/L	20	98	70	130	0	20
		1,1-dichloroethane			18	ug/L	20	88	70	130	2	20
		t-butanol (TBA)			95	ug/L	100	95	70	130	0	20
		2-butanone (MEK)			20	ug/L	20	102	70	130	5	20
		2,2-dichloropropane			18	ug/L	20	91	70	130	3	20
		cis-1,2-dichloroethene			19	ug/L	20	94	70	130	1	20
		chloroform			19	ug/L	20	95	70	130	1	20
		bromochloromethane			18	ug/L	20	91	70	130	0	20
		tetrahydrofuran (THF)			21	ug/L	20	104	70	130	9	20
		1,1,1-trichloroethane			21	ug/L	20	104	70	130	0	20
		1,1-dichloropropene			17	ug/L	20	87	70	130	0	20
		t-amyl-methyl ether (TAME)			19	ug/L	20	95	70	130	0	20
		carbon tetrachloride			18	ug/L	20	92	70	130	1	20
		1,2-dichloroethane			21	ug/L	20	105	70	130	0	20
		benzene			21	ug/L	20	103	70	130	0	20
		trichloroethene			22	ug/L	20	110	70	130	2	20
		1,2-dichloropropane			20	ug/L	20	98	70	130	2	20
		bromodichloromethane			21	ug/L	20	103	70	130	2	20
		1,4-dioxane		<	50	ug/L	40	106	70	130	6	20
		dibromomethane			18	ug/L	20	91	70	130	0	20
		4-methyl-2-pentanone (MIBK)			21	ug/L	20	107	70	130	0	20
		cis-1,3-dichloropropene			19	ug/L	20	97	70	130	2	20
		toluene			19	ug/L	20	97	70	130	1	20
		trans-1,3-dichloropropene			20	ug/L	20	99	70	130	3	20
		2-hexanone			20	ug/L	20	102	70	130	10	20
		1,1,2-trichloroethane			20	ug/L	20	98	70	130	2	20
		1,3-dichloropropane			19	ug/L	20	96	70	130	2	20
		tetrachloroethene			20	ug/L	20	100	70	130	2	20
		dibromochloromethane			17	ug/L	20	84	70	130	4	20
		1,2-dibromoethane (EDB)			18	ug/L	20	90	70	130	4	20
		chlorobenzene			18	ug/L	20	91	70	130	2	20
		1,1,1,2-tetrachloroethane			19	ug/L	20	95	70	130	6	20
		ethylbenzene			20	ug/L	20	99	70	130	1	20
		m&p-xylenes			40	ug/L	40	99	70	130	2	20
		o-xylene			20	ug/L	20	102	70	130	1	20
		styrene			21	ug/L	20	107	70	130	3	20
		bromoform			18	ug/L	20	90	70	130	9	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501897	isopropylbenzene		21	ug/L	20	103	70	130	1	20
		1,1,2,2-tetrachloroethane		20	ug/L	20	100	70	130	5	20
		1,2,3-trichloropropane		20	ug/L	20	99	70	130	4	20
		n-propylbenzene		19	ug/L	20	97	70	130	3	20
		bromobenzene		19	ug/L	20	94	70	130	2	20
		1,3,5-trimethylbenzene		20	ug/L	20	101	70	130	2	20
		2-chlorotoluene		19	ug/L	20	96	70	130	3	20
		4-chlorotoluene		19	ug/L	20	96	70	130	2	20
		tert-butylbenzene		20	ug/L	20	98	70	130	4	20
		1,2,4-trimethylbenzene		20	ug/L	20	99	70	130	2	20
		sec-butylbenzene		19	ug/L	20	94	70	130	4	20
		1,3-dichlorobenzene		20	ug/L	20	101	70	130	2	20
		4-isopropyltoluene		18	ug/L	20	89	70	130	4	20
		1,4-dichlorobenzene		18	ug/L	20	92	70	130	1	20
		1,2-dichlorobenzene		18	ug/L	20	91	70	130	3	20
		n-butylbenzene		19	ug/L	20	93	70	130	3	20
		1,2-dibromo-3-chloropropane (DBCP)		19	ug/L	20	94	70	130	1	20
		1,2,4-trichlorobenzene		20	ug/L	20	98	70	130	5	20
		hexachlorobutadiene		19	ug/L	20	97	70	130	5	20
		naphthalene		21	ug/L	20	106	70	130	4	20
		1,2,3-trichlorobenzene		21	ug/L	20	106	70	130	6	20
		1,1,2-trichloro-1,2,2-trifluoroethane		21	ug/L	20	104	70	130	2	20
		dibromofluoromethane SUR		99	%			78	114		
		toluene-D8 SUR		103	%			88	110		
		4-bromofluorobenzene SUR		101	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1501900	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1501900	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene		<	0.5	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		1,1,2-trichloro-1,2,2-trifluoroethane		<	2	ug/L						
		dibromofluoromethane SUR			99	%			78	114		
		toluene-D8 SUR			102	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1501900	dichlorodifluoromethane			17	ug/L	20	83		70	130		
		chloromethane			21	ug/L	20	107		70	130		
		vinyl chloride			18	ug/L	20	91		70	130		
		bromomethane			33	ug/L	20	164	*	70	130		
		chloroethane			36	ug/L	20	178	*	70	130		
		trichlorofluoromethane			21	ug/L	20	104		70	130		
		diethyl ether			22	ug/L	20	108		70	130		
		acetone		<	50	ug/L	20	135					
		1,1-dichloroethene			19	ug/L	20	95		70	130		
		methylene chloride			19	ug/L	20	97		70	130		
		carbon disulfide			16	ug/L	20	82		70	130		
		methyl t-butyl ether (MTBE)			22	ug/L	20	111		70	130		
		trans-1,2-dichloroethene			20	ug/L	20	102		70	130		
		isopropyl ether (DIPE)			21	ug/L	20	107		70	130		
		ethyl t-butyl ether (ETBE)			22	ug/L	20	108		70	130		
		1,1-dichloroethane			18	ug/L	20	91		70	130		
		t-butanol (TBA)			130	ug/L	100	131	*	70	130		
		2-butanone (MEK)			26	ug/L	20	128		70	130		
		2,2-dichloropropane			19	ug/L	20	94		70	130		
		cis-1,2-dichloroethene			19	ug/L	20	97		70	130		
		chloroform			20	ug/L	20	98		70	130		
		bromochloromethane			19	ug/L	20	96		70	130		
		tetrahydrofuran (THF)			27	ug/L	20	133	*	70	130		
		1,1,1-trichloroethane			21	ug/L	20	106		70	130		
		1,1-dichloropropene			18	ug/L	20	90		70	130		
		t-amyl-methyl ether (TAME)			21	ug/L	20	103		70	130		
		carbon tetrachloride			19	ug/L	20	95		70	130		
		1,2-dichloroethane			21	ug/L	20	107		70	130		
		benzene			21	ug/L	20	106		70	130		
		trichloroethene			22	ug/L	20	110		70	130		
		1,2-dichloropropane			20	ug/L	20	99		70	130		
		bromodichloromethane			21	ug/L	20	103		70	130		
		1,4-dioxane			54	ug/L	40	135	*	70	130		
		dibromomethane			20	ug/L	20	99		70	130		
		4-methyl-2-pentanone (MIBK)			26	ug/L	20	130		70	130		
		cis-1,3-dichloropropene			20	ug/L	20	98		70	130		
		toluene			20	ug/L	20	98		70	130		
		trans-1,3-dichloropropene			21	ug/L	20	104		70	130		
		2-hexanone			27	ug/L	20	133	*	70	130		
		1,1,2-trichloroethane			20	ug/L	20	101		70	130		
		1,3-dichloropropane			20	ug/L	20	101		70	130		
		tetrachloroethene			22	ug/L	20	109		70	130		
		dibromochloromethane			18	ug/L	20	89		70	130		
		1,2-dibromoethane (EDB)			20	ug/L	20	98		70	130		
		chlorobenzene			19	ug/L	20	97		70	130		
		1,1,1,2-tetrachloroethane			20	ug/L	20	100		70	130		
		ethylbenzene			20	ug/L	20	102		70	130		
		m&p-xylenes			41	ug/L	40	104		70	130		
		o-xylene			22	ug/L	20	110		70	130		
		styrene			22	ug/L	20	112		70	130		
		bromoform			19	ug/L	20	97		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1501900	isopropylbenzene		22	ug/L	20	108		70	130		
		1,1,2,2-tetrachloroethane		22	ug/L	20	109		70	130		
		1,2,3-trichloropropane		21	ug/L	20	105		70	130		
		n-propylbenzene		19	ug/L	20	94		70	130		
		bromobenzene		19	ug/L	20	95		70	130		
		1,3,5-trimethylbenzene		21	ug/L	20	103		70	130		
		2-chlorotoluene		19	ug/L	20	93		70	130		
		4-chlorotoluene		19	ug/L	20	94		70	130		
		tert-butylbenzene		19	ug/L	20	97		70	130		
		1,2,4-trimethylbenzene		20	ug/L	20	100		70	130		
		sec-butylbenzene		19	ug/L	20	94		70	130		
		1,3-dichlorobenzene		21	ug/L	20	103		70	130		
		4-isopropyltoluene		18	ug/L	20	90		70	130		
		1,4-dichlorobenzene		19	ug/L	20	94		70	130		
		1,2-dichlorobenzene		19	ug/L	20	96		70	130		
		n-butylbenzene		19	ug/L	20	95		70	130		
		1,2-dibromo-3-chloropropane (DBCP)		22	ug/L	20	111		70	130		
		1,2,4-trichlorobenzene		23	ug/L	20	115		70	130		
		hexachlorobutadiene		20	ug/L	20	98		70	130		
		naphthalene		27	ug/L	20	136	*	70	130		
		1,2,3-trichlorobenzene		25	ug/L	20	127		70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		23	ug/L	20	115		70	130		
		dibromofluoromethane SUR		104	%				78	114		
		toluene-D8 SUR		101	%				88	110		
		4-bromofluorobenzene SUR		109	%				86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501900	dichlorodifluoromethane			17	ug/L	20	83		70	130	0	20
		chloromethane			21	ug/L	20	106		70	130	1	20
		vinyl chloride			18	ug/L	20	92		70	130	1	20
		bromomethane			36	ug/L	20	178	*	70	130	9	20
		chloroethane			35	ug/L	20	176	*	70	130	1	20
		trichlorofluoromethane			21	ug/L	20	107		70	130	2	20
		diethyl ether			21	ug/L	20	106		70	130	2	20
		acetone		<	50	ug/L	20	140				4	20
		1,1-dichloroethene			18	ug/L	20	92		70	130	2	20
		methylene chloride			19	ug/L	20	93		70	130	4	20
		carbon disulfide			17	ug/L	20	86		70	130	4	20
		methyl t-butyl ether (MTBE)			22	ug/L	20	109		70	130	2	20
		trans-1,2-dichloroethene			20	ug/L	20	101		70	130	1	20
		isopropyl ether (DIPE)			21	ug/L	20	104		70	130	2	20
		ethyl t-butyl ether (ETBE)			21	ug/L	20	107		70	130	1	20
		1,1-dichloroethane			18	ug/L	20	91		70	130	0	20
		t-butanol (TBA)			130	ug/L	100	134	*	70	130	2	20
		2-butanone (MEK)			26	ug/L	20	131	*	70	130	2	20
		2,2-dichloropropane			19	ug/L	20	93		70	130	1	20
		cis-1,2-dichloroethene			19	ug/L	20	97		70	130	1	20
		chloroform			20	ug/L	20	98		70	130	0	20
		bromochloromethane			19	ug/L	20	94		70	130	1	20
		tetrahydrofuran (THF)			27	ug/L	20	137	*	70	130	3	20
		1,1,1-trichloroethane			22	ug/L	20	108		70	130	2	20
		1,1-dichloropropene			18	ug/L	20	90		70	130	0	20
		t-amyl-methyl ether (TAME)			21	ug/L	20	103		70	130	0	20
		carbon tetrachloride			19	ug/L	20	96		70	130	1	20
		1,2-dichloroethane			22	ug/L	20	108		70	130	1	20
		benzene			21	ug/L	20	105		70	130	1	20
		trichloroethene			22	ug/L	20	110		70	130	0	20
		1,2-dichloropropane			20	ug/L	20	100		70	130	0	20
		bromodichloromethane			21	ug/L	20	103		70	130	0	20
		1,4-dioxane			55	ug/L	40	137	*	70	130	1	20
		dibromomethane			20	ug/L	20	100		70	130	2	20
		4-methyl-2-pentanone (MIBK)			26	ug/L	20	132	*	70	130	1	20
		cis-1,3-dichloropropene			20	ug/L	20	100		70	130	2	20
		toluene			20	ug/L	20	98		70	130	0	20
		trans-1,3-dichloropropene			21	ug/L	20	104		70	130	0	20
		2-hexanone			28	ug/L	20	138	*	70	130	3	20
		1,1,2-trichloroethane			21	ug/L	20	104		70	130	3	20
		1,3-dichloropropane			20	ug/L	20	99		70	130	2	20
		tetrachloroethene			21	ug/L	20	105		70	130	4	20
		dibromochloromethane			18	ug/L	20	89		70	130	1	20
		1,2-dibromoethane (EDB)			19	ug/L	20	97		70	130	1	20
		chlorobenzene			19	ug/L	20	95		70	130	3	20
		1,1,1,2-tetrachloroethane			20	ug/L	20	98		70	130	2	20
		ethylbenzene			20	ug/L	20	99		70	130	3	20
		m&p-xylenes			40	ug/L	40	101		70	130	3	20
		o-xylene			21	ug/L	20	105		70	130	4	20
		styrene			22	ug/L	20	109		70	130	3	20
		bromoform			20	ug/L	20	101		70	130	5	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCSD1501900	isopropylbenzene		21	ug/L	20	105		70	130	2	20
		1,1,2,2-tetrachloroethane		21	ug/L	20	105		70	130	4	20
		1,2,3-trichloropropane		21	ug/L	20	104		70	130	1	20
		n-propylbenzene		18	ug/L	20	91		70	130	3	20
		bromobenzene		19	ug/L	20	93		70	130	2	20
		1,3,5-trimethylbenzene		20	ug/L	20	100		70	130	3	20
		2-chlorotoluene		18	ug/L	20	89		70	130	4	20
		4-chlorotoluene		18	ug/L	20	91		70	130	3	20
		tert-butylbenzene		19	ug/L	20	94		70	130	2	20
		1,2,4-trimethylbenzene		19	ug/L	20	97		70	130	4	20
		sec-butylbenzene		18	ug/L	20	91		70	130	3	20
		1,3-dichlorobenzene		20	ug/L	20	99		70	130	4	20
		4-isopropyltoluene		17	ug/L	20	86		70	130	4	20
		1,4-dichlorobenzene		19	ug/L	20	93		70	130	1	20
		1,2-dichlorobenzene		19	ug/L	20	93		70	130	4	20
		n-butylbenzene		18	ug/L	20	89		70	130	6	20
		1,2-dibromo-3-chloropropane (DBCP)		22	ug/L	20	110		70	130	1	20
		1,2,4-trichlorobenzene		22	ug/L	20	110		70	130	5	20
		hexachlorobutadiene		19	ug/L	20	96		70	130	2	20
		naphthalene		27	ug/L	20	134	*	70	130	1	20
		1,2,3-trichlorobenzene		25	ug/L	20	127		70	130	0	20
		1,1,2-trichloro-1,2,2-trifluoroethane		22	ug/L	20	110		70	130	4	20
		dibromofluoromethane SUR		107	%				78	114		
		toluene-D8 SUR		106	%				88	110		
		4-bromofluorobenzene SUR		111	%				86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA EPH	BLK8033	naphthalene		<	0.5	ug/L						
		2-methylnaphthalene		<	0.5	ug/L						
		phenanthrene		<	0.5	ug/L						
		acenaphthene		<	0.5	ug/L						
		acenaphthylene		<	0.5	ug/L						
		fluorene		<	0.5	ug/L						
		anthracene		<	0.5	ug/L						
		fluoranthene		<	0.5	ug/L						
		pyrene		<	0.5	ug/L						
		benzo(a)anthracene		<	0.5	ug/L						
		chrysene		<	0.5	ug/L						
		benzo(b)fluoranthene		<	0.5	ug/L						
		benzo(k)fluoranthene		<	0.5	ug/L						
		benzo(a)pyrene		<	0.2	ug/L						
		indeno(1,2,3-cd)pyrene		<	0.5	ug/L						
		dibenzo(a,h)anthracene		<	0.5	ug/L						
		benzo(g,h,i)perylene		<	0.5	ug/L						
		Unadjusted C11-C22 Aromatics		<	100	ug/L						
		C9-C18 Aliphatics		<	100	ug/L						
		C19-C36 Aliphatics		<	100	ug/L						
		C11-C22 Aromatics		<	100	ug/L						
		1-chloro-octadecane SUR			47	%			40	140		
		o-terphenyl SUR			44	%			40	140		
		2-fluorobiphenyl SUR			69	%			40	140		
		2-bromonaphthalene SUR			68	%			40	140		
MA EPH	LCS8033	naphthalene			31	ug/L	60	51	40	140		
		2-methylnaphthalene			35	ug/L	60	58	40	140		
		phenanthrene			44	ug/L	60	73	40	140		
		acenaphthene			35	ug/L	60	58	40	140		
		acenaphthylene			37	ug/L	60	62	40	140		
		fluorene			39	ug/L	60	65	40	140		
		anthracene			38	ug/L	60	63	40	140		
		fluoranthene			44	ug/L	60	74	40	140		
		pyrene			46	ug/L	60	76	40	140		
		benzo(a)anthracene			45	ug/L	60	75	40	140		
		chrysene			49	ug/L	60	82	40	140		
		benzo(b)fluoranthene			45	ug/L	60	75	40	140		
		benzo(k)fluoranthene			45	ug/L	60	75	40	140		
		benzo(a)pyrene			46	ug/L	60	76	40	140		
		indeno(1,2,3-cd)pyrene			40	ug/L	60	66	40	140		
		dibenzo(a,h)anthracene			48	ug/L	60	80	40	140		
		benzo(g,h,i)perylene			48	ug/L	60	79	40	140		
		Unadjusted C11-C22 Aromatics			700	ug/L	1020	68	40	140		
		C9-C18 Aliphatics			200	ug/L	360	55	40	140		
		C19-C36 Aliphatics			380	ug/L	480	79	40	140		
		C11-C22 Aromatics		<	100	ug/L						
		1-chloro-octadecane SUR			48	%			40	140		
		o-terphenyl SUR			50	%			40	140		
		2-fluorobiphenyl SUR			78	%			40	140		
		2-bromonaphthalene SUR			80	%			40	140		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
MA EPH	LCSD8033	naphthalene			36	ug/L	60	60	40	140	16	25
		2-methylnaphthalene			41	ug/L	60	69	40	140	17	25
		phenanthrene			49	ug/L	60	82	40	140	12	25
		acenaphthene			40	ug/L	60	67	40	140	14	25
		acenaphthylene			43	ug/L	60	72	40	140	16	25
		fluorene			45	ug/L	60	74	40	140	13	25
		anthracene			42	ug/L	60	71	40	140	12	25
		fluoranthene			49	ug/L	60	82	40	140	10	25
		pyrene			53	ug/L	60	88	40	140	14	25
		benzo(a)anthracene			49	ug/L	60	81	40	140	8	25
		chrysene			54	ug/L	60	89	40	140	9	25
		benzo(b)fluoranthene			47	ug/L	60	78	40	140	5	25
		benzo(k)fluoranthene			52	ug/L	60	87	40	140	14	25
		benzo(a)pyrene			50	ug/L	60	83	40	140	9	25
		indeno(1,2,3-cd)pyrene			44	ug/L	60	74	40	140	11	25
		dibenzo(a,h)anthracene			53	ug/L	60	89	40	140	10	25
		benzo(g,h,i)perylene			53	ug/L	60	88	40	140	10	25
		Unadjusted C11-C22 Aromatics			710	ug/L	1020	69	40	140	1	25
		C9-C18 Aliphatics			210	ug/L	360	60	40	140	7	25
		C19-C36 Aliphatics			400	ug/L	480	84	40	140	6	25
		C11-C22 Aromatics		<	100	ug/L						
		1-chloro-octadecane SUR			52	%			40	140		
		o-terphenyl SUR			51	%			40	140		
		2-fluorobiphenyl SUR			73	%			40	140		
		2-bromonaphthalene SUR			76	%			40	140		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3510C8082A	BLK8044	PCB-1016		<	0.30	ug/L						
		PCB-1221		<	0.30	ug/L						
		PCB-1232		<	0.30	ug/L						
		PCB-1242		<	0.30	ug/L						
		PCB-1248		<	0.30	ug/L						
		PCB-1254		<	0.30	ug/L						
		PCB-1260		<	0.30	ug/L						
		tetrachloro-m-xylene SUR			65	%			30	150		
		decachlorobiphenyl SUR			63	%			30	150		
SW3510C8082A	LCS8044	PCB-1016			0.9	ug/L	1	86	40	140		
		PCB-1221		<	0.3	ug/L						
		PCB-1232		<	0.3	ug/L						
		PCB-1242		<	0.3	ug/L						
		PCB-1248		<	0.3	ug/L						
		PCB-1254		<	0.3	ug/L						
		PCB-1260			1.0	ug/L	1	97	40	140		
		tetrachloro-m-xylene SUR			86	%			30	150		
		decachlorobiphenyl SUR			42	%			30	150		
SW3510C8082A	LCSD8044	PCB-1016			0.9	ug/L	1	85	40	140	1	20
		PCB-1221		<	0.3	ug/L						
		PCB-1232		<	0.3	ug/L						
		PCB-1242		<	0.3	ug/L						
		PCB-1248		<	0.3	ug/L						
		PCB-1254		<	0.3	ug/L						
		PCB-1260			0.8	ug/L	1	85	40	140	13	20
		tetrachloro-m-xylene SUR			78	%			30	150		
		decachlorobiphenyl SUR			34	%			30	150		

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33653

Company Name: Woodard + Curran
Company Address: 40 Shattuck Rd #110
Report To: Keri Stevens / Jarrod Yoder
Phone #: 978-557-8150
Invoice to Email: JYoder@woodardcurran.com
☐ Hard Copy Invoice Required

Project Name: Lewis Chemical
Project #: 229286.01
Project Location: NH (MA) ME VT NY Other
Protocol: RCRA (MCP) SDWA NHDES NPDES OTHER
Reporting Limits: QAPP EPA DW GW-1 Other S-1
Quote # 2014 Fee Schedule ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	Sampling: SAMPLER	☐ VOC 8260 ☐ VOC 8260 NHDES ☒ VOC 8260 MADEP	☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT	☒ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☒ 1,4-Dioxane	☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:	☐ TPH ☐ DRO 8015 ☐ MEDRO ☒ EPH MADEP ☐ TPH Fingerprint	☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB	☒ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB	☐ O&G 1664 ☐ Mineral O&G SM5520F Total + Dissolved Aroclor	☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity	☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity	☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness	☐ Total Metals-list:	☐ Dissolved Metals-list:	☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC	☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN	☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P	☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride	☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde	8082 Total + Dissolved PCB - Congener (ON HOLD)			Grab (G) or Composite (C)
33653-14	ESM-7	2	X			2					7/16/15	1130	JG	2																							G
diss -02 -01	ESM-6	2	X			2					7/16/15	1320	JG	2						2														2			G
-03	ESM-~~+3~~ per A. Rocco Tip Blanks	8	X			6					7/16/15	1345	AR	2		4		2*		[illegible]														[illegible]			G
-04	Trip Blank-1	2	X			2					7/14/15	LAB	–	1		1																					G
-05	Trip Blank 2	1																																			

ESM-7 on 33654 AD

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed _____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS * EPH samples unpreserved. PCB congeners samples to be placed on hold.

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) JYoder@woodardcurran.com ; KStevens@ ...
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☑ YES ☐ NO
TEMPERATURE 5 °C

CUSTODY RECORD
QSD-01 Revision 08/05/14

Relinquished by/Sampler:	Date	Time	Received by:	Date	Time
[signature]	7/16/15	1535	[signature]	7/16/15	1535
Relinquished by: [signature]	7/16/15	1755	Received by:		
Relinquished by:			Received by Laboratory: [signature]	7-16-15	17:55

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

~~33675~~ 33653

Company Name: Woodard + Curran

Company Address: 40 Shattuck Rd #110 Andover, MA

Report To: Jarod Yoder

Phone #: 978-557-8150

Invoice to Email: JYoder@woodardcurran.com

☐ Hard Copy Invoice Required

Project Name: Lewis Chemical

Project #: 229286.01

Project Location: NH (MA) ME VT NY Other

Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER

Reporting Limits: QAPP GW-1 S-1 EPA DW Other

Quote # 2014 Rates ☐ NH Reimbursement Pricing

PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	☒ VOC 8260 MADEP	☐ VOC 8260 NHDES	☐ VOC 624	☐ VOC BTEX	☐ VOC 524.2	☒ VPH MADEP	☐ MEGRO	☐ DRO 8015	☐ 8270PAH	☒ 8082 PCB	☐ 8081 Pesticides	☐ O&G 1664	☐ pH	☐ TSS	☐ RCRA Metals	☐ Total Metals-list:	☐ Dissolved Metals-list:	☐ Ammonia	☐ T-Phosphorus	☐ Cyanide	☐ Nitrate	☐ Nitrite	☐ Corrosivity	☐ TCLP Metals	Subcontract:	8082 Total + diss. PCB - Congeners (on HOLD)	Grab (G) or Composite (C)
33653-06	ESM-3B-S	8	X			X					7/16/15	1640	AR	2					4		2																			
-07	ESM-3B-SD	8	X			X					7/17/15	1130	AR	2					4		2																			
div -12 -08	ESM-5	12	X			X					7/16/15	1535	JG	2					4		2		2																	2	
-09	ESM-5B	8	X			X					7/17/15	1020	JG	2					4		2																			
-10	ESM-9	2	X			X					7/17/15	0745	JG	2																											
-11	ESM-13	6	X			X					7/17/15	0935	AR	2					2		2																			
-13	TRIP Blank	2d																																						

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed ____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS
PCB Congeners ON HOLD

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) See above
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☑ YES ☐ NO
TEMPERATURE 5.5 °C

CUSTODY RECORD
QSD-01 Revision 01/09/15

	Relinquished by Sampler:	Date	Time	Received by:	Date	Time
1		7/17/15	1430		7/17/15	1435
2	Relinquished by:	7/17/15	1730	Received by:	Date	Time
3	Relinquished by:	Date	Time	Received by Laboratory:	7/17/15	17:30

10515 Research Drive
Knoxville, TN 37932
Phone: (865) 573-8188
Fax: (865) 573-8133

Client: Jarrod Yoder
Woodard & Curran
40 Shattuck Rd
Suite 110
Andover, MA 01810

Phone: 978-557-8150

Fax:

Identifier: 052MG **Date Rec:** 07/18/2015 **Report Date:** 07/21/2015

Client Project #: 229286.01 **Client Project Name:** Lewis Chemical

Purchase Order #:

Analysis Requested: CENSUS

Reviewed By:



NOTICE: This report is intended only for the addressee shown above and may contain confidential or privileged information. If the recipient of this material is not the intended recipient or if you have received this in error, please notify Microbial Insights, Inc. immediately. The data and other information in this report represent only the sample(s) analyzed and are rendered upon condition that it is not to be reproduced without approval from Microbial Insights, Inc. Thank you for your cooperation.

MICROBIAL INSIGHTS, INC.

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Woodard & Curran**
Project: Lewis Chemical

MI Project Number: **052MG**
Date Received: 07/18/2015

Sample Information

Client Sample ID:		**ESM-3**	**ESM-3B-D**	**ESM-5**	**ESM-5B**	**ESM-9**
Sample Date:		07/16/2015	07/17/2015	07/16/2015	07/17/2015	07/17/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		JS	JS	JS	JS	JS
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	**6.35E+04**	**3.40E+00**	**1.12E+05**	<5.00E-01	**6.30E+01**
tceA Reductase	TCE	**3.64E+02**	<3.00E-01	**2.07E+02**	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	**4.67E+04**	**5.80E+00**	**4.52E+04**	<5.00E-01	**2.91E+01**
Vinyl Chloride Reductase	VCR	**3.84E+03**	**1.00E-01 (J)**	**9.98E+03**	<5.00E-01	**5.00E-01**
Dehalobacter spp.	*DHBt*	**7.76E+02**	**3.00E-01 (J)**	**1.62E+02**	**8.60E+00**	**1.31E+02**

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

MICROBIAL INSIGHTS, INC.

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Woodard & Curran**
Project: Lewis Chemical

MI Project Number: **052MG**
Date Received: 07/18/2015

Sample Information

Client Sample ID:	**ESM-13**
Sample Date:	07/17/2015
Units:	cells/mL
Analyst:	JS

Dechlorinating Bacteria

Dehalococcoides	*DHC*	**1.11E+03**
tceA Reductase	TCE	**1.89E+01**
BAV1 Vinyl Chloride Reductase	BVC	**6.95E+01**
Vinyl Chloride Reductase	VCR	**7.29E+01**

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Keri Stevens
Woodard & Curran
40 Shattuck Road
Suite 110
Andover, MA 01810

PO Number: None
Job ID: 33712
Date Received: 7/21/15

Project: Lewis Chemical 229286.01

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

(for)

Sue Sylvester
Principal, General Manager

Date of Approval: 8/3/2015
Total number of pages: 10

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Lewis Chemical 229286.01

Lab ID: 33712

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
G-C-1	Water	7/20/2015 8:25	33712-001	
				Water Digestion for ICP Analysis
				Dissolved Metals Prep for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
				Alkalinity in water by SM2320B
				Ammonia in water by SM4500NH3-D
ESM-3	Water	7/16/2015 13:45	33712-002	
				Water Digestion for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
				Sulfide in water by SM4500-S2 D+F
G-C-1 Dissolved	Water	7/16/2015 8:25	33712-003	
				Dissolved Metals Prep for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010

Project ID: Lewis Chemical 229286.01

Job ID: 33712

Sample#: 33712-001
Sample ID: G-C-1
Matrix: Water
Sampled: 7/20/15 8:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Iron	**14**	0.05	mg/L	1	AC	7/27/15	8046	7/27/15	21:07	SW3005A6010C
Manganese	**2.8**	0.03	mg/L	1	AC	7/27/15	8046	7/27/15	21:07	SW3005A6010C

Sample#: 33712-002
Sample ID: ESM-3
Matrix: Water
Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Iron	**38**	0.05	mg/L	1	AC	7/27/15	8046	7/27/15	21:14	SW3005A6010C
Manganese	**2.0**	0.03	mg/L	1	AC	7/27/15	8046	7/27/15	21:14	SW3005A6010C

Sample#: 33712-003
Sample ID: G-C-1 Dissolved
Matrix: Water
Sampled: 7/16/15 8:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Iron	**15**	0.05	mg/L	1	AC	7/27/15	8048	7/27/15	16:57	SW3005A6010C
Manganese	**3.2**	0.03	mg/L	1	AC	7/27/15	8048	7/27/15	16:57	SW3005A6010C

Sample#: 33712-001
Sample ID: G-C-1
Matrix: Water
Sampled: 7/20/15 8:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Alkalinity, total (as CaCO3)	**58**	5	mg/L	1	APA		1501910	7/23/15		SM2320B
Ammonia as N	**2.2**	0.5	mg/L	1	APA		1501995	7/29/15		SM4500NH3-D

Sample#: 33712-002
Sample ID: ESM-3
Matrix: Water
Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Sulfide	< 0.04	0.04	mg/L	1	APA		1501917	7/23/15		SM4500-S2 D+F

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 229286.01

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **33712**

Matrices: Groundwater/Surface Water ☑ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☑ No*☐

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☑ No*☐
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: SCSylvester (for) **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 8/3/15**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 33712

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 6 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3005A6010C	BLK8048	Iron		<	0.05	mg/L						
		Manganese		<	0.03	mg/L						
SW3005A6010C	LCS8048	Iron			0.52	mg/L	0.5	103	80	120		
		Manganese			0.52	mg/L	0.5	104	80	120		
SW3005A6010C	MS8048	Iron	33654-011		56	mg/L	0.5	648	75	125		
		Manganese	33654-011		4.6	mg/L	0.5	136	75	125		
SW3005A6010C	MSD8048	Iron	33654-011		54	mg/L	0.5	284	75	125	3	20
		Manganese	33654-011		4.5	mg/L	0.5	120	75	125	2	20

Absolute Resource associates

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SM2320B	CCVB1501910	Alkalinity, total (as CaCO3)			10.00	pH			9.94	10.06		
SM2320B	CCVE1501910	Alkalinity, total (as CaCO3)			52	mg/L	50	103	90	110		
SM2320B	DUP1501910	Alkalinity, total (as CaCO3)	33712-001		58	mg/L					0	25
SM2320B	LCS1501910	Alkalinity, total (as CaCO3)			26	mg/L	25	106	80	120		
SM2320B	PB1501910	Alkalinity, total (as CaCO3)		<	5	mg/L						
SM4500NH3-D	LCS1501995	Ammonia as N			5.4	mg/L	5	108	75	125		
SM4500NH3-D	LCSD1501995	Ammonia as N			5.2	mg/L	5	104	75	125	4	25
SM4500NH3-D	MS1501995	Ammonia as N	33680-002		6.8	mg/L	5	109	75	125		
SM4500NH3-D	PB1501995	Ammonia as N		<	0.5	mg/L						
SM4500-S2 D+F	LCS1501917	Sulfide			0.92	mg/L	1	92	75	125		
SM4500-S2 D+F	LCSD1501917	Sulfide			0.94	mg/L	1	94	75	125	2	20
SM4500-S2 D+F	PB1501917	Sulfide		<	0.04	mg/L						

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33712

Company Name: Woodard + Curran

Company Address: 40 Shattuck Rd #110, Andover, MA

Report To: Jarrod Yoder

Phone #: 978-557-8150

Invoice to Email: JYoder@woodardcurran.com

☐ Hard Copy Invoice Required

Project Name: Lewis Chemical

Project #: 229286.01

Project Location: NH (MA) ME VT NY Other

Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER

Reporting Limits: QAPP GW-1 S-1 EPA DW Other

Quote # 2014 Rate Schedule ☐ NH Reimbursement Pricing

PO #

ANALYSIS REQUEST

☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT ☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane ☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List: ☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint ☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB ☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB ☐ O&G 1664 ☐ Mineral O&G SM5520F ☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ TSS ☐ TDS ☐ TVS ☒ Alkalinity ☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness ☒ Total Metals-list: Fe, Mn ☒ Dissolved Metals-list: Fe, Mn ☒ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN ☒ Sulfide ☐ Cyanide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride ☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP ☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde Grab (G) or Composite (C)

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER
03 33712-01	G-C-1	4	X				X				7/20/15	0825	AR
02	ESM-3	2	X				X				7/16/15	~~1535~~ 1345	AR

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS
Please provide W&C GIS Key EDD.
ESM-3 samples listed on previous chain but not submitted. (7/~~17~~16/15)

REPORTING INSTRUCTIONS ☐ PDF (e-mail address) ☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☑ YES ☐ NO
TEMPERATURE 6 °C

CUSTODY RECORD
QSD-01 Revision 01/09/15

Relinquished by Sampler:	Date	Time	Received by:	Date	Time
	7/21/15	1215			
Relinquished by:	7/21/15	16:14	Received by:	7/21/15	17:14
Relinquished by:	Date	Time	Received by Laboratory:	7/21/15	16:14

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Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Jarrod Yoder
Woodard & Curran
40 Shattuck Road
Suite 110
Andover, MA 01810

PO Number: None
Job ID: 33654
Date Received: 7/17/15

Project: Lewis Chemical 229286.01

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Sue Sylvester (for)
Principal, General Manager

Date of Approval: 7/31/2015
Total number of pages: 22

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Lewis Chemical 229286.01

Lab ID: 33654

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
ESM-7	Water	7/16/2015 11:30	33654-001	
				Water Digestion for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
				DHG: Methane,Ethane&Ethene by 3810/8015
				Alkalinity in water by SM2320B
				Ammonia in water by SM4500NH3-D
				Dissolved Organic Carbon by 5310C
				Nitrate-N in water (NO3) by 300.0A
				Sulfate in water (SO4) by 300.0A
				Sulfide in water by SM4500-S2 D+F
ESM-3B-S	Water	7/16/2015 16:40	33654-002	
				Water Digestion for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
				Alkalinity in water by SM2320B
				Ammonia in water by SM4500NH3-D
ESM-5B	Water	7/17/2015 10:20	33654-003	
				Water Digestion for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
				DHG: Methane,Ethane&Ethene by 3810/8015
				Alkalinity in water by SM2320B
				Ammonia in water by SM4500NH3-D
				Dissolved Organic Carbon by 5310C
				Sulfide in water by SM4500-S2 D+F
ESM-5	Water	7/16/2015 15:35	33654-004	
				Water Digestion for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
				Alkalinity in water by SM2320B
				Ammonia in water by SM4500NH3-D
				Nitrate-N in water (NO3) by 300.0A
				Sulfate in water (SO4) by 300.0A
				Sulfide in water by SM4500-S2 D+F
ESM-9	Water	7/17/2015 7:45	33654-005	
				Water Digestion for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
				DHG: Methane,Ethane&Ethene by 3810/8015
				Alkalinity in water by SM2320B
				Ammonia in water by SM4500NH3-D
				Dissolved Organic Carbon by 5310C
				Nitrate-N in water (NO3) by 300.0A
				Sulfate in water (SO4) by 300.0A
				Sulfide in water by SM4500-S2 D+F
ESM-13	Water	7/17/2015 9:35	33654-006	
				Water Digestion for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
				DHG: Methane,Ethane&Ethene by 3810/8015
				Alkalinity in water by SM2320B

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Project ID: Lewis Chemical 229286.01

Lab ID: 33654

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
ESM-13	Water	7/17/2015 9:35	33654-006	
				Ammonia in water by SM4500NH3-D
				Dissolved Organic Carbon by 5310C
				Nitrate-N in water (NO3) by 300.0A
				Sulfate in water (SO4) by 300.0A
				Sulfide in water by SM4500-S2 D+F
ESM-3B-D	Water	7/17/2015 11:30	33654-007	
				Water Digestion for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
				DHG: Methane,Ethane&Ethene by 3810/8015
				Alkalinity in water by SM2320B
				Ammonia in water by SM4500NH3-D
				Dissolved Organic Carbon by 5310C
				Nitrate-N in water (NO3) by 300.0A
				Sulfate in water (SO4) by 300.0A
				Sulfide in water by SM4500-S2 D+F
ESM-3	Water	7/16/2015 13:45	33654-008	
				DHG: Methane,Ethane&Ethene by 3810/8015
				Alkalinity in water by SM2320B
				Ammonia in water by SM4500NH3-D
				Dissolved Organic Carbon by 5310C
				Nitrate-N in water (NO3) by 300.0A
				Sulfate in water (SO4) by 300.0A
ESM-3B-S Dissolved	Water	7/16/2015 16:40	33654-009	
				Dissolved Metals Prep for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
ESM-5B Dissolved	Water	7/17/2015 10:20	33654-010	
				Dissolved Metals Prep for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
ESM-5 Dissolved	Water	7/16/2015 15:35	33654-011	
				Dissolved Metals Prep for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
ESM-9 Dissolved	Water	7/17/2015 7:45	33654-012	
				Dissolved Metals Prep for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
ESM-13 Dissolved	Water	7/17/2015 9:35	33654-013	
				Dissolved Metals Prep for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
ESM-3B-D Dissolved	Water	7/17/2015 11:30	33654-014	
				Dissolved Metals Prep for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010
ESM-3 Dissolved	Water	7/16/2015 13:45	33654-015	
				Dissolved Metals Prep for ICP Analysis
				Iron in water by 6010
				Manganese in water by 6010

Project ID: Lewis Chemical 229286.01

Lab ID: 33654

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
ESM-7 Dissolved	Water	7/16/2015 11:30	33654-016	Dissolved Metals Prep for ICP Analysis Iron in water by 6010 Manganese in water by 6010

Project ID: Lewis Chemical 229286.01

Job ID: 33654

Sample#: 33654-001

Sample ID: ESM-7

Matrix: Water

Sampled: 7/16/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
methane	**49**	10	ug/L	1	AJD		1501872	7/20/15	14:35	SW3810/8015B
ethane	< 20	20	ug/L	1	AJD		1501872	7/20/15	14:35	SW3810/8015B
ethene	< 20	20	ug/L	1	AJD		1501872	7/20/15	14:35	SW3810/8015B

Sample#: 33654-003

Sample ID: ESM-5B

Matrix: Water

Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
methane	< 10	10	ug/L	1	AJD		1501872	7/20/15	14:37	SW3810/8015B
ethane	< 20	20	ug/L	1	AJD		1501872	7/20/15	14:37	SW3810/8015B
ethene	< 20	20	ug/L	1	AJD		1501872	7/20/15	14:37	SW3810/8015B

Sample#: 33654-005

Sample ID: ESM-9

Matrix: Water

Sampled: 7/17/15 7:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
methane	< 10	10	ug/L	1	AJD		1501872	7/20/15	14:40	SW3810/8015B
ethane	< 20	20	ug/L	1	AJD		1501872	7/20/15	14:40	SW3810/8015B
ethene	< 20	20	ug/L	1	AJD		1501872	7/20/15	14:40	SW3810/8015B

Sample#: 33654-006

Sample ID: ESM-13

Matrix: Water

Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
methane	< 10	10	ug/L	1	AJD		1501872	7/20/15	14:41	SW3810/8015B
ethane	< 20	20	ug/L	1	AJD		1501872	7/20/15	14:41	SW3810/8015B
ethene	< 20	20	ug/L	1	AJD		1501872	7/20/15	14:41	SW3810/8015B

Project ID: Lewis Chemical 229286.01

Job ID: 33654

Sample#: 33654-007

Sample ID: ESM-3B-D

Matrix: Water

Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
methane	< 10	10	ug/L	1	AJD		1501872	7/20/15	14:43	SW3810/8015B
ethane	< 20	20	ug/L	1	AJD		1501872	7/20/15	14:43	SW3810/8015B
ethene	< 20	20	ug/L	1	AJD		1501872	7/20/15	14:43	SW3810/8015B

Sample#: 33654-008

Sample ID: ESM-3

Matrix: Water

Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
methane	< 10	10	ug/L	1	AJD		1501872	7/20/15	14:44	SW3810/8015B
ethane	< 20	20	ug/L	1	AJD		1501872	7/20/15	14:44	SW3810/8015B
ethene	< 20	20	ug/L	1	AJD		1501872	7/20/15	14:44	SW3810/8015B

Project ID: Lewis Chemical 229286.01

Job ID: 33654

Sample#: 33654-001
Sample ID: ESM-7
Matrix: Water
Sampled: 7/16/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Iron	**1.2**	0.05	mg/L	1	AC	7/23/15	8035	7/23/15	17:31	SW3005A6010C
Manganese	**2.3**	0.03	mg/L	1	AC	7/23/15	8035	7/23/15	17:31	SW3005A6010C

Sample#: 33654-002
Sample ID: ESM-3B-S
Matrix: Water
Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Iron	**0.14**	0.05	mg/L	1	AC	7/23/15	8035	7/23/15	17:38	SW3005A6010C
Manganese	**1.6**	0.03	mg/L	1	AC	7/23/15	8035	7/23/15	17:38	SW3005A6010C

Sample#: 33654-003
Sample ID: ESM-5B
Matrix: Water
Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Iron	**0.07**	0.05	mg/L	1	AC	7/23/15	8035	7/23/15	17:45	SW3005A6010C
Manganese	**0.56**	0.03	mg/L	1	AC	7/23/15	8035	7/23/15	17:45	SW3005A6010C

Sample#: 33654-004
Sample ID: ESM-5
Matrix: Water
Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Iron	**54**	0.05	mg/L	1	AC	7/23/15	8035	7/23/15	16:26	SW3005A6010C
Manganese	**3.4**	0.03	mg/L	1	AC	7/23/15	8035	7/23/15	16:26	SW3005A6010C

Sample#: 33654-005
Sample ID: ESM-9
Matrix: Water
Sampled: 7/17/15 7:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Iron	**52**	0.05	mg/L	1	AC	7/23/15	8035	7/23/15	17:53	SW3005A6010C
Manganese	**3.3**	0.03	mg/L	1	AC	7/23/15	8035	7/23/15	17:53	SW3005A6010C

Sample#: 33654-006
Sample ID: ESM-13
Matrix: Water
Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Iron	**6.0**	0.05	mg/L	1	AC	7/23/15	8035	7/23/15	18:00	SW3005A6010C
Manganese	**0.23**	0.03	mg/L	1	AC	7/23/15	8035	7/23/15	18:00	SW3005A6010C

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Project ID: Lewis Chemical 229286.01

Job ID: 33654

Sample#: 33654-007
Sample ID: ESM-3B-D
Matrix: Water
Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Iron	**0.10**	0.05	mg/L	1	AC	7/23/15	8035	7/23/15	18:07	SW3005A6010C
Manganese	**7.1**	0.03	mg/L	1	AC	7/23/15	8035	7/23/15	18:07	SW3005A6010C

Sample#: 33654-009
Sample ID: ESM-3B-S Dissolved
Matrix: Water
Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Iron	< 0.05	0.05	mg/L	1	AC	7/27/15	8048	7/27/15	15:23	SW3005A6010C
Manganese	**1.7**	0.03	mg/L	1	AC	7/27/15	8048	7/27/15	15:23	SW3005A6010C

Sample#: 33654-010
Sample ID: ESM-5B Dissolved
Matrix: Water
Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Iron	< 0.05	0.05	mg/L	1	AC	7/27/15	8048	7/27/15	15:31	SW3005A6010C
Manganese	**0.52**	0.03	mg/L	1	AC	7/27/15	8048	7/27/15	15:31	SW3005A6010C

Sample#: 33654-011
Sample ID: ESM-5 Dissolved
Matrix: Water
Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Iron	**53**	0.05	mg/L	1	AC	7/27/15	8048	7/27/15	14:53	SW3005A6010C
Manganese	**3.9**	0.03	mg/L	1	AC	7/27/15	8048	7/27/15	14:53	SW3005A6010C

Sample#: 33654-012
Sample ID: ESM-9 Dissolved
Matrix: Water
Sampled: 7/17/15 7:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Iron	**40**	0.05	mg/L	1	AC	7/27/15	8048	7/27/15	15:38	SW3005A6010C
Manganese	**3.4**	0.03	mg/L	1	AC	7/27/15	8048	7/27/15	15:38	SW3005A6010C

Sample#: 33654-013
Sample ID: ESM-13 Dissolved
Matrix: Water
Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Iron	**7.9**	0.05	mg/L	1	AC	7/27/15	8048	7/27/15	15:45	SW3005A6010C
Manganese	**0.32**	0.03	mg/L	1	AC	7/27/15	8048	7/27/15	15:45	SW3005A6010C

Project ID: Lewis Chemical 229286.01

Job ID: 33654

Sample#: 33654-014

Sample ID: ESM-3B-D Dissolved

Matrix: Water

Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Iron	< 0.05	0.05	mg/L	1	AC	7/27/15	8048	7/27/15	16:14	SW3005A6010C
Manganese	**6.4**	0.03	mg/L	1	AC	7/27/15	8048	7/27/15	16:14	SW3005A6010C

Sample#: 33654-015

Sample ID: ESM-3 Dissolved

Matrix: Water

Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Iron	**47**	0.05	mg/L	1	AC	7/27/15	8048	7/27/15	16:21	SW3005A6010C
Manganese	**2.2**	0.03	mg/L	1	AC	7/27/15	8048	7/27/15	16:21	SW3005A6010C

Sample#: 33654-016

Sample ID: ESM-7 Dissolved

Matrix: Water

Sampled: 7/16/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Iron	**0.97**	0.05	mg/L	1	AC	7/27/15	8048	7/27/15	16:28	SW3005A6010C
Manganese	**2.5**	0.03	mg/L	1	AC	7/27/15	8048	7/27/15	16:28	SW3005A6010C

Project ID: Lewis Chemical 229286.01

Job ID: 33654

Sample#: 33654-001

Sample ID: ESM-7

Matrix: Water

Sampled: 7/16/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Alkalinity, total (as CaCO3)	**43**	5	mg/L	1	AMH		1501906	7/21/15		SM2320B
Ammonia as N	< 0.5	0.5	mg/L	1	APA		1501966	7/27/15		SM4500NH3-D
Nitrate-N	**1.1**	0.1	mg/L	1	AJC		1501875	7/17/15	20:38	E300.0A
Sulfate	**47**	0.5	mg/L	1	AJC		1501875	7/17/15	20:38	E300.0A
Sulfide	< 0.04	0.04	mg/L	1	APA		1501895	7/21/15		SM4500-S2 D+F

Sample#: 33654-002

Sample ID: ESM-3B-S

Matrix: Water

Sampled: 7/16/15 16:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Alkalinity, total (as CaCO3)	**110**	5	mg/L	1	AMH		1501906	7/21/15		SM2320B
Ammonia as N	< 0.5	0.5	mg/L	1	APA		1501966	7/27/15		SM4500NH3-D

Sample#: 33654-003

Sample ID: ESM-5B

Matrix: Water

Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Alkalinity, total (as CaCO3)	**66**	5	mg/L	1	AMH		1501906	7/21/15		SM2320B
Ammonia as N	< 0.5	0.5	mg/L	1	APA		1501966	7/27/15		SM4500NH3-D
Sulfide	< 0.04	0.04	mg/L	1	APA		1501895	7/21/15		SM4500-S2 D+F

Sample#: 33654-004

Sample ID: ESM-5

Matrix: Water

Sampled: 7/16/15 15:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Alkalinity, total (as CaCO3)	**36**	5	mg/L	1	AMH		1501906	7/21/15		SM2320B
Ammonia as N	**3.7**	0.5	mg/L	1	APA		1501966	7/27/15		SM4500NH3-D
Nitrate-N	< 0.1	0.1	mg/L	1	AJC		1501875	7/17/15	22:00	E300.0A
Sulfate	**180**	5.0	mg/L	10	AJC		1501944	7/24/15	23:22	E300.0A
Sulfide	< 0.04	0.04	mg/L	1	APA		1501895	7/21/15		SM4500-S2 D+F

Project ID: Lewis Chemical 229286.01

Job ID: 33654

Sample#: 33654-005

Sample ID: ESM-9

Matrix: Water

Sampled: 7/17/15 7:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Alkalinity, total (as CaCO3)	< 5	5	mg/L	1	AMH		1501906	7/21/15		SM2320B
Ammonia as N	**2.4**	0.5	mg/L	1	APA		1501966	7/27/15		SM4500NH3-D
Nitrate-N	< 0.1	0.1	mg/L	1	AJC		1501875	7/17/15	22:16	E300.0A
Sulfate	**560**	5.0	mg/L	10	AJC		1501944	7/24/15	23:38	E300.0A
Sulfide	< 0.04	0.04	mg/L	1	APA		1501895	7/21/15		SM4500-S2 D+F

Sample#: 33654-006

Sample ID: ESM-13

Matrix: Water

Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Alkalinity, total (as CaCO3)	**17**	5	mg/L	1	AMH		1501906	7/21/15		SM2320B
Ammonia as N	< 0.5	0.5	mg/L	1	APA		1501966	7/27/15		SM4500NH3-D
Nitrate-N	**2.1**	0.1	mg/L	1	AJC		1501875	7/17/15	22:33	E300.0A
Sulfate	**120**	5.0	mg/L	10	AJC		1501944	7/24/15	23:55	E300.0A
Sulfide	< 0.04	0.04	mg/L	1	APA		1501895	7/21/15		SM4500-S2 D+F

Sample#: 33654-007

Sample ID: ESM-3B-D

Matrix: Water

Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Alkalinity, total (as CaCO3)	**65**	5	mg/L	1	AMH		1501906	7/21/15		SM2320B
Ammonia as N	< 0.5	0.5	mg/L	1	APA		1501966	7/27/15		SM4500NH3-D
Nitrate-N	< 5.0	5.0	mg/L	50	AJC		1501876	7/18/15	15:23	E300.0A
Sulfate	**700**	25	mg/L	50	AJC		1501876	7/18/15	15:23	E300.0A
Sulfide	< 0.04	0.04	mg/L	1	APA		1501895	7/21/15		SM4500-S2 D+F

Sample#: 33654-008

Sample ID: ESM-3

Matrix: Water

Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Alkalinity, total (as CaCO3)	**76**	5	mg/L	1	AMH		1501906	7/21/15		SM2320B
Ammonia as N	**5.6**	0.5	mg/L	1	APA		1501966	7/27/15		SM4500NH3-D
Nitrate-N	< 0.1	0.1	mg/L	1	AJC		1501875	7/18/15	0:12	E300.0A
Sulfate	**190**	5.0	mg/L	10	AJC		1501944	7/25/15	0:11	E300.0A

Project ID: Lewis Chemical 229286.01

Job ID: 33654

Sample#: 33654-001
Sample ID: ESM-7
Matrix: Water
Sampled: 7/16/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Dissolved Organic Carbon (DOC)	**1.8**	1.0	mg/L	1	AJD		1502000	7/28/15	17:18	SM5310C

Sample#: 33654-003
Sample ID: ESM-5B
Matrix: Water
Sampled: 7/17/15 10:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Dissolved Organic Carbon (DOC)	< 1.0	1.0	mg/L	1	AJD		1502000	7/28/15	17:38	SM5310C

Sample#: 33654-005
Sample ID: ESM-9
Matrix: Water
Sampled: 7/17/15 7:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Dissolved Organic Carbon (DOC)	**4.8**	1.0	mg/L	1	AJD		1502000	7/28/15	18:17	SM5310C

Sample#: 33654-006
Sample ID: ESM-13
Matrix: Water
Sampled: 7/17/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Dissolved Organic Carbon (DOC)	**1.9**	1.0	mg/L	1	AJD		1502000	7/28/15	18:35	SM5310C

Sample#: 33654-007
Sample ID: ESM-3B-D
Matrix: Water
Sampled: 7/17/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Dissolved Organic Carbon (DOC)	< 1.0	1.0	mg/L	1	AJD		1502000	7/28/15	18:54	SM5310C

Sample#: 33654-008
Sample ID: ESM-3
Matrix: Water
Sampled: 7/16/15 13:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Dissolved Organic Carbon (DOC)	**17**	1.0	mg/L	1	AJD		1502000	7/28/15	19:14	SM5310C

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 229286.01

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **33654**

Matrices: Groundwater/Surface Water ☑ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☑ No*☐

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☑ No*☐
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: SCSylvester (for) **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 7/31/15**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

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Case Narrative
Lab # 33654

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 5 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3810/8015B	BLK1501872	methane		<	10	ug/L						
		ethane		<	20	ug/L						
		ethene		<	20	ug/L						
SW3810/8015B	LCS1501872	methane			87	ug/L	92	94	75	125		
		ethane			200	ug/L	184	107	75	125		
SW3810/8015B	LCSD1501872	methane			86	ug/L	92	94	75	125	1	20
		ethane			200	ug/L	184	111	75	125	4	20

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3005A6010C	BLK8035	Iron		<	0.05	mg/L						
		Manganese		<	0.03	mg/L						
SW3005A6010C	LCS8035	Iron			0.50	mg/L	0.5	101	80	120		
		Manganese			0.50	mg/L	0.5	99	80	120		
SW3005A6010C	LCSD8035	Iron			0.50	mg/L	0.5	99	80	120	2	20
		Manganese			0.49	mg/L	0.5	97	80	120	2	20
SW3005A6010C	MS8035	Iron	33654-004		54	mg/L	0.5	138	75	125		
		Manganese	33654-004		3.8	mg/L	0.5	92	75	125		
SW3005A6010C	MSD8035	Iron	33654-004		54	mg/L	0.5	50	75	125	1	20
		Manganese	33654-004		3.8	mg/L	0.5	86	75	125	1	20
SW3005A6010C	BLK8048	Iron		<	0.05	mg/L						
		Manganese		<	0.03	mg/L						
SW3005A6010C	LCS8048	Iron			0.52	mg/L	0.5	103	80	120		
		Manganese			0.52	mg/L	0.5	104	80	120		
SW3005A6010C	MS8048	Iron	33654-011		56	mg/L	0.5	648	75	125		
		Manganese	33654-011		4.6	mg/L	0.5	136	75	125		
SW3005A6010C	MSD8048	Iron	33654-011		54	mg/L	0.5	284	75	125	3	20
		Manganese	33654-011		4.5	mg/L	0.5	120	75	125	2	20

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
E300.0A	BLK1501875	Nitrate-N		<	0.1	mg/L						
		Sulfate		<	0.5	mg/L						
E300.0A	LCS1501875	Nitrate-N			1.1	mg/L	1	107	90	110		
		Sulfate			10	mg/L	10	100	90	110		
E300.0A	MS1501875	Nitrate-N	33634-001		1.7	mg/L	1.66	102	90	110		
E300.0A	BLK1501876	Nitrate-N		<	0.1	mg/L						
		Sulfate		<	0.5	mg/L						
E300.0A	LCS1501876	Nitrate-N			1.0	mg/L	1	104	90	110		
		Sulfate			9.9	mg/L	10	99	90	110		
E300.0A	BLK1501944	Sulfate		<	0.5	mg/L						
E300.0A	LCS1501944	Sulfate			10	mg/L	10	100	90	110		
SM2320B	CCVB1501906	Alkalinity, total (as CaCO3)			10.00	pH			9.94	10.06		
SM2320B	CCVE1501906	Alkalinity, total (as CaCO3)			27	mg/L	25	108	90	110		
SM2320B	CCVM1501906	Alkalinity, total (as CaCO3)			52	mg/L	50	104	90	110		
SM2320B	DUP1501906	Alkalinity, total (as CaCO3)	33575-008		58	mg/L					0	25
SM2320B	DUP1501906	Alkalinity, total (as CaCO3)	33576-006		26	mg/L					1	25
SM2320B	LCS1501906	Alkalinity, total (as CaCO3)			27	mg/L	25	107	80	120		
SM2320B	PB1501906	Alkalinity, total (as CaCO3)		<	5	mg/L						
SM4500NH3-D	DUP1501966	Ammonia as N	33654-007	<	0.5	mg/L						25
SM4500NH3-D	LCS1501966	Ammonia as N			5.2	mg/L	5	104	75	125		
SM4500NH3-D	LCSD1501966	Ammonia as N			5.4	mg/L	5	108	75	125	4	25
SM4500NH3-D	MS1501966	Ammonia as N	33654-007		5.4	mg/L	5	103	75	125		
SM4500NH3-D	PB1501966	Ammonia as N		<	0.5	mg/L						
SM4500-S2 D+F	LCS1501895	Sulfide			1.1	mg/L	1	107	75	125		
SM4500-S2 D+F	LCSD1501895	Sulfide			1.1	mg/L	1	108	75	125	1	20
SM4500-S2 D+F	MS1501895	Sulfide	33654-005		1.1	mg/L	1	108	75	125		
SM4500-S2 D+F	PB1501895	Sulfide		<	0.04	mg/L						

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SM5310C	BLK1502000	Dissolved Organic Carbon (DOC)		<	1	mg/L						
SM5310C	LCS1502000	Dissolved Organic Carbon (DOC)			10	mg/L	10	97	80	120		
SM5310C	LCSD1502000	Dissolved Organic Carbon (DOC)			10	mg/L	10	96	80	120	2	20

PAGE____ OF____

Absolute Resource associates

124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
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CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33654

Company Name: Woodard + Curran

Company Address: 40 Shattuck Rd #110 Andover, MA

Report To: Jarrod Yoder

Phone #: 978-557-8150

Invoice to Email: JYoder@woodardcurran.com

☐ Hard Copy Invoice Required

Project Name: Lewis Chemical

Project #: 229286.01

Project Location: NH (MA) ME VT NY ____ Other

Protocol: RCRA (MCP) SDWA NHDES NPDES OTHER

Reporting Limits: QAPP EPA DW GW-1 Other S-1

Quote # 2014 Fee Sched. ☐ NH Reimbursement Pricing

PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	Sampling: SAMPLER	☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP	☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT	☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane	☐ VOC 524.2 ☐ VOC 524.2 NH List ☒ Gases-List: M/E/E	☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint	☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB	☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB	☐ O&G 1664 ☐ Mineral O&G SM5520F	☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity	☐ TSS ☐ TDS ☐ TS ☐ TVS ☒ Alkalinity	☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness	☒ Total Metals-list: Fe, Mn	☒ Dissolved Metals-list: Fe, Mn	☒ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC	☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN	☐ Cyanide ☒ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P	☒ Nitrate ☐ Nitrite ☐ Chloride ☒ Sulfate ☐ Bromide ☐ Fluoride	☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde	DOC (5310 C)	Grab (G) or Composite (C)
diss	~~ESM-3/ESM-3D~~	~~8~~	~~X~~								~~7/16/15~~	~~1345~~	~~AR~~				~~2~~						~~1~~		~~1~~	~~1~~	~~1~~		~~1~~	~~1~~				~~2~~	~~G~~
-09	33654-02 ESM-3B-S	4	X				X	X			7/16/15	1640	AR										1		1	1	1		~~3~~	~~3~~				~~2~~	G
-10	-03 ESM-5B	109	X				X	X			7/17/15	1020	JG				2						1		1	1	1							2	
-11	-04 ESM-5	4	X				X	X			7/16/15	1535	JG										1		1	1	1		1	1					
-12	-05 ESM-9	10	X				X	X			7/17/15	0745	JG				2						1		1	1	1		1	1				2	
-13	-06 ESM-13	10	X				X	X			7/17/15	0935	AR				2						1		1	1	1		1	1				2	
-14	-07 ESM-3B-D	10	X				X	X			7/17/15	1130	AR				2						1		1	1	1		1	1				2	
-11	-04 ESM-5MS	2	X				X				7/16/15	1535	JG												1	1									
-11	-04 ESM-5MSD	2	X				X				7/16/15	1535	JG												1	1									
-15	-08 ESM-3	10	X				X	X			7/16/15	1345	AR				2						1		1	1	1		1	1				2	

TAT REQUESTED

Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed ____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) see above

☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☒ YES ☐ NO

TEMPERATURE 5.5 °C

CUSTODY RECORD

QSD-01 Revision 01/09/15

	Date	Time		Date	Time
Relinquished by Sampler: [signature]	7/17/15	1430	Received by: [signature]	7/17/15	1435
Relinquished by: [signature]	7/17/15	1730	Received by:		
Relinquished by:			Received by Laboratory: [signature]	7/17/15	17:30

21

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33654

Company Name: Woodard + Curran
Company Address: 40 Shattuck Rd #110
Report To: Keri Stevens / Jarrod Yoder
Phone #: 978-557-8150
Invoice to Email: JYoder@woodardcurran.com
☐ Hard Copy Invoice Required

Project Name: Lewis Chemical
Project #: 229286.01
Project Location: NH (MA) ME VT NY Other
Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER
Reporting Limits: QAPP GW-1 S-1 EPA DW Other
Quote # 2014 Fee Schedule ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP
☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT
☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane
☐ VOC 524.2 ☐ VOC 524.2 NH List ☒ Gases-List: methane, ethane, ethene
☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint
☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB
☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB
☐ O&G 1664 ☐ Mineral O&G SM5520F
☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity
☐ TSS ☐ TDS ☐ TS ☐ TVS ☒ Alkalinity
☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness
☒ Total Metals-list: Fe, Mn
☒ Dissolved Metals-list: Fe, Mn (filtered)
☒ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC
☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN
☐ Cyanide ☒ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P
☒ Nitrate ☐ Nitrite ☐ Chloride ☒ Sulfate ☐ Bromide ☐ Fluoride
☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP
☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide
Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde
DOC (5310 C)

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	VOC 524.2	Total Metals-list: Fe, Mn	Dissolved Metals-list: Fe, Mn (filtered)	Ammonia	Cyanide	Sulfide	Nitrate	Nitrite	Sulfate	Chloride	DOC (5310 C)	Grab (G) or Composite (C)
33654-01	ESM-7	10	X								7/16/15	1130	JG	2	1	1	1		1		1		2	G
	~~ESM-6~~										~~7/16/15~~		~~JG~~												

7/16-16

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) JYoder@woodardcurran.com; KStevens@
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☑ YES ☐ NO
TEMPERATURE 5 °C

CUSTODY RECORD
QSD-01 Revision 08/05/14

	Date	Time		Date	Time
Relinquished by Sampler:	7/16/15	1535	Received by:	7/16/15	1535
Relinquished by:	7/16/15	1755	Received by:		
Relinquished by:			Received by Laboratory:	7-16-15	17:55

22

COMMITMENT & INTEGRITY
DRIVE RESULTS

40 Shattuck Road
Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

September 24, 2015 *delivered via electronic mail*

Robert Lowell
Massachusetts Department of Conservation & Recreation
251 Causeway Street, Suite 600
Boston, MA 02114-2104

Re: Notice of Environmental Sampling
Release Tracking Number (RTN) 3-1616
12-24 Fairmount Court, Hyde Park, Boston, Massachusetts

Dear Mr. Lowell:

Massachusetts regulations require that results of environmental analyses be provided to an owner of a property where samples were collected as part of response actions conducted in accordance with the Massachusetts Contingency Plan. Analytical results from the recent soil sampling performed July 23, 2015 have been validated and are available for your review. The laboratory reports and a copy of the MassDEP transmittal form (BWSC123) are included with this letter that was transmitted via email.

Please note that public involvement opportunities are available under 310 CMR 40.1403(9) and 40.1404. Additional information about the public involvement regulations that require this notice and a description of such public involvement activities may be reviewed at the following web address http://www.mass.gov/eea/agencies/massdep/cleanup/.

If you would like additional information regarding this notice, you may us at (978) 482-7871.

Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal/Geographic Manager

229286.01

Attachments: BWSC123 Form
Laboratory Analytical Reports

cc: James Smith, Boston Department of Neighborhood Development
Brian Miller, CDW Consultants

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 1616

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 12-24 Fairmount Court

City/Town: Boston Zip Code: 02136

B. This notice is being provided to the following party:

1. Name: Mass. Department of Conservation & Recreation
2. Street Address: 251 Causeway Street, Suite 600

City/Town: Boston Zip Code: 02114

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 12-24 Fairmount Court

City/Town: Boston Zip Code: 02136

2. MCP phase of work during which the sampling will be/has been conducted:

☐ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☑ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Temporary Solution Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☐ commercial ☑ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Soil samples collected from various locations at the site.

E. Contact information related to the party providing this notice:

Contact Name: Jarrod Yoder of Woodard & Curran
Street Address: 40 Shattuck Road, Suite 110
City/Town: Andover Zip Code: 01810
Telephone: (978) 482-7871 Email: jyoder@woodardcurran.com

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 1616

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/eea/agencies/massdep/cleanup. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://public.dep.state.ma.us/SearchableSites2/Search.aspx to view site-specific files on-line or http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Jarred Yoder
Woodard & Curran
40 Shattuck Road
Suite 110
Andover, MA 01810

PO Number: None
Job ID: 33758
Date Received: 7/24/15

Project: Lewis Chemical 229286.01

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

JSylvester (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 8/6/2015
Total number of pages: 11

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Lewis Chemical 229286.01

Lab ID: 33758

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
WC-GP-2 (0-3)	Solid	7/23/2015 9:05	33758-001	
				Percent Dry Matter for Sample Calc by SM2540B,G
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
WC-GP-2 (0-3)	TCLP	7/23/2015 9:05	33758-002	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Chromium in water by 6010

Project ID: Lewis Chemical 229286.01
Job ID: 33758
Sample#: 33758-001
Sample ID: WC-GP-2 (0-3)
Matrix: Solid
Sampled: 7/23/15 9:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Oxidation Reduction Potential	**370**		mV	1	APA		1501989	7/29/15	4:45	ASTM1498-08
pH	**5.9**		pH	1	APA		1501962	7/28/15	4:25	SW9045C

Project ID: 229286.01 Lewis Chemical
Job ID: 33758
Sample #: 33758-002
Sample ID: WC-GP-2 (0-3)
Matrix: TCLP Extract
Sampled: 7/23/15 9:05
TCLP: 7/29/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium	< 0.50	0.50	5	mg/L	1	AC	7/30/15	8054	7/30/15	17:01	SW1311 SW3005A6010C

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 229286.01

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **33758**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☑ No*☐

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☑ No*☐
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: SCSylvester (for) **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 8/6/15**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 33758

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 1 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3005A6010C	BLK8054	Chromium		<	0.05	mg/L						
SW3005A6010C	LCS8054	Chromium			0.53	mg/L	0.5	105	80	120		
SW3005A6010C	LCSD8054	Chromium			0.54	mg/L	0.5	108	80	120	2	20
SW3005A6010C	MS8054	Chromium	33758-002		0.52	mg/L	0.5	102	75	125		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW9045C	DUP1501962	pH	33758-001	5.9	pH					

SDG #3

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33758

Company Name: Woodard + Curran

Company Address: 40 Shattuck Rd #110, Andover, MA

Report To: Jarrod Yoder

Phone #: 978-557-8150

Invoice to Email: JYoder@woodardcurran.com

☐ Hard Copy Invoice Required

Project Name: Lewis Chemical

Project #: 229286.01

Project Location: NH (MA) ME VT NY Other

Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER

Reporting Limits: QAPP GW-1 S-1 EPA DW Other

Quote # ☐ NH Reimbursement Pricing

PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	Sampling: SAMPLER
33758-01	WC-GP-2 (0-3)	3		X							7/23/15	0905	KS

☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT ☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane ☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List: ☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint ☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB ☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB ☐ O&G 1664 ☐ Mineral O&G SM5520F ☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness ☐ Total Metals-list: ☐ Dissolved Metals-list: ☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN ☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride ☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP ☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde

| | | | | | | |

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Jarrod Yoder
Woodard & Curran
40 Shattuck Road
Suite 110
Andover, MA 01810

PO Number: None
Job ID: 33756
Date Received: 7/24/15

Project: Lewis Chemical

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

JSylvester (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 8/10/2015
Total number of pages: 14

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Lewis Chemical
Lab ID: 33756

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
WC-GP-7 (7-10)	TCLP	7/23/2015 7:55	33756-001	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-GP-5 (6-8)	TCLP	7/23/2015 8:20	33756-002	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-II-A07 (0-0.5)	TCLP	7/23/2015 8:30	33756-003	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-II-A01 (0-0.5)	TCLP	7/23/2015 8:45	33756-004	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-GP-2 (0-3)	Solid	7/23/2015 9:05	33756-005	
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
WC-TP-3 (5.5)	TCLP	7/23/2015 9:35	33756-006	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-ESMB-2 (0-5)	TCLP	7/23/2015 9:50	33756-007	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-I-A03 (0-0.5)	TCLP	7/23/2015 10:15	33756-008	
				Water Digestion for ICP Analysis
				TCLP Extraction
				Lead in water by 6010
WC-GP-7 (7-10)	Solid	7/23/2015 7:55	33756-009	
				Solid Digestion for ICP Analysis
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
WC-GP-5 (6-8)	Solid	7/23/2015 8:20	33756-010	
				Solid Digestion for ICP Analysis
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
WC-II-A07 (0-0.5)	Solid	7/23/2015 8:30	33756-011	
				Solid Digestion for ICP Analysis
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
WC-II-A01 (0-0.5)	Solid	7/23/2015 8:45	33756-012	
				Solid Digestion for ICP Analysis
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
WC-TP-3 (5.5)	Solid	7/23/2015 9:35	33756-013	

Absolute Resource associates

Project ID: Lewis Chemical
Lab ID: 33756

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
WC-TP-3 (5.5)	Solid	7/23/2015 9:35	33756-013	Solid Digestion for ICP Analysis Lead in solids by 6010 Percent Dry Matter for Sample Calc by SM2540B,G

Project ID: Lewis Chemical
Job ID: 33756
Sample#: 33756-005
Sample ID: WC-GP-2 (0-3)
Matrix: Solid Percent Dry: 90.7% Results expressed on a dry weight basis.
Sampled: 7/23/15 9:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**0.63**	0.44	ug/g	1	AJD		1502098	8/6/15		SW3060A7196A

Project ID: Lewis Chemical
Job ID: 33756

Sample#: 33756-009
Sample ID: WC-GP-7 (7-10)
Matrix: Solid Percent Dry: 85.5% Results expressed on a dry weight basis.
Sampled: 7/23/15 7:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**1300**	1.1	ug/g	1	AC	7/30/15	8055	7/30/15	19:52	SW3051A6010C

Sample#: 33756-010
Sample ID: WC-GP-5 (6-8)
Matrix: Solid Percent Dry: 93.4% Results expressed on a dry weight basis.
Sampled: 7/23/15 8:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**130**	1.0	ug/g	1	AC	7/30/15	8055	7/30/15	19:59	SW3051A6010C

Sample#: 33756-011
Sample ID: WC-II-A07 (0-0.5)
Matrix: Solid Percent Dry: 94.2% Results expressed on a dry weight basis.
Sampled: 7/23/15 8:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**400**	1.0	ug/g	1	AC	7/30/15	8055	7/30/15	20:06	SW3051A6010C

Sample#: 33756-012
Sample ID: WC-II-A01 (0-0.5)
Matrix: Solid Percent Dry: 95% Results expressed on a dry weight basis.
Sampled: 7/23/15 8:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**330**	1.0	ug/g	1	AC	7/30/15	8055	7/30/15	20:13	SW3051A6010C

Sample#: 33756-013
Sample ID: WC-TP-3 (5.5)
Matrix: Solid Percent Dry: 90.4% Results expressed on a dry weight basis.
Sampled: 7/23/15 9:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**310**	1.1	ug/g	1	AC	7/30/15	8055	7/30/15	20:42	SW3051A6010C

Project ID: Lewis Chemical
Job ID: 33756
Sample #: 33756-001
Sample ID: WC-GP-7 (7-10)
Matrix: TCLP Extract
Sampled: 7/23/15 7:55
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**5.8**	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	15:37	SW1311 SW3005A6010C

Sample #: 33756-002
Sample ID: WC-GP-5 (6-8)
Matrix: TCLP Extract
Sampled: 7/23/15 8:20
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	< 0.080	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	16:05	SW1311 SW3005A6010C

Sample #: 33756-003
Sample ID: WC-II-A07 (0-0.5)
Matrix: TCLP Extract
Sampled: 7/23/15 8:30
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**0.28**	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	16:12	SW1311 SW3005A6010C

Sample #: 33756-004
Sample ID: WC-II-A01 (0-0.5)
Matrix: TCLP Extract
Sampled: 7/23/15 8:45
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	< 0.080	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	16:19	SW1311 SW3005A6010C

Sample #: 33756-006
Sample ID: WC-TP-3 (5.5)
Matrix: TCLP Extract
Sampled: 7/23/15 9:35
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	< 0.080	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	16:26	SW1311 SW3005A6010C

Sample #: 33756-007
Sample ID: WC-ESMB-2 (0-5)
Matrix: TCLP Extract
Sampled: 7/23/15 9:50
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**2.4**	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	16:33	SW1311 SW3005A6010C

Project ID: Lewis Chemical
Job ID: 33756
Sample #: 33756-008
Sample ID: WC-I-A03 (0-0.5)
Matrix: TCLP Extract
Sampled: 7/23/15 10:15
TCLP: 8/4/15

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Lead	**0.34**	0.080	5	mg/L	1	AC	8/5/15	8072	8/5/15	16:41	SW1311 SW3005A6010C

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #:

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **33756**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☑	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

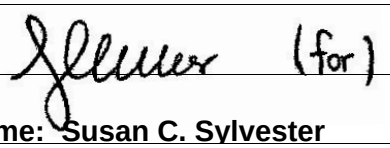
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☑ No*☐

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☑ No*☐
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:  **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 8/10/15**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 33756

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at -1 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW3005A6010C	BLK8072	Lead		<	0.01	mg/L							
SW3005A6010C	DUP8072	Lead	33839-001	<	0.01	mg/L						170	20
SW3005A6010C	LCS8072	Lead			27	ug/g	25	110		80	120		
SW3005A6010C	LCSD8072	Lead			0.54	mg/L	0.5	108		80	120		20
SW3005A6010C	MS8072	Lead	33839-001		0.52	mg/L	0.5	103		70	130		
SW3051A6010C	BLK8055	Lead		<	0.50	ug/g							
SW3051A6010C	CRM8055	Lead			5600	ug/g	5100			3750	6470		
SW3051A6010C	CRMD8055	Lead			5500	ug/g	5100			3750	6470	1	35
SW3051A6010C	DUP8055	Lead	33777-007		390	ug/g						1	35
SW3051A6010C	MS8055	Lead	33777-007		470	ug/g	58.4	129	*	75	125		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3060A7196A	CRM1502098	Chromium, Hexavalent			57	ug/g	93		26.2	288		
SW3060A7196A	CRMD1502098	Chromium, Hexavalent			62	ug/g	93		26.2	288	10	30
SW3060A7196A	PB1502098	Chromium, Hexavalent		<	0.40	ug/g						

SDG#1

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33756

Company Name: Woodard + Curran
Company Address: 40 Shattuck Rd #110, Andover, MA
Report To: Jarod Yoder
Phone #: 978-557-8150
Invoice to Email: JYoder@woodardcurran.com
☐ Hard Copy Invoice Required

Project Name: Lewis Chemical
Project #:
Project Location: NH (MA) ME VT NY Other
Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER
Reporting Limits: QAPP GW-1 S-1 EPA DW Other
Quote # ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP
☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT
☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane
☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:
☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint
☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB
☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB
☐ O&G 1664 ☐ Mineral O&G SM5520F
☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity
☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity
☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness
☐ Total Metals-list:
☐ Dissolved Metals-list:
☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TOC
☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN
☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P
☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride
☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitability/FP
☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide
Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde
TCLP Lead
Cr^{6+}
Grab (G) or Composite (C)

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	TCLP Lead	Cr^{6+}	Grab (G) or Composite (C)
33756-01	WC-GP-7 (7-10)	1		X							7-23-15	7:55	KS	X		
-02	WC-GP-5 (6-8)	1		X							7-23-15	08:20	KS	X		
-03	WC-II-A07 (0-0.5)	1		X							7-23-15	0830	KS	X		
-04	WC-II-A01 (0-0.5)	1		X							7-23-15	0845	KS	X		
-05	WC-GP-2 (0-3)	1		X							7-23-15	0905	KS	X		
-06	WC-GP-3 (5.5)	1		X							7-23-15	0935	KS		X	
-07	WC-ESMB-2 (0-5)	1		X							7-23-15	0950	KS	X		
-08	WC-I-A03 (0-0.5)	1		X							7-23-15	1015	KS	X		

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☐
*Date Needed _____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS
WSC GIS Key EDD

REPORTING INSTRUCTIONS ☒PDF (e-mail address) JYoder@woodardcurran.com; KSteven@ ☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☑ YES ☐ NO
TEMPERATURE -1 °C

CUSTODY RECORD
QSD-01 Revision 01/09/15

		Date	Time
Relinquished by Sampler:	Ken B. Lane	7-24-15	11:00
Relinquished by:		7/24/15	1325
Relinquished by:			
Received by:		7/24/15	1100
Received by:			
Received by Laboratory:		7/24/15	13:35

14

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-84571-1
Client Project/Site: Boston DND Lewis Chemical

For:
Woodard & Curran, Inc.
40 Shattuck Road
Suite 110
Andover, Massachusetts 01810

Attn: Mr. Jarrod Yoder

Authorized for release by:
8/6/2015 12:10:12 PM

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Job ID: 480-84571-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-84571-1

Receipt
The samples were received on 7/25/2015 2:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

Receipt Exceptions

The following sample was canceled by the client on 7/27/15: WC-ESM-5 ANGLED (10-12) (480-84571-4).

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method SM 5210B: The glucose-glutamic acid standard (LCS) recovered outside the recovery limits specified in the method in batch 480-256502 for Biochemical Oxygen Demand .

Method 9060A: The relative standard deviation for the following samples WC-ESM-5 (10-12.5) (480-84571-2), WC-ESM-5 (12.5-15) (480-84571-3), WC-ESM-3 (11-14) (480-84571-9) and WC-ESM-3 (14-15) (480-84571-10) was outside the method required control limit: WC-ESM-5 (10-12.5) (480-84571-2), WC-ESM-5 (12.5-15) (480-84571-3), WC-ESM-3 (11-14) (480-84571-9) and WC-ESM-3 (14-15) (480-84571-10). Sample matrix interference is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-84571-1**

Project Location: **Boston DND Lewis Chemical** RTN:

This form provides certifications for the data set for the following Laboratory Sample ID Number(s):

480-84571-1[1-10]

Matrices: ☐ Groundwater/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☒	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☒	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	☒ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☒ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☒ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☒ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

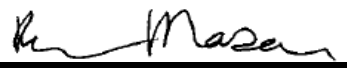
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☒ Yes ☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350**

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☒ Yes ☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☒ Yes ☐ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature:  Position: Project Manager

Printed Name: Becky Mason Date: 8/6/15 10:34

This form has been electronically signed and approved

Detection Summary

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Client Sample ID: WC-ESM-5 (5-10) — Lab Sample ID: 480-84571-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.942	J	1.32	0.529	mg/Kg	1	☼	6010	Total/NA
Barium	24.0		0.662	0.146	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.238	J	0.265	0.0371	mg/Kg	1	☼	6010	Total/NA
Cadmium	16.5		0.265	0.0397	mg/Kg	1	☼	6010	Total/NA
Chromium	7.10		0.662	0.265	mg/Kg	1	☼	6010	Total/NA
Nickel	7.47		1.32	0.304	mg/Kg	1	☼	6010	Total/NA
Vanadium	11.6		0.662	0.146	mg/Kg	1	☼	6010	Total/NA
Zinc	278		3.31	0.847	mg/Kg	1	☼	6010	Total/NA
Lead	4.21		0.662	0.318	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0320	J	0.125	0.0102	mg/Kg	1	☼	7471A	Total/NA
Chemical Oxygen Demand	228		200	200	mg/Kg	1		410.4	ASTM Leach
Total Organic Carbon - Quad	108		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	105		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	108		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	109		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	110		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
Biochemical Oxygen Demand	56.4	*	40.0	20.0	mg/Kg	1		SM 5210B	ASTM Leach

Client Sample ID: WC-ESM-5 (10-12.5) — Lab Sample ID: 480-84571-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	31.9		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	26.9		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	37.0		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	25.6		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	38.2		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
Biochemical Oxygen Demand	38.2	J *	40.0	20.0	mg/Kg	1		SM 5210B	ASTM Leach

Client Sample ID: WC-ESM-5 (12.5-15) — Lab Sample ID: 480-84571-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	41.8		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	33.7		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	49.5		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	35.7		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	48.3		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
Biochemical Oxygen Demand	41.8	*	40.0	20.0	mg/Kg	1		SM 5210B	ASTM Leach

Client Sample ID: WC-ESM-7 (10-12.5) — Lab Sample ID: 480-84571-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chemical Oxygen Demand	825		200	200	mg/Kg	1		410.4	ASTM Leach
Total Organic Carbon - Quad	162		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	142		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	183		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	144		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	180		20.0	7.20	mg/Kg	1		9060A	ASTM Leach

Client Sample ID: WC-ESM-7 (12.5-15) — Lab Sample ID: 480-84571-6

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample ID: WC-ESM-7 (12.5-15) (Continued) — Lab Sample ID: 480-84571-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.82		1.30	0.520	mg/Kg	1	☼	6010	Total/NA
Barium	18.2		0.650	0.143	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.321		0.260	0.0364	mg/Kg	1	☼	6010	Total/NA
Chromium	13.6		0.650	0.260	mg/Kg	1	☼	6010	Total/NA
Nickel	4.03		1.30	0.299	mg/Kg	1	☼	6010	Total/NA
Vanadium	26.3		0.650	0.143	mg/Kg	1	☼	6010	Total/NA
Zinc	17.5		3.25	0.832	mg/Kg	1	☼	6010	Total/NA
Lead	3.84		0.650	0.312	mg/Kg	1	☼	6010	Total/NA
Selenium	0.732		0.650	0.520	mg/Kg	1	☼	6010	Total/NA
Antimony	0.744	B	0.650	0.520	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0146	J	0.137	0.0111	mg/Kg	1	☼	7471A	Total/NA
Chemical Oxygen Demand	287		200	200	mg/Kg	1		410.4	ASTM Leach
Total Organic Carbon - Quad	60.6		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	53.9		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	67.5		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	53.5		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	67.3		20.0	7.19	mg/Kg	1		9060A	ASTM Leach
Biochemical Oxygen Demand	34.2	J *	40.0	20.0	mg/Kg	1		SM 5210B	ASTM Leach

Client Sample ID: WC-ESM-7 (15-17.5) — Lab Sample ID: 480-84571-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	329		140	50.4	mg/Kg	7		9060A	ASTM Leach
TOC Result 1	278		140	50.4	mg/Kg	7		9060A	ASTM Leach
TOC Result 2	381		140	50.4	mg/Kg	7		9060A	ASTM Leach
TOC Result 3	287		140	50.4	mg/Kg	7		9060A	ASTM Leach
TOC Result 4	369		140	50.4	mg/Kg	7		9060A	ASTM Leach

Client Sample ID: WC-ESM-3 (9-11) — Lab Sample ID: 480-84571-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chemical Oxygen Demand	533		200	200	mg/Kg	1		410.4	ASTM Leach
Total Organic Carbon - Quad	106		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	89.0		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	120		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	89.5		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	123		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
Biochemical Oxygen Demand	268	*	40.0	20.0	mg/Kg	1		SM 5210B	ASTM Leach

Client Sample ID: WC-ESM-3 (11-14) — Lab Sample ID: 480-84571-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chemical Oxygen Demand	209		200	200	mg/Kg	1		410.4	ASTM Leach
Total Organic Carbon - Quad	31.6		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	26.1		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	36.7		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	26.5		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	37.1		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
Biochemical Oxygen Demand	70.0	*	40.0	20.0	mg/Kg	1		SM 5210B	ASTM Leach

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Client Sample ID: WC-ESM-3 (14-15)

Lab Sample ID: 480-84571-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	31.4		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 1	26.2		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 2	36.2		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 3	26.0		20.0	7.20	mg/Kg	1		9060A	ASTM Leach
TOC Result 4	37.1		20.0	7.20	mg/Kg	1		9060A	ASTM Leach

This Detection Summary does not include radiochemical test results.

Client Sample ID: WC-ESM-5 (5-10)

Lab Sample ID: 480-84571-1
Date Collected: 07/23/15 11:24
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	228		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	108		20.0	7.20	mg/Kg			08/01/15 20:34	1
TOC Result 1	105		20.0	7.20	mg/Kg			08/01/15 20:34	1
TOC Result 2	108		20.0	7.20	mg/Kg			08/01/15 20:34	1
TOC Result 3	109		20.0	7.20	mg/Kg			08/01/15 20:34	1
TOC Result 4	110		20.0	7.20	mg/Kg			08/01/15 20:34	1
Biochemical Oxygen Demand	56.4	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-5 (5-10)

Lab Sample ID: 480-84571-1
Date Collected: 07/23/15 11:24
Matrix: Solid
Date Received: 07/25/15 02:30
Percent Solids: 79.2

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.662		0.662	0.265	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Arsenic	0.942	J	1.32	0.529	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Barium	24.0		0.662	0.146	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Beryllium	0.238	J	0.265	0.0371	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Cadmium	16.5		0.265	0.0397	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Chromium	7.10		0.662	0.265	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Nickel	7.47		1.32	0.304	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Thallium	<1.32		1.32	0.397	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Vanadium	11.6		0.662	0.146	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Zinc	278		3.31	0.847	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Lead	4.21		0.662	0.318	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Selenium	<0.662		0.662	0.529	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1
Antimony	<0.662		0.662	0.529	mg/Kg	☼	07/29/15 08:28	07/30/15 12:09	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0320	J	0.125	0.0102	mg/Kg	☼	07/28/15 15:10	07/28/15 19:28	1

Client Sample ID: WC-ESM-5 (10-12.5)

Lab Sample ID: 480-84571-2
Date Collected: 07/23/15 11:29
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<200		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	31.9		20.0	7.20	mg/Kg			08/01/15 22:54	1
TOC Result 1	26.9		20.0	7.20	mg/Kg			08/01/15 22:54	1
TOC Result 2	37.0		20.0	7.20	mg/Kg			08/01/15 22:54	1
TOC Result 3	25.6		20.0	7.20	mg/Kg			08/01/15 22:54	1
TOC Result 4	38.2		20.0	7.20	mg/Kg			08/01/15 22:54	1
Biochemical Oxygen Demand	38.2	J *	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-5 (12.5-15)

Lab Sample ID: 480-84571-3
Date Collected: 07/23/15 11:30
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<200		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	**41.8**		20.0	7.19	mg/Kg			08/01/15 23:23	1
TOC Result 1	**33.7**		20.0	7.19	mg/Kg			08/01/15 23:23	1
TOC Result 2	**49.5**		20.0	7.19	mg/Kg			08/01/15 23:23	1
TOC Result 3	**35.7**		20.0	7.19	mg/Kg			08/01/15 23:23	1
TOC Result 4	**48.3**		20.0	7.19	mg/Kg			08/01/15 23:23	1
Biochemical Oxygen Demand	**41.8**	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-7 (10-12.5)

Lab Sample ID: 480-84571-5
Date Collected: 07/23/15 14:10
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**825**		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	**162**		20.0	7.20	mg/Kg			08/01/15 23:52	1
TOC Result 1	**142**		20.0	7.20	mg/Kg			08/01/15 23:52	1
TOC Result 2	**183**		20.0	7.20	mg/Kg			08/01/15 23:52	1
TOC Result 3	**144**		20.0	7.20	mg/Kg			08/01/15 23:52	1
TOC Result 4	**180**		20.0	7.20	mg/Kg			08/01/15 23:52	1
Biochemical Oxygen Demand	<40.0	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-7 (12.5-15)

Lab Sample ID: 480-84571-6
Date Collected: 07/23/15 14:11
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**287**		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	**60.6**		20.0	7.19	mg/Kg			08/02/15 00:21	1
TOC Result 1	**53.9**		20.0	7.19	mg/Kg			08/02/15 00:21	1
TOC Result 2	**67.5**		20.0	7.19	mg/Kg			08/02/15 00:21	1
TOC Result 3	**53.5**		20.0	7.19	mg/Kg			08/02/15 00:21	1
TOC Result 4	**67.3**		20.0	7.19	mg/Kg			08/02/15 00:21	1
Biochemical Oxygen Demand	**34.2**	J *	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-7 (12.5-15)

Lab Sample ID: 480-84571-6
Date Collected: 07/23/15 14:11
Matrix: Solid
Date Received: 07/25/15 02:30
Percent Solids: 74.8

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.650		0.650	0.260	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Arsenic	**1.82**		1.30	0.520	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Barium	**18.2**		0.650	0.143	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Beryllium	**0.321**		0.260	0.0364	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Cadmium	<0.260		0.260	0.0390	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Chromium	**13.6**		0.650	0.260	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Nickel	**4.03**		1.30	0.299	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Thallium	<1.30		1.30	0.390	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1

Client Sample ID: WC-ESM-7 (12.5-15)

Lab Sample ID: 480-84571-6
Date Collected: 07/23/15 14:11
Matrix: Solid
Date Received: 07/25/15 02:30
Percent Solids: 74.8

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	26.3		0.650	0.143	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Zinc	17.5		3.25	0.832	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Lead	3.84		0.650	0.312	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Selenium	0.732		0.650	0.520	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1
Antimony	0.744	B	0.650	0.520	mg/Kg	☼	07/29/15 08:28	07/30/15 11:55	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0146	J	0.137	0.0111	mg/Kg	☼	07/28/15 15:10	07/28/15 19:29	1

Client Sample ID: WC-ESM-7 (15-17.5)

Lab Sample ID: 480-84571-7
Date Collected: 07/23/15 14:30
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<200	F1	200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	329		140	50.4	mg/Kg			08/02/15 05:37	7
TOC Result 1	278		140	50.4	mg/Kg			08/02/15 05:37	7
TOC Result 2	381		140	50.4	mg/Kg			08/02/15 05:37	7
TOC Result 3	287		140	50.4	mg/Kg			08/02/15 05:37	7
TOC Result 4	369		140	50.4	mg/Kg			08/02/15 05:37	7
Biochemical Oxygen Demand	<40.0	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-3 (9-11)

Lab Sample ID: 480-84571-8
Date Collected: 07/23/15 15:20
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	533		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	106		20.0	7.20	mg/Kg			08/02/15 06:06	1
TOC Result 1	89.0		20.0	7.20	mg/Kg			08/02/15 06:06	1
TOC Result 2	120		20.0	7.20	mg/Kg			08/02/15 06:06	1
TOC Result 3	89.5		20.0	7.20	mg/Kg			08/02/15 06:06	1
TOC Result 4	123		20.0	7.20	mg/Kg			08/02/15 06:06	1
Biochemical Oxygen Demand	268	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-3 (11-14)

Lab Sample ID: 480-84571-9
Date Collected: 07/23/15 15:30
Matrix: Solid
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	209		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	31.6		20.0	7.20	mg/Kg			08/02/15 06:35	1
TOC Result 1	26.1		20.0	7.20	mg/Kg			08/02/15 06:35	1
TOC Result 2	36.7		20.0	7.20	mg/Kg			08/02/15 06:35	1
TOC Result 3	26.5		20.0	7.20	mg/Kg			08/02/15 06:35	1
TOC Result 4	37.1		20.0	7.20	mg/Kg			08/02/15 06:35	1

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Client Sample ID: WC-ESM-3 (11-14)

Lab Sample ID: 480-84571-9
Matrix: Solid
Date Collected: 07/23/15 15:30
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	**70.0**	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Client Sample ID: WC-ESM-3 (14-15)

Lab Sample ID: 480-84571-10
Matrix: Solid
Date Collected: 07/23/15 15:31
Date Received: 07/25/15 02:30

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<200		200	200	mg/Kg			08/05/15 11:50	1
Total Organic Carbon - Quad	**31.4**		20.0	7.20	mg/Kg			08/02/15 07:03	1
TOC Result 1	**26.2**		20.0	7.20	mg/Kg			08/02/15 07:03	1
TOC Result 2	**36.2**		20.0	7.20	mg/Kg			08/02/15 07:03	1
TOC Result 3	**26.0**		20.0	7.20	mg/Kg			08/02/15 07:03	1
TOC Result 4	**37.1**		20.0	7.20	mg/Kg			08/02/15 07:03	1
Biochemical Oxygen Demand	<40.0	*	40.0	20.0	mg/Kg			07/31/15 10:53	1

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-255797/1-A
Matrix: Solid
Analysis Batch: 256247

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.492		0.492	0.197	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Arsenic	<0.983		0.983	0.393	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Barium	<0.492		0.492	0.108	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Beryllium	<0.197		0.197	0.0275	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Cadmium	<0.197		0.197	0.0295	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Chromium	<0.492		0.492	0.197	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Nickel	<0.983		0.983	0.226	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Thallium	<0.983		0.983	0.295	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Vanadium	<0.492		0.492	0.108	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Zinc	<2.46		2.46	0.629	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Lead	<0.492		0.492	0.236	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Selenium	<0.492		0.492	0.393	mg/Kg		07/29/15 08:28	07/30/15 11:46	1
Antimony	0.4189	J	0.492	0.393	mg/Kg		07/29/15 08:28	07/30/15 11:46	1

Lab Sample ID: LCDSRM 480-255797/3-A
Matrix: Solid
Analysis Batch: 256247

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 255797

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver			52.6	44.87		mg/Kg		85.3	66.7 - 133.5	2	30
Arsenic			113	103.0		mg/Kg		91.2	69.7 - 142.5	0	30
Barium			155	141.1		mg/Kg		91.1	81.9 - 117.4	4	30
Beryllium			109	98.36		mg/Kg		90.2	82.8 - 117.4	1	30
Cadmium			67.5	60.38		mg/Kg		89.5	82.2 - 117.8	3	30
Chromium			164	144.9		mg/Kg		88.4	79.3 - 120.7	2	30
Nickel			89.3	91.38		mg/Kg		102.3	82.3 - 117.6	3	30
Thallium			116	120.4		mg/Kg		103.8	78.6 - 120.7	1	30
Vanadium			73.0	69.19		mg/Kg		94.8	76.7 - 123.3	2	30
Zinc			168	142.7		mg/Kg		84.9	82.1 - 118.5	0	30
Lead			90.1	91.51		mg/Kg		101.6	81.7 - 118.8	0	30
Selenium			156	143.8		mg/Kg		92.2	77.6 - 121.8	1	30
Antimony			94.0	81.46		mg/Kg		86.7	0.5 - 213.8	1	30

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-255797/2-A
Matrix: Solid
Analysis Batch: 256247

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255797

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	52.6	45.89		mg/Kg		87.2	66.7 - 133.5
Arsenic	113	103.2		mg/Kg		91.3	69.7 - 142.5
Barium	155	147.4		mg/Kg		95.1	81.9 - 117.4
Beryllium	109	99.74		mg/Kg		91.5	82.8 - 117.4
Cadmium	67.5	61.99		mg/Kg		91.8	82.2 - 117.8
Chromium	164	148.1		mg/Kg		90.3	79.3 - 120.7
Nickel	89.3	93.72		mg/Kg		105.0	82.3 - 117.6
Thallium	116	121.4		mg/Kg		104.7	78.6 - 120.7
Vanadium	73.0	70.28		mg/Kg		96.3	76.7 - 123.3
Zinc	168	142.2		mg/Kg		84.7	82.1 - 118.5
Lead	90.1	91.24		mg/Kg		101.3	81.7 - 118.8
Selenium	156	144.5		mg/Kg		92.6	77.6 - 121.8
Antimony	94.0	82.29		mg/Kg		87.5	0.5 - 213.8

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-255719/1-A
Matrix: Solid
Analysis Batch: 255935

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255719

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0999		0.0999	0.00809	mg/Kg		07/28/15 15:10	07/28/15 18:46	1

Lab Sample ID: LCDSRM 480-255719/3-A
Matrix: Solid
Analysis Batch: 255935

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 255719

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	8.37	10.60		mg/Kg		126.6	51.3 - 148.1	9	

Lab Sample ID: LCSSRM 480-255719/2-A
Matrix: Solid
Analysis Batch: 255935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255719

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	8.37	9.719		mg/Kg		116.1	51.3 - 148.1

Method: 410.4 - COD

Lab Sample ID: MB 480-256322/28-A
Matrix: Solid
Analysis Batch: 257176

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<200		200	200	mg/Kg			08/05/15 11:50	1

Lab Sample ID: 480-84571-1 MS
Matrix: Solid
Analysis Batch: 257176

Client Sample ID: WC-ESM-5 (5-10)
Prep Type: ASTM Leach

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	228		1000	1331		mg/Kg		110	75 - 125

Lab Sample ID: 480-84571-1 MSD
Matrix: Solid
Analysis Batch: 257176

Client Sample ID: WC-ESM-5 (5-10)
Prep Type: ASTM Leach

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	228		1000	1376		mg/Kg		115	75 - 125	3	20

Lab Sample ID: 480-84571-7 MS
Matrix: Solid
Analysis Batch: 257176

Client Sample ID: WC-ESM-7 (15-17.5)
Prep Type: ASTM Leach

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	<200	F1	999	1324	F1	mg/Kg		133	75 - 125

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-256322/28-A
Matrix: Solid
Analysis Batch: 256654

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	<20.0		20.0	7.20	mg/Kg			08/01/15 20:06	1
TOC Result 1	<20.0		20.0	7.20	mg/Kg			08/01/15 20:06	1
TOC Result 2	<20.0		20.0	7.20	mg/Kg			08/01/15 20:06	1
TOC Result 3	<20.0		20.0	7.20	mg/Kg			08/01/15 20:06	1
TOC Result 4	<20.0		20.0	7.20	mg/Kg			08/01/15 20:06	1

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-256502/1
Matrix: Solid
Analysis Batch: 256502

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<2.00		2.00	1.00	mg/Kg			07/31/15 10:53	1

Method: SM 5210B - BOD, 5-Day (Continued)

Lab Sample ID: LCS 480-256502/2
Matrix: Solid
Analysis Batch: 256502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	198	150.7	*	mg/Kg		76	85 - 115

Lab Sample ID: MB 480-256322/28-A
Matrix: Solid
Analysis Batch: 256502

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<40.0		40.0	20.0	mg/Kg			07/31/15 10:53	1

Metals

Prep Batch: 255719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	Total/NA	Solid	7471A	
480-84571-6	WC-ESM-7 (12.5-15)	Total/NA	Solid	7471A	
LCDSRM 480-255719/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-255719/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-255719/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 255797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	Total/NA	Solid	3050B	
480-84571-6	WC-ESM-7 (12.5-15)	Total/NA	Solid	3050B	
LCDSRM 480-255797/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-255797/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-255797/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 255935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	Total/NA	Solid	7471A	255719
480-84571-6	WC-ESM-7 (12.5-15)	Total/NA	Solid	7471A	255719
LCDSRM 480-255719/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	255719
LCSSRM 480-255719/2-A	Lab Control Sample	Total/NA	Solid	7471A	255719
MB 480-255719/1-A	Method Blank	Total/NA	Solid	7471A	255719

Analysis Batch: 256247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	Total/NA	Solid	6010	255797
480-84571-6	WC-ESM-7 (12.5-15)	Total/NA	Solid	6010	255797
LCDSRM 480-255797/3-A	Lab Control Sample Dup	Total/NA	Solid	6010	255797
LCSSRM 480-255797/2-A	Lab Control Sample	Total/NA	Solid	6010	255797
MB 480-255797/1-A	Method Blank	Total/NA	Solid	6010	255797

General Chemistry

Analysis Batch: 255404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	Total/NA	Solid	Moisture	
480-84571-2	WC-ESM-5 (10-12.5)	Total/NA	Solid	Moisture	
480-84571-3	WC-ESM-5 (12.5-15)	Total/NA	Solid	Moisture	
480-84571-5	WC-ESM-7 (10-12.5)	Total/NA	Solid	Moisture	
480-84571-6	WC-ESM-7 (12.5-15)	Total/NA	Solid	Moisture	
480-84571-7	WC-ESM-7 (15-17.5)	Total/NA	Solid	Moisture	
480-84571-8	WC-ESM-3 (9-11)	Total/NA	Solid	Moisture	
480-84571-9	WC-ESM-3 (11-14)	Total/NA	Solid	Moisture	
480-84571-10	WC-ESM-3 (14-15)	Total/NA	Solid	Moisture	

Leach Batch: 256322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	ASTM Leach	Solid	D3987-85	
480-84571-1	WC-ESM-5 (5-10)	ASTM Leach	Solid	D3987-85	
480-84571-1	WC-ESM-5 (5-10)	ASTM Leach	Solid	D3987-85	
480-84571-1 MS	WC-ESM-5 (5-10)	ASTM Leach	Solid	D3987-85	

General Chemistry (Continued)

Leach Batch: 256322 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1 MSD	WC-ESM-5 (5-10)	ASTM Leach	Solid	D3987-85	
480-84571-2	WC-ESM-5 (10-12.5)	ASTM Leach	Solid	D3987-85	
480-84571-2	WC-ESM-5 (10-12.5)	ASTM Leach	Solid	D3987-85	
480-84571-2	WC-ESM-5 (10-12.5)	ASTM Leach	Solid	D3987-85	
480-84571-3	WC-ESM-5 (12.5-15)	ASTM Leach	Solid	D3987-85	
480-84571-3	WC-ESM-5 (12.5-15)	ASTM Leach	Solid	D3987-85	
480-84571-3	WC-ESM-5 (12.5-15)	ASTM Leach	Solid	D3987-85	
480-84571-5	WC-ESM-7 (10-12.5)	ASTM Leach	Solid	D3987-85	
480-84571-5	WC-ESM-7 (10-12.5)	ASTM Leach	Solid	D3987-85	
480-84571-5	WC-ESM-7 (10-12.5)	ASTM Leach	Solid	D3987-85	
480-84571-6	WC-ESM-7 (12.5-15)	ASTM Leach	Solid	D3987-85	
480-84571-6	WC-ESM-7 (12.5-15)	ASTM Leach	Solid	D3987-85	
480-84571-6	WC-ESM-7 (12.5-15)	ASTM Leach	Solid	D3987-85	
480-84571-7	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	D3987-85	
480-84571-7	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	D3987-85	
480-84571-7	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	D3987-85	
480-84571-7 MS	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	D3987-85	
480-84571-8	WC-ESM-3 (9-11)	ASTM Leach	Solid	D3987-85	
480-84571-8	WC-ESM-3 (9-11)	ASTM Leach	Solid	D3987-85	
480-84571-8	WC-ESM-3 (9-11)	ASTM Leach	Solid	D3987-85	
480-84571-9	WC-ESM-3 (11-14)	ASTM Leach	Solid	D3987-85	
480-84571-9	WC-ESM-3 (11-14)	ASTM Leach	Solid	D3987-85	
480-84571-9	WC-ESM-3 (11-14)	ASTM Leach	Solid	D3987-85	
480-84571-10	WC-ESM-3 (14-15)	ASTM Leach	Solid	D3987-85	
480-84571-10	WC-ESM-3 (14-15)	ASTM Leach	Solid	D3987-85	
480-84571-10	WC-ESM-3 (14-15)	ASTM Leach	Solid	D3987-85	
MB 480-256322/28-A	Method Blank	ASTM Leach	Solid	D3987-85	

Analysis Batch: 256502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	ASTM Leach	Solid	SM 5210B	256322
480-84571-2	WC-ESM-5 (10-12.5)	ASTM Leach	Solid	SM 5210B	256322
480-84571-3	WC-ESM-5 (12.5-15)	ASTM Leach	Solid	SM 5210B	256322
480-84571-5	WC-ESM-7 (10-12.5)	ASTM Leach	Solid	SM 5210B	256322
480-84571-6	WC-ESM-7 (12.5-15)	ASTM Leach	Solid	SM 5210B	256322
480-84571-7	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	SM 5210B	256322
480-84571-8	WC-ESM-3 (9-11)	ASTM Leach	Solid	SM 5210B	256322
480-84571-9	WC-ESM-3 (11-14)	ASTM Leach	Solid	SM 5210B	256322
480-84571-10	WC-ESM-3 (14-15)	ASTM Leach	Solid	SM 5210B	256322
LCS 480-256502/2	Lab Control Sample	Total/NA	Solid	SM 5210B	
MB 480-256322/28-A	Method Blank	ASTM Leach	Solid	SM 5210B	256322
USB 480-256502/1	Method Blank	Total/NA	Solid	SM 5210B	

Analysis Batch: 256654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	ASTM Leach	Solid	9060A	256322
480-84571-2	WC-ESM-5 (10-12.5)	ASTM Leach	Solid	9060A	256322
480-84571-3	WC-ESM-5 (12.5-15)	ASTM Leach	Solid	9060A	256322
480-84571-5	WC-ESM-7 (10-12.5)	ASTM Leach	Solid	9060A	256322
480-84571-6	WC-ESM-7 (12.5-15)	ASTM Leach	Solid	9060A	256322
480-84571-7	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	9060A	256322

General Chemistry (Continued)

Analysis Batch: 256654 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-8	WC-ESM-3 (9-11)	ASTM Leach	Solid	9060A	256322
480-84571-9	WC-ESM-3 (11-14)	ASTM Leach	Solid	9060A	256322
480-84571-10	WC-ESM-3 (14-15)	ASTM Leach	Solid	9060A	256322
MB 480-256322/28-A	Method Blank	ASTM Leach	Solid	9060A	256322

Analysis Batch: 257176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-84571-1	WC-ESM-5 (5-10)	ASTM Leach	Solid	410.4	256322
480-84571-1 MS	WC-ESM-5 (5-10)	ASTM Leach	Solid	410.4	256322
480-84571-1 MSD	WC-ESM-5 (5-10)	ASTM Leach	Solid	410.4	256322
480-84571-2	WC-ESM-5 (10-12.5)	ASTM Leach	Solid	410.4	256322
480-84571-3	WC-ESM-5 (12.5-15)	ASTM Leach	Solid	410.4	256322
480-84571-5	WC-ESM-7 (10-12.5)	ASTM Leach	Solid	410.4	256322
480-84571-6	WC-ESM-7 (12.5-15)	ASTM Leach	Solid	410.4	256322
480-84571-7	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	410.4	256322
480-84571-7 MS	WC-ESM-7 (15-17.5)	ASTM Leach	Solid	410.4	256322
480-84571-8	WC-ESM-3 (9-11)	ASTM Leach	Solid	410.4	256322
480-84571-9	WC-ESM-3 (11-14)	ASTM Leach	Solid	410.4	256322
480-84571-10	WC-ESM-3 (14-15)	ASTM Leach	Solid	410.4	256322
MB 480-256322/28-A	Method Blank	ASTM Leach	Solid	410.4	256322

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Client Sample ID: WC-ESM-5 (5-10)

Lab Sample ID: 480-84571-1
Matrix: Solid
Date Collected: 07/23/15 11:24
Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/01/15 20:34	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-5 (5-10)

Lab Sample ID: 480-84571-1
Matrix: Solid
Percent Solids: 79.2
Date Collected: 07/23/15 11:24
Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			255797	07/29/15 08:28	CMM	TAL BUF
Total/NA	Analysis	6010		1	256247	07/30/15 12:09	SLB	TAL BUF
Total/NA	Prep	7471A			255719	07/28/15 15:10	TAS	TAL BUF
Total/NA	Analysis	7471A		1	255935	07/28/15 19:28	TAS	TAL BUF

Client Sample ID: WC-ESM-5 (10-12.5)

Lab Sample ID: 480-84571-2
Matrix: Solid
Date Collected: 07/23/15 11:29
Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/01/15 22:54	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-5 (12.5-15)

Lab Sample ID: 480-84571-3
Matrix: Solid
Date Collected: 07/23/15 11:30
Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/01/15 23:23	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-7 (10-12.5)

Lab Sample ID: 480-84571-5

Date Collected: 07/23/15 14:10

Matrix: Solid

Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/01/15 23:52	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-7 (12.5-15)

Lab Sample ID: 480-84571-6

Date Collected: 07/23/15 14:11

Matrix: Solid

Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/02/15 00:21	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-7 (12.5-15)

Lab Sample ID: 480-84571-6

Date Collected: 07/23/15 14:11

Matrix: Solid

Date Received: 07/25/15 02:30

Percent Solids: 74.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			255797	07/29/15 08:28	CMM	TAL BUF
Total/NA	Analysis	6010		1	256247	07/30/15 11:55	SLB	TAL BUF
Total/NA	Prep	7471A			255719	07/28/15 15:10	TAS	TAL BUF
Total/NA	Analysis	7471A		1	255935	07/28/15 19:29	TAS	TAL BUF

Client Sample ID: WC-ESM-7 (15-17.5)

Lab Sample ID: 480-84571-7

Date Collected: 07/23/15 14:30

Matrix: Solid

Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		7	256654	08/02/15 05:37	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Client Sample ID: WC-ESM-3 (9-11)

Lab Sample ID: 480-84571-8

Date Collected: 07/23/15 15:20

Matrix: Solid

Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/02/15 06:06	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-3 (11-14)

Lab Sample ID: 480-84571-9

Date Collected: 07/23/15 15:30

Matrix: Solid

Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/02/15 06:35	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Client Sample ID: WC-ESM-3 (14-15)

Lab Sample ID: 480-84571-10

Date Collected: 07/23/15 15:31

Matrix: Solid

Date Received: 07/25/15 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	410.4		1	257176	08/05/15 11:50	KMF	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	9060A		1	256654	08/02/15 07:03	NCH	TAL BUF
Total/NA	Analysis	Moisture		1	255404	07/25/15 16:40	CMK	TAL BUF
ASTM Leach	Leach	D3987-85			256322	07/29/15 17:11	MRF	TAL BUF
ASTM Leach	Analysis	SM 5210B		1	256502	07/31/15 10:53	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	1169CA	09-30-15 *
Connecticut	State Program	1	PH-0568	09-30-16
Florida	NELAP	4	E87672	06-30-16
Georgia	State Program	4	N/A	03-31-16
Georgia	State Program	4	956	03-31-16
Illinois	NELAP	5	200003	09-30-15 *
Iowa	State Program	7	374	03-01-17
Kansas	NELAP	7	E-10187	09-30-15 *
Kentucky (DW)	State Program	4	90029	12-31-15
Kentucky (UST)	State Program	4	30	03-31-16
Kentucky (WW)	State Program	4	90029	12-31-15
Louisiana	NELAP	6	02031	06-30-16
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-16
Massachusetts	State Program	1	M-NY044	06-30-16
Michigan	State Program	5	9937	03-31-16
Minnesota	NELAP	5	036-999-337	12-31-15
New Hampshire	NELAP	1	2337	11-17-15
New Jersey	NELAP	2	NY455	09-30-15 *
New York	NELAP	2	10026	03-31-16
North Dakota	State Program	8	R-176	03-31-16
Oklahoma	State Program	6	9421	08-31-15 *
Oregon	NELAP	10	NY200003	06-09-16
Pennsylvania	NELAP	3	68-00281	07-31-16
Rhode Island	State Program	1	LAO00328	12-30-15
Tennessee	State Program	4	TN02970	03-31-16
Texas	NELAP	6	T104704412-11-2	07-31-16
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-15 *
Washington	State Program	10	C784	02-10-16
West Virginia DEP	State Program	3	252	09-30-15 *
Wisconsin	State Program	5	998310390	08-31-15 *

* Certification renewal pending - certification considered valid.

Method Summary

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Method	Method Description	Protocol	Laboratory
6010	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
410.4	COD	MCAWW	TAL BUF
9060A	Organic Carbon, Total (TOC)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Woodard & Curran, Inc.
Project/Site: Boston DND Lewis Chemical

TestAmerica Job ID: 480-84571-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-84571-1	WC-ESM-5 (5-10)	Solid	07/23/15 11:24	07/25/15 02:30
480-84571-2	WC-ESM-5 (10-12.5)	Solid	07/23/15 11:29	07/25/15 02:30
480-84571-3	WC-ESM-5 (12.5-15)	Solid	07/23/15 11:30	07/25/15 02:30
480-84571-5	WC-ESM-7 (10-12.5)	Solid	07/23/15 14:10	07/25/15 02:30
480-84571-6	WC-ESM-7 (12.5-15)	Solid	07/23/15 14:11	07/25/15 02:30
480-84571-7	WC-ESM-7 (15-17.5)	Solid	07/23/15 14:30	07/25/15 02:30
480-84571-8	WC-ESM-3 (9-11)	Solid	07/23/15 15:20	07/25/15 02:30
480-84571-9	WC-ESM-3 (11-14)	Solid	07/23/15 15:30	07/25/15 02:30
480-84571-10	WC-ESM-3 (14-15)	Solid	07/23/15 15:31	07/25/15 02:30

Login Sample Receipt Checklist

Client: Woodard & Curran, Inc.

Job Number: 480-84571-1

Login Number: 84571
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	W AND C
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road – Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:

Client Contact: JARROD YODER
Company: WOODARD + CURRAN
Address: 40 SHATTUCK RD.
City: ANDOVER MA 01810
State and Zip:
Client's Phone: 978-557-8150
Client's Contact Email: JYODER@WOODARDCURRAN.COM
Client's Project Name/Number: BOSTON DND - LEWIS CHEMICAL
Sample Collection Site Name & Location: 229286.01

Sample Collector's Name (Please Print Neatly): KERI STEVENS
Sample Collector's Phone: 603-731-9936
Due Date Requested:
Turnaround Time (TAT) Requested (business days): 5-DAY WTC GISKEY EDD
Quote # or Project #:
PO #:
WO #:
PWS ID #:

Lab PM: BECKY MASON
E-Mail:
Lab COC Barcode Label

480-84571 Chain of Custody

COC No: 33000
Page: 1 of 1
Job #:

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP [X] GW1/S1 [ ]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [X]
eDEP Filing [ ] NPDES [ ]

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit Test-America to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	TOC	COD	BOD	MCP 14 Metals (Total)	Total Number of Containers (enter total)
			Preservation Code:		Z	C	Z	A	↓
WC-ESM-5 (5-10)	7-23-15	11:24	G	Soil	X	X	X	X	2
WC-ESM-5 (10-12.5)	7-23-15	11:29	G	Soil	X	X	X		1
WC-ESM-5 (12.5-15)	7-23-15	11:30	G	Soil	X	X	X		1
WC-ESM-5 angled (10-12)	7-23-15	13:05	G	Soil	X	X	X		1
WC-ESM-7 (10-12.5)	7-23-15	14:10	G	Soil	X	X	X		1
WC-ESM-7 (12.5-15)	7-23-15	14:11	G	Soil	X	X	X	X	2
WC-ESM-7 (15-17.5)	7-23-15	14:30	G	Soil	X	X	X		1
WC-ESM-3 (9-11)	7-23-15	15:20	G	Soil	X	X	X		1
WC-ESM-3 (11-14)	7-23-15	15:30	G	Soil	X	X	X		1
WC-ESM-3 (14-15)	7-23-15	15:31	G	Soil	X	X	X		1

Special Instructions & Notes:

Possible Hazard Identification (please check off each that may apply):
[ ] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [X] Unknown [ ] Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month):
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

** **Matrix Types:** A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◄

	Date/Time:	Company		Date/Time:	Company
Relinquished by: Kristy Lauer	7-24-15 1400	WTC	Received by:	7-24-15 1700	TA
Relinquished by:	7-24-15 1700	T	Received by:	25July15 0230	TMB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.4

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Jarrod Yoder
Woodard & Curran
40 Shattuck Road
Suite 110
Andover, MA 01810

PO Number: None
Job ID: 33757
Date Received: 7/24/15

Project: Lewis Chemical

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

JSylvester (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 8/11/2015
Total number of pages: 36

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Lewis Chemical
Lab ID: 33757

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
ESM-5 (5-10)	Solid	7/23/2015 11:24	33757-001	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-5 (10-12.5)	Solid	7/23/2015 11:29	33757-002	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-5 (12.5-15)	Solid	7/23/2015 11:30	33757-003	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-7 (10-12.5)	Solid	7/23/2015 14:10	33757-004	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-7 (12.5-15)	Solid	7/23/2015 14:11	33757-005	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-7 (15-17.5)	Solid	7/23/2015 14:13	33757-006	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-3 (9-11)	Solid	7/23/2015 15:20	33757-007	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-3 (11-14)	Solid	7/23/2015 15:30	33757-008	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
ESM-3 (14-15)	Solid	7/23/2015 15:31	33757-009	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)
Trip Blank	Solid	7/23/2015 0:00	33757-010	
				VOCs in solids by 8260
ESM-5 ANGLED (10-12)	Solid	7/23/2015 13:05	33757-011	
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solids by 8260
				Volatile Tentatively Identified Compounds (TICs)

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-001
Sample ID: ESM-5 (5-10)
Matrix: Solid Percent Dry: 81% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.61 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 11:24

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
diethyl ether	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1-dichloroethane	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
cis-1,2-dichloroethene	**5.2**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1,1-trichloroethane	**2.8**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
trichloroethene	**1.0**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
toluene	**0.6**	0.5	ug/g	5	LMM		8060	8/4/15	20:45	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C

Absolute Resource associates

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-001
Sample ID: ESM-5 (5-10)
Matrix: Solid Percent Dry: 81% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.61 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 11:24

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**26**	0.5	ug/g	5	LMM		8060	8/4/15	20:45	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
chlorobenzene	**0.4**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
ethylbenzene	**2.3**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
m&p-xylenes	**7.7**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
o-xylene	**2.2**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
isopropylbenzene	**0.2**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
n-propylbenzene	**0.3**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,3,5-trimethylbenzene	**0.8**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2,4-trimethylbenzene	**2.5**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
sec-butylbenzene	**0.3**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,3-dichlorobenzene	**0.3**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
4-isopropyltoluene	**0.5**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,4-dichlorobenzene	**0.3**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2-dichlorobenzene	**8.3**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2,4-trichlorobenzene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
naphthalene	**0.4**	0.2	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**6.4**	0.1	ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	1:12	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**90**	78-114	%	1	LMM		8060	8/4/15	1:12	SW5035A8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM		8060	8/4/15	1:12	SW5035A8260C
4-bromofluorobenzene SUR	**98**	86-115	%	1	LMM		8060	8/4/15	1:12	SW5035A8260C
a,a,a-trifluorotoluene SUR	**95**	70-130	%	1	LMM		8060	8/4/15	1:12	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-002
Sample ID: ESM-5 (10-12.5)
Matrix: Solid Percent Dry: 90.1% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.73 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 11:29

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
diethyl ether	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1-dichloroethane	**0.2**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
cis-1,2-dichloroethene	**8.7**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1,1-trichloroethane	**24**	4.6	ug/g	50	LMM		8060	8/6/15	11:14	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
trichloroethene	**26**	4.6	ug/g	50	LMM		8060	8/6/15	11:14	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
toluene	**18**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-002
Sample ID: ESM-5 (10-12.5)
Matrix: Solid Percent Dry: 90.1% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.73 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 11:29

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**240**	4.6	ug/g	50	LMM		8060	8/6/15	11:14	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
chlorobenzene	**4.4**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
ethylbenzene	**7.4**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
m&p-xylenes	**20**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
o-xylene	**6.1**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
n-propylbenzene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,3,5-trimethylbenzene	**0.2**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2,4-trimethylbenzene	**0.7**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
sec-butylbenzene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
4-isopropyltoluene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,4-dichlorobenzene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2-dichlorobenzene	**2.7**	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**28**	4.6	ug/g	50	LMM		8060	8/6/15	11:14	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	16:10	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**90**	78-114	%	1	LMM		8060	8/4/15	16:10	SW5035A8260C
toluene-D8 SUR	**104**	88-110	%	1	LMM		8060	8/4/15	16:10	SW5035A8260C
4-bromofluorobenzene SUR	**101**	86-115	%	1	LMM		8060	8/4/15	16:10	SW5035A8260C
a,a,a-trifluorotoluene SUR	**93**	70-130	%	1	LMM		8060	8/4/15	16:10	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-003
Sample ID: ESM-5 (12.5-15)
Matrix: Solid Percent Dry: 89.8% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.64 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
diethyl ether	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
2-butanone (MEK)	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
cis-1,2-dichloroethene	**0.3**	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
tetrahydrofuran (THF)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1,1-trichloroethane	**0.2**	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
2-hexanone	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-003
Sample ID: ESM-5 (12.5-15)
Matrix: Solid Percent Dry: 89.8% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.64 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	21:15	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**84**	78-114	%	1	LMM		8060	8/4/15	21:15	SW5035A8260C
toluene-D8 SUR	**100**	88-110	%	1	LMM		8060	8/4/15	21:15	SW5035A8260C
4-bromofluorobenzene SUR	**98**	86-115	%	1	LMM		8060	8/4/15	21:15	SW5035A8260C
a,a,a-trifluorotoluene SUR	**91**	70-130	%	1	LMM		8060	8/4/15	21:15	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-004
Sample ID: ESM-7 (10-12.5)
Matrix: Solid Percent Dry: 83.8% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.67 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
diethyl ether	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
cis-1,2-dichloroethene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
trichloroethene	**0.3**	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-004
Sample ID: ESM-7 (10-12.5)
Matrix: Solid Percent Dry: 83.8% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.67 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**0.4**	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	21:45	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**84**	78-114	%	1	LMM		8060	8/4/15	21:45	SW5035A8260C
toluene-D8 SUR	**99**	88-110	%	1	LMM		8060	8/4/15	21:45	SW5035A8260C
4-bromofluorobenzene SUR	**102**	86-115	%	1	LMM		8060	8/4/15	21:45	SW5035A8260C
a,a,a-trifluorotoluene SUR	**98**	70-130	%	1	LMM		8060	8/4/15	21:45	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-005
Sample ID: ESM-7 (12.5-15)
Matrix: Solid Percent Dry: 79.9% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.67 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 14:11

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
diethyl ether	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
methylene chloride	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-005
Sample ID: ESM-7 (12.5-15)
Matrix: Solid Percent Dry: 79.9% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.67 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 14:11

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
naphthalene	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	22:17	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**88**	78-114	%	1	LMM		8060	8/4/15	22:17	SW5035A8260C
toluene-D8 SUR	**99**	88-110	%	1	LMM		8060	8/4/15	22:17	SW5035A8260C
4-bromofluorobenzene SUR	**101**	86-115	%	1	LMM		8060	8/4/15	22:17	SW5035A8260C
a,a,a-trifluorotoluene SUR	**100**	70-130	%	1	LMM		8060	8/4/15	22:17	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-006
Sample ID: ESM-7 (15-17.5)
Matrix: Solid Percent Dry: 91.8% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.66 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 14:13

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
diethyl ether	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
2-butanone (MEK)	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
cis-1,2-dichloroethene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
tetrahydrofuran (THF)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
trichloroethene	**0.1**	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
2-hexanone	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-006
Sample ID: ESM-7 (15-17.5)
Matrix: Solid Percent Dry: 91.8% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.66 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 14:13

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**0.2**	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	22:47	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**85**	78-114	%	1	LMM		8060	8/4/15	22:47	SW5035A8260C
toluene-D8 SUR	**102**	88-110	%	1	LMM		8060	8/4/15	22:47	SW5035A8260C
4-bromofluorobenzene SUR	**104**	86-115	%	1	LMM		8060	8/4/15	22:47	SW5035A8260C
a,a,a-trifluorotoluene SUR	**100**	70-130	%	1	LMM		8060	8/4/15	22:47	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-007
Sample ID: ESM-3 (9-11)
Matrix: Solid Percent Dry: 49.8% Results expressed on a dry weight basis.
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 15:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
chloromethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
vinyl chloride	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
bromomethane	< 14	14	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
chloroethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
trichlorofluoromethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
diethyl ether	< 28.5	28.5	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
acetone	< 140	140	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1-dichloroethene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
methylene chloride	< 14	14	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
carbon disulfide	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
methyl t-butyl ether (MTBE)	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
trans-1,2-dichloroethene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
isopropyl ether (DIPE)	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1-dichloroethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
t-butanol (TBA)	< 140	140	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
2-butanone (MEK)	< 17.1	17.1	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
2,2-dichloropropane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
cis-1,2-dichloroethene	**110**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
chloroform	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
bromochloromethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
tetrahydrofuran (THF)	< 28.5	28.5	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1,1-trichloroethane	**81**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1-dichloropropene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
t-amyl-methyl ether (TAME)	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
carbon tetrachloride	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2-dichloroethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
benzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
trichloroethene	**33**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2-dichloropropane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
bromodichloromethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,4-dioxane	< 140	140	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
dibromomethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 25.6	25.6	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
cis-1,3-dichloropropene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
toluene	**580**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
trans-1,3-dichloropropene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
2-hexanone	< 28.5	28.5	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1,2-trichloroethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,3-dichloropropane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-007
Sample ID: ESM-3 (9-11)
Matrix: Solid Percent Dry: 49.8% Results expressed on a dry weight basis.
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 15:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**42**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
dibromochloromethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2-dibromoethane (EDB)	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
chlorobenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1,1,2-tetrachloroethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
ethylbenzene	**69**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
m&p-xylenes	**250**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
o-xylene	**72**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
styrene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
bromoform	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
isopropylbenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1,2,2-tetrachloroethane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2,3-trichloropropane	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
n-propylbenzene	**6.6**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
bromobenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,3,5-trimethylbenzene	**12**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
2-chlorotoluene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
4-chlorotoluene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
tert-butylbenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2,4-trimethylbenzene	**43**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
sec-butylbenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,3-dichlorobenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
4-isopropyltoluene	**11**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,4-dichlorobenzene	**13**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2-dichlorobenzene	**140**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
n-butylbenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2,4-trichlorobenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
hexachlorobutadiene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
naphthalene	< 14	14	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,2,3-trichlorobenzene	< 5.7	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**66**	5.7	ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	20	LMM		8060	8/6/15	11:45	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	20	LMM		8060	8/6/15	11:45	SW5035A8260C
toluene-D8 SUR	**103**	88-110	%	20	LMM		8060	8/6/15	11:45	SW5035A8260C
4-bromofluorobenzene SUR	**98**	86-115	%	20	LMM		8060	8/6/15	11:45	SW5035A8260C
a,a,a-trifluorotoluene SUR	**99**	70-130	%	20	LMM		8060	8/6/15	11:45	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-008
Sample ID: ESM-3 (11-14)
Matrix: Solid Percent Dry: 91.2% Results expressed on a dry weight basis.
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 15:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
diethyl ether	< 0.5	0.5	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
cis-1,2-dichloroethene	**0.2**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1,1-trichloroethane	**0.9**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
trichloroethene	**0.1**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
toluene	**4.2**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-008
Sample ID: ESM-3 (11-14)
Matrix: Solid Percent Dry: 91.2% Results expressed on a dry weight basis.
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 15:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	**0.5**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
ethylbenzene	**0.6**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
m&p-xylenes	**2.2**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
o-xylene	**0.6**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
n-propylbenzene	**0.2**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,3,5-trimethylbenzene	**0.3**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2,4-trimethylbenzene	**0.8**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
sec-butylbenzene	**0.1**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
4-isopropyltoluene	**1.4**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,4-dichlorobenzene	**0.1**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2-dichlorobenzene	**0.9**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**1.6**	0.1	ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/6/15	13:25	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**92**	78-114	%	1	LMM		8060	8/6/15	13:25	SW5035A8260C
toluene-D8 SUR	**111** *	88-110	%	1	LMM		8060	8/6/15	13:25	SW5035A8260C
4-bromofluorobenzene SUR	**111**	86-115	%	1	LMM		8060	8/6/15	13:25	SW5035A8260C
a,a,a-trifluorotoluene SUR	**95**	70-130	%	1	LMM		8060	8/6/15	13:25	SW5035A8260C

**** The surrogate showed recovery outside the acceptance limits as a result of hydrocarbons present in the sample.***

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-009
Sample ID: ESM-3 (14-15)
Matrix: Solid Percent Dry: 94.6% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.57 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 15:31

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
diethyl ether	< 0.3	0.3	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
2-butanone (MEK)	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
tetrahydrofuran (THF)	< 0.3	0.3	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.3	0.3	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
2-hexanone	< 0.3	0.3	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-009
Sample ID: ESM-3 (14-15)
Matrix: Solid Percent Dry: 94.6% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.57 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 15:31

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/6/15	12:54	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**86**	78-114	%	1	LMM		8060	8/6/15	12:54	SW5035A8260C
toluene-D8 SUR	**100**	88-110	%	1	LMM		8060	8/6/15	12:54	SW5035A8260C
4-bromofluorobenzene SUR	**100**	86-115	%	1	LMM		8060	8/6/15	12:54	SW5035A8260C
a,a,a-trifluorotoluene SUR	**96**	70-130	%	1	LMM		8060	8/6/15	12:54	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-010
Sample ID: Trip Blank
Matrix: Solid
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
diethyl ether	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-010
Sample ID: Trip Blank
Matrix: Solid
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/4/15	15:38	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**93**	78-114	%	1	LMM		8060	8/4/15	15:38	SW5035A8260C
toluene-D8 SUR	**103**	88-110	%	1	LMM		8060	8/4/15	15:38	SW5035A8260C
4-bromofluorobenzene SUR	**109**	86-115	%	1	LMM		8060	8/4/15	15:38	SW5035A8260C
a,a,a-trifluorotoluene SUR	**94**	70-130	%	1	LMM		8060	8/4/15	15:38	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-011
Sample ID: ESM-5 ANGLED (10-12)
Matrix: Solid Percent Dry: 95.3% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.65 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 13:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
diethyl ether	< 0.4	0.4	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
2-butanone (MEK)	< 0.2	0.2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
cis-1,2-dichloroethene	**0.2**	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
tetrahydrofuran (THF)	< 0.4	0.4	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1,1-trichloroethane	**0.1**	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.3	0.3	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
toluene	**0.3**	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
2-hexanone	< 0.4	0.4	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C

Project ID: Lewis Chemical
Job ID: 33757
Sample#: 33757-011
Sample ID: ESM-5 ANGLED (10-12)
Matrix: Solid Percent Dry: 95.3% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.65 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 7/23/15 13:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
m&p-xylenes	**0.1**	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
1,1,2-trichloro-1,2,2-trifluoroethane	**0.1**	0.1	ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
hexachloroethane (as TIC)	**ND**		ug/g	1	LMM		8060	8/5/15	6:26	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**90**	78-114	%	1	LMM		8060	8/5/15	6:26	SW5035A8260C
toluene-D8 SUR	**99**	88-110	%	1	LMM		8060	8/5/15	6:26	SW5035A8260C
4-bromofluorobenzene SUR	**99**	86-115	%	1	LMM		8060	8/5/15	6:26	SW5035A8260C
a,a,a-trifluorotoluene SUR	**97**	70-130	%	1	LMM		8060	8/5/15	6:26	SW5035A8260C

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #:

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **33757**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☑	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

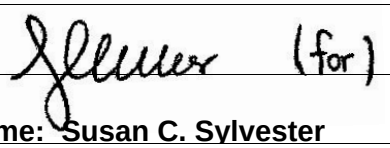
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☐ No*☑

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☑ No*☐

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:  **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 8/11/15**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 33757

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 1 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.
As noted on the result page, several VOC samples did not meet the 1:1 +/-25% methanol to soil ratio.

Calibration

See the included table for a list of compounds quantitated by quadratic equation.

Method Blank

No exceptions noted.

Surrogate Recoveries

VOC: The surrogate, toluene-D8, for sample 33757-008 showed recovery outside the acceptance limits as a result of co-eluting hydrocarbons.

Laboratory Control Sample Results

VOC: The MLCS/D8060 did not meet the acceptance criteria for dichlorodifluoromethane, chloromethane, vinyl chloride, bromomethane, carbon disulfide, and 1,2,3-trichlorobenzene. It is suspected that the standard that contains the first five compounds was degraded, leading to the failures. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required. The MLCSD8060 did not meet the acceptance criteria naphthalene. This compound showed high recovery. Any samples with detectable concentrations of this analyte have been qualified accordingly.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

VOC: The compound, hexachloroethane, was evaluated in the VOC analysis as a tentatively identified compound (TIC), as requested by the customer.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question G: The CAM protocol reporting limits were not achieved for this project due to dilutions necessary for sample analysis. Box G is "No."
Question H: See surrogate section above. Box H is "No."

Quantitation by Quadratic Equation
Lab # 33757

Quantitation of the following compounds was based on a quadratic equation

dichlorodifluoromethane
Bromomethane
Acetone
Carbon disulfide
tetrahydrofuran (THF)
Carbon tetrachloride
1,2-Dichloroethane
Bromodichloromethane
2-Hexanone
cis-1,3-dichloropropene
trans-1,3-Dichloropropene
Dibromochloromethane
1,1,1,2-Tetrachloroethane
Bromoform
bromobenzene
1,2-dibromo-3-chloropropane (DBCP)
hexachlorobutadiene

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MB8060	dichlorodifluoromethane		<	0.1	ug/g					
		chloromethane		<	0.1	ug/g					
		vinyl chloride		<	0.1	ug/g					
		bromomethane		<	0.2	ug/g					
		chloroethane		<	0.1	ug/g					
		trichlorofluoromethane		<	0.1	ug/g					
		diethyl ether		<	0.5	ug/g					
		acetone		<	2.5	ug/g					
		1,1-dichloroethene		<	0.1	ug/g					
		methylene chloride		<	0.2	ug/g					
		carbon disulfide		<	0.1	ug/g					
		methyl t-butyl ether (MTBE)		<	0.1	ug/g					
		trans-1,2-dichloroethene		<	0.1	ug/g					
		isopropyl ether (DIPE)		<	0.1	ug/g					
		ethyl t-butyl ether (ETBE)		<	0.1	ug/g					
		1,1-dichloroethane		<	0.1	ug/g					
		t-butanol (TBA)		<	2.5	ug/g					
		2-butanone (MEK)		<	0.5	ug/g					
		2,2-dichloropropane		<	0.1	ug/g					
		cis-1,2-dichloroethene		<	0.1	ug/g					
		chloroform		<	0.1	ug/g					
		bromochloromethane		<	0.1	ug/g					
		tetrahydrofuran (THF)		<	0.5	ug/g					
		1,1,1-trichloroethane		<	0.1	ug/g					
		1,1-dichloropropene		<	0.1	ug/g					
		t-amyl-methyl ether (TAME)		<	0.1	ug/g					
		carbon tetrachloride		<	0.1	ug/g					
		1,2-dichloroethane		<	0.1	ug/g					
		benzene		<	0.1	ug/g					
		trichloroethene		<	0.1	ug/g					
		1,2-dichloropropane		<	0.1	ug/g					
		bromodichloromethane		<	0.1	ug/g					
		1,4-dioxane		<	2.5	ug/g					
		dibromomethane		<	0.1	ug/g					
		4-methyl-2-pentanone (MIBK)		<	0.5	ug/g					
		cis-1,3-dichloropropene		<	0.1	ug/g					
		toluene		<	0.1	ug/g					
		trans-1,3-dichloropropene		<	0.1	ug/g					
		2-hexanone		<	0.5	ug/g					
		1,1,2-trichloroethane		<	0.1	ug/g					
		1,3-dichloropropane		<	0.1	ug/g					
		tetrachloroethene		<	0.1	ug/g					
		dibromochloromethane		<	0.1	ug/g					
		1,2-dibromoethane (EDB)		<	0.1	ug/g					
		chlorobenzene		<	0.1	ug/g					
		1,1,1,2-tetrachloroethane		<	0.1	ug/g					
		ethylbenzene		<	0.1	ug/g					
		m&p-xylenes		<	0.1	ug/g					
		o-xylene		<	0.1	ug/g					
		styrene		<	0.1	ug/g					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MB8060	bromoform		<	0.1	ug/g						
		isopropylbenzene		<	0.1	ug/g						
		1,1,2,2-tetrachloroethane		<	0.1	ug/g						
		1,2,3-trichloropropane		<	0.1	ug/g						
		n-propylbenzene		<	0.1	ug/g						
		bromobenzene		<	0.1	ug/g						
		1,3,5-trimethylbenzene		<	0.1	ug/g						
		2-chlorotoluene		<	0.1	ug/g						
		4-chlorotoluene		<	0.1	ug/g						
		tert-butylbenzene		<	0.1	ug/g						
		1,2,4-trimethylbenzene		<	0.1	ug/g						
		sec-butylbenzene		<	0.1	ug/g						
		1,3-dichlorobenzene		<	0.1	ug/g						
		4-isopropyltoluene		<	0.1	ug/g						
		1,4-dichlorobenzene		<	0.1	ug/g						
		1,2-dichlorobenzene		<	0.1	ug/g						
		n-butylbenzene		<	0.1	ug/g						
		1,2-dibromo-3-chloropropane (DBCP)		<	0.1	ug/g						
		1,2,4-trichlorobenzene		<	0.1	ug/g						
		hexachlorobutadiene		<	0.1	ug/g						
		naphthalene		<	0.2	ug/g						
		1,2,3-trichlorobenzene		<	0.1	ug/g						
		dibromofluoromethane SUR			87	%			78	114		
		toluene-D8 SUR			99	%			88	110		
		4-bromofluorobenzene SUR			97	%			86	115		
		a,a,a-trifluorotoluene SUR			84	%			70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		<	0.1	ug/g						

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCS8060	dichlorodifluoromethane			0.6	ug/g	1	55	*	70	130		
		chloromethane			0.5	ug/g	1	45	*	70	130		
		vinyl chloride			0.7	ug/g	1	68	*	70	130		
		bromomethane			0.5	ug/g	1	50	*	70	130		
		chloroethane			0.9	ug/g	1	93		70	130		
		trichlorofluoromethane			0.9	ug/g	1	85		70	130		
		diethyl ether			0.8	ug/g	1	76		70	130		
		acetone		<	2.5	ug/g	1	116					
		1,1-dichloroethene			0.7	ug/g	1	71		70	130		
		methylene chloride			0.8	ug/g	1	80		70	130		
		carbon disulfide			0.6	ug/g	1	58	*	70	130		
		methyl t-butyl ether (MTBE)			0.9	ug/g	1	89		70	130		
		trans-1,2-dichloroethene			0.7	ug/g	1	74		70	130		
		isopropyl ether (DIPE)			0.9	ug/g	1	88		70	130		
		ethyl t-butyl ether (ETBE)			0.9	ug/g	1	87		70	130		
		1,1-dichloroethane			0.7	ug/g	1	74		70	130		
		t-butanol (TBA)			4.4	ug/g	5	88		70	130		
		2-butanone (MEK)			1.0	ug/g	1	98		70	130		
		2,2-dichloropropane			0.7	ug/g	1	72		70	130		
		cis-1,2-dichloroethene			0.8	ug/g	1	79		70	130		
		chloroform			0.8	ug/g	1	80		70	130		
		bromochloromethane			0.7	ug/g	1	72		70	130		
		tetrahydrofuran (THF)			0.9	ug/g	1	89		70	130		
		1,1,1-trichloroethane			0.8	ug/g	1	84		70	130		
		1,1-dichloropropene			0.7	ug/g	1	70		70	130		
		t-amyl-methyl ether (TAME)			0.8	ug/g	1	83		70	130		
		carbon tetrachloride			0.7	ug/g	1	71		70	130		
		1,2-dichloroethane			0.9	ug/g	1	90		70	130		
		benzene			0.9	ug/g	1	86		70	130		
		trichloroethene			1.0	ug/g	1	97		70	130		
		1,2-dichloropropane			0.8	ug/g	1	82		70	130		
		bromodichloromethane			0.8	ug/g	1	82		70	130		
		1,4-dioxane		<	2.5	ug/g	2	89		70	130		
		dibromomethane			0.8	ug/g	1	81		70	130		
		4-methyl-2-pentanone (MIBK)			0.9	ug/g	1	93		70	130		
		cis-1,3-dichloropropene			0.8	ug/g	1	80		70	130		
		toluene			0.8	ug/g	1	81		70	130		
		trans-1,3-dichloropropene			0.8	ug/g	1	82		70	130		
		2-hexanone			1.0	ug/g	1	100		70	130		
		1,1,2-trichloroethane			0.9	ug/g	1	87		70	130		
		1,3-dichloropropane			0.9	ug/g	1	92		70	130		
		tetrachloroethene			0.9	ug/g	1	93		70	130		
		dibromochloromethane			0.8	ug/g	1	76		70	130		
		1,2-dibromoethane (EDB)			0.9	ug/g	1	86		70	130		
		chlorobenzene			0.9	ug/g	1	87		70	130		
		1,1,1,2-tetrachloroethane			0.9	ug/g	1	89		70	130		
		ethylbenzene			0.9	ug/g	1	94		70	130		
		m&p-xylenes			1.9	ug/g	2	94		70	130		
		o-xylene			1.0	ug/g	1	100		70	130		
		styrene			1.0	ug/g	1	104		70	130		
		bromoform			0.8	ug/g	1	83		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCS8060	isopropylbenzene		1.0	ug/g	1	99		70	130		
		1,1,2,2-tetrachloroethane		0.9	ug/g	1	92		70	130		
		1,2,3-trichloropropane		1.0	ug/g	1	103		70	130		
		n-propylbenzene		0.9	ug/g	1	90		70	130		
		bromobenzene		0.9	ug/g	1	95		70	130		
		1,3,5-trimethylbenzene		1.0	ug/g	1	99		70	130		
		2-chlorotoluene		0.9	ug/g	1	91		70	130		
		4-chlorotoluene		0.9	ug/g	1	92		70	130		
		tert-butylbenzene		0.9	ug/g	1	95		70	130		
		1,2,4-trimethylbenzene		1.0	ug/g	1	98		70	130		
		sec-butylbenzene		0.9	ug/g	1	93		70	130		
		1,3-dichlorobenzene		1.1	ug/g	1	107		70	130		
		4-isopropyltoluene		0.9	ug/g	1	89		70	130		
		1,4-dichlorobenzene		1.0	ug/g	1	99		70	130		
		1,2-dichlorobenzene		1.0	ug/g	1	102		70	130		
		n-butylbenzene		0.9	ug/g	1	94		70	130		
		1,2-dibromo-3-chloropropane (DBCP)		0.9	ug/g	1	91		70	130		
		1,2,4-trichlorobenzene		1.2	ug/g	1	123		70	130		
		hexachlorobutadiene		1.1	ug/g	1	114		70	130		
		naphthalene		1.2	ug/g	1	125		70	130		
		1,2,3-trichlorobenzene		1.3	ug/g	1	131	*	70	130		
		dibromofluoromethane SUR		96	%				78	114		
		toluene-D8 SUR		99	%				88	110		
		4-bromofluorobenzene SUR		105	%				86	115		
		a,a,a-trifluorotoluene SUR		90	%				70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		0.8	ug/g	1	75		70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCSD8060	dichlorodifluoromethane			0.5	ug/g	1	54	*	70	130	1	30
		chloromethane			0.4	ug/g	1	45	*	70	130	1	30
		vinyl chloride			0.7	ug/g	1	67	*	70	130	3	30
		bromomethane			0.6	ug/g	1	63	*	70	130	23	30
		chloroethane			1.2	ug/g	1	123		70	130	28	30
		trichlorofluoromethane			0.8	ug/g	1	84		70	130	2	30
		diethyl ether			0.9	ug/g	1	86		70	130	13	30
		acetone		<	2.5	ug/g	1	125				7	30
		1,1-dichloroethene			0.7	ug/g	1	68	*	70	130	5	30
		methylene chloride			0.8	ug/g	1	80		70	130	0	30
		carbon disulfide			0.5	ug/g	1	55	*	70	130	5	30
		methyl t-butyl ether (MTBE)			0.9	ug/g	1	90		70	130	1	30
		trans-1,2-dichloroethene			0.7	ug/g	1	73		70	130	1	30
		isopropyl ether (DIPE)			0.9	ug/g	1	88		70	130	0	30
		ethyl t-butyl ether (ETBE)			0.9	ug/g	1	87		70	130	0	30
		1,1-dichloroethane			0.7	ug/g	1	73		70	130	2	30
		t-butanol (TBA)			5.0	ug/g	5	100		70	130	13	30
		2-butanone (MEK)			1.1	ug/g	1	106		70	130	7	30
		2,2-dichloropropane			0.7	ug/g	1	71		70	130	2	30
		cis-1,2-dichloroethene			0.8	ug/g	1	78		70	130	1	30
		chloroform			0.8	ug/g	1	79		70	130	1	30
		bromochloromethane			0.7	ug/g	1	70		70	130	3	30
		tetrahydrofuran (THF)			1.0	ug/g	1	96		70	130	8	30
		1,1,1-trichloroethane			0.8	ug/g	1	81		70	130	3	30
		1,1-dichloropropene			0.7	ug/g	1	70		70	130	0	30
		t-amyl-methyl ether (TAME)			0.8	ug/g	1	83		70	130	0	30
		carbon tetrachloride			0.7	ug/g	1	72		70	130	1	30
		1,2-dichloroethane			0.9	ug/g	1	88		70	130	2	30
		benzene			0.8	ug/g	1	85		70	130	2	30
		trichloroethene			0.9	ug/g	1	94		70	130	3	30
		1,2-dichloropropane			0.8	ug/g	1	83		70	130	1	30
		bromodichloromethane			0.8	ug/g	1	80		70	130	4	30
		1,4-dioxane		<	2.5	ug/g	2	99		70	130	11	30
		dibromomethane			0.8	ug/g	1	83		70	130	2	30
		4-methyl-2-pentanone (MIBK)			1.0	ug/g	1	104		70	130	11	30
		cis-1,3-dichloropropene			0.8	ug/g	1	78		70	130	2	30
		toluene			0.8	ug/g	1	80		70	130	2	30
		trans-1,3-dichloropropene			0.8	ug/g	1	81		70	130	2	30
		2-hexanone			1.0	ug/g	1	104		70	130	4	30
		1,1,2-trichloroethane			0.9	ug/g	1	86		70	130	1	30
		1,3-dichloropropane			0.9	ug/g	1	87		70	130	5	30
		tetrachloroethene			0.9	ug/g	1	89		70	130	5	30
		dibromochloromethane			0.7	ug/g	1	73		70	130	4	30
		1,2-dibromoethane (EDB)			0.9	ug/g	1	85		70	130	1	30
		chlorobenzene			0.9	ug/g	1	86		70	130	2	30
		1,1,1,2-tetrachloroethane			0.8	ug/g	1	84		70	130	5	30
		ethylbenzene			0.9	ug/g	1	89		70	130	5	30
		m&p-xylenes			1.8	ug/g	2	91		70	130	4	30
		o-xylene			1.0	ug/g	1	96		70	130	4	30
		styrene			1.0	ug/g	1	100		70	130	3	30
		bromoform			0.8	ug/g	1	81		70	130	3	30

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCSD8060	isopropylbenzene		1.0	ug/g	1	96		70	130	4	30
		1,1,2,2-tetrachloroethane		0.9	ug/g	1	93		70	130	1	30
		1,2,3-trichloropropane		1.0	ug/g	1	103		70	130	0	30
		n-propylbenzene		0.9	ug/g	1	90		70	130	1	30
		bromobenzene		0.9	ug/g	1	93		70	130	2	30
		1,3,5-trimethylbenzene		1.0	ug/g	1	99		70	130	0	30
		2-chlorotoluene		0.9	ug/g	1	91		70	130	0	30
		4-chlorotoluene		0.9	ug/g	1	92		70	130	0	30
		tert-butylbenzene		0.9	ug/g	1	94		70	130	0	30
		1,2,4-trimethylbenzene		1.0	ug/g	1	98		70	130	0	30
		sec-butylbenzene		0.9	ug/g	1	91		70	130	1	30
		1,3-dichlorobenzene		1.1	ug/g	1	106		70	130	1	30
		4-isopropyltoluene		0.9	ug/g	1	89		70	130	0	30
		1,4-dichlorobenzene		1.0	ug/g	1	97		70	130	3	30
		1,2-dichlorobenzene		1.0	ug/g	1	97		70	130	5	30
		n-butylbenzene		0.9	ug/g	1	93		70	130	1	30
		1,2-dibromo-3-chloropropane (DBCP)		1.0	ug/g	1	102		70	130	11	30
		1,2,4-trichlorobenzene		1.2	ug/g	1	123		70	130	1	30
		hexachlorobutadiene		1.1	ug/g	1	109		70	130	4	30
		naphthalene		1.3	ug/g	1	132	*	70	130	5	30
		1,2,3-trichlorobenzene		1.4	ug/g	1	135	*	70	130	3	30
		dibromofluoromethane SUR		98	%				78	114		
		toluene-D8 SUR		99	%				88	110		
		4-bromofluorobenzene SUR		102	%				86	115		
		a,a,a-trifluorotoluene SUR		89	%				70	130		
		1,1,2-trichloro-1,2,2-trifluoroethane		0.8	ug/g	1	77		70	130	2	30

SDG # 2

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

33757

Company Name: Woodard + Curran

Company Address: 40 Shattuck Rd #110, Andover, MA

Report To: Jarrod Yoder

Phone #: 978-557-8150

Invoice to Email: JYoder@woodardcurran.com

☐ Hard Copy Invoice Required

Project Name: Lewis Chemical

Project #:

Project Location: NH (MA) ME VT NY Other

Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER

Reporting Limits: QAPP GW-1 S-1 EPA DW Other

Quote # ☐ NH Reimbursement Pricing

PO #

ANALYSIS REQUEST

☐ VOC 8260 NHDES ☐ VOC 8260 MADEP ☐ VOC 8260 ☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT ☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane ☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List: ☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint ☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB ☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB ☐ O&G 1664 ☐ Mineral O&G SM5520F ☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness ☐ Total Metals-list: ☐ Dissolved Metals-list: ☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN ☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride ☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP ☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	☒ VOC 8260	Grab (G) or Composite (C)
33757-01 WC	ESM-5 (5-10)	1		X	X					X	7-23-15	1124	KS	X	
02 WC	ESM-5 (10-12.5)	1		X						X	7/23/15	1129	KS	X	
03 WC	ESM-5 (12.5-15)	1		X						X	7/23/15	1130	KS	X	
04 WC	ESM-7 (10-12.5)	1		X						X	7/23/15	1410	KS	X	
05 WC	ESM-7 (12.5-15)	1		X						X	7/23/15	1411	KS	X	
06 WC	ESM-7 (15-17.5)	1		X						X	7/23/15	1413	KS	X	
07 WC	ESM-3 (9-11)	1		X						X	7/23/15	1520	KS	X	
08 WC	ESM-3 (11-14)	1		X						X	7/23/15	1530	KS	X	
09 WC	ESM-3 (14-15)	1		X						X	7/23/15	1531	KS	X	
10	Trip Blank	1	X							X	LAB	—		X	
11 WC	ESM-5 ANGLED (10-12)	1		X						X	7/23/15	1305	KS	X	

TAT REQUESTED

Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS
Please report w/ WTC GIS Key EDD

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) see above, KStevens@woodardcurran.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☑ YES ☐ NO
TEMPERATURE °C

CUSTODY RECORD
QSD-01 Revision 01/09/15

	Relinquished by Sampler:	Date	Time	Received by:	Date	Time
1	Kevin B. Lauer	7-24-15	11:00			
2					7/24/15	1100
3		Date	Time	Received by:	Date	Time
		7/24/15	1330			
4	Relinquished by:	Date	Time	Received by Laboratory:	Date	Time
					7/24/15	13:30

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COMMITMENT & INTEGRITY
DRIVE RESULTS

40 Shattuck Road
Suite 110
Andover, Massachusetts 01810
www.woodardcurran.com

T 866.702.6371
T 978.557.8150
F 978.557.7948

October 21, 2015 *delivered via electronic mail*

Robert Lowell
Massachusetts Department of Conservation & Recreation
251 Causeway Street, Suite 600
Boston, MA 02114-2104

Re: Notice of Environmental Sampling
Release Tracking Number (RTN) 3-1616
12-24 Fairmount Court, Hyde Park, Boston, Massachusetts

Dear Mr. Lowell:

Massachusetts regulations require that results of environmental analyses be provided to an owner of a property where samples were collected as part of response actions conducted in accordance with the Massachusetts Contingency Plan. Analytical results from the recent ecological evaluation sampling event have been validated and are available for your review. The laboratory reports and a copy of the MassDEP transmittal form (BWSC123) are included with this letter that was transmitted via email.

Please note that public involvement opportunities are available under 310 CMR 40.1403(9) and 40.1404. Additional information about the public involvement regulations that require this notice and a description of such public involvement activities may be reviewed at the following web address http://www.mass.gov/eea/agencies/massdep/cleanup/.

If you would like additional information regarding this notice, you may contact me at (978) 482-7871.

Sincerely,
WOODARD & CURRAN INC.

Jarrod P. Yoder, PG, LSP
Associate Principal/Geographic Manager

229286.01

Attachments: BWSC123 Form
Laboratory Analytical Reports

cc: James Smith, Boston Department of Neighborhood Development
Brian Miller, CDW Consultants

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 1616

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 12-24 Fairmount Court

City/Town: Boston Zip Code: 02136

B. This notice is being provided to the following party:

1. Name: Mass. Department of Conservation & Recreation
2. Street Address: 251 Causeway Street, Suite 600

City/Town: Boston Zip Code: 02114

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 12-24 Fairmount Court

City/Town: Boston Zip Code: 02136

2. MCP phase of work during which the sampling will be/has been conducted:

☐ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☑ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Temporary Solution Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☐ commercial ☑ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Ecological evaluation samples collected from surface water, pore water, and sediment in the Neponset River.

E. Contact information related to the party providing this notice:

Contact Name: Jarrod Yoder of Woodard & Curran
Street Address: 40 Shattuck Road, Suite 110
City/Town: Andover Zip Code: 01810
Telephone: (978) 482-7871 Email: jyoder@woodardcurran.com

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 1616

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/eea/agencies/massdep/cleanup. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://public.dep.state.ma.us/SearchableSites2/Search.aspx to view site-specific files on-line or http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

TABLE 1
SUMMARY OF LABORATORY ANALYTICAL DATA - PORE WATER
Former Lewis Chemical Facility, Boston, Massachusetts

			PW-10	PW-12		PW-13	PW-14	PW-15		PW-16	REF-PW-01	REF-PW-02	REF-PW-03
			PW-10-20150825	PW-12-20150826	PW-12 (DUP)-20150826	PW-13-20150826	PW-14-20150826	PW-15-20150826	PW-15 filtered-20150826	PW-16-20150826	REF-PW-01-20150827	REF-PW-02-20150827	REF-PW-03-20150827
Analyte	**CAS No.**	**Units**	8/25/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015
Hardness as calcium carbonate	STL00009	mg/L	372	476	484	532	410	390		540	348	112	20
Total Metals													
Antimony	7440-36-0	ug/L	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	--	<6.79	<6.79	<6.79	<6.79
Arsenic	7440-38-2	ug/L	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	--	<5.55	<5.55	<5.55	5.66
Barium	7440-39-3	ug/L	247	438	454	508	269	232	--	169	234	98.7	42.3
Beryllium	7440-41-7	ug/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	--	<0.3	<0.3	<0.3	<0.3
Cadmium	7440-43-9	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	0.63	<0.5	<0.5
Chromium	7440-47-3	ug/L	1.07	<1	<1	1.98	6.35	5.17	--	3.55	<1	<1	2.57
Copper	7440-50-8	ug/L	1.72	<1.6	<1.6	<1.6	<1.6	<1.6	--	<1.6	<1.6	<1.6	<1.6
Lead	7439-92-1	ug/L	<3	<3	<3	<3	<3	<3	--	<3	<3	<3	<3
Mercury	7439-97-6	ug/L	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	--	0.147	<0.12	<0.12	<0.12
Nickel	7440-02-0	ug/L	2.63	<1.26	<1.26	<1.26	3.22	6.74	--	2.71	15.4	1.4	<1.26
Selenium	7782-49-2	ug/L	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	--	<8.7	<8.7	<8.7	<8.7
Silver	7440-22-4	ug/L	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	--	<1.7	<1.7	<1.7	<1.7
Thallium	7440-28-0	ug/L	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	--	<10.2	<10.2	<10.2	<10.2
Vanadium	7440-62-2	ug/L	<1.5	<1.5	<1.5	<1.5	2.72	4.29	--	2.41	<1.5	<1.5	2.67
Zinc	7440-66-6	ug/L	26.6	<1.5	1.85	<1.5	1.66	2.12	--	3.15	440	7.99	3.35
PCBs													
Aroclor-1016	12674-11-2	ug/L	<0.233	<0.23	<0.237	<0.24	<0.24	<0.234	<0.248	<0.277	<0.238	<0.236	<0.234
Aroclor-1221	11104-28-2	ug/L	<0.233	<0.23	<0.237	<0.24	<0.24	<0.234	<0.248	<0.277	<0.238	<0.236	<0.234
Aroclor-1232	11141-16-5	ug/L	<0.233	10.6 J	6.68 J	71.5 J	26.7 J	116 J	0.742 J	43 J	9.11	1.7	<0.234
Aroclor-1242	53469-21-9	ug/L	2.93	<0.23	<0.237	<0.24	<0.24	<0.234	<0.248	<0.277	<0.238	<0.236	1.15
Aroclor-1248	12672-29-6	ug/L	<0.233	<0.23	<0.237	<0.24	<0.24	<0.234	<0.248	<0.277	<0.238	<0.236	<0.234
Aroclor-1254	11097-69-1	ug/L	0.373	<0.23	<0.237	0.344 J	0.242 J	0.48 J	<0.248	0.745 J	<0.238	<0.236	0.272
Aroclor-1260	11096-82-5	ug/L	<0.233	<0.23	<0.237	<0.24	<0.24	<0.234	<0.248	<0.277	<0.238	<0.236	<0.234
Aroclor-1262	37324-23-5	ug/L	<0.233	<0.23	<0.237	<0.24	<0.24	<0.234	<0.248	<0.277	<0.238	<0.236	<0.234
Aroclor-1268	11100-14-4	ug/L	<0.233	<0.23	<0.237	<0.24	<0.24	<0.234	<0.248	<0.277	<0.238	<0.236	<0.234
VOCs													
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,1,1-Trichloroethane	71-55-6	ug/L	2.03	498	446	<1	<4	<20	--	<4	<1	<1	<1
1,1,2,2-Tetrachloroethane	79-34-5	ug/L	<0.5	<10	<10	<0.5	<2	<10	--	<2	<0.5	<0.5	<0.5
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/L	11.1	184	158	<1	<4	<20	--	<4	<1	<1	<1
1,1,2-Trichloroethane	79-00-5	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,1-Dichloroethane	75-34-3	ug/L	10.8	447	412	3.28	<4	<20	--	<4	9.57	<1	<1
1,1-Dichloroethylene	75-35-4	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,1-Dichloropropene	563-58-6	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,2,3-Trichlorobenzene	87-61-6	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,2,3-Trichloropropane	96-18-4	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,2,4-Trichlorobenzene	120-82-1	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,2,4-Trimethylbenzene	95-63-6	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8	ug/L	<5	<100	<100	<5	<20	<100	--	<20	<5	<5	<5
1,2-Dibromoethane (EDB)	106-93-4	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,2-Dichlorobenzene	95-50-1	ug/L	1.17	36.7	32.7	5.16	<4	<20	--	<4	<1	<1	<1
1,2-Dichloroethane	107-06-2	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,2-Dichloropropane	78-87-5	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,3,5-Trimethylbenzene	108-67-8	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,3-Dichlorobenzene	541-73-1	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,3-Dichloropropane	142-28-9	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,4-Dichlorobenzene	106-46-7	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
1,4-Dioxane	123-91-1	ug/L	<50	<1000	<1000	<50	<200	<1000	--	<200	<50	<50	<50
2,2-Dichloropropane	594-20-7	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
2-Butanone (MEK)	78-93-3	ug/L	<10	<200	<200	<10	<40	<200	--	<40	<10	<10	<10
2-Chlorotoluene	95-49-8	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
2-Hexanone	591-78-6	ug/L	<10	<200	<200	<10	<40	<200	--	<40	<10	<10	<10
4-Chlorotoluene	106-43-4	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
4-Isopropyltoluene	99-87-6	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
4-Methyl-2-Pentanone (MIBK)	108-10-1	ug/L	<10	<200	<200	<10	<40	<200	--	<40	<10	<10	<10
Acetone	67-64-1	ug/L	<50	<1000	<1000	<50	<200	<1000	--	<200	<50	<50	<50
Benzene	71-43-2	ug/L	<1	<20	<20	1.08	<4	<20	--	<4	<1	<1	<1
Bromobenzene	108-86-1	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
Bromochloromethane	74-97-5	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
Bromodichloromethane	75-27-4	ug/L	<0.5	<10	<10	<0.5	<2	<10	--	<2	<0.5	<0.5	<0.5
Bromoform	75-25-2	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
Bromomethane	74-83-9	ug/L	<2	<40	<40	<2	<8	<40	--	<8	<2	<2	<2
Carbon Disulfide	75-15-0	ug/L	<10	<200	<200	<10	<40	<200	--	<40	<10	<10	<10
Carbon Tetrachloride	56-23-5	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
Chlorobenzene	108-90-7	ug/L	<1	<20	<20	3.6	<4	<20	--	<4	<1	<1	<1
Chloroethane	75-00-3	ug/L	<2	<40	<40	5.32	12.1	1800	--	12.2	<2	<2	<2
Chloroform	67-66-3	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
Chloromethane	74-87-3	ug/L	<2	<40	<40	<2	<8	<40	--	<8	<2	<2	<2
cis-1,2-Dichloroethylene	156-59-2	ug/L	20.7	356	316	1.62	<4	<20	--	<4	9.87	<1	<1
cis-1,3-Dichloropropene	10061-01-5	ug/L	<0.4	<8	<8	<0.4	<1.6	<8	--	<1.6	<0.4	<0.4	<0.4
Dibromochloromethane	124-48-1	ug/L	<0.5	<10	<10	<0.5	<2	<10	--	<2	<0.5	<0.5	<0.5
Dibromomethane	74-95-3	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
Dichlorodifluoromethane	75-71-8	ug/L	<1	122	113	<1 UJ	<4 UJ	<20	--	<4 UJ	<1	<1	<1
Diethyl Ether	60-29-7	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
Ethyl tert-Butyl Ether (ETBE)	637-92-3	ug/L	<5	<100	<100	<5	<20	<100	--	<20	<5	<5	<5
Ethylbenzene	100-41-4	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
Hexachlorobutadiene	87-68-3	ug/L	<0.4	<8	<8	<0.4	<1.6	<8	--	<1.6	<0.4	<0.4	<0.4
Isopropyl Ether (DIPE)	108-20-3	ug/L	<10	<200	<200	<10	<40	<200	--	<40	<10	<10	<10
Isopropylbenzene	98-82-8	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
m/p-Xylenes	179601-23-1	ug/L	<2	<40	<40	<2	<8	<40	--	<8	<2	<2	<2
Methyl tert-Butyl Ether (MTBE)	1634-04-4	ug/L	<1	<20	<20	<1	<4	<20	--	4.71	<1	<1	<1
Methylene Chloride	75-09-2	ug/L	<1	49.2	61.9	<1	<4 U	76.8	--	9.25	<1	<1	<1
Naphthalene	91-20-3	ug/L	<5	<100	<100	<5	<20	<100	--	<20	<5	<5	<5
n-Butylbenzene	104-51-8	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
n-Propylbenzene	103-65-1	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
o-Xylene	95-47-6	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
sec-Butylbenzene	135-98-8	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
Styrene	100-42-5	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
tert-Amyl-Methyl Ether (TAME)	994-05-8	ug/L	<5	<100	<100	<5	<20	<100	--	<20	<5	<5	<5
tert-Butylbenzene	98-06-6	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
Tetrachloroethene	127-18-4	ug/L	19.7	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
Tetrahydrofuran (THF)	109-99-9	ug/L	<10	<200	<200	<10	<40	<200	--	<40	<10	<10	<10
Toluene	108-88-3	ug/L	<1	29.2	23.4	<1	<4	<20	--	<4	<1	<1	<1
trans-1,2-Dichloroethylene	156-60-5	ug/L	1.98	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
trans-1,3-Dichloropropene	10061-02-6	ug/L	<0.4	<8	<8	<0.4	<1.6	<8	--	<1.6	<0.4	<0.4	<0.4
Trichloroethylene	79-01-6	ug/L	18.3	21.4	<20	<1	<4	<20	--	<4	4.38	<1	<1
Trichlorofluoromethane	75-69-4	ug/L	<1	<20	<20	<1	<4	<20	--	<4	<1	<1	<1
Vinyl Chloride	75-01-4	ug/L	22.6	826	726	1.93	<4	<20	--	<4	3.55	<1	<1

Notes
< = Analyte is not detected above the Laboratory Reporting Limit (LRL) presented.
-- = constituent not analyzed
J = indicates that the result is less than the LRL, but equal to or greater than the medhod detection limit and the concentration is estimated.
ug/L = micrograms per liter
mg/L = milligrams per liter
VOCs = volatile organic compounds
PCBs = polychlorinated biphenyls

TABLE 2
SUMMARY OF LABORATORY ANALYTICAL DATA - SURFACE WATER
Former Lewis Chemical Facility, Boston, Massachusetts

Analyte	CAS No.	Units	SW-10	SW-11	SW-12	SW-12 (DUP)	SW-13	SW-14	SW-15	SW-16	SW-17	SW-18	REF-SW-01	REF-SW-02	REF-SW-03	REF-SW-04
			SW-10-20150825	SW-11-20150825	SW-12-20150826	SW-12-20150826	SW-13-20150826	SW-14-20150826	SW-15-20150826	SW-16-20150826	SW-17-20150827	SW-18-20150827	REF-SW-01-20150827	REF-SW-02-20150827	REF-SW-03-20150827	REF-SW-04-20150827
			8/25/2015	8/25/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015
Hardness as calcium carbonate	STL00009	mg/L	80	76	88	104	100	88	92	84	90	88	88	84	80	32
Metals																
Antimony	7440-36-0	ug/L	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79	<6.79
Arsenic	7440-38-2	ug/L	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55	<5.55
Barium	7440-39-3	ug/L	65.2	59.7	70.2	67.4	79.7	63.6	66.3	64.8	64.4	60.7	60.1	67.9	62.5	59
Beryllium	7440-41-7	ug/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Cadmium	7440-43-9	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	7440-47-3	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Copper	7440-50-8	ug/L	<1.6	<1.6	<1.6	2.71	1.78	2.05	<1.6	2.3	2.44	2.48	2.74	1.6	2.31	2.2
Lead	7439-92-1	ug/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Mercury	7439-97-6	ug/L	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	0.142	<0.12	<0.12	<0.12
Nickel	7440-02-0	ug/L	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	1.27	1.42	<1.26	<1.26
Selenium	7782-49-2	ug/L	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7	<8.7
Silver	7440-22-4	ug/L	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
Thallium	7440-28-0	ug/L	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2	<10.2
Vanadium	7440-62-2	ug/L	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Zinc	7440-66-6	ug/L	16.3	4.68	7.77	8.33	9.32	9.21	5.66	3.56	5.57	5.18	9.17	6.53	4.12	5.02
PCBs																
Aroclor-1016	12674-11-2	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1221	11104-28-2	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1232	11141-16-5	ug/L	<0.235	<0.229	<0.233	<0.235	1.26 J	<0.233	<0.232	0.469 J	0.292	<0.235	1.25	<0.234	<0.239	<0.235
Aroclor-1242	53469-21-9	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1248	12672-29-6	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1254	11097-69-1	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1260	11096-82-5	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1262	37324-23-5	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
Aroclor-1268	11100-14-4	ug/L	<0.235	<0.229	<0.233	<0.235	<0.233	<0.233	<0.232	<0.23	<0.231	<0.235	<0.239	<0.234	<0.239	<0.235
VOCs																
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	71-55-6	ug/L	<1	<1	1.24	1.03	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	79-34-5	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloro-1,2,2-Trifluoroethan	76-13-1	ug/L	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	79-00-5	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	75-34-3	ug/L	<1	<1	1.4	1.51	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethylene	75-35-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	563-58-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	87-61-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	96-18-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	120-82-1	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	95-63-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane (DB	96-12-8	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane (EDB)	106-93-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	95-50-1	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	107-06-2	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	78-87-5	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	108-67-8	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	541-73-1	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	142-28-9	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	106-46-7	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dioxane	123-91-1	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
2,2-Dichloropropane	594-20-7	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Butanone (MEK)	78-93-3	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chlorotoluene	95-49-8	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	591-78-6	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Chlorotoluene	106-43-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Isopropyltoluene	99-87-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Methyl-2-Pentanone (MIBK)	108-10-1	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	67-64-1	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	71-43-2	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromobenzene	108-86-1	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	74-97-5	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	75-27-4	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	75-25-2	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	74-83-9	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon Disulfide	75-15-0	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	56-23-5	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	108-90-7	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	75-00-3	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	67-66-3	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	74-87-3	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-Dichloroethylene	156-59-2	ug/L	1.16	<1	1.59	1.64	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	10061-01-5	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Dibromochloromethane	124-48-1	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	74-95-3	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	75-71-8	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Diethyl Ether	60-29-7	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethyl tert-Butyl Ether (ETBE)	637-92-3	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	100-41-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	87-68-3	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Isopropyl Ether (DIPE)	108-20-3	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isopropylbenzene	98-82-8	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m/p-Xylenes	179601-23-1	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Methyl tert-Butyl Ether (MTBE)	1634-04-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	75-09-2	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	91-20-3	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	104-51-8	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	103-65-1	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	95-47-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	135-98-8	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	100-42-5	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Amyl-Methyl Ether (TAME)	994-05-8	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
tert-Butylbenzene	98-06-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	127-18-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran (THF)	109-99-9	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Toluene	108-88-3	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethylene	156-60-5	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	10061-02-6	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Trichloroethylene	79-01-6	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	75-69-4	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	75-01-4	ug/L	<1	<1	1.89	1.93	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Notes
< = Analyte is not detected above the Laboratory Reporting Limit (LRL) presented.
-- = constituent not analyzed
J = indicates that the result is less than the LRL, but equal to or greater than the medhod detection limit and the concentration is estimated.
ug/L = micrograms per liter
mg/L = milligrams per liter
VOCs = volatile organic compounds
PCBs = polychlorinated biphenyls

TABLE 3
SUMMARY OF LABORATORY ANALYTICAL DATA - SEDIMENT
Former Lewis Chemical Facility, Boston, Massachusetts

			SED-10	SED-12		SED-13	SED-14	SED-15	SED-16	SED-17	REF-SED-01	REF-SED-02	REF-SED-03	REF-SED-04
			SED-10-20150825	SED-12-20150826	SED-12 (DUP)-20150826	SED-13-20150827	SED-14-20150827	SED-15-20150827	SED-16-20150827	SED-17-20150827	REF-SED-01-20150827	REF-SED-02-20150827	REF-SED-03-20150827	REF-SED-04-20150827
Analyte	**CAS No.**	**Units**	8/25/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015
Fractional Organic Carbon	7440-44-0	%	17.4 J	9.1	9.2	8.1	3	2.6	8.7	10.8 J	5.3	16.5 J	1.4	4.3
Metals														
Antimony	7440-36-0	mg/Kg	1.79 J	2.34	2.27	<1.19	<0.79	2.44	1.97	1.61 J	<0.643	<1.82 UJ	<0.45	<4.45
Arsenic	7440-38-2	mg/Kg	2.51 J	11.1	8.87	3.56	3.82	7.99	7.36	7 J	3.29	7.81 J	1.74	<4.45
Barium	7440-39-3	mg/Kg	55.3 J	246 J+	164 J+	78 J+	51.6 J+	123 J+	113 J+	127 J+	40.1 J+	103 J+	16.7 J+	48.7 J+
Beryllium	7440-41-7	mg/Kg	0.18 J	0.896	0.606	0.315	0.257	0.517	0.428	0.475 J	0.23	0.551 J	0.127	<0.312
Cadmium	7440-43-9	mg/Kg	1.11 J	4.57	3.18	1.05	0.699	2.57	1.94	1.87 J	0.5	1.82 J	0.146	0.757
Chromium	7440-47-3	mg/Kg	25.6 J	167	112	29.3	24.1	91.4	71.3	46 J	25.1	47.3 J	6.65	31.5
Copper	7440-50-8	mg/Kg	58.2 J	164	153	39.9	41.3	146	110	69 J	55.9	75.3 J	17	26.1
Lead	7439-92-1	mg/Kg	83.9 J	544 J-	366 J-	88 J-	79.9 J-	427 J-	378 J-	131 J-	212 J-	144 J-	50.7 J-	60.5 J-
Mercury	7439-97-6	mg/Kg	0.368 J	2.01 J+	1.76 J+	0.213 J+	0.309 J+	1.16 J+	0.844 J+	0.495 J+	0.138 J+	0.464 J+	0.0266 J+	0.198 J+
Nickel	7440-02-0	mg/Kg	6.72 J	28.3	19.3	10.1	18.9	22.9	18.4	13.9 J	11.5	15.8 J	5.97	7.25
Selenium	7782-49-2	mg/Kg	<1.63 UJ	<1.22	<1.22	<1.19	<0.79	<1.25	<0.907	1.63 J	<0.643	<1.82 UJ	<0.45	<4.45
Silver	7440-22-4	mg/Kg	<0.817 UJ	1.14	0.721	<0.594	<0.395	<0.623	<0.453	<0.665 UJ	<0.322	<0.911 UJ	<0.225	<2.23
Thallium	7440-28-0	mg/Kg	<1.23 UJ	<0.914	<0.913	<0.891	<0.592	<0.935	<0.68	<0.998 UJ	<0.483	<1.37 UJ	<0.338	<3.34
Vanadium	7440-62-2	mg/Kg	17.8 J	68.4	47.7	20.6	16.9	35.8	26.9	25.5 J	16.6	30.4 J	12.2	16.1
Zinc	7440-66-6	mg/Kg	146 J	474 J+	323 J+	224 J+	207 J+	398 J+	335 J+	342 J+	206 J+	333 J+	73.1 J+	134 J+
PCBs														
Aroclor-1016	12674-11-2	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1221	11104-28-2	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1232	11141-16-5	mg/Kg	<1.57 UJ	768 J	963 J	<12.8	<8.18	218 J	128 J	<15.8 UJ	8.4	47.4 J	<0.974	<7.63
Aroclor-1242	53469-21-9	mg/Kg	5.42 J	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1248	12672-29-6	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1254	11097-69-1	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1260	11096-82-5	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1262	37324-23-5	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
Aroclor-1268	11100-14-4	mg/Kg	<1.57 UJ	<151	<129	<12.8	<8.18	<28.8	<9.03	<15.8 UJ	<1.42	<18.9 UJ	<0.974	<7.63
VOCs (Medium Level)														
1,1,1,2-Tetrachloroethane	630-20-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1,1-Trichloroethane	71-55-6	mg/Kg	<0.0263 UJ	0.129	0.0952	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1,2,2-Tetrachloroethane	79-34-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	mg/Kg	0.0771 J	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1,2-Trichloroethane	79-00-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1-Dichloroethane	75-34-3	mg/Kg	0.0451 J	<1.55	<1.28	<0.0166	0.00948	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1-Dichloroethylene	75-35-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,1-Dichloropropene	563-58-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2,3-Trichlorobenzene	87-61-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2,3-Trichloropropane	96-18-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2,4-Trichlorobenzene	120-82-1	mg/Kg	<0.0263 UJ	0.101	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2,4-Trimethylbenzene	95-63-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	0.0153	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8	mg/Kg	<0.131 UJ	<7.75	<6.39	<0.0831	<0.0468	<0.0924	<0.058	<0.0968 UJ	<0.0474	<0.125 UJ	<0.0216	<0.0563
1,2-Dibromoethane (EDB)	106-93-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2-Dichlorobenzene	95-50-1	mg/Kg	0.14 J	0.381	0.32	0.274	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2-Dichloroethane	107-06-2	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,2-Dichloropropane	78-87-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,3,5-Trimethylbenzene	108-67-8	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,3-Dichlorobenzene	541-73-1	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,3-Dichloropropane	142-28-9	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,4-Dichlorobenzene	106-46-7	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
1,4-Dioxane	123-91-1	mg/Kg	<1.31 UJ	<77.5	<63.9	<0.831	<0.468	<0.924	<0.58	<0.968 UJ	<0.474	<1.25 UJ	<0.216	<0.563
2,2-Dichloropropane	594-20-7	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
2-Butanone (MEK)	78-93-3	mg/Kg	<0.131 UJ	<7.75	<6.39	0.177	0.167	0.312	0.153	<0.0968 UJ	<0.0474	<0.125 UJ	<0.0216	<0.0563
2-Chlorotoluene	95-49-8	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
2-Hexanone	591-78-6	mg/Kg	<0.131 UJ	<7.75	<6.39	<0.0831	<0.0468	<0.0924	<0.058	<0.0968 UJ	<0.0474	<0.125 UJ	<0.0216	<0.0563
4-Chlorotoluene	106-43-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
4-Isopropyltoluene	99-87-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
4-Methyl-2-Pentanone (MIBK)	108-10-1	mg/Kg	<0.131 UJ	<7.75	<6.39	<0.0831	<0.0468	<0.0924	<0.058	<0.0968 UJ	<0.0474	<0.125 UJ	<0.0216	<0.0563
Acetone	67-64-1	mg/Kg	<1.31 UJ	<77.5	<63.9	<0.831	0.553	1.07	<0.58	<0.968 UJ	<0.474	<1.25 UJ	<0.216	<0.563
Benzene	71-43-2	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Bromobenzene	108-86-1	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Bromochloromethane	74-97-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Bromodichloromethane	75-27-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Bromoform	75-25-2	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Bromomethane	74-83-9	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Carbon Disulfide	75-15-0	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Carbon Tetrachloride	56-23-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Chlorobenzene	108-90-7	mg/Kg	<0.0263 UJ	<1.55	<1.28	0.0527	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Chloroethane	75-00-3	mg/Kg	<0.0263 UJ	<1.55 UJ	<1.28 UJ	0.0198 J-	0.0665 J-	1.18 J-	0.228 J-	<0.0194 UJ	<0.00948 UJ	<0.025 UJ	<0.00431 UJ	<0.0113 UJ
Chloroform	67-66-3	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Chloromethane	74-87-3	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
cis-1,2-Dichloroethylene	156-59-2	mg/Kg	0.178 J	0.469	0.398	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
cis-1,3-Dichloropropene	10061-01-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Dibromochloromethane	124-48-1	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Dibromomethane	74-95-3	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Dichlorodifluoromethane	75-71-8	mg/Kg	<0.0263 UJ	<1.55 UJ	<1.28 UJ	<0.0166 UJ	<0.00936 UJ	<0.0185 UJ	<0.0116 UJ	<0.0194 UJ	<0.00948 UJ	<0.025 UJ	<0.00431 UJ	<0.0113 UJ
Diethyl Ether	60-29-7	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Ethyl tert-Butyl Ether (ETBE)	637-92-3	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Ethylbenzene	100-41-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Hexachlorobutadiene	87-68-3	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Isopropyl Ether (DIPE)	108-20-3	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Isopropylbenzene	98-82-8	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
m/p-Xylenes	179601-23-1	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	0.0178	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Methyl tert-Butyl Ether (MTBE)	1634-04-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Methylene Chloride	75-09-2	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Naphthalene	91-20-3	mg/Kg	<0.131 UJ	<7.75	<6.39	<0.0831	<0.0468	<0.0924	<0.058	<0.0968 UJ	<0.0474	<0.125 UJ	<0.0216	<0.0563
n-Butylbenzene	104-51-8	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
n-Propylbenzene	103-65-1	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
o-Xylene	95-47-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	0.0285	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
sec-Butylbenzene	135-98-8	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Styrene	100-42-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
tert-Amyl-Methyl Ether (TAME)	994-05-8	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
tert-Butylbenzene	98-06-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Tetrachloroethene	127-18-4	mg/Kg	0.231 J	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113

TABLE 3
SUMMARY OF LABORATORY ANALYTICAL DATA - SEDIMENT
Former Lewis Chemical Facility, Boston, Massachusetts

			SED-10	SED-12		SED-13	SED-14	SED-15	SED-16	SED-17	REF-SED-01	REF-SED-02	REF-SED-03	REF-SED-04
			SED-10-20150825	SED-12-20150826	SED-12 (DUP)-20150826	SED-13-20150827	SED-14-20150827	SED-15-20150827	SED-16-20150827	SED-17-20150827	REF-SED-01-20150827	REF-SED-02-20150827	REF-SED-03-20150827	REF-SED-04-20150827
Analyte	**CAS No.**	**Units**	8/25/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015
Tetrahydrofuran (THF)	109-99-9	mg/Kg	<0.263 UJ	<15.5	<12.8	<0.166	0.112	<0.185	0.131	<0.194 UJ	<0.0948	<0.25 UJ	0.0561	<0.113
Toluene	108-88-3	mg/Kg	<0.0263 UJ	0.191	<1.28	<0.0166	<0.00936	0.0202	0.0128	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
trans-1,2-Dichloroethylene	156-60-5	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
trans-1,3-Dichloropropene	10061-02-6	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Trichloroethylene	79-01-6	mg/Kg	0.107 J	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Trichlorofluoromethane	75-69-4	mg/Kg	<0.0263 UJ	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
Vinyl Chloride	75-01-4	mg/Kg	0.0457 J	<1.55	<1.28	<0.0166	<0.00936	<0.0185	<0.0116	<0.0194 UJ	<0.00948	<0.025 UJ	<0.00431	<0.0113
VOCs (Low Level)														
1,1,1,2-Tetrachloroethane	630-20-6	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	71-55-6	mg/Kg	--	0.0635 J-	0.0705 J-	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	79-34-5	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	mg/Kg	--	0.0903 J-	0.132 J-	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	79-00-5	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	75-34-3	mg/Kg	--	0.0725 J-	0.0845 J-	--	--	--	--	--	--	--	--	--
1,1-Dichloroethylene	75-35-4	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	563-58-6	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	87-61-6	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	96-18-4	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	120-82-1	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	95-63-6	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8	mg/Kg	--	<0.0762 R	<0.0772 R	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (EDB)	106-93-4	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	95-50-1	mg/Kg	--	0.156 J-	0.089 J-	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	107-06-2	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	78-87-5	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	108-67-8	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	541-73-1	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	142-28-9	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	106-46-7	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
1,4-Dioxane	123-91-1	mg/Kg	--	<0.762 R	<0.772 R	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	594-20-7	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	78-93-3	mg/Kg	--	<0.0762 R	<0.0772 R	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	95-49-8	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
2-Hexanone	591-78-6	mg/Kg	--	<0.0762 R	<0.0772 R	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	106-43-4	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
4-Isopropyltoluene	99-87-6	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
4-Methyl-2-Pentanone (MIBK)	108-10-1	mg/Kg	--	<0.0762 R	<0.0772 R	--	--	--	--	--	--	--	--	--
Acetone	67-64-1	mg/Kg	--	<0.762 R	<0.772 R	--	--	--	--	--	--	--	--	--
Benzene	71-43-2	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Bromobenzene	108-86-1	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Bromochloromethane	74-97-5	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Bromodichloromethane	75-27-4	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Bromoform	75-25-2	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Bromomethane	74-83-9	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Carbon Disulfide	75-15-0	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Carbon Tetrachloride	56-23-5	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Chlorobenzene	108-90-7	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Chloroethane	75-00-3	mg/Kg	--	0.13 J-	0.0651 J-	--	--	--	--	--	--	--	--	--
Chloroform	67-66-3	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Chloromethane	74-87-3	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethylene	156-59-2	mg/Kg	--	0.0272 J-	0.031 J-	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	10061-01-5	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Dibromochloromethane	124-48-1	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Dibromomethane	74-95-3	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	75-71-8	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Diethyl Ether	60-29-7	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Ethyl tert-Butyl Ether (ETBE)	637-92-3	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Ethylbenzene	100-41-4	mg/Kg	--	0.0311 J-	<0.0154 R	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	87-68-3	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Isopropyl Ether (DIPE)	108-20-3	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Isopropylbenzene	98-82-8	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
m/p-Xylenes	179601-23-1	mg/Kg	--	0.0498 J-	<0.0154 R	--	--	--	--	--	--	--	--	--
Methyl tert-Butyl Ether (MTBE)	1634-04-4	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Methylene Chloride	75-09-2	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Naphthalene	91-20-3	mg/Kg	--	<0.0762 R	<0.0772 R	--	--	--	--	--	--	--	--	--
n-Butylbenzene	104-51-8	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
n-Propylbenzene	103-65-1	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
o-Xylene	95-47-6	mg/Kg	--	0.079 J-	0.0234 J-	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	135-98-8	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Styrene	100-42-5	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
tert-Amyl-Methyl Ether (TAME)	994-05-8	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	98-06-6	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Tetrachloroethene	127-18-4	mg/Kg	--	0.0195 J-	0.0251 J-	--	--	--	--	--	--	--	--	--
Tetrahydrofuran (THF)	109-99-9	mg/Kg	--	<0.152 R	<0.154 R	--	--	--	--	--	--	--	--	--
Toluene	108-88-3	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethylene	156-60-5	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	10061-02-6	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Trichloroethylene	79-01-6	mg/Kg	--	<0.0152 R	0.0228 J-	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane	75-69-4	mg/Kg	--	<0.0152 R	<0.0154 R	--	--	--	--	--	--	--	--	--
Vinyl Chloride	75-01-4	mg/Kg	--	<0.0152 R	0.0171 J-	--	--	--	--	--	--	--	--	--
SVOCs														
2-Methylnaphthalene	91-57-6	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	83-32-9	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	208-96-8	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	120-12-7	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	56-55-3	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	50-32-8	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	205-99-2	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	191-24-2	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	207-08-9	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	117-81-7	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	86-74-8	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	218-01-9	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 3
SUMMARY OF LABORATORY ANALYTICAL DATA - SEDIMENT
Former Lewis Chemical Facility, Boston, Massachusetts

			SED-10	SED-12		SED-13	SED-14	SED-15	SED-16	SED-17	REF-SED-01	REF-SED-02	REF-SED-03	REF-SED-04
			SED-10-20150825	SED-12-20150826	SED-12 (DUP)-20150826	SED-13-20150827	SED-14-20150827	SED-15-20150827	SED-16-20150827	SED-17-20150827	REF-SED-01-20150827	REF-SED-02-20150827	REF-SED-03-20150827	REF-SED-04-20150827
Analyte	**CAS No.**	**Units**	8/25/2015	8/26/2015	8/26/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015	8/27/2015
Dibenzofuran	132-64-9	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
di-n-Octylphthalate	117-84-0	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	206-44-0	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	86-73-7	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	193-39-5	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	85-01-8	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	129-00-0	mg/Kg	--	--	--	--	--	--	--	--	--	--	--	--

Notes

< = Analyte is not detected above the Laboratory Reporting Limit (LRL) presented.

-- = constituent not analyzed

J = indicates that the result is less than the LRL, but equal to or greater than the medhod detection limit and the concentration is estimated.

R = rejected

mg/kg = milligrams per kilogram

VOCs = volatile organic compounds

SVOCs = semi-volatile organic compounds

PCBs = polychlorinated biphenyls



Notes

1. Orthophotography provided by USGS, 2013.
2. See city of Boston Assessor's Plan Ward #18, Block #199, Lot #10598 and #10601 for site reference. Site is known as #12 and #0 Fairmount Court.
3. See S.C.R.D. Book 8338, pg 650, and LC 36001 for site property line information
4. Parcel lines and road lines from MassGIS and City of Boston. Accessed July 14, 2015.
5. Monitoring locations, soil vapor extraction system, utility locations, disposal site boundary, sampling grid, hot spots, fence line, river bank georeferenced from Figure 2 of Phase II CSA report, April 22, 2015.

FORMER LEWIS CHEMICAL SITE
CITY OF BOSTON DND

Surface Water, Pore Water, and Sediment Sampling Locations

FIGURE 5

WOODARD &CURRAN

SCALE: 1 " = 30 '	DOC: Figure5_SW_PW_SED.mxd
DATE: OCTOBER 2015	PROJECT #: 229286.01
DRAWN BY: PQ	SOURCE: USGS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-86189-1
TestAmerica Sample Delivery Group: #1
Client Project/Site: Lewis Chemical Project
Revision: 1

For:
Woodard & Curran, Inc.
40 Shattuck Road
Suite 110
Andover, Massachusetts 01810

Attn: Mr. Jarrod Yoder

Authorized for release by:
9/15/2015 2:24:25 PM

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

Links

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-86189-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-86189-1

Revised report: Adding surrogates from both columns for water PCB samples. Removed B flag from Copper data from sample 480-86189-3. Reidentified PCB hit on sample 480-86256-5.

Receipt
The samples were received on 8/26/2015 2:00 AM and 8/27/2015 1:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.5º C and 0.7º C.

Due to the dilutions required, per question G on the MassDEP Analytical Protocol Certification Form, the CAM reporting limits specified in this CAM protocol could not be achieved for some or all samples/analytes.

GC/MS VOA
Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method 8260C: The continuing calibration verification (CCV) for 1,4-Dioxane, 2-Butanone (MEK) and Acetone associated with batch 480-260445 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples are impacted: TB-01 (480-86189-1), SW-10 (480-86189-2) and PW-10 (480-86189-3).

Method 8260C: The continuing calibration verification (CCV) for 2-Butanone (MEK), 2-Hexanone, 1,4-Dioxane, Acetone and Dichlorodifluoromethane associated with batch 480-260681 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Poor performing compounds are allowed to be outside the 40% difference but not over 60% difference. The following samples are impacted: TB-02 (480-86256-1), SW-11 (480-86256-2), SW-12 (480-86256-3), SW-12 (DUP) (480-86256-4), PW-12 (480-86256-5), PW-12 (DUP) (480-86256-6), SW-13 (480-86256-7), SW-14 (480-86256-9), SW-15 (480-86256-11), PW-15 (480-86256-12) and SW-16 (480-86256-13).

Method 8260C: The continuing calibration verification (CCV) for associated with batch 480-260899 recovered outside the MCP control limits 1,4-Dioxane, Acetone and Dichlorodifluoromethane. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples are impacted: PW-13 (480-86256-8), PW-14 (480-86256-10) and PW-16 (480-86256-14).

Method 8260C: The continuing calibration verification (CCV) for 2-Butanone associated with batch 480-260941 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following sample is impacted: SED-10 (480-86189-4).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-260445 exceeded control limits for the following analytes: 2-Butanone and Tetrahydrofuran. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate and Methacrylonitrile in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the compounds can be distinguished from one another if present in a client sample. The following samples are impacted: TB-01 (480-86189-1), SW-10 (480-86189-2) and PW-10 (480-86189-3).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-260681 exceeded control limits for the following analyte: 2-Butanone and Tetrahydrofuran. Unlike the calibration standards, this is due to the co-elution with Ethyl Acetate and Methyl Methacrylate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples are impacted: TB-02 (480-86256-1), SW-11 (480-86256-2), SW-12 (480-86256-3), SW-12 (DUP) (480-86256-4), PW-12 (480-86256-5), PW-12 (DUP) (480-86256-6), SW-13 (480-86256-7), SW-14 (480-86256-9), SW-15 (480-86256-11), PW-15 (480-86256-12) and SW-16 (480-86256-13).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch preparation batch

Job ID: 480-86189-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

480-260778 and analytical batch 480-260731 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the co-elution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following sample is impacted: TB-01 (480-86189-5).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-260899 exceeded control limits for the following analyte: 2-Butanone and Tetrahydrofuran. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate and Methyl methacrylate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples are impacted: PW-13 (480-86256-8), PW-14 (480-86256-10) and PW-16 (480-86256-14).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-260899 exceeded control limits for the following analyte: Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples are impacted: PW-13 (480-86256-8), PW-14 (480-86256-10) and PW-16 (480-86256-14).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-260980 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the co-elution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following sample is impacted: SED-10 (480-86189-4).

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: PW-12 (480-86256-5), PW-12 (DUP) (480-86256-6) and PW-15 (480-86256-12). Elevated reporting limits (RLs) are provided.

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: PW-14 (480-86256-10) and PW-16 (480-86256-14). Elevated reporting limits (RLs) are provided.

Method 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 480-260980 recovered outside control limits for the following analytes: 2-Hexanone, 4-Methyl-2-pentanone, Hexachlorobutadiene, and Naphthalene. The following sample is impacted: SED-10 (480-86189-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 8082: Per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits after moisture correction do not achieve the CAM reporting limits specified in this CAM protocol; however they do achieve method 1 S1 standards.

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SED-10 (480-86189-4).2154308, 1848564, 1931921

Method 8082: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 480-260937 recovered outside control limits for the following analytes: PCB-1016 and PCB-1260. Actual spike recoveries were within acceptance limits. The following samples are being reported because there is no additional volume available for re-extraction: SW-11 (480-86256-2), SW-12 (480-86256-3), SW-12 (DUP) (480-86256-4), PW-12 (480-86256-5), PW-12 (DUP) (480-86256-6), SW-13 (480-86256-7), PW-13 (480-86256-8), SW-14 (480-86256-9), PW-14 (480-86256-10), SW-15 (480-86256-11), PW-15 (480-86256-12), SW-16 (480-86256-13), PW-16 (480-86256-14) and PW-15 filtered (480-86256-15).

Method 8082: The following samples were diluted to bring the concentration of target analytes within the calibration range: PW-13 (480-86256-8), PW-14 (480-86256-10), PW-15 (480-86256-12) and PW-16 (480-86256-14). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 480-86189-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Metals

Method 6010: The low level continuing calibration verification (CCVL 480-260906/24) for analytical batch 480-260906 contained Dissolved Zinc above the upper quality control limit. All reported samples associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of sample (480-86189-D-2-C MS), (480-86189-D-2-D MSD), (480-86189-D-2-B PDS) and (480-86189-D-2-B SD ^) was not performed.

Method 6010: The ICSA (ICSA 480-260906/9) exhibited results outside the project established control limits for Dissolved Antimony. However, the results were within TestAmerica's standard quality control limits, therefore no corrective action was necessary. SW-10 (480-86189-2), PW-10 (480-86189-3), (LCS 480-260530/2-A), (LCSD 480-260530/3-A), (MB 480-260530/1-A), (480-86189-D-2-C MS), (480-86189-D-2-D MSD), (480-86189-D-2-B PDS) and (480-86189-D-2-B SD ^)

Method 6010: The ICSA (ICSA 480-261549/9) exhibited a result outside the project established control limits for Dissolved Antimony. However, the result was within the laboratory's standard quality control limits, therefore no corrective action was necessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Geotechnical

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3540C: Due to the matrix, the following sample could not be concentrated to the final method required volume: SED-10 (480-86189-4). The reporting limits (RLs) are elevated proportionately.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 480-260937.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 480-261294.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-86189-1**

Project Location: RTN:

This form provides certifications for the data set for the following Laboratory Sample ID Number(s):

480-86189-1[1-5], 480-86256-1[1-15]

Matrices: [X] Groundwater/Surface Water [X] Soil/Sediment [ ] Drinking Water [ ] Air [ ] Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A [X]	7470/7471 Hg CAM III B [X]	Mass DEP VPH CAM IV A [ ]	8081 Pesticides CAM V B [ ]	7196 Hex Cr CAM VI B [ ]	Mass DEP APH CAM IX A [ ]
8270 SVOC CAM II B [ ]	7010 Metals CAM III C [ ]	Mass DEP EPH CAM IV B [ ]	8151 Herbicides CAM V C [ ]	8330 Explosives CAM VIII A [ ]	TO-15 VOC CAM IX B [ ]
6010 Metals CAM III A [X]	6020 Metals CAM III D [ ]	8082 PCB CAM V A [X]	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A [ ]	6860 Perchlorate CAM VIII B [ ]	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	[X] Yes [ ] No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	[X] Yes [ ] No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	[X] Yes [ ] No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	[X] Yes [ ] No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	[ ] Yes [ ] No [ ] Yes [ ] No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	[X] Yes [ ] No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	[ ] Yes [X] No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350**

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	[ ] Yes [X] No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	[X] Yes [ ] No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Becky Mason Position: Project Manager

Printed Name: Becky Mason Date: 9/4/15 9:00

This form has been electronically signed and approved

Detection Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: TB-01 — Lab Sample ID: 480-86189-1

No Detections.

Client Sample ID: SW-10 — Lab Sample ID: 480-86189-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	65.2		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	16.3	J	50.0	1.50	ug/L	1		6010	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.16		1.00	1.00	ug/L	1		8260C	Total/NA
Hardness as calcium carbonate	80000		4000	4000	ug/L	1		SM 2340C	Total/NA

Client Sample ID: PW-10 — Lab Sample ID: 480-86189-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	247		10.0	0.700	ug/L	1		6010	Dissolved
Chromium	1.07	J	5.00	1.00	ug/L	1		6010	Dissolved
Nickel	2.63	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	26.6	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	1.72	J	10.0	1.60	ug/L	1		6010	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.03		1.00	1.00	ug/L	1		8260C	Total/NA
Freon 113	11.1		1.00	1.00	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	10.8		1.00	1.00	ug/L	1		8260C	Total/NA
1,2-Dichlorobenzene	1.17		1.00	1.00	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	20.7		1.00	1.00	ug/L	1		8260C	Total/NA
Tetrachloroethene	19.7		1.00	1.00	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.98		1.00	1.00	ug/L	1		8260C	Total/NA
Trichloroethene	18.3		1.00	1.00	ug/L	1		8260C	Total/NA
Vinyl chloride	22.6		1.00	1.00	ug/L	1		8260C	Total/NA
PCB-1242	2.93		0.233	0.233	ug/L	1		8082	Total/NA
PCB-1254	0.373		0.233	0.233	ug/L	1		8082	Total/NA
Hardness as calcium carbonate	372000		4000	4000	ug/L	1		SM 2340C	Total/NA

Client Sample ID: SED-10 — Lab Sample ID: 480-86189-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	17.4				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.51	J	4.08	1.63	mg/Kg	1	☼	6010	Total/NA
Barium	55.3		2.04	0.449	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.180	J	0.817	0.114	mg/Kg	1	☼	6010	Total/NA
Cadmium	1.11		0.817	0.123	mg/Kg	1	☼	6010	Total/NA
Chromium	25.6		2.04	0.817	mg/Kg	1	☼	6010	Total/NA
Nickel	6.72		4.08	0.939	mg/Kg	1	☼	6010	Total/NA
Vanadium	17.8		2.04	0.449	mg/Kg	1	☼	6010	Total/NA
Zinc	146		10.2	2.61	mg/Kg	1	☼	6010	Total/NA
Lead	83.9		2.04	0.980	mg/Kg	1	☼	6010	Total/NA
Antimony	1.79	J	2.04	1.63	mg/Kg	1	☼	6010	Total/NA
Copper	58.2		4.08	0.858	mg/Kg	1	☼	6010	Total/NA
Mercury	0.368	J	0.412	0.0334	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SED-10 (Continued) — Lab Sample ID: 480-86189-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Freon 113	0.0771		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
1,1-Dichloroethane	0.0451		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
1,2-Dichlorobenzene	0.140		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.178		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.231		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
Trichloroethene	0.107		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
Vinyl chloride	0.0457		0.0263	0.0263	mg/Kg	1	☼	8260C	Total/NA
Aroclor-1242	5.42		1.57	1.57	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: TB-01 — Lab Sample ID: 480-86189-5

No Detections.

Client Sample ID: TB-02 — Lab Sample ID: 480-86256-1

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.07		1.00	1.00	ug/L	1		8260C	Total/NA

Client Sample ID: SW-11 — Lab Sample ID: 480-86256-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	59.7		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	4.68	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	76000		4000	1050	ug/L	1		SM 2340C	Total/NA

Client Sample ID: SW-12 — Lab Sample ID: 480-86256-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	70.2		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	7.77	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	88000		4000	1050	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.24		1.00	1.00	ug/L	1		8260C	Total/NA
Freon 113	1.00		1.00	1.00	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	1.40		1.00	1.00	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.59		1.00	1.00	ug/L	1		8260C	Total/NA
Vinyl chloride	1.89		1.00	1.00	ug/L	1		8260C	Total/NA

Client Sample ID: SW-12 (DUP) — Lab Sample ID: 480-86256-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	67.4		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	8.33	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.71	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	104000		4000	1050	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.03		1.00	1.00	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	1.51		1.00	1.00	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.64		1.00	1.00	ug/L	1		8260C	Total/NA
Vinyl chloride	1.93		1.00	1.00	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: PW-12 — Lab Sample ID: 480-86256-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	438		10.0	0.700	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	476000		4000	1050	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	498		20.0	20.0	ug/L	20		8260C	Total/NA
Freon 113	184		20.0	20.0	ug/L	20		8260C	Total/NA
1,1-Dichloroethane	447		20.0	20.0	ug/L	20		8260C	Total/NA
1,2-Dichlorobenzene	36.7		20.0	20.0	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	356		20.0	20.0	ug/L	20		8260C	Total/NA
Dichlorodifluoromethane	122		20.0	20.0	ug/L	20		8260C	Total/NA
Methylene Chloride	49.2		20.0	20.0	ug/L	20		8260C	Total/NA
Toluene	29.2		20.0	20.0	ug/L	20		8260C	Total/NA
Trichloroethene	21.4		20.0	20.0	ug/L	20		8260C	Total/NA
Vinyl chloride	826		20.0	20.0	ug/L	20		8260C	Total/NA
PCB-1232	10.6		0.230	0.230	ug/L	1		8082	Total/NA

Client Sample ID: PW-12 (DUP) — Lab Sample ID: 480-86256-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	454		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	1.85	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	484000		4000	1050	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	446		20.0	20.0	ug/L	20		8260C	Total/NA
Freon 113	158		20.0	20.0	ug/L	20		8260C	Total/NA
1,1-Dichloroethane	412		20.0	20.0	ug/L	20		8260C	Total/NA
1,2-Dichlorobenzene	32.7		20.0	20.0	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	316		20.0	20.0	ug/L	20		8260C	Total/NA
Dichlorodifluoromethane	113		20.0	20.0	ug/L	20		8260C	Total/NA
Methylene Chloride	61.9		20.0	20.0	ug/L	20		8260C	Total/NA
Toluene	23.4		20.0	20.0	ug/L	20		8260C	Total/NA
Vinyl chloride	726		20.0	20.0	ug/L	20		8260C	Total/NA
PCB-1232	6.68		0.237	0.237	ug/L	1		8082	Total/NA

Client Sample ID: SW-13 — Lab Sample ID: 480-86256-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	79.7		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	9.32	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	1.78	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	100000		4000	1050	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	1.26		0.233	0.233	ug/L	1		8082	Total/NA

Client Sample ID: PW-13 — Lab Sample ID: 480-86256-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	508		10.0	0.700	ug/L	1		6010	Dissolved
Chromium	1.98	J	5.00	1.00	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	532000		4000	1050	ug/L	1		SM 2340C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PW-13 (Continued) — Lab Sample ID: 480-86256-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.28		1.00	1.00	ug/L	1		8260C	Total/NA
1,2-Dichlorobenzene	5.16		1.00	1.00	ug/L	1		8260C	Total/NA
Benzene	1.08		1.00	1.00	ug/L	1		8260C	Total/NA
Chlorobenzene	3.60		1.00	1.00	ug/L	1		8260C	Total/NA
Chloroethane	5.32		2.00	2.00	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.62		1.00	1.00	ug/L	1		8260C	Total/NA
Vinyl chloride	1.93		1.00	1.00	ug/L	1		8260C	Total/NA
PCB-1254	0.344		0.240	0.240	ug/L	1		8082	Total/NA
PCB-1232 - DL	71.5		2.40	2.40	ug/L	10		8082	Total/NA

Client Sample ID: SW-14 — Lab Sample ID: 480-86256-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	63.6		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	9.21	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.05	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	88000		4000	1050	ug/L	1		SM 2340C	Total/NA

Client Sample ID: PW-14 — Lab Sample ID: 480-86256-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	269		10.0	0.700	ug/L	1		6010	Dissolved
Chromium	6.35		5.00	1.00	ug/L	1		6010	Dissolved
Nickel	3.22	J	10.0	1.26	ug/L	1		6010	Dissolved
Vanadium	2.72	J	10.0	1.50	ug/L	1		6010	Dissolved
Zinc	1.66	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	410000		10000	2630	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	12.1		8.00	8.00	ug/L	4		8260C	Total/NA
Methylene Chloride	7.67		4.00	4.00	ug/L	4		8260C	Total/NA
PCB-1254	0.242		0.240	0.240	ug/L	1		8082	Total/NA
PCB-1232 - DL	26.7		1.20	1.20	ug/L	5		8082	Total/NA

Client Sample ID: SW-15 — Lab Sample ID: 480-86256-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	66.3		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	5.66	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	92000		4000	1050	ug/L	1		SM 2340C	Total/NA

Client Sample ID: PW-15 — Lab Sample ID: 480-86256-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	232		10.0	0.700	ug/L	1		6010	Dissolved
Chromium	5.17		5.00	1.00	ug/L	1		6010	Dissolved
Nickel	6.74	J	10.0	1.26	ug/L	1		6010	Dissolved
Vanadium	4.29	J	10.0	1.50	ug/L	1		6010	Dissolved
Zinc	2.12	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	390000		10000	2630	ug/L	1		SM 2340C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PW-15 (Continued) — Lab Sample ID: 480-86256-12

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	1800		40.0	40.0	ug/L	20		8260C	Total/NA
Methylene Chloride	76.8		20.0	20.0	ug/L	20		8260C	Total/NA
PCB-1254	0.480		0.234	0.234	ug/L	1		8082	Total/NA
PCB-1232 - DL	116		4.68	4.68	ug/L	20		8082	Total/NA

Client Sample ID: SW-16 — Lab Sample ID: 480-86256-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	64.8		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	3.56	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.30	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	84000		4000	1050	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	0.469		0.230	0.230	ug/L	1		8082	Total/NA

Client Sample ID: PW-16 — Lab Sample ID: 480-86256-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	169		10.0	0.700	ug/L	1		6010	Dissolved
Chromium	3.55	J	5.00	1.00	ug/L	1		6010	Dissolved
Nickel	2.71	J	10.0	1.26	ug/L	1		6010	Dissolved
Vanadium	2.41	J	10.0	1.50	ug/L	1		6010	Dissolved
Zinc	3.15	J	50.0	1.50	ug/L	1		6010	Dissolved
Mercury	0.147	J	0.200	0.120	ug/L	1		7470A	Dissolved
Hardness as calcium carbonate	540000		10000	2630	ug/L	1		SM 2340C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	12.2		8.00	8.00	ug/L	4		8260C	Total/NA
Methyl tert-butyl ether	4.71		4.00	4.00	ug/L	4		8260C	Total/NA
Methylene Chloride	9.25		4.00	4.00	ug/L	4		8260C	Total/NA
PCB-1254	0.745		0.277	0.277	ug/L	1		8082	Total/NA
PCB-1232 - DL	43.0		2.77	2.77	ug/L	10		8082	Total/NA

Client Sample ID: PW-15 filtered — Lab Sample ID: 480-86256-15

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	0.742		0.248	0.248	ug/L	1		8082	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-01
Date Collected: 08/25/15 00:00
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/26/15 14:28	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Freon 113	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/26/15 14:28	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/26/15 14:28	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/26/15 14:28	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/26/15 14:28	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/26/15 14:28	1
Acetone	<50.0		50.0	50.0	ug/L			08/26/15 14:28	1
Benzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Bromoform	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/26/15 14:28	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/26/15 14:28	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/26/15 14:28	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/26/15 14:28	1
Chloroform	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/26/15 14:28	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 14:28	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/26/15 14:28	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/26/15 14:28	1

Client Sample ID: TB-01

Lab Sample ID: 480-86189-1

Date Collected: 08/25/15 00:00
Matrix: Water
Date Received: 08/26/15 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/26/15 14:28	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/26/15 14:28	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/26/15 14:28	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Styrene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/26/15 14:28	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/26/15 14:28	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/26/15 14:28	1
Toluene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 14:28	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/26/15 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/26/15 14:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/26/15 14:28*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/26/15 14:28*	*1*

Client Sample ID: SW-10

Lab Sample ID: 480-86189-2

Date Collected: 08/25/15 12:15
Matrix: Water
Date Received: 08/26/15 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/26/15 17:38	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Freon 113	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/26/15 17:38	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1

Client Sample ID: SW-10
Date Collected: 08/25/15 12:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/26/15 17:38	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/26/15 17:38	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/26/15 17:38	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/26/15 17:38	1
Acetone	<50.0		50.0	50.0	ug/L			08/26/15 17:38	1
Benzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Bromoform	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/26/15 17:38	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/26/15 17:38	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/26/15 17:38	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/26/15 17:38	1
Chloroform	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/26/15 17:38	1
cis-1,2-Dichloroethene	**1.16**		1.00	1.00	ug/L			08/26/15 17:38	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 17:38	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/26/15 17:38	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/26/15 17:38	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/26/15 17:38	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/26/15 17:38	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/26/15 17:38	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Styrene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/26/15 17:38	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/26/15 17:38	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1

Client Sample ID: SW-10

Date Collected: 08/25/15 12:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/26/15 17:38	1
Toluene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 17:38	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/26/15 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/26/15 17:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/26/15 17:38*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/26/15 17:38*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1221	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1232	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1242	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1248	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1254	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1260	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1262	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1
PCB-1268	<0.235		0.235	0.235	ug/L		08/31/15 14:58	09/01/15 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/31/15 14:58*	*09/01/15 14:54*	*1*
Tetrachloro-m-xylene	*97*		*30 - 150*	*08/31/15 14:58*	*09/01/15 14:54*	*1*
DCB Decachlorobiphenyl	*60*		*30 - 150*	*08/31/15 14:58*	*09/01/15 14:54*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/31/15 14:58*	*09/01/15 14:54*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/27/15 07:10	08/27/15 17:34	1
Arsenic	<5.55		10.0	5.55	ug/L		08/27/15 07:10	08/27/15 17:34	1
Barium	**65.2**		10.0	0.700	ug/L		08/27/15 07:10	08/27/15 17:34	1
Beryllium	<0.300		1.00	0.300	ug/L		08/27/15 07:10	08/27/15 17:34	1
Cadmium	<0.500		1.00	0.500	ug/L		08/27/15 07:10	08/27/15 17:34	1
Chromium	<1.00		5.00	1.00	ug/L		08/27/15 07:10	08/27/15 17:34	1
Nickel	<1.26		10.0	1.26	ug/L		08/27/15 07:10	08/27/15 17:34	1
Thallium	<10.2		20.0	10.2	ug/L		08/27/15 07:10	08/27/15 17:34	1
Vanadium	<1.50		10.0	1.50	ug/L		08/27/15 07:10	08/27/15 17:34	1
Zinc	**16.3**	**J**	50.0	1.50	ug/L		08/27/15 07:10	08/28/15 11:15	1
Lead	<3.00		5.00	3.00	ug/L		08/27/15 07:10	08/27/15 17:34	1
Selenium	<8.70		10.0	8.70	ug/L		08/27/15 07:10	08/27/15 17:34	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/27/15 07:10	08/27/15 17:34	1
Copper	<1.60		10.0	1.60	ug/L		08/27/15 07:10	08/28/15 11:15	1

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: SW-10

Lab Sample ID: 480-86189-2
Matrix: Water
Date Collected: 08/25/15 12:15
Date Received: 08/26/15 02:00

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/26/15 10:20	08/26/15 14:52	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**80000**		4000	4000	ug/L			09/03/15 13:51	1

Client Sample ID: PW-10

Lab Sample ID: 480-86189-3
Matrix: Water
Date Collected: 08/25/15 12:45
Date Received: 08/26/15 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,1,1-Trichloroethane	**2.03**		1.00	1.00	ug/L			08/26/15 18:02	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/26/15 18:02	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Freon 113	**11.1**		1.00	1.00	ug/L			08/26/15 18:02	1
1,1-Dichloroethane	**10.8**		1.00	1.00	ug/L			08/26/15 18:02	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/26/15 18:02	1
1,2-Dichlorobenzene	**1.17**		1.00	1.00	ug/L			08/26/15 18:02	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/26/15 18:02	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/26/15 18:02	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/26/15 18:02	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/26/15 18:02	1
Acetone	<50.0		50.0	50.0	ug/L			08/26/15 18:02	1
Benzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Bromoform	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/26/15 18:02	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/26/15 18:02	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/26/15 18:02	1

Client Sample ID: PW-10
Date Collected: 08/25/15 12:45
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<2.00		2.00	2.00	ug/L			08/26/15 18:02	1
Chloroform	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/26/15 18:02	1
cis-1,2-Dichloroethene	**20.7**		1.00	1.00	ug/L			08/26/15 18:02	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 18:02	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/26/15 18:02	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/26/15 18:02	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/26/15 18:02	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/26/15 18:02	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/26/15 18:02	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Styrene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/26/15 18:02	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/26/15 18:02	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Tetrachloroethene	**19.7**		1.00	1.00	ug/L			08/26/15 18:02	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/26/15 18:02	1
Toluene	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
trans-1,2-Dichloroethene	**1.98**		1.00	1.00	ug/L			08/26/15 18:02	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 18:02	1
Trichloroethene	**18.3**		1.00	1.00	ug/L			08/26/15 18:02	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1
Vinyl chloride	**22.6**		1.00	1.00	ug/L			08/26/15 18:02	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/26/15 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/26/15 18:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/26/15 18:02*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/26/15 18:02*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1221	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1232	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1242	**2.93**		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1248	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1254	**0.373**		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1260	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1
PCB-1262	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1

Client Sample ID: PW-10

Date Collected: 08/25/15 12:45
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-3

Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	<0.233		0.233	0.233	ug/L		08/31/15 14:58	09/01/15 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*30 - 150*	*08/31/15 14:58*	*09/01/15 15:10*	*1*
Tetrachloro-m-xylene	*101*		*30 - 150*	*08/31/15 14:58*	*09/01/15 15:10*	*1*
DCB Decachlorobiphenyl	*54*		*30 - 150*	*08/31/15 14:58*	*09/01/15 15:10*	*1*
DCB Decachlorobiphenyl	*61*		*30 - 150*	*08/31/15 14:58*	*09/01/15 15:10*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/27/15 07:10	08/27/15 17:56	1
Arsenic	<5.55		10.0	5.55	ug/L		08/27/15 07:10	08/27/15 17:56	1
Barium	**247**		10.0	0.700	ug/L		08/27/15 07:10	08/27/15 17:56	1
Beryllium	<0.300		1.00	0.300	ug/L		08/27/15 07:10	08/27/15 17:56	1
Cadmium	<0.500		1.00	0.500	ug/L		08/27/15 07:10	08/27/15 17:56	1
Chromium	**1.07**	**J**	5.00	1.00	ug/L		08/27/15 07:10	08/27/15 17:56	1
Nickel	**2.63**	**J**	10.0	1.26	ug/L		08/27/15 07:10	08/27/15 17:56	1
Thallium	<10.2		20.0	10.2	ug/L		08/27/15 07:10	08/27/15 17:56	1
Vanadium	<1.50		10.0	1.50	ug/L		08/27/15 07:10	08/27/15 17:56	1
Zinc	**26.6**	**J**	50.0	1.50	ug/L		08/27/15 07:10	08/28/15 11:18	1
Lead	<3.00		5.00	3.00	ug/L		08/27/15 07:10	08/27/15 17:56	1
Selenium	<8.70		10.0	8.70	ug/L		08/27/15 07:10	08/27/15 17:56	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/27/15 07:10	08/27/15 17:56	1
Copper	**1.72**	**J**	10.0	1.60	ug/L		08/27/15 07:10	08/27/15 17:56	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/26/15 10:20	08/26/15 14:54	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**372000**		4000	4000	ug/L			09/01/15 09:10	1

Client Sample ID: SED-10

Date Collected: 08/25/15 13:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-4

Matrix: Solid
Percent Solids: 23.1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,1,1-Trichloroethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,1,2,2-Tetrachloroethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,1,2-Trichloroethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Freon 113	**0.0771**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,1-Dichloroethane	**0.0451**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,1-Dichloroethene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,1-Dichloropropene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2,3-Trichlorobenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2,3-Trichloropropane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2,4-Trichlorobenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2,4-Trimethylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1

Client Sample ID: SED-10
Date Collected: 08/25/15 13:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-4
Matrix: Solid
Percent Solids: 23.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.131		0.131	0.131	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2-Dichlorobenzene	**0.140**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2-Dichloroethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,2-Dichloropropane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,3,5-Trimethylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,3-Dichlorobenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,3-Dichloropropane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,4-Dichlorobenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
1,4-Dioxane	<1.31		1.31	1.31	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
2,2-Dichloropropane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
2-Butanone (MEK)	<0.131	*	0.131	0.131	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
2-Chlorotoluene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
2-Hexanone	<0.131	*	0.131	0.131	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
4-Chlorotoluene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
4-Isopropyltoluene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
4-Methyl-2-pentanone (MIBK)	<0.131	*	0.131	0.131	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Acetone	<1.31		1.31	1.31	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Benzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Bromobenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Bromoform	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Bromomethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Carbon disulfide	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Carbon tetrachloride	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Chlorobenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Chlorobromomethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Chlorodibromomethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Chloroethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Chloroform	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Chloromethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
cis-1,2-Dichloroethene	**0.178**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
cis-1,3-Dichloropropene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Dichlorobromomethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Dichlorodifluoromethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Ethyl ether	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Ethylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Ethylene Dibromide	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Hexachlorobutadiene	<0.0263	*	0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Isopropyl ether	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Isopropylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Methyl tert-butyl ether	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Methylene Chloride	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
m-Xylene & p-Xylene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Naphthalene	<0.131	*	0.131	0.131	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
n-Butylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
N-Propylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
o-Xylene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
sec-Butylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Styrene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Tert-amyl methyl ether	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1

Client Sample ID: SED-10
Date Collected: 08/25/15 13:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-4
Matrix: Solid
Percent Solids: 23.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-butyl ethyl ether	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
tert-Butylbenzene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Tetrachloroethene	**0.231**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Tetrahydrofuran	<0.263		0.263	0.263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Toluene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
trans-1,2-Dichloroethene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
trans-1,3-Dichloropropene	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Trichloroethene	**0.107**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Trichlorofluoromethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Vinyl chloride	**0.0457**		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1
Dibromomethane	<0.0263		0.0263	0.0263	mg/Kg	☼	08/26/15 05:43	08/28/15 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/26/15 05:43*	*08/28/15 19:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*	*08/26/15 05:43*	*08/28/15 19:40*	*1*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*08/26/15 05:43*	*08/28/15 19:40*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1221	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1232	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1242	**5.42**		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1248	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1254	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1260	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1262	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10
Aroclor-1268	<1.57		1.57	1.57	mg/Kg	☼	08/28/15 07:16	09/02/15 03:47	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*47*		*30 - 150*	*08/28/15 07:16*	*09/02/15 03:47*	*10*
Tetrachloro-m-xylene	*50*		*30 - 150*	*08/28/15 07:16*	*09/02/15 03:47*	*10*
DCB Decachlorobiphenyl	*19*	*p X*	*30 - 150*	*08/28/15 07:16*	*09/02/15 03:47*	*10*
DCB Decachlorobiphenyl	*35*		*30 - 150*	*08/28/15 07:16*	*09/02/15 03:47*	*10*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.817		2.04	0.817	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Arsenic	**2.51**	**J**	4.08	1.63	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Barium	**55.3**		2.04	0.449	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Beryllium	**0.180**	**J**	0.817	0.114	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Cadmium	**1.11**		0.817	0.123	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Chromium	**25.6**		2.04	0.817	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Nickel	**6.72**		4.08	0.939	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Thallium	<1.23		4.08	1.23	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Vanadium	**17.8**		2.04	0.449	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Zinc	**146**		10.2	2.61	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Lead	**83.9**		2.04	0.980	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Selenium	<1.63		2.04	1.63	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1
Antimony	**1.79**	**J**	2.04	1.63	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1

Client Sample ID: SED-10

Date Collected: 08/25/15 13:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-4

Matrix: Solid
Percent Solids: 23.1

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	58.2		4.08	0.858	mg/Kg	☼	08/28/15 12:35	08/28/15 13:59	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.368	J	0.412	0.0334	mg/Kg	☼	08/28/15 10:00	08/28/15 13:43	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	17.4				%			08/27/15 13:03	1

Client Sample ID: TB-01

Date Collected: 08/25/15 00:00
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-5

Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,1,1-Trichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,1,2,2-Tetrachloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,1,2-Trichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Freon 113	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,1-Dichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,1-Dichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,1-Dichloropropene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2,3-Trichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2,3-Trichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2,4-Trichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2,4-Trimethylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2-Dibromo-3-Chloropropane	<0.0250		0.0250	0.0250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2-Dichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2-Dichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,2-Dichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,3,5-Trimethylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,3-Dichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,3-Dichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,4-Dichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
1,4-Dioxane	<0.250		0.250	0.250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
2,2-Dichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
2-Butanone (MEK)	<0.0250	*	0.0250	0.0250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
2-Chlorotoluene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
2-Hexanone	<0.0250		0.0250	0.0250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
4-Chlorotoluene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
4-Isopropyltoluene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
4-Methyl-2-pentanone (MIBK)	<0.0250		0.0250	0.0250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Acetone	<0.250		0.250	0.250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Benzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Bromobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Bromoform	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Bromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Carbon disulfide	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1

Client Sample ID: TB-01
Date Collected: 08/25/15 00:00
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-5
Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Chlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Chlorobromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Chlorodibromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Chloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Chloroform	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Chloromethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
cis-1,2-Dichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
cis-1,3-Dichloropropene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Dichlorobromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Dichlorodifluoromethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Ethyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Ethylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Ethylene Dibromide	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Hexachlorobutadiene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Isopropyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Isopropylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Methyl tert-butyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Methylene Chloride	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
m-Xylene & p-Xylene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Naphthalene	<0.0250		0.0250	0.0250	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
n-Butylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
N-Propylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
o-Xylene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
sec-Butylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Styrene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Tert-amyl methyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Tert-butyl ethyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
tert-Butylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Tetrachloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Tetrahydrofuran	<0.0500		0.0500	0.0500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Toluene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
trans-1,2-Dichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
trans-1,3-Dichloropropene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Trichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Trichlorofluoromethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Vinyl chloride	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1
Dibromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/26/15 05:43	08/27/15 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*	*08/26/15 05:43*	*08/27/15 16:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*	*08/26/15 05:43*	*08/27/15 16:18*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*08/26/15 05:43*	*08/27/15 16:18*	*1*

Client Sample ID: TB-02
Date Collected: 08/25/15 00:00
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 13:46	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 13:46	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 13:46	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 13:46	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 13:46	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 13:46	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 13:46	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 13:46	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 13:46	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 13:46	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 13:46	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 13:46	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 13:46	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 13:46	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 13:46	1

Client Sample ID: TB-02

Date Collected: 08/25/15 00:00
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 13:46	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Methylene Chloride	**1.07**		1.00	1.00	ug/L			08/27/15 13:46	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 13:46	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 13:46	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 13:46	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 13:46	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 13:46	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 13:46	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/27/15 13:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/27/15 13:46*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/27/15 13:46*	*1*

Client Sample ID: SW-11

Date Collected: 08/25/15 15:06
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 14:10	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 14:10	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1

Client Sample ID: SW-11
Date Collected: 08/25/15 15:06
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 14:10	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 14:10	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 14:10	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 14:10	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 14:10	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 14:10	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 14:10	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 14:10	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 14:10	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 14:10	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 14:10	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 14:10	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 14:10	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 14:10	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 14:10	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 14:10	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 14:10	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 14:10	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1

Client Sample ID: SW-11

Date Collected: 08/25/15 15:06
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 14:10	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 14:10	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/15 14:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/27/15 14:10*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/27/15 14:10*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.229	*	0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1221	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1232	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1242	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1248	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1254	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1260	<0.229	*	0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1262	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1
PCB-1268	<0.229		0.229	0.229	ug/L		08/28/15 09:22	08/28/15 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:11*	*1*
Tetrachloro-m-xylene	*95*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:11*	*1*
DCB Decachlorobiphenyl	*92*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:11*	*1*
DCB Decachlorobiphenyl	*102*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:11*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:13	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:13	1
Barium	**59.7**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:13	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:13	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:13	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:13	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:13	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:13	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:13	1
Zinc	**4.68**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:13	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:13	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:13	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:13	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:13	1

Client Sample ID: SW-11

Date Collected: 08/25/15 15:06
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-2
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**76000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: SW-12

Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,1,1-Trichloroethane	**1.24**		1.00	1.00	ug/L			08/27/15 14:33	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 14:33	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Freon 113	**1.00**		1.00	1.00	ug/L			08/27/15 14:33	1
1,1-Dichloroethane	**1.40**		1.00	1.00	ug/L			08/27/15 14:33	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 14:33	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 14:33	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 14:33	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 14:33	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 14:33	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 14:33	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 14:33	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 14:33	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 14:33	1

Client Sample ID: SW-12
Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 14:33	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 14:33	1
cis-1,2-Dichloroethene	**1.59**		1.00	1.00	ug/L			08/27/15 14:33	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 14:33	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 14:33	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 14:33	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 14:33	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 14:33	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 14:33	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 14:33	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 14:33	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 14:33	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 14:33	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1
Vinyl chloride	**1.89**		1.00	1.00	ug/L			08/27/15 14:33	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/27/15 14:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/27/15 14:33*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/27/15 14:33*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.233	*	0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1221	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1232	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1242	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1248	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1254	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1260	<0.233	*	0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1
PCB-1262	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1

Client Sample ID: SW-12

Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-3
Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:27*	*1*
Tetrachloro-m-xylene	*97*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:27*	*1*
DCB Decachlorobiphenyl	*96*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:27*	*1*
DCB Decachlorobiphenyl	*106*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:27*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:16	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:16	1
Barium	**70.2**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:16	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:16	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:16	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:16	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:16	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:16	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:16	1
Zinc	**7.77**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:16	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:16	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:16	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:16	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:16	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**88000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: SW-12 (DUP)

Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,1,1-Trichloroethane	**1.03**		1.00	1.00	ug/L			08/27/15 18:33	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 18:33	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,1-Dichloroethane	**1.51**		1.00	1.00	ug/L			08/27/15 18:33	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: SW-12 (DUP)
Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 18:33	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 18:33	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 18:33	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 18:33	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 18:33	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 18:33	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 18:33	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 18:33	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 18:33	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 18:33	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 18:33	1
cis-1,2-Dichloroethene	**1.64**		1.00	1.00	ug/L			08/27/15 18:33	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 18:33	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 18:33	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 18:33	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 18:33	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 18:33	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 18:33	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 18:33	1

Client Sample ID: SW-12 (DUP)

Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 18:33	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 18:33	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 18:33	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1
Vinyl chloride	**1.93**		1.00	1.00	ug/L			08/27/15 18:33	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/15 18:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/27/15 18:33*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/27/15 18:33*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.235	*	0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1221	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1232	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1242	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1248	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1254	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1260	<0.235	*	0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1262	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1
PCB-1268	<0.235		0.235	0.235	ug/L		08/28/15 09:22	08/28/15 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:43*	*1*
Tetrachloro-m-xylene	*98*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:43*	*1*
DCB Decachlorobiphenyl	*99*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:43*	*1*
DCB Decachlorobiphenyl	*110*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:43*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:39	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:39	1
Barium	**67.4**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:39	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:39	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:39	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:39	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:39	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:39	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:39	1
Zinc	**8.33**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:39	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:39	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:39	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:39	1

Client Sample ID: SW-12 (DUP)

Lab Sample ID: 480-86256-4
Date Collected: 08/26/15 08:50
Matrix: Water
Date Received: 08/27/15 01:45

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	**2.71**	**J**	10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:39	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**104000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: PW-12

Lab Sample ID: 480-86256-5
Date Collected: 08/26/15 09:20
Matrix: Water
Date Received: 08/27/15 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,1,1-Trichloroethane	**498**		20.0	20.0	ug/L			08/27/15 14:57	20
1,1,2,2-Tetrachloroethane	<10.0		10.0	10.0	ug/L			08/27/15 14:57	20
1,1,2-Trichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Freon 113	**184**		20.0	20.0	ug/L			08/27/15 14:57	20
1,1-Dichloroethane	**447**		20.0	20.0	ug/L			08/27/15 14:57	20
1,1-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,1-Dichloropropene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,2,3-Trichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,2,3-Trichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,2,4-Trichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,2,4-Trimethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,2-Dibromo-3-Chloropropane	<100		100	100	ug/L			08/27/15 14:57	20
1,2-Dichlorobenzene	**36.7**		20.0	20.0	ug/L			08/27/15 14:57	20
1,2-Dichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,2-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,3,5-Trimethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,3-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,3-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,4-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
1,4-Dioxane	<1000		1000	1000	ug/L			08/27/15 14:57	20
2,2-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
2-Butanone (MEK)	<200	*	200	200	ug/L			08/27/15 14:57	20
2-Chlorotoluene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
2-Hexanone	<200		200	200	ug/L			08/27/15 14:57	20
4-Chlorotoluene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
4-Isopropyltoluene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
4-Methyl-2-pentanone (MIBK)	<200		200	200	ug/L			08/27/15 14:57	20
Acetone	<1000		1000	1000	ug/L			08/27/15 14:57	20
Benzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Bromobenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Bromoform	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Bromomethane	<40.0		40.0	40.0	ug/L			08/27/15 14:57	20
Carbon disulfide	<200		200	200	ug/L			08/27/15 14:57	20

Client Sample ID: PW-12

Date Collected: 08/26/15 09:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Chlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Chlorobromomethane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Chlorodibromomethane	<10.0		10.0	10.0	ug/L			08/27/15 14:57	20
Chloroethane	<40.0		40.0	40.0	ug/L			08/27/15 14:57	20
Chloroform	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Chloromethane	<40.0		40.0	40.0	ug/L			08/27/15 14:57	20
cis-1,2-Dichloroethene	**356**		20.0	20.0	ug/L			08/27/15 14:57	20
cis-1,3-Dichloropropene	<8.00		8.00	8.00	ug/L			08/27/15 14:57	20
Dichlorobromomethane	<10.0		10.0	10.0	ug/L			08/27/15 14:57	20
Dichlorodifluoromethane	**122**		20.0	20.0	ug/L			08/27/15 14:57	20
Ethyl ether	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Ethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Ethylene Dibromide	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Hexachlorobutadiene	<8.00		8.00	8.00	ug/L			08/27/15 14:57	20
Isopropyl ether	<200		200	200	ug/L			08/27/15 14:57	20
Isopropylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Methyl tert-butyl ether	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Methylene Chloride	**49.2**		20.0	20.0	ug/L			08/27/15 14:57	20
m-Xylene & p-Xylene	<40.0		40.0	40.0	ug/L			08/27/15 14:57	20
Naphthalene	<100		100	100	ug/L			08/27/15 14:57	20
n-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
N-Propylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
o-Xylene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
sec-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Styrene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Tert-amyl methyl ether	<100		100	100	ug/L			08/27/15 14:57	20
Tert-butyl ethyl ether	<100		100	100	ug/L			08/27/15 14:57	20
tert-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Tetrachloroethene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Tetrahydrofuran	<200	*	200	200	ug/L			08/27/15 14:57	20
Toluene	**29.2**		20.0	20.0	ug/L			08/27/15 14:57	20
trans-1,2-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
trans-1,3-Dichloropropene	<8.00		8.00	8.00	ug/L			08/27/15 14:57	20
Trichloroethene	**21.4**		20.0	20.0	ug/L			08/27/15 14:57	20
Trichlorofluoromethane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20
Vinyl chloride	**826**		20.0	20.0	ug/L			08/27/15 14:57	20
Dibromomethane	<20.0		20.0	20.0	ug/L			08/27/15 14:57	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/15 14:57*	*20*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/27/15 14:57*	*20*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/27/15 14:57*	*20*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.230	*	0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1221	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1232	**10.6**		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1242	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1

Client Sample ID: PW-12

Date Collected: 08/26/15 09:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-5

Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1254	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1260	<0.230	*	0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1262	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1
PCB-1268	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/28/15 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:58*	*1*
Tetrachloro-m-xylene	*86*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:58*	*1*
DCB Decachlorobiphenyl	*90*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:58*	*1*
DCB Decachlorobiphenyl	*99*		*30 - 150*	*08/28/15 09:22*	*08/28/15 21:58*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:41	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:41	1
Barium	**438**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:41	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:41	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:41	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:41	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:41	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:41	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:41	1
Zinc	<1.50		50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:41	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:41	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:41	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:41	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:41	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**476000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: PW-12 (DUP)

Date Collected: 08/26/15 09:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,1,1-Trichloroethane	**446**		20.0	20.0	ug/L			08/27/15 18:56	20
1,1,2,2-Tetrachloroethane	<10.0		10.0	10.0	ug/L			08/27/15 18:56	20
1,1,2-Trichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Freon 113	**158**		20.0	20.0	ug/L			08/27/15 18:56	20
1,1-Dichloroethane	**412**		20.0	20.0	ug/L			08/27/15 18:56	20
1,1-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,1-Dichloropropene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20

Client Sample ID: PW-12 (DUP)
Date Collected: 08/26/15 09:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,2,3-Trichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,2,4-Trichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,2,4-Trimethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,2-Dibromo-3-Chloropropane	<100		100	100	ug/L			08/27/15 18:56	20
1,2-Dichlorobenzene	**32.7**		20.0	20.0	ug/L			08/27/15 18:56	20
1,2-Dichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,2-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,3,5-Trimethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,3-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,3-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,4-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
1,4-Dioxane	<1000		1000	1000	ug/L			08/27/15 18:56	20
2,2-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
2-Butanone (MEK)	<200	*	200	200	ug/L			08/27/15 18:56	20
2-Chlorotoluene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
2-Hexanone	<200		200	200	ug/L			08/27/15 18:56	20
4-Chlorotoluene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
4-Isopropyltoluene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
4-Methyl-2-pentanone (MIBK)	<200		200	200	ug/L			08/27/15 18:56	20
Acetone	<1000		1000	1000	ug/L			08/27/15 18:56	20
Benzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Bromobenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Bromoform	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Bromomethane	<40.0		40.0	40.0	ug/L			08/27/15 18:56	20
Carbon disulfide	<200		200	200	ug/L			08/27/15 18:56	20
Carbon tetrachloride	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Chlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Chlorobromomethane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Chlorodibromomethane	<10.0		10.0	10.0	ug/L			08/27/15 18:56	20
Chloroethane	<40.0		40.0	40.0	ug/L			08/27/15 18:56	20
Chloroform	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Chloromethane	<40.0		40.0	40.0	ug/L			08/27/15 18:56	20
cis-1,2-Dichloroethene	**316**		20.0	20.0	ug/L			08/27/15 18:56	20
cis-1,3-Dichloropropene	<8.00		8.00	8.00	ug/L			08/27/15 18:56	20
Dichlorobromomethane	<10.0		10.0	10.0	ug/L			08/27/15 18:56	20
Dichlorodifluoromethane	**113**		20.0	20.0	ug/L			08/27/15 18:56	20
Ethyl ether	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Ethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Ethylene Dibromide	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Hexachlorobutadiene	<8.00		8.00	8.00	ug/L			08/27/15 18:56	20
Isopropyl ether	<200		200	200	ug/L			08/27/15 18:56	20
Isopropylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Methyl tert-butyl ether	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Methylene Chloride	**61.9**		20.0	20.0	ug/L			08/27/15 18:56	20
m-Xylene & p-Xylene	<40.0		40.0	40.0	ug/L			08/27/15 18:56	20
Naphthalene	<100		100	100	ug/L			08/27/15 18:56	20
n-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
N-Propylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20

Client Sample ID: PW-12 (DUP)

Date Collected: 08/26/15 09:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
sec-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Styrene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Tert-amyl methyl ether	<100		100	100	ug/L			08/27/15 18:56	20
Tert-butyl ethyl ether	<100		100	100	ug/L			08/27/15 18:56	20
tert-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Tetrachloroethene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Tetrahydrofuran	<200	*	200	200	ug/L			08/27/15 18:56	20
Toluene	**23.4**		20.0	20.0	ug/L			08/27/15 18:56	20
trans-1,2-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
trans-1,3-Dichloropropene	<8.00		8.00	8.00	ug/L			08/27/15 18:56	20
Trichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Trichlorofluoromethane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20
Vinyl chloride	**726**		20.0	20.0	ug/L			08/27/15 18:56	20
Dibromomethane	<20.0		20.0	20.0	ug/L			08/27/15 18:56	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/27/15 18:56*	*20*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/27/15 18:56*	*20*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/27/15 18:56*	*20*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.237	*	0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1221	<0.237		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1232	**6.68**		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1242	<0.237		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1248	<0.237		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1254	<0.237		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1260	<0.237	*	0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1262	<0.237		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1
PCB-1268	<0.237		0.237	0.237	ug/L		08/28/15 09:22	08/28/15 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:14*	*1*
Tetrachloro-m-xylene	*77*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:14*	*1*
DCB Decachlorobiphenyl	*78*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:14*	*1*
DCB Decachlorobiphenyl	*84*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:14*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:44	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:44	1
Barium	**454**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:44	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:44	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:44	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:44	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:44	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:44	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:44	1

Client Sample ID: PW-12 (DUP)

Lab Sample ID: 480-86256-6

Date Collected: 08/26/15 09:20
Matrix: Water
Date Received: 08/27/15 01:45

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	**1.85**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:44	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:44	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:44	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:44	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:44	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**484000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: SW-13

Lab Sample ID: 480-86256-7

Date Collected: 08/26/15 10:00
Matrix: Water
Date Received: 08/27/15 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 15:21	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 15:21	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 15:21	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 15:21	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 15:21	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 15:21	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 15:21	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1

Client Sample ID: SW-13
Date Collected: 08/26/15 10:00
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 15:21	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 15:21	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 15:21	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 15:21	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 15:21	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 15:21	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 15:21	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 15:21	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 15:21	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 15:21	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 15:21	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 15:21	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 15:21	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 15:21	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 15:21	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/15 15:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/27/15 15:21*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/27/15 15:21*	*1*

Client Sample ID: SW-13

Date Collected: 08/26/15 10:00
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-7
Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.233	*	0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1221	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1232	**1.26**		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1242	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1248	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1254	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1260	<0.233	*	0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1262	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1
PCB-1268	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:30*	*1*
Tetrachloro-m-xylene	*87*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:30*	*1*
DCB Decachlorobiphenyl	*92*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:30*	*1*
DCB Decachlorobiphenyl	*101*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:30*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:48	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:48	1
Barium	**79.7**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:48	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:48	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:48	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:48	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:48	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:48	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:48	1
Zinc	**9.32**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:48	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:48	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:48	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:48	1
Copper	**1.78**	**J**	10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**100000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: PW-13

Date Collected: 08/26/15 10:25
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/28/15 11:31	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1

Client Sample ID: PW-13
Date Collected: 08/26/15 10:25
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,1-Dichloroethane	**3.28**		1.00	1.00	ug/L			08/28/15 11:31	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/28/15 11:31	1
1,2-Dichlorobenzene	**5.16**		1.00	1.00	ug/L			08/28/15 11:31	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/28/15 11:31	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/28/15 11:31	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/28/15 11:31	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/28/15 11:31	1
Acetone	<50.0		50.0	50.0	ug/L			08/28/15 11:31	1
Benzene	**1.08**		1.00	1.00	ug/L			08/28/15 11:31	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Bromoform	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/28/15 11:31	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/28/15 11:31	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Chlorobenzene	**3.60**		1.00	1.00	ug/L			08/28/15 11:31	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/28/15 11:31	1
Chloroethane	**5.32**		2.00	2.00	ug/L			08/28/15 11:31	1
Chloroform	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/28/15 11:31	1
cis-1,2-Dichloroethene	**1.62**		1.00	1.00	ug/L			08/28/15 11:31	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/28/15 11:31	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/28/15 11:31	1
Dichlorodifluoromethane	<1.00	*	1.00	1.00	ug/L			08/28/15 11:31	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/28/15 11:31	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/28/15 11:31	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1

Client Sample ID: PW-13

Date Collected: 08/26/15 10:25
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/28/15 11:31	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/28/15 11:31	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Styrene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/28/15 11:31	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/28/15 11:31	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/28/15 11:31	1
Toluene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/28/15 11:31	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1
Vinyl chloride	**1.93**		1.00	1.00	ug/L			08/28/15 11:31	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/28/15 11:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/28/15 11:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/28/15 11:31*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/28/15 11:31*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.240	*	0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1221	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1242	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1248	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1254	**0.344**		0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1260	<0.240	*	0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1262	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1
PCB-1268	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/28/15 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:34*	*1*
Tetrachloro-m-xylene	*90*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:34*	*1*
DCB Decachlorobiphenyl	*95*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:34*	*1*
DCB Decachlorobiphenyl	*104*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:34*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	**71.5**		2.40	2.40	ug/L		08/28/15 09:22	08/28/15 22:46	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:46*	*10*
Tetrachloro-m-xylene	*105*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:46*	*10*
DCB Decachlorobiphenyl	*118*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:46*	*10*
DCB Decachlorobiphenyl	*118*		*30 - 150*	*08/28/15 09:22*	*08/28/15 22:46*	*10*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:50	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:50	1
Barium	**508**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:50	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:50	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:50	1
Chromium	**1.98**	**J**	5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:50	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:50	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:50	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:50	1
Zinc	<1.50		50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:50	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:50	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:50	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:50	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:50	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**532000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: SW-14

Lab Sample ID: 480-86256-9

Date Collected: 08/26/15 11:10

Matrix: Water

Date Received: 08/27/15 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 16:09	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 16:09	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 16:09	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 16:09	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 16:09	1

Client Sample ID: SW-14
Date Collected: 08/26/15 11:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 16:09	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 16:09	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 16:09	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 16:09	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 16:09	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 16:09	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 16:09	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 16:09	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 16:09	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 16:09	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 16:09	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 16:09	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 16:09	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 16:09	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 16:09	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 16:09	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 16:09	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/27/15 16:09*	*1*

Client Sample ID: SW-14
Date Collected: 08/26/15 11:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/27/15 16:09*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/27/15 16:09*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.233	*	0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1221	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1232	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1242	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1248	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1254	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1260	<0.233	*	0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1262	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1
PCB-1268	<0.233		0.233	0.233	ug/L		08/28/15 09:22	08/28/15 23:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*87*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:50*	*1*
Tetrachloro-m-xylene	*97*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:50*	*1*
DCB Decachlorobiphenyl	*59*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:50*	*1*
DCB Decachlorobiphenyl	*64*		*30 - 150*	*08/28/15 09:22*	*08/28/15 23:50*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:54	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:54	1
Barium	**63.6**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:54	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:54	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:54	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:54	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:54	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:54	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:54	1
Zinc	**9.21**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:54	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:54	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:54	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:54	1
Copper	**2.05**	**J**	10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**88000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: PW-14
Date Collected: 08/26/15 11:40
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,1,1-Trichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,1,2,2-Tetrachloroethane	<2.00		2.00	2.00	ug/L			08/28/15 11:55	4
1,1,2-Trichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Freon 113	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,1-Dichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,1-Dichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,1-Dichloropropene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2,3-Trichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2,3-Trichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2,4-Trichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2,4-Trimethylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2-Dibromo-3-Chloropropane	<20.0		20.0	20.0	ug/L			08/28/15 11:55	4
1,2-Dichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2-Dichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,2-Dichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,3,5-Trimethylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,3-Dichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,3-Dichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,4-Dichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
1,4-Dioxane	<200		200	200	ug/L			08/28/15 11:55	4
2,2-Dichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
2-Butanone (MEK)	<40.0	*	40.0	40.0	ug/L			08/28/15 11:55	4
2-Chlorotoluene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
2-Hexanone	<40.0		40.0	40.0	ug/L			08/28/15 11:55	4
4-Chlorotoluene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
4-Isopropyltoluene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
4-Methyl-2-pentanone (MIBK)	<40.0		40.0	40.0	ug/L			08/28/15 11:55	4
Acetone	<200		200	200	ug/L			08/28/15 11:55	4
Benzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Bromobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Bromoform	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Bromomethane	<8.00		8.00	8.00	ug/L			08/28/15 11:55	4
Carbon disulfide	<40.0		40.0	40.0	ug/L			08/28/15 11:55	4
Carbon tetrachloride	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Chlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Chlorobromomethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Chlorodibromomethane	<2.00		2.00	2.00	ug/L			08/28/15 11:55	4
Chloroethane	**12.1**		8.00	8.00	ug/L			08/28/15 11:55	4
Chloroform	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Chloromethane	<8.00		8.00	8.00	ug/L			08/28/15 11:55	4
cis-1,2-Dichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
cis-1,3-Dichloropropene	<1.60		1.60	1.60	ug/L			08/28/15 11:55	4
Dichlorobromomethane	<2.00		2.00	2.00	ug/L			08/28/15 11:55	4
Dichlorodifluoromethane	<4.00	*	4.00	4.00	ug/L			08/28/15 11:55	4
Ethyl ether	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Ethylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Ethylene Dibromide	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Hexachlorobutadiene	<1.60		1.60	1.60	ug/L			08/28/15 11:55	4

Client Sample ID: PW-14
Date Collected: 08/26/15 11:40
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<40.0		40.0	40.0	ug/L			08/28/15 11:55	4
Isopropylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Methyl tert-butyl ether	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Methylene Chloride	**7.67**		4.00	4.00	ug/L			08/28/15 11:55	4
m-Xylene & p-Xylene	<8.00		8.00	8.00	ug/L			08/28/15 11:55	4
Naphthalene	<20.0		20.0	20.0	ug/L			08/28/15 11:55	4
n-Butylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
N-Propylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
o-Xylene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
sec-Butylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Styrene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Tert-amyl methyl ether	<20.0		20.0	20.0	ug/L			08/28/15 11:55	4
Tert-butyl ethyl ether	<20.0		20.0	20.0	ug/L			08/28/15 11:55	4
tert-Butylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Tetrachloroethene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Tetrahydrofuran	<40.0	*	40.0	40.0	ug/L			08/28/15 11:55	4
Toluene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
trans-1,2-Dichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
trans-1,3-Dichloropropene	<1.60		1.60	1.60	ug/L			08/28/15 11:55	4
Trichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Trichlorofluoromethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Vinyl chloride	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4
Dibromomethane	<4.00		4.00	4.00	ug/L			08/28/15 11:55	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/28/15 11:55*	*4*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/28/15 11:55*	*4*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/28/15 11:55*	*4*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.240	*	0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1221	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1242	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1248	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1254	**0.242**		0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1260	<0.240	*	0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1262	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1
PCB-1268	<0.240		0.240	0.240	ug/L		08/28/15 09:22	08/29/15 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:06*	*1*
Tetrachloro-m-xylene	*90*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:06*	*1*
DCB Decachlorobiphenyl	*44*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:06*	*1*
DCB Decachlorobiphenyl	*51*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:06*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	**26.7**		1.20	1.20	ug/L		08/28/15 09:22	08/29/15 00:21	5

Client Sample ID: PW-14

Date Collected: 08/26/15 11:40
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-10

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:21*	*5*
Tetrachloro-m-xylene	*92*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:21*	*5*
DCB Decachlorobiphenyl	*53*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:21*	*5*
DCB Decachlorobiphenyl	*52*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:21*	*5*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:56	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:56	1
Barium	**269**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:56	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:56	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:56	1
Chromium	**6.35**		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:56	1
Nickel	**3.22**	**J**	10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:56	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:56	1
Vanadium	**2.72**	**J**	10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:56	1
Zinc	**1.66**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:56	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:56	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:56	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:56	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:56	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**410000**		10000	2630	ug/L			08/28/15 12:15	1

Client Sample ID: SW-15

Date Collected: 08/26/15 12:40
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 16:57	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 16:57	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1

Client Sample ID: SW-15
Date Collected: 08/26/15 12:40
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 16:57	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 16:57	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 16:57	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 16:57	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 16:57	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 16:57	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 16:57	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 16:57	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 16:57	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 16:57	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 16:57	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 16:57	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 16:57	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 16:57	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 16:57	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 16:57	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 16:57	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 16:57	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1

Client Sample ID: SW-15

Date Collected: 08/26/15 12:40
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 16:57	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 16:57	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/27/15 16:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/27/15 16:57*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/27/15 16:57*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.232	*	0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1221	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1232	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1242	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1248	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1254	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1260	<0.232	*	0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1262	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1
PCB-1268	<0.232		0.232	0.232	ug/L		08/28/15 09:22	08/29/15 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*87*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:37*	*1*
Tetrachloro-m-xylene	*99*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:37*	*1*
DCB Decachlorobiphenyl	*61*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:37*	*1*
DCB Decachlorobiphenyl	*66*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:37*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:59	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:59	1
Barium	**66.3**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:59	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:59	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:59	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:59	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:59	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:59	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:59	1
Zinc	**5.66**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:59	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:59	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:59	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:59	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:59	1

Client Sample ID: SW-15

Lab Sample ID: 480-86256-11

Date Collected: 08/26/15 12:40

Matrix: Water

Date Received: 08/27/15 01:45

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	92000		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: PW-15

Lab Sample ID: 480-86256-12

Date Collected: 08/26/15 13:10

Matrix: Water

Date Received: 08/27/15 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,1,1-Trichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,1,2,2-Tetrachloroethane	<10.0		10.0	10.0	ug/L			08/27/15 17:21	20
1,1,2-Trichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Freon 113	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,1-Dichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,1-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,1-Dichloropropene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2,3-Trichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2,3-Trichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2,4-Trichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2,4-Trimethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2-Dibromo-3-Chloropropane	<100		100	100	ug/L			08/27/15 17:21	20
1,2-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2-Dichloroethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,2-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,3,5-Trimethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,3-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,3-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,4-Dichlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
1,4-Dioxane	<1000		1000	1000	ug/L			08/27/15 17:21	20
2,2-Dichloropropane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
2-Butanone (MEK)	<200	*	200	200	ug/L			08/27/15 17:21	20
2-Chlorotoluene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
2-Hexanone	<200		200	200	ug/L			08/27/15 17:21	20
4-Chlorotoluene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
4-Isopropyltoluene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
4-Methyl-2-pentanone (MIBK)	<200		200	200	ug/L			08/27/15 17:21	20
Acetone	<1000		1000	1000	ug/L			08/27/15 17:21	20
Benzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Bromobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Bromoform	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Bromomethane	<40.0		40.0	40.0	ug/L			08/27/15 17:21	20
Carbon disulfide	<200		200	200	ug/L			08/27/15 17:21	20
Carbon tetrachloride	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Chlorobenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Chlorobromomethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Chlorodibromomethane	<10.0		10.0	10.0	ug/L			08/27/15 17:21	20

Client Sample ID: PW-15
Date Collected: 08/26/15 13:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	**1800**		40.0	40.0	ug/L			08/27/15 17:21	20
Chloroform	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Chloromethane	<40.0		40.0	40.0	ug/L			08/27/15 17:21	20
cis-1,2-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
cis-1,3-Dichloropropene	<8.00		8.00	8.00	ug/L			08/27/15 17:21	20
Dichlorobromomethane	<10.0		10.0	10.0	ug/L			08/27/15 17:21	20
Dichlorodifluoromethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Ethyl ether	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Ethylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Ethylene Dibromide	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Hexachlorobutadiene	<8.00		8.00	8.00	ug/L			08/27/15 17:21	20
Isopropyl ether	<200		200	200	ug/L			08/27/15 17:21	20
Isopropylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Methyl tert-butyl ether	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Methylene Chloride	**76.8**		20.0	20.0	ug/L			08/27/15 17:21	20
m-Xylene & p-Xylene	<40.0		40.0	40.0	ug/L			08/27/15 17:21	20
Naphthalene	<100		100	100	ug/L			08/27/15 17:21	20
n-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
N-Propylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
o-Xylene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
sec-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Styrene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Tert-amyl methyl ether	<100		100	100	ug/L			08/27/15 17:21	20
Tert-butyl ethyl ether	<100		100	100	ug/L			08/27/15 17:21	20
tert-Butylbenzene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Tetrachloroethene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Tetrahydrofuran	<200	*	200	200	ug/L			08/27/15 17:21	20
Toluene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
trans-1,2-Dichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
trans-1,3-Dichloropropene	<8.00		8.00	8.00	ug/L			08/27/15 17:21	20
Trichloroethene	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Trichlorofluoromethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Vinyl chloride	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20
Dibromomethane	<20.0		20.0	20.0	ug/L			08/27/15 17:21	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/15 17:21*	*20*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/27/15 17:21*	*20*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/27/15 17:21*	*20*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.234	*	0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1221	<0.234		0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1242	<0.234		0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1248	<0.234		0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1254	**0.480**		0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1260	<0.234	*	0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1262	<0.234		0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1
PCB-1268	<0.234		0.234	0.234	ug/L		08/28/15 09:22	08/29/15 00:53	1

Client Sample ID: PW-15

Date Collected: 08/26/15 13:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-12
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:53*	*1*
Tetrachloro-m-xylene	*91*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:53*	*1*
DCB Decachlorobiphenyl	*38*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:53*	*1*
DCB Decachlorobiphenyl	*41*		*30 - 150*	*08/28/15 09:22*	*08/29/15 00:53*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	**116**		4.68	4.68	ug/L		08/28/15 09:22	08/31/15 11:20	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*117*		*30 - 150*	*08/28/15 09:22*	*08/31/15 11:20*	*20*
Tetrachloro-m-xylene	*139*		*30 - 150*	*08/28/15 09:22*	*08/31/15 11:20*	*20*
DCB Decachlorobiphenyl	*63*		*30 - 150*	*08/28/15 09:22*	*08/31/15 11:20*	*20*
DCB Decachlorobiphenyl	*63*		*30 - 150*	*08/28/15 09:22*	*08/31/15 11:20*	*20*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 20:02	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 20:02	1
Barium	**232**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 20:02	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 20:02	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 20:02	1
Chromium	**5.17**		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 20:02	1
Nickel	**6.74**	**J**	10.0	1.26	ug/L		08/28/15 07:30	08/28/15 20:02	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 20:02	1
Vanadium	**4.29**	**J**	10.0	1.50	ug/L		08/28/15 07:30	08/28/15 20:02	1
Zinc	**2.12**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 20:02	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 20:02	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 20:02	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 20:02	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 20:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**390000**		10000	2630	ug/L			08/28/15 12:15	1

Client Sample ID: SW-16

Date Collected: 08/26/15 13:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-13
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 17:45	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1

Client Sample ID: SW-16
Date Collected: 08/26/15 13:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-13
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 17:45	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 17:45	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/27/15 17:45	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 17:45	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 17:45	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 17:45	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 17:45	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 17:45	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 17:45	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 17:45	1
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 17:45	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 17:45	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 17:45	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 17:45	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 17:45	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 17:45	1

Client Sample ID: SW-16

Date Collected: 08/26/15 13:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-13

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 17:45	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 17:45	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 17:45	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Tetrahydrofuran	<10.0	*	10.0	10.0	ug/L			08/27/15 17:45	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 17:45	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/27/15 17:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/27/15 17:45*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/27/15 17:45*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.230	*	0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1221	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1232	**0.469**		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1242	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1248	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1254	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1260	<0.230	*	0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1262	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1
PCB-1268	<0.230		0.230	0.230	ug/L		08/28/15 09:22	08/29/15 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:25*	*1*
Tetrachloro-m-xylene	*87*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:25*	*1*
DCB Decachlorobiphenyl	*51*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:25*	*1*
DCB Decachlorobiphenyl	*55*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:25*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 19:11	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 19:11	1
Barium	**64.8**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 19:11	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 19:11	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 19:11	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 19:11	1

Client Sample ID: SW-16

Lab Sample ID: 480-86256-13

Date Collected: 08/26/15 13:50

Matrix: Water

Date Received: 08/27/15 01:45

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 19:11	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 19:11	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 19:11	1
Zinc	**3.56**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 19:11	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 19:11	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 19:11	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 19:11	1
Copper	**2.30**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 19:11	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 18:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**84000**		4000	1050	ug/L			08/28/15 12:15	1

Client Sample ID: PW-16

Lab Sample ID: 480-86256-14

Date Collected: 08/26/15 14:20

Matrix: Water

Date Received: 08/27/15 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,1,1-Trichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,1,2,2-Tetrachloroethane	<2.00		2.00	2.00	ug/L			08/28/15 12:19	4
1,1,2-Trichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Freon 113	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,1-Dichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,1-Dichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,1-Dichloropropene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2,3-Trichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2,3-Trichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2,4-Trichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2,4-Trimethylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2-Dibromo-3-Chloropropane	<20.0		20.0	20.0	ug/L			08/28/15 12:19	4
1,2-Dichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2-Dichloroethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,2-Dichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,3,5-Trimethylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,3-Dichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,3-Dichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,4-Dichlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
1,4-Dioxane	<200		200	200	ug/L			08/28/15 12:19	4
2,2-Dichloropropane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
2-Butanone (MEK)	<40.0	*	40.0	40.0	ug/L			08/28/15 12:19	4
2-Chlorotoluene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
2-Hexanone	<40.0		40.0	40.0	ug/L			08/28/15 12:19	4
4-Chlorotoluene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
4-Isopropyltoluene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4

Client Sample ID: PW-16
Date Collected: 08/26/15 14:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-14
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	<40.0		40.0	40.0	ug/L			08/28/15 12:19	4
Acetone	<200		200	200	ug/L			08/28/15 12:19	4
Benzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Bromobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Bromoform	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Bromomethane	<8.00		8.00	8.00	ug/L			08/28/15 12:19	4
Carbon disulfide	<40.0		40.0	40.0	ug/L			08/28/15 12:19	4
Carbon tetrachloride	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Chlorobenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Chlorobromomethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Chlorodibromomethane	<2.00		2.00	2.00	ug/L			08/28/15 12:19	4
Chloroethane	**12.2**		8.00	8.00	ug/L			08/28/15 12:19	4
Chloroform	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Chloromethane	<8.00		8.00	8.00	ug/L			08/28/15 12:19	4
cis-1,2-Dichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
cis-1,3-Dichloropropene	<1.60		1.60	1.60	ug/L			08/28/15 12:19	4
Dichlorobromomethane	<2.00		2.00	2.00	ug/L			08/28/15 12:19	4
Dichlorodifluoromethane	<4.00	*	4.00	4.00	ug/L			08/28/15 12:19	4
Ethyl ether	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Ethylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Ethylene Dibromide	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Hexachlorobutadiene	<1.60		1.60	1.60	ug/L			08/28/15 12:19	4
Isopropyl ether	<40.0		40.0	40.0	ug/L			08/28/15 12:19	4
Isopropylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Methyl tert-butyl ether	**4.71**		4.00	4.00	ug/L			08/28/15 12:19	4
Methylene Chloride	**9.25**		4.00	4.00	ug/L			08/28/15 12:19	4
m-Xylene & p-Xylene	<8.00		8.00	8.00	ug/L			08/28/15 12:19	4
Naphthalene	<20.0		20.0	20.0	ug/L			08/28/15 12:19	4
n-Butylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
N-Propylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
o-Xylene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
sec-Butylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Styrene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Tert-amyl methyl ether	<20.0		20.0	20.0	ug/L			08/28/15 12:19	4
Tert-butyl ethyl ether	<20.0		20.0	20.0	ug/L			08/28/15 12:19	4
tert-Butylbenzene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Tetrachloroethene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Tetrahydrofuran	<40.0	*	40.0	40.0	ug/L			08/28/15 12:19	4
Toluene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
trans-1,2-Dichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
trans-1,3-Dichloropropene	<1.60		1.60	1.60	ug/L			08/28/15 12:19	4
Trichloroethene	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Trichlorofluoromethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Vinyl chloride	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4
Dibromomethane	<4.00		4.00	4.00	ug/L			08/28/15 12:19	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/28/15 12:19*	*4*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/28/15 12:19*	*4*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/28/15 12:19*	*4*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.277	*	0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1221	<0.277		0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1242	<0.277		0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1248	<0.277		0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1254	**0.745**		0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1260	<0.277	*	0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1262	<0.277		0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1
PCB-1268	<0.277		0.277	0.277	ug/L		08/28/15 09:22	08/29/15 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:41*	*1*
Tetrachloro-m-xylene	*86*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:41*	*1*
DCB Decachlorobiphenyl	*57*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:41*	*1*
DCB Decachlorobiphenyl	*67*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:41*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) - DL

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	**43.0**		2.77	2.77	ug/L		08/28/15 09:22	08/29/15 01:57	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:57*	*10*
Tetrachloro-m-xylene	*93*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:57*	*10*
DCB Decachlorobiphenyl	*71*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:57*	*10*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*08/28/15 09:22*	*08/29/15 01:57*	*10*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 20:14	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 20:14	1
Barium	**169**		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 20:14	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 20:14	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 20:14	1
Chromium	**3.55**	**J**	5.00	1.00	ug/L		08/28/15 07:30	08/28/15 20:14	1
Nickel	**2.71**	**J**	10.0	1.26	ug/L		08/28/15 07:30	08/28/15 20:14	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 20:14	1
Vanadium	**2.41**	**J**	10.0	1.50	ug/L		08/28/15 07:30	08/28/15 20:14	1
Zinc	**3.15**	**J**	50.0	1.50	ug/L		08/28/15 07:30	08/28/15 20:14	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 20:14	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 20:14	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 20:14	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 20:14	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.147**	**J**	0.200	0.120	ug/L		08/27/15 09:50	08/27/15 18:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**540000**		10000	2630	ug/L			08/28/15 12:15	1

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: PW-15 filtered
Date Collected: 08/26/15 13:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-15
Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.248	*	0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1221	<0.248		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1232	**0.742**		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1242	<0.248		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1248	<0.248		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1254	<0.248		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1260	<0.248	*	0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1262	<0.248		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1
PCB-1268	<0.248		0.248	0.248	ug/L		08/28/15 09:22	08/29/15 02:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*30 - 150*	*08/28/15 09:22*	*08/29/15 02:44*	*1*
Tetrachloro-m-xylene	*92*		*30 - 150*	*08/28/15 09:22*	*08/29/15 02:44*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/28/15 09:22*	*08/29/15 02:44*	*1*
DCB Decachlorobiphenyl	*73*		*30 - 150*	*08/28/15 09:22*	*08/29/15 02:44*	*1*

Surrogate Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TOL	12DCE	BFB	12DCE	BFB	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)	(70-130)	(70-130)
480-86189-4	SED-10	106	94	73	94	73	73
480-86189-5	TB-01	97	107	97	107	97	97
LCS 480-260778/1-A	Lab Control Sample	99	113	103	113	103	103
LCS 480-260980/1-A	Lab Control Sample	102	110	103	110	103	103
LCSD 480-260778/2-A	Lab Control Sample Dup	98	112	101	112	101	101
LCSD 480-260980/14-A	Lab Control Sample Dup	102	110	102	110	102	102
MB 480-260778/3-A	Method Blank	99	104	99	104	99	99
MB 480-260980/15-A	Method Blank	101	101	98	101	98	98

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
480-86189-1	TB-01	96	101	93
480-86189-2	SW-10	97	103	94
480-86189-3	PW-10	97	101	95
480-86256-1	TB-02	95	104	93
480-86256-2	SW-11	97	101	94
480-86256-3	SW-12	96	102	96
480-86256-4	SW-12 (DUP)	97	100	96
480-86256-5	PW-12	97	102	96
480-86256-6	PW-12 (DUP)	95	100	94
480-86256-7	SW-13	97	104	97
480-86256-8	PW-13	95	99	95
480-86256-9	SW-14	95	100	95
480-86256-10	PW-14	95	96	95
480-86256-11	SW-15	94	101	93
480-86256-12	PW-15	97	99	94
480-86256-13	SW-16	94	101	93
480-86256-14	PW-16	96	98	95
LCS 480-260445/4	Lab Control Sample	95	100	96
LCS 480-260681/5	Lab Control Sample	96	97	97
LCS 480-260899/5	Lab Control Sample	96	92	95
LCSD 480-260445/5	Lab Control Sample Dup	96	95	97
LCSD 480-260681/6	Lab Control Sample Dup	96	97	98
LCSD 480-260899/6	Lab Control Sample Dup	96	94	98
MB 480-260445/7	Method Blank	98	101	94
MB 480-260681/8	Method Blank	95	98	95
MB 480-260899/8	Method Blank	97	94	95

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
480-86189-4	SED-10	47	50	19 p X	35
LCS 240-195244/23-A	Lab Control Sample	77	71	88	84
LCSD 240-195244/24-A	Lab Control Sample Dup	82	78	88	86
MB 240-195244/22-A	Method Blank	83	80	89	89

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
480-86189-2	SW-10	83	97	60	68
480-86189-3	PW-10	84	101	54	61
480-86256-2	SW-11	83	95	92	102
480-86256-3	SW-12	84	97	96	106
480-86256-4	SW-12 (DUP)	86	98	99	110
480-86256-5	PW-12	76	86	90	99
480-86256-6	PW-12 (DUP)	68	77	78	84
480-86256-7	SW-13	82	87	92	101
480-86256-8 - DL	PW-13	82	105	118	118
480-86256-8	PW-13	61	90	95	104
480-86256-9	SW-14	87	97	59	64
480-86256-10	PW-14	71	90	44	51
480-86256-10 - DL	PW-14	78	92	53	52
480-86256-11	SW-15	87	99	61	66
480-86256-12	PW-15	78	91	38	41
480-86256-12 - DL	PW-15	117	139	63	63
480-86256-13	SW-16	79	87	51	55
480-86256-14	PW-16	66	86	57	67
480-86256-14 - DL	PW-16	78	93	71	77
480-86256-15	PW-15 filtered	90	92	68	73
LCS 480-260937/2-A	Lab Control Sample	85	95	84	91
LCS 480-261294/2-A	Lab Control Sample	89	99	50	57
LCSD 480-260937/3-A	Lab Control Sample Dup	69	78	66	72
LCSD 480-261294/3-A	Lab Control Sample Dup	89	102	50	57
MB 480-260937/1-A	Method Blank	83	97	89	98
MB 480-261294/1-A	Method Blank	83	100	60	70

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-260445/7
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/26/15 10:45	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Freon 113	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/26/15 10:45	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/26/15 10:45	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
2-Butanone (MEK)	<10.0		10.0	10.0	ug/L			08/26/15 10:45	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/26/15 10:45	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/26/15 10:45	1
Acetone	<50.0		50.0	50.0	ug/L			08/26/15 10:45	1
Benzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Bromoform	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/26/15 10:45	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/26/15 10:45	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/26/15 10:45	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/26/15 10:45	1
Chloroform	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/26/15 10:45	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 10:45	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/26/15 10:45	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260445/7
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/26/15 10:45	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/26/15 10:45	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/26/15 10:45	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/26/15 10:45	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Styrene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/26/15 10:45	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/26/15 10:45	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/26/15 10:45	1
Toluene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/26/15 10:45	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/26/15 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/26/15 10:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/26/15 10:45*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/26/15 10:45*	*1*

Lab Sample ID: LCS 480-260445/4
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.10		ug/L		100	70 - 130
1,1,1-Trichloroethane	25.0	25.78		ug/L		103	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.15		ug/L		105	70 - 130
1,1,2-Trichloroethane	25.0	25.29		ug/L		101	70 - 130
Freon 113	25.0	26.61		ug/L		106	70 - 130
1,1-Dichloroethane	25.0	27.79		ug/L		111	70 - 130
1,1-Dichloroethene	25.0	26.16		ug/L		105	70 - 130
1,1-Dichloropropene	25.0	27.00		ug/L		108	70 - 130
1,2,3-Trichlorobenzene	25.0	25.17		ug/L		101	70 - 130
1,2,3-Trichloropropane	25.0	26.17		ug/L		105	70 - 130
1,2,4-Trichlorobenzene	25.0	25.47		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	25.0	26.50		ug/L		106	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	24.73		ug/L		99	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260445/4
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	25.0	26.06		ug/L		104	70 - 130
1,2-Dichloroethane	25.0	25.98		ug/L		104	70 - 130
1,2-Dichloropropane	25.0	27.26		ug/L		109	70 - 130
1,3,5-Trimethylbenzene	25.0	26.67		ug/L		107	70 - 130
1,3-Dichlorobenzene	25.0	26.50		ug/L		106	70 - 130
1,3-Dichloropropane	25.0	26.17		ug/L		105	70 - 130
1,4-Dichlorobenzene	25.0	26.17		ug/L		105	70 - 130
1,4-Dioxane	500	538.7		ug/L		108	70 - 130
2,2-Dichloropropane	25.0	25.74		ug/L		103	70 - 130
2-Butanone (MEK)	125	260.4	*	ug/L		208	70 - 130
2-Chlorotoluene	25.0	26.44		ug/L		106	70 - 130
2-Hexanone	125	135.3		ug/L		108	70 - 130
4-Chlorotoluene	25.0	26.89		ug/L		108	70 - 130
4-Isopropyltoluene	25.0	27.06		ug/L		108	70 - 130
4-Methyl-2-pentanone (MIBK)	125	135.4		ug/L		108	70 - 130
Acetone	125	145.8		ug/L		117	70 - 130
Benzene	25.0	26.40		ug/L		106	70 - 130
Bromobenzene	25.0	26.44		ug/L		106	70 - 130
Bromoform	25.0	23.55		ug/L		94	70 - 130
Bromomethane	25.0	23.78		ug/L		95	70 - 130
Carbon disulfide	25.0	26.96		ug/L		108	70 - 130
Carbon tetrachloride	25.0	25.70		ug/L		103	70 - 130
Chlorobenzene	25.0	26.30		ug/L		105	70 - 130
Chlorobromomethane	25.0	25.22		ug/L		101	70 - 130
Chlorodibromomethane	25.0	25.20		ug/L		101	70 - 130
Chloroethane	25.0	25.71		ug/L		103	70 - 130
Chloroform	25.0	25.80		ug/L		103	70 - 130
Chloromethane	25.0	28.09		ug/L		112	70 - 130
cis-1,2-Dichloroethene	25.0	25.96		ug/L		104	70 - 130
cis-1,3-Dichloropropene	25.0	25.97		ug/L		104	70 - 130
Dichlorobromomethane	25.0	25.46		ug/L		102	70 - 130
Dichlorodifluoromethane	25.0	25.56		ug/L		102	70 - 130
Ethyl ether	25.0	26.68		ug/L		107	70 - 130
Ethylbenzene	25.0	26.64		ug/L		107	70 - 130
Ethylene Dibromide	25.0	25.67		ug/L		103	70 - 130
Hexachlorobutadiene	25.0	26.69		ug/L		107	70 - 130
Isopropyl ether	25.0	26.10		ug/L		104	70 - 130
Isopropylbenzene	25.0	26.47		ug/L		106	70 - 130
Methyl tert-butyl ether	25.0	25.23		ug/L		101	70 - 130
Methylene Chloride	25.0	25.67		ug/L		103	70 - 130
m-Xylene & p-Xylene	25.0	25.27		ug/L		101	70 - 130
Naphthalene	25.0	25.47		ug/L		102	70 - 130
n-Butylbenzene	25.0	27.37		ug/L		109	70 - 130
N-Propylbenzene	25.0	26.80		ug/L		107	70 - 130
o-Xylene	25.0	25.13		ug/L		101	70 - 130
sec-Butylbenzene	25.0	27.02		ug/L		108	70 - 130
Styrene	25.0	26.02		ug/L		104	70 - 130
Tert-amyl methyl ether	25.0	23.96		ug/L		96	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260445/4
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tert-butyl ethyl ether	25.0	24.52		ug/L		98	70 - 130
tert-Butylbenzene	25.0	26.60		ug/L		106	70 - 130
Tetrachloroethene	25.0	26.35		ug/L		105	70 - 130
Tetrahydrofuran	50.0	73.26	*	ug/L		147	70 - 130
Toluene	25.0	26.25		ug/L		105	70 - 130
trans-1,2-Dichloroethene	25.0	26.60		ug/L		106	70 - 130
trans-1,3-Dichloropropene	25.0	24.77		ug/L		99	70 - 130
Trichloroethene	25.0	26.74		ug/L		107	70 - 130
Trichlorofluoromethane	25.0	25.64		ug/L		103	70 - 130
Vinyl chloride	25.0	26.57		ug/L		106	70 - 130
Dibromomethane	25.0	25.83		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 480-260445/5
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.93		ug/L		100	70 - 130	1	20
1,1,1-Trichloroethane	25.0	24.08		ug/L		96	70 - 130	7	20
1,1,2,2-Tetrachloroethane	25.0	25.36		ug/L		101	70 - 130	3	20
1,1,2-Trichloroethane	25.0	26.20		ug/L		105	70 - 130	4	20
Freon 113	25.0	24.93		ug/L		100	70 - 130	7	20
1,1-Dichloroethane	25.0	26.39		ug/L		106	70 - 130	5	20
1,1-Dichloroethene	25.0	24.67		ug/L		99	70 - 130	6	20
1,1-Dichloropropene	25.0	25.68		ug/L		103	70 - 130	5	20
1,2,3-Trichlorobenzene	25.0	24.90		ug/L		100	70 - 130	1	20
1,2,3-Trichloropropane	25.0	25.07		ug/L		100	70 - 130	4	20
1,2,4-Trichlorobenzene	25.0	24.85		ug/L		99	70 - 130	2	20
1,2,4-Trimethylbenzene	25.0	25.21		ug/L		101	70 - 130	5	20
1,2-Dibromo-3-Chloropropane	25.0	25.71		ug/L		103	70 - 130	4	20
1,2-Dichlorobenzene	25.0	25.11		ug/L		100	70 - 130	4	20
1,2-Dichloroethane	25.0	25.25		ug/L		101	70 - 130	3	20
1,2-Dichloropropane	25.0	26.24		ug/L		105	70 - 130	4	20
1,3,5-Trimethylbenzene	25.0	25.38		ug/L		102	70 - 130	5	20
1,3-Dichlorobenzene	25.0	25.00		ug/L		100	70 - 130	6	20
1,3-Dichloropropane	25.0	25.89		ug/L		104	70 - 130	1	20
1,4-Dichlorobenzene	25.0	24.74		ug/L		99	70 - 130	6	20
1,4-Dioxane	500	574.6		ug/L		115	70 - 130	6	20
2,2-Dichloropropane	25.0	24.22		ug/L		97	70 - 130	6	20
2-Butanone (MEK)	125	247.2	*	ug/L		198	70 - 130	5	20
2-Chlorotoluene	25.0	25.14		ug/L		101	70 - 130	5	20
2-Hexanone	125	138.5		ug/L		111	70 - 130	2	20
4-Chlorotoluene	25.0	25.58		ug/L		102	70 - 130	5	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260445/5
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Isopropyltoluene	25.0	25.28		ug/L		101	70 - 130	7	20
4-Methyl-2-pentanone (MIBK)	125	137.1		ug/L		110	70 - 130	1	20
Acetone	125	142.1		ug/L		114	70 - 130	3	20
Benzene	25.0	24.90		ug/L		100	70 - 130	6	20
Bromobenzene	25.0	25.44		ug/L		102	70 - 130	4	20
Bromoform	25.0	24.11		ug/L		96	70 - 130	2	20
Bromomethane	25.0	22.23		ug/L		89	70 - 130	7	20
Carbon disulfide	25.0	25.17		ug/L		101	70 - 130	7	20
Carbon tetrachloride	25.0	24.04		ug/L		96	70 - 130	7	20
Chlorobenzene	25.0	25.62		ug/L		102	70 - 130	3	20
Chlorobromomethane	25.0	24.63		ug/L		99	70 - 130	2	20
Chlorodibromomethane	25.0	25.19		ug/L		101	70 - 130	0	20
Chloroethane	25.0	23.52		ug/L		94	70 - 130	9	20
Chloroform	25.0	25.00		ug/L		100	70 - 130	3	20
Chloromethane	25.0	26.15		ug/L		105	70 - 130	7	20
cis-1,2-Dichloroethene	25.0	24.58		ug/L		98	70 - 130	5	20
cis-1,3-Dichloropropene	25.0	25.41		ug/L		102	70 - 130	2	20
Dichlorobromomethane	25.0	24.65		ug/L		99	70 - 130	3	20
Dichlorodifluoromethane	25.0	23.68		ug/L		95	70 - 130	8	20
Ethyl ether	25.0	25.64		ug/L		103	70 - 130	4	20
Ethylbenzene	25.0	25.68		ug/L		103	70 - 130	4	20
Ethylene Dibromide	25.0	26.15		ug/L		105	70 - 130	2	20
Hexachlorobutadiene	25.0	25.18		ug/L		101	70 - 130	6	20
Isopropyl ether	25.0	24.98		ug/L		100	70 - 130	4	20
Isopropylbenzene	25.0	24.93		ug/L		100	70 - 130	6	20
Methyl tert-butyl ether	25.0	24.41		ug/L		98	70 - 130	3	20
Methylene Chloride	25.0	25.07		ug/L		100	70 - 130	2	20
m-Xylene & p-Xylene	25.0	25.18		ug/L		101	70 - 130	0	20
Naphthalene	25.0	24.94		ug/L		100	70 - 130	2	20
n-Butylbenzene	25.0	25.95		ug/L		104	70 - 130	5	20
N-Propylbenzene	25.0	25.23		ug/L		101	70 - 130	6	20
o-Xylene	25.0	24.92		ug/L		100	70 - 130	1	20
sec-Butylbenzene	25.0	25.58		ug/L		102	70 - 130	5	20
Styrene	25.0	25.98		ug/L		104	70 - 130	0	20
Tert-amyl methyl ether	25.0	23.54		ug/L		94	70 - 130	2	20
Tert-butyl ethyl ether	25.0	23.49		ug/L		94	70 - 130	4	20
tert-Butylbenzene	25.0	25.59		ug/L		102	70 - 130	4	20
Tetrachloroethene	25.0	26.17		ug/L		105	70 - 130	1	20
Tetrahydrofuran	50.0	72.88	*	ug/L		146	70 - 130	1	20
Toluene	25.0	25.48		ug/L		102	70 - 130	3	20
trans-1,2-Dichloroethene	25.0	24.85		ug/L		99	70 - 130	7	20
trans-1,3-Dichloropropene	25.0	25.57		ug/L		102	70 - 130	3	20
Trichloroethene	25.0	24.84		ug/L		99	70 - 130	7	20
Trichlorofluoromethane	25.0	23.62		ug/L		94	70 - 130	8	20
Vinyl chloride	25.0	24.49		ug/L		98	70 - 130	8	20
Dibromomethane	25.0	24.56		ug/L		98	70 - 130	5	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260445/5
Matrix: Water
Analysis Batch: 260445

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: MB 480-260681/8
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/27/15 11:18	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Freon 113	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/27/15 11:18	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/27/15 11:18	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
2-Butanone (MEK)	<10.0		10.0	10.0	ug/L			08/27/15 11:18	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/27/15 11:18	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/27/15 11:18	1
Acetone	<50.0		50.0	50.0	ug/L			08/27/15 11:18	1
Benzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Bromoform	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/27/15 11:18	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/27/15 11:18	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/27/15 11:18	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/27/15 11:18	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260681/8
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/27/15 11:18	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 11:18	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/27/15 11:18	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/27/15 11:18	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/27/15 11:18	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/27/15 11:18	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/27/15 11:18	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Styrene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/27/15 11:18	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/27/15 11:18	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/27/15 11:18	1
Toluene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/27/15 11:18	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/27/15 11:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/27/15 11:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/27/15 11:18*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/27/15 11:18*	*1*

Lab Sample ID: LCS 480-260681/5
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.40		ug/L		102	70 - 130
1,1,1-Trichloroethane	25.0	25.39		ug/L		102	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.08		ug/L		104	70 - 130
1,1,2-Trichloroethane	25.0	26.16		ug/L		105	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260681/5
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Freon 113	25.0	26.56		ug/L		106	70 - 130
1,1-Dichloroethane	25.0	27.26		ug/L		109	70 - 130
1,1-Dichloroethene	25.0	25.13		ug/L		101	70 - 130
1,1-Dichloropropene	25.0	26.79		ug/L		107	70 - 130
1,2,3-Trichlorobenzene	25.0	25.42		ug/L		102	70 - 130
1,2,3-Trichloropropane	25.0	26.15		ug/L		105	70 - 130
1,2,4-Trichlorobenzene	25.0	25.68		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	25.0	27.18		ug/L		109	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	25.86		ug/L		103	70 - 130
1,2-Dichlorobenzene	25.0	26.57		ug/L		106	70 - 130
1,2-Dichloroethane	25.0	25.62		ug/L		102	70 - 130
1,2-Dichloropropane	25.0	27.49		ug/L		110	70 - 130
1,3,5-Trimethylbenzene	25.0	27.20		ug/L		109	70 - 130
1,3-Dichlorobenzene	25.0	26.81		ug/L		107	70 - 130
1,3-Dichloropropane	25.0	25.95		ug/L		104	70 - 130
1,4-Dichlorobenzene	25.0	26.36		ug/L		105	70 - 130
1,4-Dioxane	500	554.6		ug/L		111	70 - 130
2,2-Dichloropropane	25.0	25.58		ug/L		102	70 - 130
2-Butanone (MEK)	125	263.2	*	ug/L		211	70 - 130
2-Chlorotoluene	25.0	26.54		ug/L		106	70 - 130
2-Hexanone	125	141.2		ug/L		113	70 - 130
4-Chlorotoluene	25.0	27.51		ug/L		110	70 - 130
4-Isopropyltoluene	25.0	27.47		ug/L		110	70 - 130
4-Methyl-2-pentanone (MIBK)	125	138.7		ug/L		111	70 - 130
Acetone	125	158.6		ug/L		127	70 - 130
Benzene	25.0	26.02		ug/L		104	70 - 130
Bromobenzene	25.0	26.47		ug/L		106	70 - 130
Bromoform	25.0	23.07		ug/L		92	70 - 130
Bromomethane	25.0	22.08		ug/L		88	70 - 130
Carbon disulfide	25.0	26.77		ug/L		107	70 - 130
Carbon tetrachloride	25.0	24.99		ug/L		100	70 - 130
Chlorobenzene	25.0	26.41		ug/L		106	70 - 130
Chlorobromomethane	25.0	25.03		ug/L		100	70 - 130
Chlorodibromomethane	25.0	25.42		ug/L		102	70 - 130
Chloroethane	25.0	23.85		ug/L		95	70 - 130
Chloroform	25.0	25.68		ug/L		103	70 - 130
Chloromethane	25.0	23.99		ug/L		96	70 - 130
cis-1,2-Dichloroethene	25.0	25.39		ug/L		102	70 - 130
cis-1,3-Dichloropropene	25.0	24.91		ug/L		100	70 - 130
Dichlorobromomethane	25.0	25.47		ug/L		102	70 - 130
Dichlorodifluoromethane	25.0	19.19		ug/L		77	70 - 130
Ethyl ether	25.0	26.13		ug/L		105	70 - 130
Ethylbenzene	25.0	26.54		ug/L		106	70 - 130
Ethylene Dibromide	25.0	26.19		ug/L		105	70 - 130
Hexachlorobutadiene	25.0	26.53		ug/L		106	70 - 130
Isopropyl ether	25.0	26.16		ug/L		105	70 - 130
Isopropylbenzene	25.0	27.14		ug/L		109	70 - 130
Methyl tert-butyl ether	25.0	24.64		ug/L		99	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260681/5
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	25.38		ug/L		102	70 - 130
m-Xylene & p-Xylene	25.0	25.75		ug/L		103	70 - 130
Naphthalene	25.0	25.48		ug/L		102	70 - 130
n-Butylbenzene	25.0	28.03		ug/L		112	70 - 130
N-Propylbenzene	25.0	27.17		ug/L		109	70 - 130
o-Xylene	25.0	25.31		ug/L		101	70 - 130
sec-Butylbenzene	25.0	27.22		ug/L		109	70 - 130
Styrene	25.0	27.19		ug/L		109	70 - 130
Tert-amyl methyl ether	25.0	23.92		ug/L		96	70 - 130
Tert-butyl ethyl ether	25.0	24.43		ug/L		98	70 - 130
tert-Butylbenzene	25.0	26.86		ug/L		107	70 - 130
Tetrachloroethene	25.0	27.20		ug/L		109	70 - 130
Tetrahydrofuran	50.0	73.65	*	ug/L		147	70 - 130
Toluene	25.0	26.67		ug/L		107	70 - 130
trans-1,2-Dichloroethene	25.0	26.27		ug/L		105	70 - 130
trans-1,3-Dichloropropene	25.0	24.15		ug/L		97	70 - 130
Trichloroethene	25.0	26.85		ug/L		107	70 - 130
Trichlorofluoromethane	25.0	23.95		ug/L		96	70 - 130
Vinyl chloride	25.0	23.91		ug/L		96	70 - 130
Dibromomethane	25.0	25.25		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 480-260681/6
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	25.58		ug/L		102	70 - 130	1	20
1,1,1-Trichloroethane	25.0	24.83		ug/L		99	70 - 130	2	20
1,1,2,2-Tetrachloroethane	25.0	26.85		ug/L		107	70 - 130	3	20
1,1,2-Trichloroethane	25.0	26.29		ug/L		105	70 - 130	1	20
Freon 113	25.0	25.32		ug/L		101	70 - 130	5	20
1,1-Dichloroethane	25.0	26.76		ug/L		107	70 - 130	2	20
1,1-Dichloroethene	25.0	24.50		ug/L		98	70 - 130	3	20
1,1-Dichloropropene	25.0	26.12		ug/L		104	70 - 130	3	20
1,2,3-Trichlorobenzene	25.0	25.46		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	25.0	25.29		ug/L		101	70 - 130	3	20
1,2,4-Trichlorobenzene	25.0	25.58		ug/L		102	70 - 130	0	20
1,2,4-Trimethylbenzene	25.0	26.58		ug/L		106	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	25.0	25.69		ug/L		103	70 - 130	1	20
1,2-Dichlorobenzene	25.0	26.15		ug/L		105	70 - 130	2	20
1,2-Dichloroethane	25.0	25.45		ug/L		102	70 - 130	1	20
1,2-Dichloropropane	25.0	26.09		ug/L		104	70 - 130	5	20
1,3,5-Trimethylbenzene	25.0	26.78		ug/L		107	70 - 130	2	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260681/6
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	25.0	26.35		ug/L		105	70 - 130	2	20
1,3-Dichloropropane	25.0	25.64		ug/L		103	70 - 130	1	20
1,4-Dichlorobenzene	25.0	26.10		ug/L		104	70 - 130	1	20
1,4-Dioxane	500	641.2		ug/L		128	70 - 130	14	20
2,2-Dichloropropane	25.0	24.55		ug/L		98	70 - 130	4	20
2-Butanone (MEK)	125	268.1	*	ug/L		214	70 - 130	2	20
2-Chlorotoluene	25.0	26.38		ug/L		106	70 - 130	1	20
2-Hexanone	125	142.8		ug/L		114	70 - 130	1	20
4-Chlorotoluene	25.0	26.66		ug/L		107	70 - 130	3	20
4-Isopropyltoluene	25.0	26.97		ug/L		108	70 - 130	2	20
4-Methyl-2-pentanone (MIBK)	125	138.7		ug/L		111	70 - 130	0	20
Acetone	125	159.8		ug/L		128	70 - 130	1	20
Benzene	25.0	26.00		ug/L		104	70 - 130	0	20
Bromobenzene	25.0	26.19		ug/L		105	70 - 130	1	20
Bromoform	25.0	23.24		ug/L		93	70 - 130	1	20
Bromomethane	25.0	20.87		ug/L		83	70 - 130	6	20
Carbon disulfide	25.0	25.99		ug/L		104	70 - 130	3	20
Carbon tetrachloride	25.0	24.04		ug/L		96	70 - 130	4	20
Chlorobenzene	25.0	26.09		ug/L		104	70 - 130	1	20
Chlorobromomethane	25.0	25.07		ug/L		100	70 - 130	0	20
Chlorodibromomethane	25.0	24.94		ug/L		100	70 - 130	2	20
Chloroethane	25.0	22.21		ug/L		89	70 - 130	7	20
Chloroform	25.0	25.10		ug/L		100	70 - 130	2	20
Chloromethane	25.0	23.95		ug/L		96	70 - 130	0	20
cis-1,2-Dichloroethene	25.0	25.59		ug/L		102	70 - 130	1	20
cis-1,3-Dichloropropene	25.0	25.65		ug/L		103	70 - 130	3	20
Dichlorobromomethane	25.0	25.09		ug/L		100	70 - 130	2	20
Dichlorodifluoromethane	25.0	18.22		ug/L		73	70 - 130	5	20
Ethyl ether	25.0	25.89		ug/L		104	70 - 130	1	20
Ethylbenzene	25.0	25.88		ug/L		104	70 - 130	3	20
Ethylene Dibromide	25.0	26.08		ug/L		104	70 - 130	0	20
Hexachlorobutadiene	25.0	26.07		ug/L		104	70 - 130	2	20
Isopropyl ether	25.0	26.04		ug/L		104	70 - 130	0	20
Isopropylbenzene	25.0	26.22		ug/L		105	70 - 130	3	20
Methyl tert-butyl ether	25.0	24.96		ug/L		100	70 - 130	1	20
Methylene Chloride	25.0	24.99		ug/L		100	70 - 130	2	20
m-Xylene & p-Xylene	25.0	25.08		ug/L		100	70 - 130	3	20
Naphthalene	25.0	25.54		ug/L		102	70 - 130	0	20
n-Butylbenzene	25.0	26.67		ug/L		107	70 - 130	5	20
N-Propylbenzene	25.0	26.39		ug/L		106	70 - 130	3	20
o-Xylene	25.0	25.05		ug/L		100	70 - 130	1	20
sec-Butylbenzene	25.0	26.42		ug/L		106	70 - 130	3	20
Styrene	25.0	26.22		ug/L		105	70 - 130	4	20
Tert-amyl methyl ether	25.0	24.65		ug/L		99	70 - 130	3	20
Tert-butyl ethyl ether	25.0	24.07		ug/L		96	70 - 130	2	20
tert-Butylbenzene	25.0	26.00		ug/L		104	70 - 130	3	20
Tetrachloroethene	25.0	26.17		ug/L		105	70 - 130	4	20
Tetrahydrofuran	50.0	73.59	*	ug/L		147	70 - 130	0	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260681/6
Matrix: Water
Analysis Batch: 260681

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			25.0	25.87		ug/L		103	70 - 130	3	20
trans-1,2-Dichloroethene			25.0	25.43		ug/L		102	70 - 130	3	20
trans-1,3-Dichloropropene			25.0	24.13		ug/L		97	70 - 130	0	20
Trichloroethene			25.0	25.45		ug/L		102	70 - 130	5	20
Trichlorofluoromethane			25.0	22.97		ug/L		92	70 - 130	4	20
Vinyl chloride			25.0	23.25		ug/L		93	70 - 130	3	20
Dibromomethane			25.0	25.73		ug/L		103	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 480-260778/3-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260778

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,1,2-Tetrachloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,1-Trichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,1-Trichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,2,2-Tetrachloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,2,2-Tetrachloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,2-Trichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1,2-Trichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Freon 113	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Freon 113	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1-Dichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1-Dichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1-Dichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1-Dichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1-Dichloropropene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,1-Dichloropropene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,3-Trichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,3-Trichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,3-Trichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,3-Trichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,4-Trichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,4-Trichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,4-Trimethylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2,4-Trimethylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dibromo-3-Chloropropane	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dibromo-3-Chloropropane	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dichloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260778/3-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260778

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,2-Dichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,3,5-Trimethylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,3,5-Trimethylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,3-Dichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,3-Dichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,3-Dichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,3-Dichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,4-Dichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,4-Dichlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,4-Dioxane	<0.242		0.242	0.242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
1,4-Dioxane	<0.242		0.242	0.242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2,2-Dichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2,2-Dichloropropane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2-Butanone (MEK)	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2-Butanone (MEK)	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2-Chlorotoluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2-Chlorotoluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2-Hexanone	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
2-Hexanone	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
4-Chlorotoluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
4-Chlorotoluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
4-Isopropyltoluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
4-Isopropyltoluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
4-Methyl-2-pentanone (MIBK)	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
4-Methyl-2-pentanone (MIBK)	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Acetone	<0.242		0.242	0.242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Acetone	<0.242		0.242	0.242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Benzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Benzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Bromobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Bromobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Bromoform	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Bromoform	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Bromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Bromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Carbon disulfide	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Carbon disulfide	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Carbon tetrachloride	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Carbon tetrachloride	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chlorobenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chlorobromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chlorobromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chlorodibromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chlorodibromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chloroethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260778/3-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260778

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chloroform	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chloromethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Chloromethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
cis-1,2-Dichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
cis-1,2-Dichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
cis-1,3-Dichloropropene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
cis-1,3-Dichloropropene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Dichlorobromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Dichlorobromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Dichlorodifluoromethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Dichlorodifluoromethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Ethyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Ethyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Ethylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Ethylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Ethylene Dibromide	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Ethylene Dibromide	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Hexachlorobutadiene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Hexachlorobutadiene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Isopropyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Isopropyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Isopropylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Isopropylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Methyl tert-butyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Methyl tert-butyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Methylene Chloride	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Methylene Chloride	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
m-Xylene & p-Xylene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
m-Xylene & p-Xylene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Naphthalene	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Naphthalene	<0.0242		0.0242	0.0242	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
n-Butylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
n-Butylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
N-Propylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
N-Propylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
o-Xylene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
o-Xylene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
sec-Butylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
sec-Butylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Styrene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Styrene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tert-amyl methyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tert-amyl methyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tert-butyl ethyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tert-butyl ethyl ether	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
tert-Butylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
tert-Butylbenzene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260778/3-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260778

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tetrachloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tetrahydrofuran	<0.0484		0.0484	0.0484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Tetrahydrofuran	<0.0484		0.0484	0.0484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Toluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Toluene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
trans-1,2-Dichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
trans-1,2-Dichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
trans-1,3-Dichloropropene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
trans-1,3-Dichloropropene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Trichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Trichloroethene	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Trichlorofluoromethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Trichlorofluoromethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Vinyl chloride	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Vinyl chloride	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Dibromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1
Dibromomethane	<0.00484		0.00484	0.00484	mg/Kg		08/27/15 12:29	08/27/15 14:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/27/15 12:29*	*08/27/15 14:26*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/27/15 12:29*	*08/27/15 14:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*08/27/15 12:29*	*08/27/15 14:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*08/27/15 12:29*	*08/27/15 14:26*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/27/15 12:29*	*08/27/15 14:26*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/27/15 12:29*	*08/27/15 14:26*	*1*

Lab Sample ID: LCS 480-260778/1-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260778

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0496	0.05129		mg/Kg		103	70 - 130
1,1,1,2-Tetrachloroethane	0.0496	0.05129		mg/Kg		103	70 - 130
1,1,1-Trichloroethane	0.0496	0.04806		mg/Kg		97	70 - 130
1,1,1-Trichloroethane	0.0496	0.04806		mg/Kg		97	70 - 130
1,1,2,2-Tetrachloroethane	0.0496	0.04990		mg/Kg		101	70 - 130
1,1,2,2-Tetrachloroethane	0.0496	0.04990		mg/Kg		101	70 - 130
1,1,2-Trichloroethane	0.0496	0.04798		mg/Kg		97	70 - 130
1,1,2-Trichloroethane	0.0496	0.04798		mg/Kg		97	70 - 130
Freon 113	0.0496	0.04537		mg/Kg		91	70 - 130
Freon 113	0.0496	0.04537		mg/Kg		91	70 - 130
1,1-Dichloroethane	0.0496	0.04895		mg/Kg		99	70 - 130
1,1-Dichloroethane	0.0496	0.04895		mg/Kg		99	70 - 130
1,1-Dichloroethene	0.0496	0.04674		mg/Kg		94	70 - 130
1,1-Dichloroethene	0.0496	0.04674		mg/Kg		94	70 - 130
1,1-Dichloropropene	0.0496	0.04731		mg/Kg		95	70 - 130
1,1-Dichloropropene	0.0496	0.04731		mg/Kg		95	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260778/1-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260778

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichlorobenzene	0.0496	0.04951		mg/Kg		100	70 - 130
1,2,3-Trichlorobenzene	0.0496	0.04951		mg/Kg		100	70 - 130
1,2,3-Trichloropropane	0.0496	0.04862		mg/Kg		98	70 - 130
1,2,3-Trichloropropane	0.0496	0.04862		mg/Kg		98	70 - 130
1,2,4-Trichlorobenzene	0.0496	0.05040		mg/Kg		102	70 - 130
1,2,4-Trichlorobenzene	0.0496	0.05040		mg/Kg		102	70 - 130
1,2,4-Trimethylbenzene	0.0496	0.04976		mg/Kg		100	70 - 130
1,2,4-Trimethylbenzene	0.0496	0.04976		mg/Kg		100	70 - 130
1,2-Dibromo-3-Chloropropane	0.0496	0.05345		mg/Kg		108	70 - 130
1,2-Dibromo-3-Chloropropane	0.0496	0.05345		mg/Kg		108	70 - 130
1,2-Dichlorobenzene	0.0496	0.04901		mg/Kg		99	70 - 130
1,2-Dichlorobenzene	0.0496	0.04901		mg/Kg		99	70 - 130
1,2-Dichloroethane	0.0496	0.04806		mg/Kg		97	70 - 130
1,2-Dichloroethane	0.0496	0.04806		mg/Kg		97	70 - 130
1,2-Dichloropropane	0.0496	0.04889		mg/Kg		99	70 - 130
1,2-Dichloropropane	0.0496	0.04889		mg/Kg		99	70 - 130
1,3,5-Trimethylbenzene	0.0496	0.04929		mg/Kg		99	70 - 130
1,3,5-Trimethylbenzene	0.0496	0.04929		mg/Kg		99	70 - 130
1,3-Dichlorobenzene	0.0496	0.04844		mg/Kg		98	70 - 130
1,3-Dichlorobenzene	0.0496	0.04844		mg/Kg		98	70 - 130
1,3-Dichloropropane	0.0496	0.04836		mg/Kg		97	70 - 130
1,3-Dichloropropane	0.0496	0.04836		mg/Kg		97	70 - 130
1,4-Dichlorobenzene	0.0496	0.04828		mg/Kg		97	70 - 130
1,4-Dichlorobenzene	0.0496	0.04828		mg/Kg		97	70 - 130
1,4-Dioxane	0.992	0.9343		mg/Kg		94	70 - 130
1,4-Dioxane	0.992	0.9343		mg/Kg		94	70 - 130
2,2-Dichloropropane	0.0496	0.05009		mg/Kg		101	70 - 130
2,2-Dichloropropane	0.0496	0.05009		mg/Kg		101	70 - 130
2-Butanone (MEK)	0.248	0.4808	*	mg/Kg		194	70 - 130
2-Butanone (MEK)	0.248	0.4808	*	mg/Kg		194	70 - 130
2-Chlorotoluene	0.0496	0.04948		mg/Kg		100	70 - 130
2-Chlorotoluene	0.0496	0.04948		mg/Kg		100	70 - 130
2-Hexanone	0.248	0.2600		mg/Kg		105	70 - 130
2-Hexanone	0.248	0.2600		mg/Kg		105	70 - 130
4-Chlorotoluene	0.0496	0.04868		mg/Kg		98	70 - 130
4-Chlorotoluene	0.0496	0.04868		mg/Kg		98	70 - 130
4-Isopropyltoluene	0.0496	0.05035		mg/Kg		101	70 - 130
4-Isopropyltoluene	0.0496	0.05035		mg/Kg		101	70 - 130
4-Methyl-2-pentanone (MIBK)	0.248	0.2554		mg/Kg		103	70 - 130
4-Methyl-2-pentanone (MIBK)	0.248	0.2554		mg/Kg		103	70 - 130
Acetone	0.248	0.2556		mg/Kg		103	70 - 130
Acetone	0.248	0.2556		mg/Kg		103	70 - 130
Benzene	0.0496	0.04805		mg/Kg		97	70 - 130
Benzene	0.0496	0.04805		mg/Kg		97	70 - 130
Bromobenzene	0.0496	0.04794		mg/Kg		97	70 - 130
Bromobenzene	0.0496	0.04794		mg/Kg		97	70 - 130
Bromoform	0.0496	0.04542		mg/Kg		92	70 - 130
Bromoform	0.0496	0.04542		mg/Kg		92	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260778/1-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260778

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	0.0496	0.04633		mg/Kg		93	70 - 130
Bromomethane	0.0496	0.04633		mg/Kg		93	70 - 130
Carbon disulfide	0.0496	0.04922		mg/Kg		99	70 - 130
Carbon disulfide	0.0496	0.04922		mg/Kg		99	70 - 130
Carbon tetrachloride	0.0496	0.04870		mg/Kg		98	70 - 130
Carbon tetrachloride	0.0496	0.04870		mg/Kg		98	70 - 130
Chlorobenzene	0.0496	0.04789		mg/Kg		97	70 - 130
Chlorobenzene	0.0496	0.04789		mg/Kg		97	70 - 130
Chlorobromomethane	0.0496	0.04964		mg/Kg		100	70 - 130
Chlorobromomethane	0.0496	0.04964		mg/Kg		100	70 - 130
Chlorodibromomethane	0.0496	0.05278		mg/Kg		106	70 - 130
Chlorodibromomethane	0.0496	0.05278		mg/Kg		106	70 - 130
Chloroethane	0.0496	0.04569		mg/Kg		92	70 - 130
Chloroethane	0.0496	0.04569		mg/Kg		92	70 - 130
Chloroform	0.0496	0.04779		mg/Kg		96	70 - 130
Chloroform	0.0496	0.04779		mg/Kg		96	70 - 130
Chloromethane	0.0496	0.04731		mg/Kg		95	70 - 130
Chloromethane	0.0496	0.04731		mg/Kg		95	70 - 130
cis-1,2-Dichloroethene	0.0496	0.04869		mg/Kg		98	70 - 130
cis-1,2-Dichloroethene	0.0496	0.04869		mg/Kg		98	70 - 130
cis-1,3-Dichloropropene	0.0496	0.05381		mg/Kg		108	70 - 130
cis-1,3-Dichloropropene	0.0496	0.05381		mg/Kg		108	70 - 130
Dichlorobromomethane	0.0496	0.05200		mg/Kg		105	70 - 130
Dichlorobromomethane	0.0496	0.05200		mg/Kg		105	70 - 130
Dichlorodifluoromethane	0.0496	0.04566		mg/Kg		92	70 - 130
Dichlorodifluoromethane	0.0496	0.04566		mg/Kg		92	70 - 130
Ethyl ether	0.0496	0.05051		mg/Kg		102	70 - 130
Ethyl ether	0.0496	0.05051		mg/Kg		102	70 - 130
Ethylbenzene	0.0496	0.04878		mg/Kg		98	70 - 130
Ethylbenzene	0.0496	0.04878		mg/Kg		98	70 - 130
Ethylene Dibromide	0.0496	0.04944		mg/Kg		100	70 - 130
Ethylene Dibromide	0.0496	0.04944		mg/Kg		100	70 - 130
Hexachlorobutadiene	0.0496	0.04664		mg/Kg		94	70 - 130
Hexachlorobutadiene	0.0496	0.04664		mg/Kg		94	70 - 130
Isopropyl ether	0.0496	0.05087		mg/Kg		103	70 - 130
Isopropyl ether	0.0496	0.05087		mg/Kg		103	70 - 130
Isopropylbenzene	0.0496	0.04882		mg/Kg		98	70 - 130
Isopropylbenzene	0.0496	0.04882		mg/Kg		98	70 - 130
Methyl tert-butyl ether	0.0496	0.04999		mg/Kg		101	70 - 130
Methyl tert-butyl ether	0.0496	0.04999		mg/Kg		101	70 - 130
Methylene Chloride	0.0496	0.04942		mg/Kg		100	70 - 130
Methylene Chloride	0.0496	0.04942		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	0.0496	0.04930		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.0496	0.04930		mg/Kg		99	70 - 130
Naphthalene	0.0496	0.05006		mg/Kg		101	70 - 130
Naphthalene	0.0496	0.05006		mg/Kg		101	70 - 130
n-Butylbenzene	0.0496	0.05058		mg/Kg		102	70 - 130
n-Butylbenzene	0.0496	0.05058		mg/Kg		102	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260778/1-A
Matrix: Solid
Analysis Batch: 260730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260778

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Propylbenzene	0.0496	0.04893		mg/Kg		99	70 - 130
N-Propylbenzene	0.0496	0.04893		mg/Kg		99	70 - 130
o-Xylene	0.0496	0.04952		mg/Kg		100	70 - 130
o-Xylene	0.0496	0.04952		mg/Kg		100	70 - 130
sec-Butylbenzene	0.0496	0.04860		mg/Kg		98	70 - 130
sec-Butylbenzene	0.0496	0.04860		mg/Kg		98	70 - 130
Styrene	0.0496	0.05062		mg/Kg		102	70 - 130
Styrene	0.0496	0.05062		mg/Kg		102	70 - 130
Tert-amyl methyl ether	0.0496	0.05203		mg/Kg		105	70 - 130
Tert-amyl methyl ether	0.0496	0.05203		mg/Kg		105	70 - 130
Tert-butyl ethyl ether	0.0496	0.05055		mg/Kg		102	70 - 130
Tert-butyl ethyl ether	0.0496	0.05055		mg/Kg		102	70 - 130
tert-Butylbenzene	0.0496	0.04916		mg/Kg		99	70 - 130
tert-Butylbenzene	0.0496	0.04916		mg/Kg		99	70 - 130
Tetrachloroethene	0.0496	0.04869		mg/Kg		98	70 - 130
Tetrachloroethene	0.0496	0.04869		mg/Kg		98	70 - 130
Tetrahydrofuran	0.0992	0.1073		mg/Kg		108	70 - 130
Tetrahydrofuran	0.0992	0.1073		mg/Kg		108	70 - 130
Toluene	0.0496	0.04753		mg/Kg		96	70 - 130
Toluene	0.0496	0.04753		mg/Kg		96	70 - 130
trans-1,2-Dichloroethene	0.0496	0.04828		mg/Kg		97	70 - 130
trans-1,2-Dichloroethene	0.0496	0.04828		mg/Kg		97	70 - 130
trans-1,3-Dichloropropene	0.0496	0.05224		mg/Kg		105	70 - 130
trans-1,3-Dichloropropene	0.0496	0.05224		mg/Kg		105	70 - 130
Trichloroethene	0.0496	0.04871		mg/Kg		98	70 - 130
Trichloroethene	0.0496	0.04871		mg/Kg		98	70 - 130
Trichlorofluoromethane	0.0496	0.04424		mg/Kg		89	70 - 130
Trichlorofluoromethane	0.0496	0.04424		mg/Kg		89	70 - 130
Vinyl chloride	0.0496	0.04680		mg/Kg		94	70 - 130
Vinyl chloride	0.0496	0.04680		mg/Kg		94	70 - 130
Dibromomethane	0.0496	0.04981		mg/Kg		100	70 - 130
Dibromomethane	0.0496	0.04981		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 480-260778/2-A
Matrix: Solid
Analysis Batch: 260731

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260778

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0499	0.05084		mg/Kg		102	70 - 130	1	20
1,1,1-Trichloroethane	0.0499	0.04692		mg/Kg		94	70 - 130	2	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260778/2-A
Matrix: Solid
Analysis Batch: 260731

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260778

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	0.0499	0.05135		mg/Kg		103	70 - 130	3	20
1,1,2-Trichloroethane	0.0499	0.04940		mg/Kg		99	70 - 130	3	20
Freon 113	0.0499	0.04277		mg/Kg		86	70 - 130	6	20
1,1-Dichloroethane	0.0499	0.04838		mg/Kg		97	70 - 130	1	20
1,1-Dichloroethene	0.0499	0.04552		mg/Kg		91	70 - 130	3	20
1,1-Dichloropropene	0.0499	0.04728		mg/Kg		95	70 - 130	0	20
1,2,3-Trichlorobenzene	0.0499	0.04831		mg/Kg		97	70 - 130	2	20
1,2,3-Trichloropropane	0.0499	0.05068		mg/Kg		102	70 - 130	4	20
1,2,4-Trichlorobenzene	0.0499	0.04904		mg/Kg		98	70 - 130	3	20
1,2,4-Trimethylbenzene	0.0499	0.04868		mg/Kg		98	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	0.0499	0.05669		mg/Kg		114	70 - 130	6	20
1,2-Dichlorobenzene	0.0499	0.04857		mg/Kg		97	70 - 130	1	20
1,2-Dichloroethane	0.0499	0.04893		mg/Kg		98	70 - 130	2	20
1,2-Dichloropropane	0.0499	0.04987		mg/Kg		100	70 - 130	2	20
1,3,5-Trimethylbenzene	0.0499	0.04828		mg/Kg		97	70 - 130	2	20
1,3-Dichlorobenzene	0.0499	0.04790		mg/Kg		96	70 - 130	1	20
1,3-Dichloropropane	0.0499	0.04950		mg/Kg		99	70 - 130	2	20
1,4-Dichlorobenzene	0.0499	0.04723		mg/Kg		95	70 - 130	2	20
1,4-Dioxane	0.998	0.9795		mg/Kg		98	70 - 130	5	20
2,2-Dichloropropane	0.0499	0.04880		mg/Kg		98	70 - 130	3	20
2-Butanone (MEK)	0.250	0.5102	*	mg/Kg		205	70 - 130	6	20
2-Chlorotoluene	0.0499	0.04883		mg/Kg		98	70 - 130	1	20
2-Hexanone	0.250	0.2775		mg/Kg		111	70 - 130	7	20
4-Chlorotoluene	0.0499	0.05274		mg/Kg		106	70 - 130	8	20
4-Isopropyltoluene	0.0499	0.04891		mg/Kg		98	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	0.250	0.2660		mg/Kg		107	70 - 130	4	20
Acetone	0.250	0.2667		mg/Kg		107	70 - 130	4	20
Benzene	0.0499	0.04765		mg/Kg		95	70 - 130	1	20
Bromobenzene	0.0499	0.04831		mg/Kg		97	70 - 130	1	20
Bromoform	0.0499	0.04713		mg/Kg		94	70 - 130	4	20
Bromomethane	0.0499	0.04232		mg/Kg		85	70 - 130	9	20
Carbon disulfide	0.0499	0.04859		mg/Kg		97	70 - 130	1	20
Carbon tetrachloride	0.0499	0.04761		mg/Kg		95	70 - 130	2	20
Chlorobenzene	0.0499	0.04788		mg/Kg		96	70 - 130	0	20
Chlorobromomethane	0.0499	0.04977		mg/Kg		100	70 - 130	0	20
Chlorodibromomethane	0.0499	0.05422		mg/Kg		109	70 - 130	3	20
Chloroethane	0.0499	0.04323		mg/Kg		87	70 - 130	6	20
Chloroform	0.0499	0.04749		mg/Kg		95	70 - 130	1	20
Chloromethane	0.0499	0.04486		mg/Kg		90	70 - 130	5	20
cis-1,2-Dichloroethene	0.0499	0.04815		mg/Kg		96	70 - 130	1	20
cis-1,3-Dichloropropene	0.0499	0.05492		mg/Kg		110	70 - 130	2	20
Dichlorobromomethane	0.0499	0.05258		mg/Kg		105	70 - 130	1	20
Dichlorodifluoromethane	0.0499	0.04200		mg/Kg		84	70 - 130	8	20
Ethyl ether	0.0499	0.05353		mg/Kg		107	70 - 130	6	20
Ethylbenzene	0.0499	0.04790		mg/Kg		96	70 - 130	2	20
Ethylene Dibromide	0.0499	0.05076		mg/Kg		102	70 - 130	3	20
Hexachlorobutadiene	0.0499	0.04459		mg/Kg		89	70 - 130	5	20
Isopropyl ether	0.0499	0.05077		mg/Kg		102	70 - 130	0	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260778/2-A
Matrix: Solid
Analysis Batch: 260731

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260778

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Isopropylbenzene			0.0499	0.04780		mg/Kg		96	70 - 130	2	20
Methyl tert-butyl ether			0.0499	0.05097		mg/Kg		102	70 - 130	2	20
Methylene Chloride			0.0499	0.04887		mg/Kg		98	70 - 130	1	20
m-Xylene & p-Xylene			0.0499	0.04814		mg/Kg		96	70 - 130	2	20
Naphthalene			0.0499	0.05090		mg/Kg		102	70 - 130	2	20
n-Butylbenzene			0.0499	0.04859		mg/Kg		97	70 - 130	4	20
N-Propylbenzene			0.0499	0.04777		mg/Kg		96	70 - 130	2	20
o-Xylene			0.0499	0.04866		mg/Kg		98	70 - 130	2	20
sec-Butylbenzene			0.0499	0.04733		mg/Kg		95	70 - 130	3	20
Styrene			0.0499	0.05037		mg/Kg		101	70 - 130	1	20
Tert-amyl methyl ether			0.0499	0.05378		mg/Kg		108	70 - 130	3	20
Tert-butyl ethyl ether			0.0499	0.05078		mg/Kg		102	70 - 130	0	20
tert-Butylbenzene			0.0499	0.04737		mg/Kg		95	70 - 130	4	20
Tetrachloroethene			0.0499	0.04784		mg/Kg		96	70 - 130	2	20
Tetrahydrofuran			0.0998	0.1099		mg/Kg		110	70 - 130	2	20
Toluene			0.0499	0.04700		mg/Kg		94	70 - 130	1	20
trans-1,2-Dichloroethene			0.0499	0.04703		mg/Kg		94	70 - 130	3	20
trans-1,3-Dichloropropene			0.0499	0.05350		mg/Kg		107	70 - 130	2	20
Trichloroethene			0.0499	0.04844		mg/Kg		97	70 - 130	1	20
Trichlorofluoromethane			0.0499	0.04235		mg/Kg		85	70 - 130	4	20
Vinyl chloride			0.0499	0.04334		mg/Kg		87	70 - 130	8	20
Dibromomethane			0.0499	0.05076		mg/Kg		102	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 480-260899/8
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/28/15 10:52	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Freon 113	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/28/15 10:52	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260899/8
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/28/15 10:52	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
2-Butanone (MEK)	<10.0		10.0	10.0	ug/L			08/28/15 10:52	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/28/15 10:52	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/28/15 10:52	1
Acetone	<50.0		50.0	50.0	ug/L			08/28/15 10:52	1
Benzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Bromoform	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/28/15 10:52	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/28/15 10:52	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/28/15 10:52	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/28/15 10:52	1
Chloroform	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/28/15 10:52	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/28/15 10:52	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/28/15 10:52	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/28/15 10:52	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/28/15 10:52	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/28/15 10:52	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/28/15 10:52	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Styrene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/28/15 10:52	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/28/15 10:52	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260899/8
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/28/15 10:52	1
Toluene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/28/15 10:52	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/28/15 10:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/28/15 10:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*08/28/15 10:52*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/28/15 10:52*	*1*

Lab Sample ID: LCS 480-260899/5
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.85		ug/L		99	70 - 130
1,1,1-Trichloroethane	25.0	24.54		ug/L		98	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.76		ug/L		103	70 - 130
1,1,2-Trichloroethane	25.0	25.88		ug/L		104	70 - 130
Freon 113	25.0	26.02		ug/L		104	70 - 130
1,1-Dichloroethane	25.0	27.37		ug/L		109	70 - 130
1,1-Dichloroethene	25.0	25.09		ug/L		100	70 - 130
1,1-Dichloropropene	25.0	27.23		ug/L		109	70 - 130
1,2,3-Trichlorobenzene	25.0	24.88		ug/L		100	70 - 130
1,2,3-Trichloropropane	25.0	24.91		ug/L		100	70 - 130
1,2,4-Trichlorobenzene	25.0	25.57		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	25.0	26.94		ug/L		108	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	22.60		ug/L		90	70 - 130
1,2-Dichlorobenzene	25.0	25.97		ug/L		104	70 - 130
1,2-Dichloroethane	25.0	24.64		ug/L		99	70 - 130
1,2-Dichloropropane	25.0	26.68		ug/L		107	70 - 130
1,3,5-Trimethylbenzene	25.0	27.13		ug/L		109	70 - 130
1,3-Dichlorobenzene	25.0	26.76		ug/L		107	70 - 130
1,3-Dichloropropane	25.0	25.53		ug/L		102	70 - 130
1,4-Dichlorobenzene	25.0	26.32		ug/L		105	70 - 130
1,4-Dioxane	500	458.5		ug/L		92	70 - 130
2,2-Dichloropropane	25.0	25.26		ug/L		101	70 - 130
2-Butanone (MEK)	125	248.2	*	ug/L		199	70 - 130
2-Chlorotoluene	25.0	27.43		ug/L		110	70 - 130
2-Hexanone	125	133.3		ug/L		107	70 - 130
4-Chlorotoluene	25.0	27.15		ug/L		109	70 - 130
4-Isopropyltoluene	25.0	27.89		ug/L		112	70 - 130
4-Methyl-2-pentanone (MIBK)	125	131.9		ug/L		105	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260899/5
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	125	149.1		ug/L		119	70 - 130
Benzene	25.0	26.60		ug/L		106	70 - 130
Bromobenzene	25.0	26.59		ug/L		106	70 - 130
Bromoform	25.0	21.13		ug/L		85	70 - 130
Bromomethane	25.0	21.82		ug/L		87	70 - 130
Carbon disulfide	25.0	26.01		ug/L		104	70 - 130
Carbon tetrachloride	25.0	23.78		ug/L		95	70 - 130
Chlorobenzene	25.0	26.42		ug/L		106	70 - 130
Chlorobromomethane	25.0	24.46		ug/L		98	70 - 130
Chlorodibromomethane	25.0	23.28		ug/L		93	70 - 130
Chloroethane	25.0	23.53		ug/L		94	70 - 130
Chloroform	25.0	25.07		ug/L		100	70 - 130
Chloromethane	25.0	23.74		ug/L		95	70 - 130
cis-1,2-Dichloroethene	25.0	25.51		ug/L		102	70 - 130
cis-1,3-Dichloropropene	25.0	24.57		ug/L		98	70 - 130
Dichlorobromomethane	25.0	23.95		ug/L		96	70 - 130
Dichlorodifluoromethane	25.0	17.47		ug/L		70	70 - 130
Ethyl ether	25.0	25.01		ug/L		100	70 - 130
Ethylbenzene	25.0	26.88		ug/L		108	70 - 130
Ethylene Dibromide	25.0	24.93		ug/L		100	70 - 130
Hexachlorobutadiene	25.0	27.38		ug/L		110	70 - 130
Isopropyl ether	25.0	26.16		ug/L		105	70 - 130
Isopropylbenzene	25.0	27.06		ug/L		108	70 - 130
Methyl tert-butyl ether	25.0	24.23		ug/L		97	70 - 130
Methylene Chloride	25.0	25.38		ug/L		102	70 - 130
m-Xylene & p-Xylene	25.0	26.08		ug/L		104	70 - 130
Naphthalene	25.0	24.29		ug/L		97	70 - 130
n-Butylbenzene	25.0	27.64		ug/L		111	70 - 130
N-Propylbenzene	25.0	27.71		ug/L		111	70 - 130
o-Xylene	25.0	25.80		ug/L		103	70 - 130
sec-Butylbenzene	25.0	27.50		ug/L		110	70 - 130
Styrene	25.0	26.75		ug/L		107	70 - 130
Tert-amyl methyl ether	25.0	23.30		ug/L		93	70 - 130
Tert-butyl ethyl ether	25.0	23.94		ug/L		96	70 - 130
tert-Butylbenzene	25.0	26.76		ug/L		107	70 - 130
Tetrachloroethene	25.0	26.35		ug/L		105	70 - 130
Tetrahydrofuran	50.0	67.01	*	ug/L		134	70 - 130
Toluene	25.0	26.99		ug/L		108	70 - 130
trans-1,2-Dichloroethene	25.0	26.12		ug/L		104	70 - 130
trans-1,3-Dichloropropene	25.0	23.75		ug/L		95	70 - 130
Trichloroethene	25.0	26.37		ug/L		105	70 - 130
Trichlorofluoromethane	25.0	23.52		ug/L		94	70 - 130
Vinyl chloride	25.0	23.76		ug/L		95	70 - 130
Dibromomethane	25.0	24.39		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260899/5
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 480-260899/6
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	24.50		ug/L		98	70 - 130	1	20
1,1,1-Trichloroethane			25.0	23.65		ug/L		95	70 - 130	4	20
1,1,2,2-Tetrachloroethane			25.0	25.52		ug/L		102	70 - 130	1	20
1,1,2-Trichloroethane			25.0	25.72		ug/L		103	70 - 130	1	20
Freon 113			25.0	25.01		ug/L		100	70 - 130	4	20
1,1-Dichloroethane			25.0	26.48		ug/L		106	70 - 130	3	20
1,1-Dichloroethene			25.0	24.31		ug/L		97	70 - 130	3	20
1,1-Dichloropropene			25.0	25.74		ug/L		103	70 - 130	6	20
1,2,3-Trichlorobenzene			25.0	24.47		ug/L		98	70 - 130	2	20
1,2,3-Trichloropropane			25.0	24.89		ug/L		100	70 - 130	0	20
1,2,4-Trichlorobenzene			25.0	25.05		ug/L		100	70 - 130	2	20
1,2,4-Trimethylbenzene			25.0	26.08		ug/L		104	70 - 130	3	20
1,2-Dibromo-3-Chloropropane			25.0	22.46		ug/L		90	70 - 130	1	20
1,2-Dichlorobenzene			25.0	25.75		ug/L		103	70 - 130	1	20
1,2-Dichloroethane			25.0	24.22		ug/L		97	70 - 130	2	20
1,2-Dichloropropane			25.0	25.65		ug/L		103	70 - 130	4	20
1,3,5-Trimethylbenzene			25.0	26.42		ug/L		106	70 - 130	3	20
1,3-Dichlorobenzene			25.0	25.65		ug/L		103	70 - 130	4	20
1,3-Dichloropropane			25.0	25.47		ug/L		102	70 - 130	0	20
1,4-Dichlorobenzene			25.0	25.69		ug/L		103	70 - 130	2	20
1,4-Dioxane			500	544.9		ug/L		109	70 - 130	17	20
2,2-Dichloropropane			25.0	23.91		ug/L		96	70 - 130	6	20
2-Butanone (MEK)			125	243.5	*	ug/L		195	70 - 130	2	20
2-Chlorotoluene			25.0	26.15		ug/L		105	70 - 130	5	20
2-Hexanone			125	133.3		ug/L		107	70 - 130	0	20
4-Chlorotoluene			25.0	26.56		ug/L		106	70 - 130	2	20
4-Isopropyltoluene			25.0	26.08		ug/L		104	70 - 130	7	20
4-Methyl-2-pentanone (MIBK)			125	132.4		ug/L		106	70 - 130	0	20
Acetone			125	143.4		ug/L		115	70 - 130	4	20
Benzene			25.0	25.14		ug/L		101	70 - 130	6	20
Bromobenzene			25.0	26.00		ug/L		104	70 - 130	2	20
Bromoform			25.0	21.40		ug/L		86	70 - 130	1	20
Bromomethane			25.0	20.74		ug/L		83	70 - 130	5	20
Carbon disulfide			25.0	24.84		ug/L		99	70 - 130	5	20
Carbon tetrachloride			25.0	22.97		ug/L		92	70 - 130	3	20
Chlorobenzene			25.0	25.85		ug/L		103	70 - 130	2	20
Chlorobromomethane			25.0	23.93		ug/L		96	70 - 130	2	20
Chlorodibromomethane			25.0	23.67		ug/L		95	70 - 130	2	20
Chloroethane			25.0	21.81		ug/L		87	70 - 130	8	20
Chloroform			25.0	24.22		ug/L		97	70 - 130	3	20
Chloromethane			25.0	21.84		ug/L		87	70 - 130	8	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260899/6
Matrix: Water
Analysis Batch: 260899

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	25.0	24.71		ug/L		99	70 - 130	3	20
cis-1,3-Dichloropropene	25.0	24.08		ug/L		96	70 - 130	2	20
Dichlorobromomethane	25.0	23.85		ug/L		95	70 - 130	0	20
Dichlorodifluoromethane	25.0	16.44	*	ug/L		66	70 - 130	6	20
Ethyl ether	25.0	23.92		ug/L		96	70 - 130	4	20
Ethylbenzene	25.0	26.19		ug/L		105	70 - 130	3	20
Ethylene Dibromide	25.0	25.25		ug/L		101	70 - 130	1	20
Hexachlorobutadiene	25.0	25.32		ug/L		101	70 - 130	8	20
Isopropyl ether	25.0	25.23		ug/L		101	70 - 130	4	20
Isopropylbenzene	25.0	25.97		ug/L		104	70 - 130	4	20
Methyl tert-butyl ether	25.0	24.03		ug/L		96	70 - 130	1	20
Methylene Chloride	25.0	24.55		ug/L		98	70 - 130	3	20
m-Xylene & p-Xylene	25.0	25.26		ug/L		101	70 - 130	3	20
Naphthalene	25.0	23.99		ug/L		96	70 - 130	1	20
n-Butylbenzene	25.0	26.80		ug/L		107	70 - 130	3	20
N-Propylbenzene	25.0	26.37		ug/L		105	70 - 130	5	20
o-Xylene	25.0	25.10		ug/L		100	70 - 130	3	20
sec-Butylbenzene	25.0	26.48		ug/L		106	70 - 130	4	20
Styrene	25.0	26.46		ug/L		106	70 - 130	1	20
Tert-amyl methyl ether	25.0	23.12		ug/L		92	70 - 130	1	20
Tert-butyl ethyl ether	25.0	23.68		ug/L		95	70 - 130	1	20
tert-Butylbenzene	25.0	25.86		ug/L		103	70 - 130	3	20
Tetrachloroethene	25.0	26.03		ug/L		104	70 - 130	1	20
Tetrahydrofuran	50.0	66.47	*	ug/L		133	70 - 130	1	20
Toluene	25.0	25.66		ug/L		103	70 - 130	5	20
trans-1,2-Dichloroethene	25.0	25.15		ug/L		101	70 - 130	4	20
trans-1,3-Dichloropropene	25.0	24.13		ug/L		97	70 - 130	2	20
Trichloroethene	25.0	25.69		ug/L		103	70 - 130	3	20
Trichlorofluoromethane	25.0	22.33		ug/L		89	70 - 130	5	20
Vinyl chloride	25.0	21.59		ug/L		86	70 - 130	10	20
Dibromomethane	25.0	23.87		ug/L		95	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 480-260980/15-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260980

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,1,1-Trichloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,1,2,2-Tetrachloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,1,2-Trichloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Freon 113	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,1-Dichloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260980/15-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260980

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,1-Dichloropropene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2,3-Trichlorobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2,3-Trichloropropane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2,4-Trichlorobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2,4-Trimethylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2-Dibromo-3-Chloropropane	<0.0248		0.0248	0.0248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2-Dichlorobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2-Dichloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,2-Dichloropropane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,3,5-Trimethylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,3-Dichlorobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,3-Dichloropropane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,4-Dichlorobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
1,4-Dioxane	<0.248		0.248	0.248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
2,2-Dichloropropane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
2-Butanone (MEK)	<0.0248		0.0248	0.0248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
2-Chlorotoluene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
2-Hexanone	<0.0248		0.0248	0.0248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
4-Chlorotoluene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
4-Isopropyltoluene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
4-Methyl-2-pentanone (MIBK)	<0.0248		0.0248	0.0248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Acetone	<0.248		0.248	0.248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Benzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Bromobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Bromoform	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Bromomethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Carbon disulfide	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Carbon tetrachloride	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Chlorobenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Chlorobromomethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Chlorodibromomethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Chloroethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Chloroform	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Chloromethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
cis-1,2-Dichloroethene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
cis-1,3-Dichloropropene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Dichlorobromomethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Dichlorodifluoromethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Ethyl ether	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Ethylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Ethylene Dibromide	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Hexachlorobutadiene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Isopropyl ether	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Isopropylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Methyl tert-butyl ether	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Methylene Chloride	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
m-Xylene & p-Xylene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-260980/15-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260980

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<0.0248		0.0248	0.0248	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
n-Butylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
N-Propylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
o-Xylene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
sec-Butylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Styrene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Tert-amyl methyl ether	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Tert-butyl ethyl ether	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
tert-Butylbenzene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Tetrachloroethene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Tetrahydrofuran	<0.0495		0.0495	0.0495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Toluene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
trans-1,2-Dichloroethene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
trans-1,3-Dichloropropene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Trichloroethene	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Trichlorofluoromethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Vinyl chloride	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1
Dibromomethane	<0.00495		0.00495	0.00495	mg/Kg		08/28/15 16:54	08/28/15 19:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/28/15 16:54*	*08/28/15 19:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*	*08/28/15 16:54*	*08/28/15 19:14*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/28/15 16:54*	*08/28/15 19:14*	*1*

Lab Sample ID: LCS 480-260980/1-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0499	0.05091		mg/Kg		102	70 - 130
1,1,1-Trichloroethane	0.0499	0.04500		mg/Kg		90	70 - 130
1,1,2,2-Tetrachloroethane	0.0499	0.05339		mg/Kg		107	70 - 130
1,1,2-Trichloroethane	0.0499	0.04956		mg/Kg		99	70 - 130
Freon 113	0.0499	0.04269		mg/Kg		86	70 - 130
1,1-Dichloroethane	0.0499	0.04622		mg/Kg		93	70 - 130
1,1-Dichloroethene	0.0499	0.04337		mg/Kg		87	70 - 130
1,1-Dichloropropene	0.0499	0.04463		mg/Kg		89	70 - 130
1,2,3-Trichlorobenzene	0.0499	0.05072		mg/Kg		102	70 - 130
1,2,3-Trichloropropane	0.0499	0.05273		mg/Kg		106	70 - 130
1,2,4-Trichlorobenzene	0.0499	0.05163		mg/Kg		103	70 - 130
1,2,4-Trimethylbenzene	0.0499	0.05061		mg/Kg		101	70 - 130
1,2-Dibromo-3-Chloropropane	0.0499	0.05901		mg/Kg		118	70 - 130
1,2-Dichlorobenzene	0.0499	0.05014		mg/Kg		100	70 - 130
1,2-Dichloroethane	0.0499	0.04643		mg/Kg		93	70 - 130
1,2-Dichloropropane	0.0499	0.04699		mg/Kg		94	70 - 130
1,3,5-Trimethylbenzene	0.0499	0.05012		mg/Kg		100	70 - 130
1,3-Dichlorobenzene	0.0499	0.04924		mg/Kg		99	70 - 130
1,3-Dichloropropane	0.0499	0.04975		mg/Kg		100	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260980/1-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0499	0.04898		mg/Kg		98	70 - 130
1,4-Dioxane	0.998	1.055		mg/Kg		106	70 - 130
2,2-Dichloropropane	0.0499	0.04721		mg/Kg		95	70 - 130
2-Butanone (MEK)	0.250	0.4899	*	mg/Kg		196	70 - 130
2-Chlorotoluene	0.0499	0.05008		mg/Kg		100	70 - 130
2-Hexanone	0.250	0.2846		mg/Kg		114	70 - 130
4-Chlorotoluene	0.0499	0.05334		mg/Kg		107	70 - 130
4-Isopropyltoluene	0.0499	0.05063		mg/Kg		101	70 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2766		mg/Kg		111	70 - 130
Acetone	0.250	<0.250		mg/Kg		99	70 - 130
Benzene	0.0499	0.04519		mg/Kg		91	70 - 130
Bromobenzene	0.0499	0.04912		mg/Kg		98	70 - 130
Bromoform	0.0499	0.04750		mg/Kg		95	70 - 130
Bromomethane	0.0499	0.04481		mg/Kg		90	70 - 130
Carbon disulfide	0.0499	0.04466		mg/Kg		89	70 - 130
Carbon tetrachloride	0.0499	0.04564		mg/Kg		91	70 - 130
Chlorobenzene	0.0499	0.04798		mg/Kg		96	70 - 130
Chlorobromomethane	0.0499	0.04730		mg/Kg		95	70 - 130
Chlorodibromomethane	0.0499	0.05378		mg/Kg		108	70 - 130
Chloroethane	0.0499	0.04489		mg/Kg		90	70 - 130
Chloroform	0.0499	0.04533		mg/Kg		91	70 - 130
Chloromethane	0.0499	0.04448		mg/Kg		89	70 - 130
cis-1,2-Dichloroethene	0.0499	0.04583		mg/Kg		92	70 - 130
cis-1,3-Dichloropropene	0.0499	0.05160		mg/Kg		103	70 - 130
Dichlorobromomethane	0.0499	0.04993		mg/Kg		100	70 - 130
Dichlorodifluoromethane	0.0499	0.04011		mg/Kg		80	70 - 130
Ethyl ether	0.0499	0.04631		mg/Kg		93	70 - 130
Ethylbenzene	0.0499	0.04803		mg/Kg		96	70 - 130
Ethylene Dibromide	0.0499	0.05058		mg/Kg		101	70 - 130
Hexachlorobutadiene	0.0499	0.04790		mg/Kg		96	70 - 130
Isopropyl ether	0.0499	0.04868		mg/Kg		98	70 - 130
Isopropylbenzene	0.0499	0.04919		mg/Kg		99	70 - 130
Methyl tert-butyl ether	0.0499	0.04878		mg/Kg		98	70 - 130
Methylene Chloride	0.0499	0.05461		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	0.0499	0.04792		mg/Kg		96	70 - 130
Naphthalene	0.0499	0.05433		mg/Kg		109	70 - 130
n-Butylbenzene	0.0499	0.05040		mg/Kg		101	70 - 130
N-Propylbenzene	0.0499	0.04915		mg/Kg		98	70 - 130
o-Xylene	0.0499	0.04866		mg/Kg		98	70 - 130
sec-Butylbenzene	0.0499	0.04898		mg/Kg		98	70 - 130
Styrene	0.0499	0.05042		mg/Kg		101	70 - 130
Tert-amyl methyl ether	0.0499	0.05097		mg/Kg		102	70 - 130
Tert-butyl ethyl ether	0.0499	0.04866		mg/Kg		98	70 - 130
tert-Butylbenzene	0.0499	0.04911		mg/Kg		98	70 - 130
Tetrachloroethene	0.0499	0.04822		mg/Kg		97	70 - 130
Tetrahydrofuran	0.0998	0.1121		mg/Kg		112	70 - 130
Toluene	0.0499	0.04729		mg/Kg		95	70 - 130
trans-1,2-Dichloroethene	0.0499	0.04479		mg/Kg		90	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-260980/1-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	0.0499	0.05398		mg/Kg		108	70 - 130
Trichloroethene	0.0499	0.04585		mg/Kg		92	70 - 130
Trichlorofluoromethane	0.0499	0.04187		mg/Kg		84	70 - 130
Vinyl chloride	0.0499	0.04428		mg/Kg		89	70 - 130
Dibromomethane	0.0499	0.04841		mg/Kg		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 480-260980/14-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260980

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0498	0.04392		mg/Kg		88	70 - 130	15	20
1,1,1-Trichloroethane	0.0498	0.04047		mg/Kg		81	70 - 130	11	20
1,1,2,2-Tetrachloroethane	0.0498	0.04556		mg/Kg		91	70 - 130	16	20
1,1,2-Trichloroethane	0.0498	0.04357		mg/Kg		87	70 - 130	13	20
Freon 113	0.0498	0.03716		mg/Kg		75	70 - 130	14	20
1,1-Dichloroethane	0.0498	0.04169		mg/Kg		84	70 - 130	10	20
1,1-Dichloroethene	0.0498	0.03895		mg/Kg		78	70 - 130	11	20
1,1-Dichloropropene	0.0498	0.03991		mg/Kg		80	70 - 130	11	20
1,2,3-Trichlorobenzene	0.0498	0.04145		mg/Kg		83	70 - 130	20	20
1,2,3-Trichloropropane	0.0498	0.04511		mg/Kg		91	70 - 130	16	20
1,2,4-Trichlorobenzene	0.0498	0.04261		mg/Kg		86	70 - 130	19	20
1,2,4-Trimethylbenzene	0.0498	0.04380		mg/Kg		88	70 - 130	14	20
1,2-Dibromo-3-Chloropropane	0.0498	0.04837		mg/Kg		97	70 - 130	20	20
1,2-Dichlorobenzene	0.0498	0.04296		mg/Kg		86	70 - 130	15	20
1,2-Dichloroethane	0.0498	0.04214		mg/Kg		85	70 - 130	10	20
1,2-Dichloropropane	0.0498	0.04208		mg/Kg		84	70 - 130	11	20
1,3,5-Trimethylbenzene	0.0498	0.04325		mg/Kg		87	70 - 130	15	20
1,3-Dichlorobenzene	0.0498	0.04240		mg/Kg		85	70 - 130	15	20
1,3-Dichloropropane	0.0498	0.04349		mg/Kg		87	70 - 130	13	20
1,4-Dichlorobenzene	0.0498	0.04221		mg/Kg		85	70 - 130	15	20
1,4-Dioxane	0.996	0.9052		mg/Kg		91	70 - 130	15	20
2,2-Dichloropropane	0.0498	0.04151		mg/Kg		83	70 - 130	13	20
2-Butanone (MEK)	0.249	0.4230	*	mg/Kg		170	70 - 130	15	20
2-Chlorotoluene	0.0498	0.04346		mg/Kg		87	70 - 130	14	20
2-Hexanone	0.249	0.2248	*	mg/Kg		90	70 - 130	23	20
4-Chlorotoluene	0.0498	0.04637		mg/Kg		93	70 - 130	14	20
4-Isopropyltoluene	0.0498	0.04342		mg/Kg		87	70 - 130	15	20
4-Methyl-2-pentanone (MIBK)	0.249	0.2251	*	mg/Kg		90	70 - 130	21	20
Acetone	0.249	<0.249		mg/Kg		86	70 - 130	14	20
Benzene	0.0498	0.04067		mg/Kg		82	70 - 130	11	20
Bromobenzene	0.0498	0.04238		mg/Kg		85	70 - 130	15	20
Bromoform	0.0498	0.03983		mg/Kg		80	70 - 130	18	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-260980/14-A
Matrix: Solid
Analysis Batch: 260941

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260980

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane			0.0498	0.04199		mg/Kg		84	70 - 130	7	20
Carbon disulfide			0.0498	0.04071		mg/Kg		82	70 - 130	9	20
Carbon tetrachloride			0.0498	0.04018		mg/Kg		81	70 - 130	13	20
Chlorobenzene			0.0498	0.04209		mg/Kg		85	70 - 130	13	20
Chlorobromomethane			0.0498	0.04223		mg/Kg		85	70 - 130	11	20
Chlorodibromomethane			0.0498	0.04623		mg/Kg		93	70 - 130	15	20
Chloroethane			0.0498	0.04134		mg/Kg		83	70 - 130	8	20
Chloroform			0.0498	0.04094		mg/Kg		82	70 - 130	10	20
Chloromethane			0.0498	0.04040		mg/Kg		81	70 - 130	10	20
cis-1,2-Dichloroethene			0.0498	0.04114		mg/Kg		83	70 - 130	11	20
cis-1,3-Dichloropropene			0.0498	0.04600		mg/Kg		92	70 - 130	11	20
Dichlorobromomethane			0.0498	0.04359		mg/Kg		88	70 - 130	14	20
Dichlorodifluoromethane			0.0498	0.03612		mg/Kg		73	70 - 130	10	20
Ethyl ether			0.0498	0.04421		mg/Kg		89	70 - 130	5	20
Ethylbenzene			0.0498	0.04214		mg/Kg		85	70 - 130	13	20
Ethylene Dibromide			0.0498	0.04398		mg/Kg		88	70 - 130	14	20
Hexachlorobutadiene			0.0498	0.03851	*	mg/Kg		77	70 - 130	22	20
Isopropyl ether			0.0498	0.04191		mg/Kg		84	70 - 130	15	20
Isopropylbenzene			0.0498	0.04261		mg/Kg		86	70 - 130	14	20
Methyl tert-butyl ether			0.0498	0.04248		mg/Kg		85	70 - 130	14	20
Methylene Chloride			0.0498	0.05091		mg/Kg		102	70 - 130	7	20
m-Xylene & p-Xylene			0.0498	0.04180		mg/Kg		84	70 - 130	14	20
Naphthalene			0.0498	0.04353	*	mg/Kg		87	70 - 130	22	20
n-Butylbenzene			0.0498	0.04322		mg/Kg		87	70 - 130	15	20
N-Propylbenzene			0.0498	0.04278		mg/Kg		86	70 - 130	14	20
o-Xylene			0.0498	0.04265		mg/Kg		86	70 - 130	13	20
sec-Butylbenzene			0.0498	0.04202		mg/Kg		84	70 - 130	15	20
Styrene			0.0498	0.04386		mg/Kg		88	70 - 130	14	20
Tert-amyl methyl ether			0.0498	0.04395		mg/Kg		88	70 - 130	15	20
Tert-butyl ethyl ether			0.0498	0.04187		mg/Kg		84	70 - 130	15	20
tert-Butylbenzene			0.0498	0.04192		mg/Kg		84	70 - 130	16	20
Tetrachloroethene			0.0498	0.04199		mg/Kg		84	70 - 130	14	20
Tetrahydrofuran			0.0996	0.09137		mg/Kg		92	70 - 130	20	20
Toluene			0.0498	0.04124		mg/Kg		83	70 - 130	14	20
trans-1,2-Dichloroethene			0.0498	0.04021		mg/Kg		81	70 - 130	11	20
trans-1,3-Dichloropropene			0.0498	0.04615		mg/Kg		93	70 - 130	16	20
Trichloroethene			0.0498	0.04101		mg/Kg		82	70 - 130	11	20
Trichlorofluoromethane			0.0498	0.03717		mg/Kg		75	70 - 130	12	20
Vinyl chloride			0.0498	0.03935		mg/Kg		79	70 - 130	12	20
Dibromomethane			0.0498	0.04317		mg/Kg		87	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Lab Sample ID: MB 240-195244/22-A
Matrix: Solid
Analysis Batch: 195799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 195244

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1221	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1232	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1242	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1248	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1254	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1260	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1262	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1
Aroclor-1268	<0.0330		0.0330	0.0330	mg/Kg		08/28/15 07:16	09/01/15 23:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/28/15 07:16*	*09/01/15 23:58*	*1*
Tetrachloro-m-xylene	*80*		*30 - 150*	*08/28/15 07:16*	*09/01/15 23:58*	*1*
DCB Decachlorobiphenyl	*89*		*30 - 150*	*08/28/15 07:16*	*09/01/15 23:58*	*1*
DCB Decachlorobiphenyl	*89*		*30 - 150*	*08/28/15 07:16*	*09/01/15 23:58*	*1*

Lab Sample ID: LCS 240-195244/23-A
Matrix: Solid
Analysis Batch: 195799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 195244

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			0.333	0.2694		mg/Kg		81	40 - 140		
Aroclor-1260			0.333	0.2656		mg/Kg		80	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*77*		*30 - 150*
Tetrachloro-m-xylene	*71*		*30 - 150*
DCB Decachlorobiphenyl	*88*		*30 - 150*
DCB Decachlorobiphenyl	*84*		*30 - 150*

Lab Sample ID: LCSD 240-195244/24-A
Matrix: Solid
Analysis Batch: 195799

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 195244

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016			0.333	0.2904		mg/Kg		87	40 - 140	8	30
Aroclor-1260			0.333	0.3008		mg/Kg		90	40 - 140	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*82*		*30 - 150*
Tetrachloro-m-xylene	*78*		*30 - 150*
DCB Decachlorobiphenyl	*88*		*30 - 150*
DCB Decachlorobiphenyl	*86*		*30 - 150*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: MB 480-260937/1-A
Matrix: Water
Analysis Batch: 261050

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260937

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1221	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1232	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1242	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1248	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1254	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1260	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1262	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1
PCB-1268	<0.250		0.250	0.250	ug/L		08/28/15 09:22	08/28/15 20:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/28/15 09:22*	*08/28/15 20:23*	*1*
Tetrachloro-m-xylene	*97*		*30 - 150*	*08/28/15 09:22*	*08/28/15 20:23*	*1*
DCB Decachlorobiphenyl	*89*		*30 - 150*	*08/28/15 09:22*	*08/28/15 20:23*	*1*
DCB Decachlorobiphenyl	*98*		*30 - 150*	*08/28/15 09:22*	*08/28/15 20:23*	*1*

Lab Sample ID: LCS 480-260937/2-A
Matrix: Water
Analysis Batch: 261050

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260937

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	3.454		ug/L		86	40 - 140		
PCB-1260			4.00	3.265		ug/L		82	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*85*		*30 - 150*
Tetrachloro-m-xylene	*95*		*30 - 150*
DCB Decachlorobiphenyl	*84*		*30 - 150*
DCB Decachlorobiphenyl	*91*		*30 - 150*

Lab Sample ID: LCSD 480-260937/3-A
Matrix: Water
Analysis Batch: 261050

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260937

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			4.00	2.753	*	ug/L		69	40 - 140	23	20
PCB-1260			4.00	2.398	*	ug/L		60	40 - 140	31	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*69*		*30 - 150*
Tetrachloro-m-xylene	*78*		*30 - 150*
DCB Decachlorobiphenyl	*66*		*30 - 150*
DCB Decachlorobiphenyl	*72*		*30 - 150*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: MB 480-261294/1-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261294

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1221	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1232	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1242	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1248	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1254	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1260	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1262	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1268	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*
Tetrachloro-m-xylene	*100*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*
DCB Decachlorobiphenyl	*60*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*
DCB Decachlorobiphenyl	*70*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*

Lab Sample ID: LCS 480-261294/2-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261294

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	3.703		ug/L		93	40 - 140		
PCB-1260			4.00	3.634		ug/L		91	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*30 - 150*
Tetrachloro-m-xylene	*99*		*30 - 150*
DCB Decachlorobiphenyl	*50*		*30 - 150*
DCB Decachlorobiphenyl	*57*		*30 - 150*

Lab Sample ID: LCSD 480-261294/3-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261294

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			4.00	3.692		ug/L		92	40 - 140	0	20
PCB-1260			4.00	3.594		ug/L		90	40 - 140	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*30 - 150*
Tetrachloro-m-xylene	*102*		*30 - 150*
DCB Decachlorobiphenyl	*50*		*30 - 150*
DCB Decachlorobiphenyl	*57*		*30 - 150*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-260774/1-A
Matrix: Solid
Analysis Batch: 261173

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260774

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.201		0.502	0.201	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Arsenic	<0.401		1.00	0.401	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Barium	<0.110		0.502	0.110	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Beryllium	<0.0281		0.201	0.0281	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Cadmium	<0.0301		0.201	0.0301	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Chromium	<0.201		0.502	0.201	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Nickel	<0.231		1.00	0.231	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Thallium	<0.301		1.00	0.301	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Vanadium	<0.110		0.502	0.110	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Zinc	<0.642		2.51	0.642	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Lead	<0.241		0.502	0.241	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Selenium	<0.401		0.502	0.401	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Antimony	<0.401		0.502	0.401	mg/Kg		08/28/15 12:35	08/28/15 13:42	1
Copper	<0.211		1.00	0.211	mg/Kg		08/28/15 12:35	08/28/15 13:42	1

Lab Sample ID: LCDSRM 480-260774/3-A
Matrix: Solid
Analysis Batch: 261173

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260774

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver			52.6	44.59		mg/Kg		84.8	66.7 - 133.5	0	30
Arsenic			113	98.13		mg/Kg		86.8	69.7 - 142.5	1	30
Barium			155	141.4		mg/Kg		91.2	72.9 - 127.1	4	30
Beryllium			109	94.88		mg/Kg		87.0	74.7 - 124.8	2	30
Cadmium			67.5	59.37		mg/Kg		88.0	73.2 - 126.8	3	30
Chromium			164	146.4		mg/Kg		89.3	70.7 - 129.9	3	30
Nickel			89.3	91.68		mg/Kg		102.7	72.0 - 127.7	3	30
Thallium			116	115.0		mg/Kg		99.1	67.4 - 131.9	1	30
Vanadium			73.0	70.07		mg/Kg		96.0	59.7 - 139.7	2	30
Zinc			168	146.4		mg/Kg		87.1	69.0 - 131.5	3	30
Lead			90.1	89.37		mg/Kg		99.2	70.1 - 129.9	2	30
Selenium			156	135.2		mg/Kg		86.7	67.3 - 132.1	3	30
Antimony			94.0	77.64		mg/Kg		82.6	22.8 - 257.4	5	30
Copper			100	113.7		mg/Kg		113.7	96.2 - 161.0	3	30

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-260774/2-A
Matrix: Solid
Analysis Batch: 261173

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260774

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	52.6	44.48		mg/Kg		84.6	66.7 - 133.5
Arsenic	113	97.29		mg/Kg		86.1	69.7 - 142.5
Barium	155	135.4		mg/Kg		87.3	72.9 - 127.1
Beryllium	109	93.32		mg/Kg		85.6	74.7 - 124.8
Cadmium	67.5	57.90		mg/Kg		85.8	73.2 - 126.8
Chromium	164	142.2		mg/Kg		86.7	70.7 - 129.9
Nickel	89.3	88.53		mg/Kg		99.1	72.0 - 127.7
Thallium	116	113.4		mg/Kg		97.8	67.4 - 131.9
Vanadium	73.0	68.87		mg/Kg		94.3	59.7 - 139.7
Zinc	168	142.7		mg/Kg		84.9	69.0 - 131.5
Lead	90.1	87.93		mg/Kg		97.6	70.1 - 129.9
Selenium	156	131.3		mg/Kg		84.2	67.3 - 132.1
Antimony	94.0	74.12		mg/Kg		78.9	22.8 - 257.4
Copper	100	110.1		mg/Kg		110.1	96.2 - 161.0

Lab Sample ID: MB 480-260530/1-A
Matrix: Water
Analysis Batch: 260906

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 260530

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/27/15 07:10	08/27/15 17:22	1
Arsenic	<5.55		10.0	5.55	ug/L		08/27/15 07:10	08/27/15 17:22	1
Barium	<0.700		10.0	0.700	ug/L		08/27/15 07:10	08/27/15 17:22	1
Beryllium	<0.300		1.00	0.300	ug/L		08/27/15 07:10	08/27/15 17:22	1
Cadmium	<0.500		1.00	0.500	ug/L		08/27/15 07:10	08/27/15 17:22	1
Chromium	<1.00		5.00	1.00	ug/L		08/27/15 07:10	08/27/15 17:22	1
Nickel	<1.26		10.0	1.26	ug/L		08/27/15 07:10	08/27/15 17:22	1
Thallium	<10.2		20.0	10.2	ug/L		08/27/15 07:10	08/27/15 17:22	1
Vanadium	<1.50		10.0	1.50	ug/L		08/27/15 07:10	08/27/15 17:22	1
Lead	<3.00		5.00	3.00	ug/L		08/27/15 07:10	08/27/15 17:22	1
Selenium	<8.70		10.0	8.70	ug/L		08/27/15 07:10	08/27/15 17:22	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/27/15 07:10	08/27/15 17:22	1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: MB 480-260530/1-A
Matrix: Water
Analysis Batch: 261171

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 260530

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	<1.50		50.0	1.50	ug/L		08/27/15 07:10	08/28/15 11:07	1
Copper	<1.60		10.0	1.60	ug/L		08/27/15 07:10	08/28/15 11:07	1

Lab Sample ID: LCS 480-260530/2-A
Matrix: Water
Analysis Batch: 260906

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 260530

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	50.0	48.15		ug/L		96	80 - 120
Arsenic	200	190.7		ug/L		95	80 - 120
Barium	200	204.9		ug/L		102	80 - 120
Beryllium	200	196.4		ug/L		98	80 - 120
Cadmium	200	196.9		ug/L		98	80 - 120
Chromium	200	203.4		ug/L		102	80 - 120
Nickel	200	189.6		ug/L		95	80 - 120
Thallium	200	194.1		ug/L		97	80 - 120
Vanadium	200	198.8		ug/L		99	80 - 120
Lead	200	198.4		ug/L		99	80 - 120
Selenium	200	193.7		ug/L		97	80 - 120
Antimony	200	190.6	^	ug/L		95	80 - 120

Lab Sample ID: LCS 480-260530/2-A
Matrix: Water
Analysis Batch: 261171

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 260530

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	200	194.2		ug/L		97	80 - 120
Copper	200	195.6		ug/L		98	80 - 120

Lab Sample ID: LCSD 480-260530/3-A
Matrix: Water
Analysis Batch: 260906

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 260530

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	50.0	47.87		ug/L		96	80 - 120	1	20
Arsenic	200	193.6		ug/L		97	80 - 120	1	20
Barium	200	202.4		ug/L		101	80 - 120	1	20
Beryllium	200	196.0		ug/L		98	80 - 120	0	20
Cadmium	200	196.6		ug/L		98	80 - 120	0	20
Chromium	200	202.1		ug/L		101	80 - 120	1	20
Nickel	200	189.6		ug/L		95	80 - 120	0	20
Thallium	200	194.7		ug/L		97	80 - 120	0	20
Vanadium	200	196.4		ug/L		98	80 - 120	1	20
Lead	200	198.6		ug/L		99	80 - 120	0	20
Selenium	200	194.5		ug/L		97	80 - 120	0	20
Antimony	200	191.4	^	ug/L		96	80 - 120	0	20

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSD 480-260530/3-A
Matrix: Water
Analysis Batch: 261171

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 260530

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	200	193.8		ug/L		97	80 - 120	0	20
Copper	200	196.0		ug/L		98	80 - 120	0	20

Lab Sample ID: MB 480-260740/1-A
Matrix: Water
Analysis Batch: 261177

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 260740

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/28/15 07:30	08/28/15 19:05	1
Arsenic	<5.55		10.0	5.55	ug/L		08/28/15 07:30	08/28/15 19:05	1
Barium	<0.700		10.0	0.700	ug/L		08/28/15 07:30	08/28/15 19:05	1
Beryllium	<0.300		1.00	0.300	ug/L		08/28/15 07:30	08/28/15 19:05	1
Cadmium	<0.500		1.00	0.500	ug/L		08/28/15 07:30	08/28/15 19:05	1
Chromium	<1.00		5.00	1.00	ug/L		08/28/15 07:30	08/28/15 19:05	1
Nickel	<1.26		10.0	1.26	ug/L		08/28/15 07:30	08/28/15 19:05	1
Thallium	<10.2		20.0	10.2	ug/L		08/28/15 07:30	08/28/15 19:05	1
Vanadium	<1.50		10.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:05	1
Zinc	<1.50		50.0	1.50	ug/L		08/28/15 07:30	08/28/15 19:05	1
Lead	<3.00		5.00	3.00	ug/L		08/28/15 07:30	08/28/15 19:05	1
Selenium	<8.70		10.0	8.70	ug/L		08/28/15 07:30	08/28/15 19:05	1
Antimony	<6.79		6.00	6.79	ug/L		08/28/15 07:30	08/28/15 19:05	1
Copper	<1.60		10.0	1.60	ug/L		08/28/15 07:30	08/28/15 19:05	1

Lab Sample ID: LCS 480-260740/2-A
Matrix: Water
Analysis Batch: 261177

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 260740

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	50.0	48.72		ug/L		97	80 - 120
Arsenic	200	190.1		ug/L		95	80 - 120
Barium	200	202.5		ug/L		101	80 - 120
Beryllium	200	193.4		ug/L		97	80 - 120
Cadmium	200	194.1		ug/L		97	80 - 120
Chromium	200	199.3		ug/L		100	80 - 120
Nickel	200	186.7		ug/L		93	80 - 120
Thallium	200	190.8		ug/L		95	80 - 120
Vanadium	200	196.5		ug/L		98	80 - 120
Zinc	200	190.4		ug/L		95	80 - 120
Lead	200	197.7		ug/L		99	80 - 120
Selenium	200	188.1		ug/L		94	80 - 120
Antimony	200	188.9		ug/L		94	80 - 120
Copper	200	191.1		ug/L		96	80 - 120

Lab Sample ID: LCSD 480-260740/3-A
Matrix: Water
Analysis Batch: 261177

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 260740

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	50.0	48.32		ug/L		97	80 - 120	1	20

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSD 480-260740/3-A
Matrix: Water
Analysis Batch: 261177

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 260740

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	190.7		ug/L		95	80 - 120	0	20
Barium	200	200.7		ug/L		100	80 - 120	1	20
Beryllium	200	192.3		ug/L		96	80 - 120	1	20
Cadmium	200	193.4		ug/L		97	80 - 120	0	20
Chromium	200	198.2		ug/L		99	80 - 120	1	20
Nickel	200	186.0		ug/L		93	80 - 120	0	20
Thallium	200	190.7		ug/L		95	80 - 120	0	20
Vanadium	200	194.8		ug/L		97	80 - 120	1	20
Zinc	200	189.1		ug/L		95	80 - 120	1	20
Lead	200	194.1		ug/L		97	80 - 120	2	20
Selenium	200	189.3		ug/L		95	80 - 120	1	20
Antimony	200	188.7		ug/L		94	80 - 120	0	20
Copper	200	190.0		ug/L		95	80 - 120	1	20

Lab Sample ID: MB 480-261254/1-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 17:40	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 17:40	1
Barium	<0.700		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 17:40	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 17:40	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 17:40	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 17:40	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 17:40	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 17:40	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 17:40	1
Zinc	<1.50		50.0	1.50	ug/L		08/31/15 11:31	09/01/15 17:40	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 17:40	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 17:40	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 17:40	1
Copper	<1.60		10.0	1.60	ug/L		08/31/15 11:31	09/01/15 17:40	1

Lab Sample ID: LCS 480-261254/2-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	50.0	46.66		ug/L		93	80 - 120
Arsenic	200	193.2		ug/L		97	80 - 120
Barium	200	198.4		ug/L		99	80 - 120
Beryllium	200	200.2		ug/L		100	80 - 120
Cadmium	200	200.0		ug/L		100	80 - 120
Chromium	200	203.9		ug/L		102	80 - 120
Nickel	200	190.9		ug/L		95	80 - 120
Thallium	200	195.7		ug/L		98	80 - 120
Vanadium	200	198.2		ug/L		99	80 - 120
Zinc	200	194.5		ug/L		97	80 - 120

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-261254/2-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	200	203.8		ug/L		102	80 - 120
Selenium	200	193.9		ug/L		97	80 - 120
Antimony	200	194.6	^	ug/L		97	80 - 120
Copper	200	194.6		ug/L		97	80 - 120

Lab Sample ID: LCSD 480-261254/3-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	50.0	47.10		ug/L		94	80 - 120	1	20
Arsenic	200	190.7		ug/L		95	80 - 120	1	20
Barium	200	193.9		ug/L		97	80 - 120	2	20
Beryllium	200	196.6		ug/L		98	80 - 120	2	20
Cadmium	200	196.6		ug/L		98	80 - 120	2	20
Chromium	200	198.7		ug/L		99	80 - 120	3	20
Nickel	200	186.5		ug/L		93	80 - 120	2	20
Thallium	200	192.2		ug/L		96	80 - 120	2	20
Vanadium	200	192.6		ug/L		96	80 - 120	3	20
Zinc	200	192.1		ug/L		96	80 - 120	1	20
Lead	200	199.5		ug/L		100	80 - 120	2	20
Selenium	200	187.6		ug/L		94	80 - 120	3	20
Antimony	200	192.3	^	ug/L		96	80 - 120	1	20
Copper	200	191.8		ug/L		96	80 - 120	1	20

Lab Sample ID: 480-86189-2 MS
Matrix: Water
Analysis Batch: 260906

Client Sample ID: SW-10
Prep Type: Dissolved
Prep Batch: 260530

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<1.70		50.0	48.29		ug/L		97	75 - 125
Arsenic	<5.55		200	197.5		ug/L		99	75 - 125
Barium	65.2		200	263.1		ug/L		99	75 - 125
Beryllium	<0.300		200	197.8		ug/L		99	75 - 125
Cadmium	<0.500		200	198.7		ug/L		99	75 - 125
Chromium	<1.00		200	203.7		ug/L		102	75 - 125
Nickel	<1.26		200	195.2		ug/L		98	75 - 125
Thallium	<10.2		200	193.3		ug/L		97	75 - 125
Vanadium	<1.50		200	199.7		ug/L		100	75 - 125
Zinc	11.3	J	200	208.3		ug/L		99	75 - 125
Lead	<3.00		200	202.2		ug/L		101	75 - 125
Selenium	<8.70		200	197.9		ug/L		99	75 - 125
Antimony	<6.79	^	200	193.4	^	ug/L		97	75 - 125
Copper	2.05	J B ^	200	199.0		ug/L		98	75 - 125

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: 480-86189-2 MSD — **Client Sample ID: SW-10**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 260906 — **Prep Batch: 260530**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<1.70		50.0	47.76		ug/L		96	75 - 125	1	20
Arsenic	<5.55		200	192.6		ug/L		96	75 - 125	3	20
Barium	65.2		200	261.9		ug/L		98	75 - 125	0	20
Beryllium	<0.300		200	195.7		ug/L		98	75 - 125	1	20
Cadmium	<0.500		200	196.0		ug/L		98	75 - 125	1	20
Chromium	<1.00		200	202.4		ug/L		101	75 - 125	1	20
Nickel	<1.26		200	192.7		ug/L		96	75 - 125	1	20
Thallium	<10.2		200	191.4		ug/L		96	75 - 125	1	20
Vanadium	<1.50		200	199.4		ug/L		100	75 - 125	0	20
Zinc	11.3	J	200	205.5		ug/L		97	75 - 125	1	20
Lead	<3.00		200	200.2		ug/L		100	75 - 125	1	20
Selenium	<8.70		200	196.4		ug/L		98	75 - 125	1	20
Antimony	<6.79	^	200	190.9	^	ug/L		95	75 - 125	1	20
Copper	2.05	J B ^	200	194.9		ug/L		96	75 - 125	2	20

Lab Sample ID: 480-86256-3 MS — **Client Sample ID: SW-12**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 261177 — **Prep Batch: 260740**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<1.70		50.0	47.97		ug/L		96	75 - 125
Arsenic	<5.55		200	196.9		ug/L		98	75 - 125
Barium	70.2		200	269.2		ug/L		100	75 - 125
Beryllium	<0.300		200	197.2		ug/L		99	75 - 125
Cadmium	<0.500		200	198.9		ug/L		99	75 - 125
Chromium	<1.00		200	201.8		ug/L		101	75 - 125
Nickel	<1.26		200	194.4		ug/L		97	75 - 125
Thallium	<10.2		200	194.0		ug/L		97	75 - 125
Vanadium	<1.50		200	199.5		ug/L		100	75 - 125
Zinc	7.77	J	200	201.8		ug/L		97	75 - 125
Lead	<3.00		200	202.5		ug/L		101	75 - 125
Selenium	<8.70		200	197.1		ug/L		99	75 - 125
Antimony	<6.79		200	194.7		ug/L		97	75 - 125
Copper	<1.60		200	197.4		ug/L		99	75 - 125

Lab Sample ID: 480-86256-3 MSD — **Client Sample ID: SW-12**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 261177 — **Prep Batch: 260740**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<1.70		50.0	47.60		ug/L		95	75 - 125	1	20
Arsenic	<5.55		200	190.8		ug/L		95	75 - 125	3	20
Barium	70.2		200	261.1		ug/L		95	75 - 125	3	20
Beryllium	<0.300		200	191.7		ug/L		96	75 - 125	3	20
Cadmium	<0.500		200	192.7		ug/L		96	75 - 125	3	20
Chromium	<1.00		200	195.2		ug/L		98	75 - 125	3	20
Nickel	<1.26		200	189.0		ug/L		94	75 - 125	3	20
Thallium	<10.2		200	188.3		ug/L		94	75 - 125	3	20

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: 480-86256-3 MSD
Matrix: Water
Analysis Batch: 261177

Client Sample ID: SW-12
Prep Type: Dissolved
Prep Batch: 260740

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	<1.50		200	192.9		ug/L		96	75 - 125	3	20
Zinc	7.77	J	200	196.5		ug/L		94	75 - 125	3	20
Lead	<3.00		200	197.1		ug/L		99	75 - 125	3	20
Selenium	<8.70		200	188.0		ug/L		94	75 - 125	5	20
Antimony	<6.79		200	188.3		ug/L		94	75 - 125	3	20
Copper	<1.60		200	190.5		ug/L		95	75 - 125	4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-260657/1-A
Matrix: Water
Analysis Batch: 260939

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/27/15 09:50	08/27/15 17:28	1

Lab Sample ID: LCS 480-260657/2-A
Matrix: Water
Analysis Batch: 260939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	6.67	6.483		ug/L		97	80 - 120

Lab Sample ID: LCSD 480-260657/3-A
Matrix: Water
Analysis Batch: 260939

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260657

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	6.67	6.717		ug/L		101	80 - 120	4	20

Lab Sample ID: MB 480-260078/1-D
Matrix: Water
Analysis Batch: 260662

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 260475

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/26/15 10:20	08/26/15 14:18	1

Lab Sample ID: LCS 480-260078/2-D
Matrix: Water
Analysis Batch: 260662

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 260475

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	6.67	6.567		ug/L		98	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 480-260078/3-B
Matrix: Water
Analysis Batch: 260662

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved
Prep Batch: 260475

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			6.67	6.600		ug/L		99	80 - 120	1	20

Lab Sample ID: 480-86256-2 MS
Matrix: Water
Analysis Batch: 260939

Client Sample ID: SW-11
Prep Type: Dissolved
Prep Batch: 260657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	<0.120		6.67	6.683		ug/L		100	75 - 125		

Lab Sample ID: 480-86256-2 MSD
Matrix: Water
Analysis Batch: 260939

Client Sample ID: SW-11
Prep Type: Dissolved
Prep Batch: 260657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.120		6.67	6.600		ug/L		99	75 - 125	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-260886/1-A
Matrix: Solid
Analysis Batch: 261013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260886

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00812		0.100	0.00812	mg/Kg		08/28/15 10:00	08/28/15 13:20	1

Lab Sample ID: LCDSRM 480-260886/3-A
Matrix: Solid
Analysis Batch: 261013

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260886

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			8.37	9.703		mg/Kg		115.9	51.3 - 148.1	10	

Lab Sample ID: LCSSRM 480-260886/2-A
Matrix: Solid
Analysis Batch: 261013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260886

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			8.37	8.792		mg/Kg		105.0	51.3 - 148.1		

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 480-261027/27
Matrix: Water
Analysis Batch: 261027

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<525		2000	525	ug/L			08/28/15 12:15	1

Method: SM 2340C - Hardness, Total (mg/l as CaC03) (Continued)

Lab Sample ID: MB 480-261027/3
Matrix: Water
Analysis Batch: 261027

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<525		2000	525	ug/L			08/28/15 12:15	1

Lab Sample ID: LCS 480-261027/28
Matrix: Water
Analysis Batch: 261027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362000	352000		ug/L		97	90 - 110

Lab Sample ID: LCS 480-261027/4
Matrix: Water
Analysis Batch: 261027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362000	348000		ug/L		96	90 - 110

Lab Sample ID: 480-86256-9 MS
Matrix: Water
Analysis Batch: 261027

Client Sample ID: SW-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	88000		200000	284000		ug/L		98	74 - 130

Lab Sample ID: 480-86256-9 MSD
Matrix: Water
Analysis Batch: 261027

Client Sample ID: SW-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hardness as calcium carbonate	88000		200000	284000		ug/L		98	74 - 130	0	15

Lab Sample ID: MB 480-261500/27
Matrix: Water
Analysis Batch: 261500

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<2000		2000	2000	ug/L			09/01/15 09:10	1

Lab Sample ID: MB 480-261500/51
Matrix: Water
Analysis Batch: 261500

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<2000		2000	2000	ug/L			09/01/15 09:10	1

Lab Sample ID: MB 480-261500/75
Matrix: Water
Analysis Batch: 261500

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<2000		2000	2000	ug/L			09/01/15 09:10	1

Lab Sample ID: LCS 480-261500/28
Matrix: Water
Analysis Batch: 261500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362000	352000		ug/L		97	90 - 110

Lab Sample ID: LCS 480-261500/52
Matrix: Water
Analysis Batch: 261500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362000	352000		ug/L		97	90 - 110

Lab Sample ID: LCS 480-261500/76
Matrix: Water
Analysis Batch: 261500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362000	352000		ug/L		97	90 - 110

Lab Sample ID: MB 480-261950/3
Matrix: Water
Analysis Batch: 261950

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<2000		2000	2000	ug/L			09/03/15 13:51	1

Lab Sample ID: LCS 480-261950/4
Matrix: Water
Analysis Batch: 261950

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362000	356000		ug/L		98	90 - 110

Lab Sample ID: 480-86189-2 MS
Matrix: Water
Analysis Batch: 261950

Client Sample ID: SW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	80000		200000	284000		ug/L		102	74 - 130

Lab Sample ID: 480-86189-2 DU
Matrix: Water
Analysis Batch: 261950

Client Sample ID: SW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hardness as calcium carbonate	80000		84000		ug/L		5	15

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Analysis Batch: 260445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-1	TB-01	Total/NA	Water	8260C	
480-86189-2	SW-10	Total/NA	Water	8260C	
480-86189-3	PW-10	Total/NA	Water	8260C	
LCS 480-260445/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-260445/5	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-260445/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 260681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-1	TB-02	Total/NA	Water	8260C	
480-86256-2	SW-11	Total/NA	Water	8260C	
480-86256-3	SW-12	Total/NA	Water	8260C	
480-86256-4	SW-12 (DUP)	Total/NA	Water	8260C	
480-86256-5	PW-12	Total/NA	Water	8260C	
480-86256-6	PW-12 (DUP)	Total/NA	Water	8260C	
480-86256-7	SW-13	Total/NA	Water	8260C	
480-86256-9	SW-14	Total/NA	Water	8260C	
480-86256-11	SW-15	Total/NA	Water	8260C	
480-86256-12	PW-15	Total/NA	Water	8260C	
480-86256-13	SW-16	Total/NA	Water	8260C	
LCS 480-260681/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-260681/6	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-260681/8	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 260730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-260778/1-A	Lab Control Sample	Total/NA	Solid	8260C	260778
MB 480-260778/3-A	Method Blank	Total/NA	Solid	8260C	260778

Analysis Batch: 260731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-5	TB-01	Total/NA	Solid	8260C	260778
LCS 480-260778/1-A	Lab Control Sample	Total/NA	Solid	8260C	260778
LCSD 480-260778/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	260778
MB 480-260778/3-A	Method Blank	Total/NA	Solid	8260C	260778

Prep Batch: 260778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-5	TB-01	Total/NA	Solid	5035A	
LCS 480-260778/1-A	Lab Control Sample	Total/NA	Solid	5035A	
LCSD 480-260778/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A	
MB 480-260778/3-A	Method Blank	Total/NA	Solid	5035A	

Analysis Batch: 260899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-8	PW-13	Total/NA	Water	8260C	
480-86256-10	PW-14	Total/NA	Water	8260C	
480-86256-14	PW-16	Total/NA	Water	8260C	
LCS 480-260899/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-260899/6	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-260899/8	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 260941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	8260C	260980
LCS 480-260980/1-A	Lab Control Sample	Total/NA	Solid	8260C	260980
LCSD 480-260980/14-A	Lab Control Sample Dup	Total/NA	Solid	8260C	260980
MB 480-260980/15-A	Method Blank	Total/NA	Solid	8260C	260980

Prep Batch: 260980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	5035A	
LCS 480-260980/1-A	Lab Control Sample	Total/NA	Solid	5035A	
LCSD 480-260980/14-A	Lab Control Sample Dup	Total/NA	Solid	5035A	
MB 480-260980/15-A	Method Blank	Total/NA	Solid	5035A	

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Prep Batch: 195244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	3540C	
LCS 240-195244/23-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-195244/24-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-195244/22-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 195799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	8082	195244
LCS 240-195244/23-A	Lab Control Sample	Total/NA	Solid	8082	195244
LCSD 240-195244/24-A	Lab Control Sample Dup	Total/NA	Solid	8082	195244
MB 240-195244/22-A	Method Blank	Total/NA	Solid	8082	195244

Prep Batch: 260937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Total/NA	Water	3510C	
480-86256-3	SW-12	Total/NA	Water	3510C	
480-86256-4	SW-12 (DUP)	Total/NA	Water	3510C	
480-86256-5	PW-12	Total/NA	Water	3510C	
480-86256-6	PW-12 (DUP)	Total/NA	Water	3510C	
480-86256-7	SW-13	Total/NA	Water	3510C	
480-86256-8	PW-13	Total/NA	Water	3510C	
480-86256-8 - DL	PW-13	Total/NA	Water	3510C	
480-86256-9	SW-14	Total/NA	Water	3510C	
480-86256-10 - DL	PW-14	Total/NA	Water	3510C	
480-86256-10	PW-14	Total/NA	Water	3510C	
480-86256-11	SW-15	Total/NA	Water	3510C	
480-86256-12	PW-15	Total/NA	Water	3510C	
480-86256-12 - DL	PW-15	Total/NA	Water	3510C	
480-86256-13	SW-16	Total/NA	Water	3510C	
480-86256-14	PW-16	Total/NA	Water	3510C	
480-86256-14 - DL	PW-16	Total/NA	Water	3510C	
480-86256-15	PW-15 filtered	Total/NA	Water	3510C	
LCS 480-260937/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-260937/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-260937/1-A	Method Blank	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Analysis Batch: 261050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Total/NA	Water	8082	260937
480-86256-3	SW-12	Total/NA	Water	8082	260937
480-86256-4	SW-12 (DUP)	Total/NA	Water	8082	260937
480-86256-5	PW-12	Total/NA	Water	8082	260937
480-86256-6	PW-12 (DUP)	Total/NA	Water	8082	260937
480-86256-7	SW-13	Total/NA	Water	8082	260937
480-86256-8 - DL	PW-13	Total/NA	Water	8082	260937
480-86256-8	PW-13	Total/NA	Water	8082	260937
480-86256-9	SW-14	Total/NA	Water	8082	260937
480-86256-10	PW-14	Total/NA	Water	8082	260937
480-86256-10 - DL	PW-14	Total/NA	Water	8082	260937
480-86256-11	SW-15	Total/NA	Water	8082	260937
480-86256-12	PW-15	Total/NA	Water	8082	260937
480-86256-13	SW-16	Total/NA	Water	8082	260937
480-86256-14	PW-16	Total/NA	Water	8082	260937
480-86256-14 - DL	PW-16	Total/NA	Water	8082	260937
480-86256-15	PW-15 filtered	Total/NA	Water	8082	260937
LCS 480-260937/2-A	Lab Control Sample	Total/NA	Water	8082	260937
LCSD 480-260937/3-A	Lab Control Sample Dup	Total/NA	Water	8082	260937
MB 480-260937/1-A	Method Blank	Total/NA	Water	8082	260937

Analysis Batch: 261230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-12 - DL	PW-15	Total/NA	Water	8082	260937

Prep Batch: 261294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Total/NA	Water	3510C	
480-86189-3	PW-10	Total/NA	Water	3510C	
LCS 480-261294/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-261294/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-261294/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 261409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Total/NA	Water	8082	261294
480-86189-3	PW-10	Total/NA	Water	8082	261294
LCS 480-261294/2-A	Lab Control Sample	Total/NA	Water	8082	261294
LCSD 480-261294/3-A	Lab Control Sample Dup	Total/NA	Water	8082	261294
MB 480-261294/1-A	Method Blank	Total/NA	Water	8082	261294

Metals

Filtration Batch: 260078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-260078/2-D	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 480-260078/3-B	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
MB 480-260078/1-D	Method Blank	Dissolved	Water	FILTRATION	

Metals (Continued)

Prep Batch: 260475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Dissolved	Water	7470A	
480-86189-3	PW-10	Dissolved	Water	7470A	
LCS 480-260078/2-D	Lab Control Sample	Dissolved	Water	7470A	260078
LCSD 480-260078/3-B	Lab Control Sample Dup	Dissolved	Water	7470A	260078
MB 480-260078/1-D	Method Blank	Dissolved	Water	7470A	260078

Prep Batch: 260530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Dissolved	Water	3005A	
480-86189-2 MS	SW-10	Dissolved	Water	3005A	
480-86189-2 MSD	SW-10	Dissolved	Water	3005A	
480-86189-3	PW-10	Dissolved	Water	3005A	
LCS 480-260530/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 480-260530/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 480-260530/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 260657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Dissolved	Water	7470A	
480-86256-2 MS	SW-11	Dissolved	Water	7470A	
480-86256-2 MSD	SW-11	Dissolved	Water	7470A	
480-86256-3	SW-12	Dissolved	Water	7470A	
480-86256-4	SW-12 (DUP)	Dissolved	Water	7470A	
480-86256-5	PW-12	Dissolved	Water	7470A	
480-86256-6	PW-12 (DUP)	Dissolved	Water	7470A	
480-86256-7	SW-13	Dissolved	Water	7470A	
480-86256-8	PW-13	Dissolved	Water	7470A	
480-86256-9	SW-14	Dissolved	Water	7470A	
480-86256-10	PW-14	Dissolved	Water	7470A	
480-86256-11	SW-15	Dissolved	Water	7470A	
480-86256-12	PW-15	Dissolved	Water	7470A	
480-86256-13	SW-16	Dissolved	Water	7470A	
480-86256-14	PW-16	Dissolved	Water	7470A	
LCS 480-260657/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 480-260657/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 480-260657/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 260662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Dissolved	Water	7470A	260475
480-86189-3	PW-10	Dissolved	Water	7470A	260475
LCS 480-260078/2-D	Lab Control Sample	Dissolved	Water	7470A	260475
LCSD 480-260078/3-B	Lab Control Sample Dup	Dissolved	Water	7470A	260475
MB 480-260078/1-D	Method Blank	Dissolved	Water	7470A	260475

Prep Batch: 260740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Dissolved	Water	3005A	
480-86256-3	SW-12	Dissolved	Water	3005A	
480-86256-3 MS	SW-12	Dissolved	Water	3005A	
480-86256-3 MSD	SW-12	Dissolved	Water	3005A	

Metals (Continued)

Prep Batch: 260740 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-4	SW-12 (DUP)	Dissolved	Water	3005A	
480-86256-5	PW-12	Dissolved	Water	3005A	
480-86256-6	PW-12 (DUP)	Dissolved	Water	3005A	
480-86256-7	SW-13	Dissolved	Water	3005A	
480-86256-8	PW-13	Dissolved	Water	3005A	
480-86256-9	SW-14	Dissolved	Water	3005A	
480-86256-10	PW-14	Dissolved	Water	3005A	
480-86256-11	SW-15	Dissolved	Water	3005A	
480-86256-12	PW-15	Dissolved	Water	3005A	
480-86256-14	PW-16	Dissolved	Water	3005A	
LCS 480-260740/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 480-260740/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 480-260740/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 260774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	3050B	
LCDSRM 480-260774/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-260774/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-260774/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 260886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	7471A	
LCDSRM 480-260886/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-260886/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-260886/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 260906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Dissolved	Water	6010	260530
480-86189-2 MS	SW-10	Dissolved	Water	6010	260530
480-86189-2 MSD	SW-10	Dissolved	Water	6010	260530
480-86189-3	PW-10	Dissolved	Water	6010	260530
LCS 480-260530/2-A	Lab Control Sample	Total Recoverable	Water	6010	260530
LCSD 480-260530/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010	260530
MB 480-260530/1-A	Method Blank	Total Recoverable	Water	6010	260530

Analysis Batch: 260939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Dissolved	Water	7470A	260657
480-86256-2 MS	SW-11	Dissolved	Water	7470A	260657
480-86256-2 MSD	SW-11	Dissolved	Water	7470A	260657
480-86256-3	SW-12	Dissolved	Water	7470A	260657
480-86256-4	SW-12 (DUP)	Dissolved	Water	7470A	260657
480-86256-5	PW-12	Dissolved	Water	7470A	260657
480-86256-6	PW-12 (DUP)	Dissolved	Water	7470A	260657
480-86256-7	SW-13	Dissolved	Water	7470A	260657
480-86256-8	PW-13	Dissolved	Water	7470A	260657
480-86256-9	SW-14	Dissolved	Water	7470A	260657
480-86256-10	PW-14	Dissolved	Water	7470A	260657

Metals (Continued)

Analysis Batch: 260939 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-11	SW-15	Dissolved	Water	7470A	260657
480-86256-12	PW-15	Dissolved	Water	7470A	260657
480-86256-13	SW-16	Dissolved	Water	7470A	260657
480-86256-14	PW-16	Dissolved	Water	7470A	260657
LCS 480-260657/2-A	Lab Control Sample	Total/NA	Water	7470A	260657
LCSD 480-260657/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	260657
MB 480-260657/1-A	Method Blank	Total/NA	Water	7470A	260657

Analysis Batch: 261013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	7471A	260886
LCDSRM 480-260886/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	260886
LCSSRM 480-260886/2-A	Lab Control Sample	Total/NA	Solid	7471A	260886
MB 480-260886/1-A	Method Blank	Total/NA	Solid	7471A	260886

Analysis Batch: 261171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Dissolved	Water	6010	260530
480-86189-3	PW-10	Dissolved	Water	6010	260530
LCS 480-260530/2-A	Lab Control Sample	Total Recoverable	Water	6010	260530
LCSD 480-260530/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010	260530
MB 480-260530/1-A	Method Blank	Total Recoverable	Water	6010	260530

Analysis Batch: 261173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	6010	260774
LCDSRM 480-260774/3-A	Lab Control Sample Dup	Total/NA	Solid	6010	260774
LCSSRM 480-260774/2-A	Lab Control Sample	Total/NA	Solid	6010	260774
MB 480-260774/1-A	Method Blank	Total/NA	Solid	6010	260774

Analysis Batch: 261177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Dissolved	Water	6010	260740
480-86256-3	SW-12	Dissolved	Water	6010	260740
480-86256-3 MS	SW-12	Dissolved	Water	6010	260740
480-86256-3 MSD	SW-12	Dissolved	Water	6010	260740
480-86256-4	SW-12 (DUP)	Dissolved	Water	6010	260740
480-86256-5	PW-12	Dissolved	Water	6010	260740
480-86256-6	PW-12 (DUP)	Dissolved	Water	6010	260740
480-86256-7	SW-13	Dissolved	Water	6010	260740
480-86256-8	PW-13	Dissolved	Water	6010	260740
480-86256-9	SW-14	Dissolved	Water	6010	260740
480-86256-10	PW-14	Dissolved	Water	6010	260740
480-86256-11	SW-15	Dissolved	Water	6010	260740
480-86256-12	PW-15	Dissolved	Water	6010	260740
480-86256-14	PW-16	Dissolved	Water	6010	260740
LCS 480-260740/2-A	Lab Control Sample	Total Recoverable	Water	6010	260740
LCSD 480-260740/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010	260740
MB 480-260740/1-A	Method Blank	Total Recoverable	Water	6010	260740

Metals (Continued)

Prep Batch: 261254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-13	SW-16	Dissolved	Water	3005A	
LCS 480-261254/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 480-261254/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 480-261254/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 261549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-13	SW-16	Dissolved	Water	6010	261254
LCS 480-261254/2-A	Lab Control Sample	Total Recoverable	Water	6010	261254
LCSD 480-261254/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010	261254
MB 480-261254/1-A	Method Blank	Total Recoverable	Water	6010	261254

General Chemistry

Analysis Batch: 260635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	Moisture	

Analysis Batch: 261027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86256-2	SW-11	Total/NA	Water	SM 2340C	
480-86256-3	SW-12	Total/NA	Water	SM 2340C	
480-86256-4	SW-12 (DUP)	Total/NA	Water	SM 2340C	
480-86256-5	PW-12	Total/NA	Water	SM 2340C	
480-86256-6	PW-12 (DUP)	Total/NA	Water	SM 2340C	
480-86256-7	SW-13	Total/NA	Water	SM 2340C	
480-86256-8	PW-13	Total/NA	Water	SM 2340C	
480-86256-9	SW-14	Total/NA	Water	SM 2340C	
480-86256-9 MS	SW-14	Total/NA	Water	SM 2340C	
480-86256-9 MSD	SW-14	Total/NA	Water	SM 2340C	
480-86256-10	PW-14	Total/NA	Water	SM 2340C	
480-86256-11	SW-15	Total/NA	Water	SM 2340C	
480-86256-12	PW-15	Total/NA	Water	SM 2340C	
480-86256-13	SW-16	Total/NA	Water	SM 2340C	
480-86256-14	PW-16	Total/NA	Water	SM 2340C	
LCS 480-261027/28	Lab Control Sample	Total/NA	Water	SM 2340C	
LCS 480-261027/4	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 480-261027/27	Method Blank	Total/NA	Water	SM 2340C	
MB 480-261027/3	Method Blank	Total/NA	Water	SM 2340C	

Analysis Batch: 261500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-3	PW-10	Total/NA	Water	SM 2340C	
LCS 480-261500/28	Lab Control Sample	Total/NA	Water	SM 2340C	
LCS 480-261500/52	Lab Control Sample	Total/NA	Water	SM 2340C	
LCS 480-261500/76	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 480-261500/27	Method Blank	Total/NA	Water	SM 2340C	
MB 480-261500/51	Method Blank	Total/NA	Water	SM 2340C	
MB 480-261500/75	Method Blank	Total/NA	Water	SM 2340C	

General Chemistry (Continued)

Analysis Batch: 261950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-2	SW-10	Total/NA	Water	SM 2340C	
480-86189-2 DU	SW-10	Total/NA	Water	SM 2340C	
480-86189-2 MS	SW-10	Total/NA	Water	SM 2340C	
LCS 480-261950/4	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 480-261950/3	Method Blank	Total/NA	Water	SM 2340C	

Geotechnical

Analysis Batch: 93262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86189-4	SED-10	Total/NA	Solid	D2974	

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: TB-01
Date Collected: 08/25/15 00:00
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260445	08/26/15 14:28	SWO	TAL BUF

Client Sample ID: SW-10
Date Collected: 08/25/15 12:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260445	08/26/15 17:38	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:58	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 14:54	KS	TAL BUF
Dissolved	Prep	3005A			260530	08/27/15 07:10	CMM	TAL BUF
Dissolved	Analysis	6010		1	260906	08/27/15 17:34	AMH	TAL BUF
Dissolved	Prep	3005A			260530	08/27/15 07:10	CMM	TAL BUF
Dissolved	Analysis	6010		1	261171	08/28/15 11:15	AMH	TAL BUF
Dissolved	Prep	7470A			260475	08/26/15 10:20	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260662	08/26/15 14:52	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261950	09/03/15 13:51	KMF	TAL BUF

Client Sample ID: PW-10
Date Collected: 08/25/15 12:45
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260445	08/26/15 18:02	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:58	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 15:10	KS	TAL BUF
Dissolved	Prep	3005A			260530	08/27/15 07:10	CMM	TAL BUF
Dissolved	Analysis	6010		1	260906	08/27/15 17:56	AMH	TAL BUF
Dissolved	Prep	3005A			260530	08/27/15 07:10	CMM	TAL BUF
Dissolved	Analysis	6010		1	261171	08/28/15 11:18	AMH	TAL BUF
Dissolved	Prep	7470A			260475	08/26/15 10:20	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260662	08/26/15 14:54	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261500	09/01/15 09:10	MDL	TAL BUF

Client Sample ID: SED-10
Date Collected: 08/25/15 13:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	260635	08/26/15 23:03	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93262	08/27/15 13:03	SML	TAL BUR

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: SED-10

Date Collected: 08/25/15 13:15
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-4
Matrix: Solid
Percent Solids: 23.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			260980	08/26/15 05:43	NQN	TAL BUF
Total/NA	Analysis	8260C		1	260941	08/28/15 19:40	NQN	TAL BUF
Total/NA	Prep	3540C			195244	08/28/15 07:16	NAK	TAL CAN
Total/NA	Analysis	8082		10	195799	09/02/15 03:47	LSH	TAL CAN
Total/NA	Prep	3050B			260774	08/28/15 12:35	CMM	TAL BUF
Total/NA	Analysis	6010		1	261173	08/28/15 13:59	SLB	TAL BUF
Total/NA	Prep	7471A			260886	08/28/15 10:00	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261013	08/28/15 13:43	TAS	TAL BUF

Client Sample ID: TB-01

Date Collected: 08/25/15 00:00
Date Received: 08/26/15 02:00

Lab Sample ID: 480-86189-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			260778	08/26/15 05:43	NQN	TAL BUF
Total/NA	Analysis	8260C		1	260731	08/27/15 16:18	NQN	TAL BUF

Client Sample ID: TB-02

Date Collected: 08/25/15 00:00
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 13:46	SWO	TAL BUF

Client Sample ID: SW-11

Date Collected: 08/25/15 15:06
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 14:10	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 21:11	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:13	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:33	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: SW-12

Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 14:33	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 21:27	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:16	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:43	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: SW-12 (DUP)

Date Collected: 08/26/15 08:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 18:33	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 21:43	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:39	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:45	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: PW-12

Date Collected: 08/26/15 09:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	260681	08/27/15 14:57	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 21:58	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:41	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:47	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Client Sample ID: PW-12 (DUP)

Lab Sample ID: 480-86256-6

Date Collected: 08/26/15 09:20
Matrix: Water
Date Received: 08/27/15 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	260681	08/27/15 18:56	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 22:14	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:44	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:48	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: SW-13

Lab Sample ID: 480-86256-7

Date Collected: 08/26/15 10:00
Matrix: Water
Date Received: 08/27/15 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 15:21	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 22:30	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:48	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:50	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: PW-13

Lab Sample ID: 480-86256-8

Date Collected: 08/26/15 10:25
Matrix: Water
Date Received: 08/27/15 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260899	08/28/15 11:31	SWO	TAL BUF
Total/NA	Prep	3510C	DL		260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082	DL	10	261050	08/28/15 22:46	KS	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 23:34	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:50	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:52	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: SW-14

Lab Sample ID: 480-86256-9

Date Collected: 08/26/15 11:10

Matrix: Water

Date Received: 08/27/15 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 16:09	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/28/15 23:50	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:54	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:53	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: PW-14

Lab Sample ID: 480-86256-10

Date Collected: 08/26/15 11:40

Matrix: Water

Date Received: 08/27/15 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	260899	08/28/15 11:55	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/29/15 00:06	KS	TAL BUF
Total/NA	Prep	3510C	DL		260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082	DL	5	261050	08/29/15 00:21	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:56	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:55	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: SW-15

Lab Sample ID: 480-86256-11

Date Collected: 08/26/15 12:40

Matrix: Water

Date Received: 08/27/15 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 16:57	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/29/15 00:37	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 19:59	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:57	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: PW-15

Date Collected: 08/26/15 13:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	260681	08/27/15 17:21	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/29/15 00:53	KS	TAL BUF
Total/NA	Prep	3510C	DL		260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082	DL	20	261230	08/31/15 11:20	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 20:02	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 17:59	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: SW-16

Date Collected: 08/26/15 13:50
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	260681	08/27/15 17:45	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/29/15 01:25	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 19:11	LMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 18:04	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: PW-16

Date Collected: 08/26/15 14:20
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	260899	08/28/15 12:19	SWO	TAL BUF
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/29/15 01:41	KS	TAL BUF
Total/NA	Prep	3510C	DL		260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082	DL	10	261050	08/29/15 01:57	KS	TAL BUF
Dissolved	Prep	3005A			260740	08/28/15 07:30	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261177	08/28/15 20:14	AMH	TAL BUF
Dissolved	Prep	7470A			260657	08/27/15 09:50	TAS	TAL BUF
Dissolved	Analysis	7470A		1	260939	08/27/15 18:06	TAS	TAL BUF
Total/NA	Analysis	SM 2340C		1	261027	08/28/15 12:15	MDL	TAL BUF

Client Sample ID: PW-15 filtered

Date Collected: 08/26/15 13:10
Date Received: 08/27/15 01:45

Lab Sample ID: 480-86256-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			260937	08/28/15 09:22	VNP	TAL BUF
Total/NA	Analysis	8082		1	261050	08/29/15 02:44	KS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010	3005A	Water	Antimony
6010	3005A	Water	Arsenic
6010	3005A	Water	Barium
6010	3005A	Water	Beryllium
6010	3005A	Water	Cadmium
6010	3005A	Water	Chromium
6010	3005A	Water	Copper
6010	3005A	Water	Lead
6010	3005A	Water	Nickel
6010	3005A	Water	Selenium
6010	3005A	Water	Silver
6010	3005A	Water	Thallium
6010	3005A	Water	Vanadium
6010	3005A	Water	Zinc
6010	3050B	Solid	Antimony
6010	3050B	Solid	Arsenic
6010	3050B	Solid	Barium
6010	3050B	Solid	Beryllium
6010	3050B	Solid	Cadmium
6010	3050B	Solid	Chromium
6010	3050B	Solid	Copper
6010	3050B	Solid	Lead
6010	3050B	Solid	Nickel
6010	3050B	Solid	Selenium
6010	3050B	Solid	Silver
6010	3050B	Solid	Thallium
6010	3050B	Solid	Vanadium
6010	3050B	Solid	Zinc
7470A	7470A	Water	Mercury
7471A	7471A	Solid	Mercury
8082	3510C	Water	PCB-1016
8082	3510C	Water	PCB-1221
8082	3510C	Water	PCB-1232
8082	3510C	Water	PCB-1242
8082	3510C	Water	PCB-1248
8082	3510C	Water	PCB-1254
8082	3510C	Water	PCB-1260
8082	3510C	Water	PCB-1262
8082	3510C	Water	PCB-1268
8260C		Water	1,1,1,2-Tetrachloroethane
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,1-Dichloropropene

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trichlorobenzene
8260C		Water	1,2,3-Trichloropropane
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2,4-Trimethylbenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dichlorobenzene
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloropropane
8260C		Water	1,3,5-Trimethylbenzene
8260C		Water	1,3-Dichlorobenzene
8260C		Water	1,3-Dichloropropane
8260C		Water	1,4-Dichlorobenzene
8260C		Water	1,4-Dioxane
8260C		Water	2,2-Dichloropropane
8260C		Water	2-Butanone (MEK)
8260C		Water	2-Chlorotoluene
8260C		Water	2-Hexanone
8260C		Water	4-Chlorotoluene
8260C		Water	4-Isopropyltoluene
8260C		Water	4-Methyl-2-pentanone (MIBK)
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromobenzene
8260C		Water	Bromoform
8260C		Water	Bromomethane
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorobromomethane
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Dibromomethane
8260C		Water	Dichlorobromomethane
8260C		Water	Dichlorodifluoromethane
8260C		Water	Ethyl ether
8260C		Water	Ethylbenzene
8260C		Water	Ethylene Dibromide
8260C		Water	Freon 113
8260C		Water	Hexachlorobutadiene
8260C		Water	Isopropyl ether
8260C		Water	Isopropylbenzene
8260C		Water	Methyl tert-butyl ether

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Methylene Chloride
8260C		Water	m-Xylene & p-Xylene
8260C		Water	Naphthalene
8260C		Water	n-Butylbenzene
8260C		Water	N-Propylbenzene
8260C		Water	o-Xylene
8260C		Water	sec-Butylbenzene
8260C		Water	Styrene
8260C		Water	Tert-amyl methyl ether
8260C		Water	Tert-butyl ethyl ether
8260C		Water	tert-Butylbenzene
8260C		Water	Tetrachloroethene
8260C		Water	Tetrahydrofuran
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Trichlorofluoromethane
8260C		Water	Vinyl chloride
8260C	5035A	Solid	1,1,1,2-Tetrachloroethane
8260C	5035A	Solid	1,1,1-Trichloroethane
8260C	5035A	Solid	1,1,2,2-Tetrachloroethane
8260C	5035A	Solid	1,1,2-Trichloroethane
8260C	5035A	Solid	1,1-Dichloroethane
8260C	5035A	Solid	1,1-Dichloroethene
8260C	5035A	Solid	1,1-Dichloropropene
8260C	5035A	Solid	1,2,3-Trichlorobenzene
8260C	5035A	Solid	1,2,3-Trichloropropane
8260C	5035A	Solid	1,2,4-Trichlorobenzene
8260C	5035A	Solid	1,2,4-Trimethylbenzene
8260C	5035A	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035A	Solid	1,2-Dichlorobenzene
8260C	5035A	Solid	1,2-Dichloroethane
8260C	5035A	Solid	1,2-Dichloropropane
8260C	5035A	Solid	1,3,5-Trimethylbenzene
8260C	5035A	Solid	1,3-Dichlorobenzene
8260C	5035A	Solid	1,3-Dichloropropane
8260C	5035A	Solid	1,4-Dichlorobenzene
8260C	5035A	Solid	1,4-Dioxane
8260C	5035A	Solid	2,2-Dichloropropane
8260C	5035A	Solid	2-Butanone (MEK)
8260C	5035A	Solid	2-Chlorotoluene
8260C	5035A	Solid	2-Hexanone
8260C	5035A	Solid	4-Chlorotoluene
8260C	5035A	Solid	4-Isopropyltoluene
8260C	5035A	Solid	4-Methyl-2-pentanone (MIBK)

Certification Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C	5035A	Solid	Acetone
8260C	5035A	Solid	Benzene
8260C	5035A	Solid	Bromobenzene
8260C	5035A	Solid	Bromoform
8260C	5035A	Solid	Bromomethane
8260C	5035A	Solid	Carbon disulfide
8260C	5035A	Solid	Carbon tetrachloride
8260C	5035A	Solid	Chlorobenzene
8260C	5035A	Solid	Chlorobromomethane
8260C	5035A	Solid	Chlorodibromomethane
8260C	5035A	Solid	Chloroethane
8260C	5035A	Solid	Chloroform
8260C	5035A	Solid	Chloromethane
8260C	5035A	Solid	cis-1,2-Dichloroethene
8260C	5035A	Solid	cis-1,3-Dichloropropene
8260C	5035A	Solid	Dibromomethane
8260C	5035A	Solid	Dichlorobromomethane
8260C	5035A	Solid	Dichlorodifluoromethane
8260C	5035A	Solid	Ethyl ether
8260C	5035A	Solid	Ethylbenzene
8260C	5035A	Solid	Ethylene Dibromide
8260C	5035A	Solid	Freon 113
8260C	5035A	Solid	Hexachlorobutadiene
8260C	5035A	Solid	Isopropyl ether
8260C	5035A	Solid	Isopropylbenzene
8260C	5035A	Solid	Methyl tert-butyl ether
8260C	5035A	Solid	Methylene Chloride
8260C	5035A	Solid	m-Xylene & p-Xylene
8260C	5035A	Solid	Naphthalene
8260C	5035A	Solid	n-Butylbenzene
8260C	5035A	Solid	N-Propylbenzene
8260C	5035A	Solid	o-Xylene
8260C	5035A	Solid	sec-Butylbenzene
8260C	5035A	Solid	Styrene
8260C	5035A	Solid	Tert-amyl methyl ether
8260C	5035A	Solid	Tert-butyl ethyl ether
8260C	5035A	Solid	tert-Butylbenzene
8260C	5035A	Solid	Tetrachloroethene
8260C	5035A	Solid	Tetrahydrofuran
8260C	5035A	Solid	Toluene
8260C	5035A	Solid	trans-1,2-Dichloroethene
8260C	5035A	Solid	trans-1,3-Dichloropropene
8260C	5035A	Solid	Trichloroethene
8260C	5035A	Solid	Trichlorofluoromethane
8260C	5035A	Solid	Vinyl chloride
Moisture		Solid	Percent Moisture

Certification Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-15
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-13-16
Florida	NELAP	4	E87467	06-30-16
L-A-B	DoD ELAP		L2336	02-26-17
Maine	State Program	1	VT00008	04-17-17
Minnesota	NELAP	5	050-999-436	12-31-15
New Hampshire	NELAP	1	2006	12-18-15
New Jersey	NELAP	2	VT972	09-30-15
New York	NELAP	2	10391	03-31-16
Pennsylvania	NELAP	3	68-00489	04-30-16
Rhode Island	State Program	1	LAO00298	12-30-15
US Fish & Wildlife	Federal		LE-058448-0	02-28-16
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-15
Virginia	NELAP	3	460209	12-14-15

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	09-30-15 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	10-31-15 *
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL CAN
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	TAL BUF
D2974	Moisture, Ash and Organic Matter	ASTM	TAL BUR

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
MA DEP = Massachusetts Department Of Environmental Protection
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86189-1
SDG: #1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-86189-1	TB-01	Water	08/25/15 00:00	08/26/15 02:00
480-86189-2	SW-10	Water	08/25/15 12:15	08/26/15 02:00
480-86189-3	PW-10	Water	08/25/15 12:45	08/26/15 02:00
480-86189-4	SED-10	Solid	08/25/15 13:15	08/26/15 02:00
480-86189-5	TB-01	Solid	08/25/15 00:00	08/26/15 02:00
480-86256-1	TB-02	Water	08/25/15 00:00	08/27/15 01:45
480-86256-2	SW-11	Water	08/25/15 15:06	08/27/15 01:45
480-86256-3	SW-12	Water	08/26/15 08:50	08/27/15 01:45
480-86256-4	SW-12 (DUP)	Water	08/26/15 08:50	08/27/15 01:45
480-86256-5	PW-12	Water	08/26/15 09:20	08/27/15 01:45
480-86256-6	PW-12 (DUP)	Water	08/26/15 09:20	08/27/15 01:45
480-86256-7	SW-13	Water	08/26/15 10:00	08/27/15 01:45
480-86256-8	PW-13	Water	08/26/15 10:25	08/27/15 01:45
480-86256-9	SW-14	Water	08/26/15 11:10	08/27/15 01:45
480-86256-10	PW-14	Water	08/26/15 11:40	08/27/15 01:45
480-86256-11	SW-15	Water	08/26/15 12:40	08/27/15 01:45
480-86256-12	PW-15	Water	08/26/15 13:10	08/27/15 01:45
480-86256-13	SW-16	Water	08/26/15 13:50	08/27/15 01:45
480-86256-14	PW-16	Water	08/26/15 14:20	08/27/15 01:45
480-86256-15	PW-15 filtered	Water	08/26/15 13:10	08/27/15 01:45

Login Sample Receipt Checklist

Client: Woodard & Curran, Inc.

Job Number: 480-86189-1
SDG Number: #1

Login Number: 86189
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	26AUG2015 0543
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	W AND C
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Woodard & Curran, Inc.

Job Number: 480-86189-1
SDG Number: #1

Login Number: 86189
List Number: 2
Creator: Nye, Elizabeth A

List Source: TestAmerica Burlington
List Creation: 08/27/15 12:46 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	651696
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8 ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Woodard & Curran, Inc.

Job Number: 480-86189-1
SDG Number: #1

Login Number: 86256
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	W AND C
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

★SDG #1★

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Ben Gregory	Lab PM:	Lab COC Barcode Label	COC No: 33395
Client Contact: Keri Stevens	Sample Collector's Phone: 781-801-2476	E-Mail:		Page: 1 of 1
Company: Woodard + Curran				Job #:
Address: 40 Shattuck Rd Suite 110	Due Date Requested:	Analysis Requested		Preservation Codes: A - Hydrochloric Acid; B - Sodium Hydroxide; C - Zinc Acetate; D - Nitric Acid; E - Sodium Bisulfite; F - Methanol; H - Ascorbic Acid; J - Deionized Water; M - Hexane; N - No Preservative; P - Sodium Sulfate; Q - Sodium Sulfite; R - Sodium Thiosulfate; S - Sulfuric Acid; Z - other (specify)
City: Andover, MA 01810	Turnaround Time (TAT) Requested (business days): 5 day per MSA			
State and Zip:				
Client's Phone: 978-557-8150	Quote # or Project #:			
Client's Contact Email: ksteverse@woodardcurran.com	PO #:			
Client's Project Name/Number: Lewis Chem	WO #:			
Sample Collection Site Name & Location:	PWS ID #:			

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	VOCs - 8260	Total Metals MCP14+Cu+Fe	Diss. Metals MCP14+Cu+Fe	Hardness	Total PCBs 8082	Total PCBs 8082 w sox	FOC	% solids	VOCs - 8260	Total Number of Containers (enter total for each line)	Special Instructions & Notes:
Preservation Codes →					A	N	D	D	N	N	N	N	F	↓	
TB-01	8/25/15				X								X	5	
SW-10	8/25/15	1215	G	W	X		X	X	X					7	Dissolved metals and hardness on field filtered
PW-10	8/25/15	1245	G	W	X		X	X	X					7	
SED-10	8/25/15	1315	G	S		X			X	X	X	X		7	

480-86189 Chain of Custody

Regulatory Programs: MCP [X] GW1/S1 [ ] RCP [ ] CT RSR [ ] DEP Form [ ] EDD Required [ ] eDEP Filing [ ] NPDES [ ]

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit TestAmerica to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Possible Hazard Identification (please check off each that may apply): [ ] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [X] Unknown [ ] Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month) : [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

** **Matrix Types**: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◄

Relinquished by:	Date/Time: 8/25/15 1440	Company: W+C	Received by:	Date/Time: 8/26/15 1500	Company: TA
Relinquished by:	Date/Time: 8/25/15 16:00	Company: TA	Received by:	Date/Time: 26 Aug 15 0200	Company: DAS
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.7 #1

☆SDG 1 continued☆ (17)

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Ben Gregory	Lab PM: Becky Mason	Lab COC Barcode Label
Client Contact: Keri Stevens	Sample Collector's Phone: 781 801 2476	E-Mail:	
Company: Woodard + Curran			
Address: 40 Shattuck Rd Suite 110	Due Date Requested:		
City: Andover	Turnaround Time (TAT) Requested (business days): 5day per MSA		
State and Zip: MA 01810			
Client's Phone: 978-557-8150	Quote # or Project #:		
Client's Contact Email: Kstevens @	PO #:		
Client's Project Name/Number: Lewis Chemical	WO #:		
Sample Collection Site Name & Location: Boston DND, Boston, MA	PWS ID #:		

COC No: 33400
Page: 1 of 2
Job #:

Analysis Requested

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	VOCs-8260	VOCs-8260	Total Metals MCP14+Cu	Diss Metals MCP14+Cu	Hardness	Total PCBs 8082	Total PCBs w/ soxlhet	FOC	% Solids	Total Number of Containers (enter total for each line)	Special Instructions & Notes:
			Preservation Codes →		A	F	D	D	D	N	N	N	N		
TB-02	8/25/15													~~5~~ 2	Dissolved
SW-11	8/25/15	1506	G	W	X			X	X	X				5	Metals and
SW-12	8/26/15	850	G	W	X			X	X	X				5	hardness are
SW-12 (DUP)	8/26/15	850	G	W	X			X	X	X				5	field filtered
PW-12	8/26/15	920	G	W	X			X	X	X				5	
PW-12 (DUP)	8/26/15	920	G	W	X			X	X	X				5	
SW-13	8/26/15	1000	G	W	X			X	X	X				5	
PW-13	8/26/15	1025	G	W	X			X	X	X				5	
SW-14	8/26/15	1110	G	W	X			X	X	X				5	
PW-14	8/26/15	1140	G	W	X			X	X	X				5	

480-86256 Chain of Custody

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP [X] GW1/S1 [ ]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [ ]
eDEP Filing [ ] NPDES [ ]

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit TestAmerica to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Possible Hazard Identification (please check off each that may apply):
[ ] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [X] Unknown [ ] Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month):
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

** Matrix Types: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◄

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8/26/15 1450	W+C	[signature]	[illegible] 1550	[illegible]
[signature]	8/26/15 15:45	TA	[signature]	27 Aug 15 0145	TAB

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.5 #1

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road - Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

★SDG #1 cont★ (9)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:
Client Contact: Keri Stevens
Company: Weston + Sampson
Address: 40 Shattuck Rd Suite 110
City: Andover
State and Zip: MA 01810
Client's Phone: 978-557-8150
Client's Contact Email: ksteviens@
Client's Project Name/Number: Lewis Chemical
Sample Collection Site Name & Location: Boston DND, Boston, MA

Sample Collector's Name (Please Print Neatly): Ben Gregory
Sample Collector's Phone: 781-801-2476
Lab PM: Becky Mason
E-Mail:
Lab COC Barcode Label

COC No: 33402
Page: 2 of 2
Job #: 229286

Due Date Requested:
Turnaround Time (TAT) Requested (business days): 5-day per MSA
Quote # or Project #:
PO #:
WO #:
PWS ID #:

Analysis Requested

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	VOCs - 8260	VOCs - 8260	Total Metals MCP14 + Cu	Diss Metals MCP14 + Cu	Hardness	Total PCBs 8082	Total PCBs w/ sox/hot	FOC	% Solid	Dissolved PCBs 8082	Total Number of Containers (enter total for each line)
			Preservation Codes →		A	F	D	D	D	N	N	N	N	N	↓
SW-15	8/26/15	1240	G	W	X			X	X	X					5
PW-15	8/26/15	1310	G	W	X			X	X	X				X	6
SW-16	8/26/15	1350	G	W	X			X	X	X					5
PW-16	8/26/15	1420	G	W	X			X	X	X					4

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP [X] GW1/S1 [ ]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [ ]
eDEP Filing [ ] NPDES [ ]

SUBCONTRACT POLICY: Unless you provide in-structions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit Test-America to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Special Instructions & Notes:
Dissolved metals and hardness are field filtered.

Possible Hazard Identification (please check off each that may apply):
[ ] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [X] Unknown [ ] Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month) :
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

** **Matrix Types**: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◄

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	8/26/15 1450	WSC		8/26/15 1515	TA
Relinquished by:	8/26/15 1545	TA		27Aug15 0145	VNO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.5 ★1

WI-QA-010 rev 8
Revised 10/29/2014
TAL-8245-360R

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-86375-1
TestAmerica Sample Delivery Group: #2
Client Project/Site: Lewis Chemical Project
Revision: 2

For:
Woodard & Curran, Inc.
40 Shattuck Road
Suite 110
Andover, Massachusetts 01810

Attn: Mr. Jarrod Yoder

Authorized for release by:
9/16/2015 9:36:09 AM

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-86375-1

Laboratory: TestAmerica Buffalo

Narrative

Revised report 2: corrected ID for SED-12 (DUP) (480-86375-3).

Revised report: Adding surrogates from both columns for water PCB sample. On original report reported two results for hits of PCB, this report corrects that by only reporting one. Removed MS/MSD comment for PCB, this was on a prep batch that was not used. Clarified NCM about 8260 on sample 480-86375-4.

Comments

Due to the dilutions required, per question G on the MassDEP Analytical Protocol Certification Form, the CAM reporting limits specified in this CAM protocol could not be achieved for some or all samples/analytes.

Receipt

The samples were received on 8/29/2015 at 2:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.4º C and 1.3º C.

GC/MS VOA

Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method 8260C: With the exception of diluted samples and adjustments made for % solids or insufficient sample mass, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-Dibromo-3-Chloropropane, Bromomethane, Chloroethane, Chloromethane, Dichlorodifluoromethane, m&p-Xylene, Naphthalene, Tetrahydrofuran, and Trichlorofluoromethane.

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-261184 exceeded control limits for 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were impacted: TB-03 (480-86375-1), SW-17 (480-86375-5), REF-SW-01 (480-86375-7), REF-PW-01 (480-86375-8), REF-SW-02 (480-86375-10), REF-PW-02 (480-86375-11), TB-04 (480-86375-12), REF-SW-03 (480-86375-14), REF-PW-03 (480-86375-15), REF-SW-04 (480-86375-17) and SW-18 (480-86375-22).

Method 8260C: The laboratory control sample duplicate (LCSD) for batch 480-261184 exceeded control limits 1,4-Dioxane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were impacted: TB-03 (480-86375-1), SW-17 (480-86375-5), REF-SW-01 (480-86375-7), REF-PW-01 (480-86375-8), REF-SW-02 (480-86375-10), REF-PW-02 (480-86375-11), TB-04 (480-86375-12), REF-SW-03 (480-86375-14), REF-PW-03 (480-86375-15), REF-SW-04 (480-86375-17) and SW-18 (480-86375-22).

Method 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for batch 480-261184 recovered outside control limits for 1,4-Dioxane. The following samples were impacted: TB-03 (480-86375-1), SW-17 (480-86375-5), REF-SW-01 (480-86375-7), REF-PW-01 (480-86375-8), REF-SW-02 (480-86375-10), REF-PW-02 (480-86375-11), TB-04 (480-86375-12), REF-SW-03 (480-86375-14), REF-PW-03 (480-86375-15), REF-SW-04 (480-86375-17) and SW-18 (480-86375-22)

Method 8260C: The continuing calibration verification (CCV) for 2-Butanone (MEK) and Tetrahydrofuran associated with batch 480-261208 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples were impacted: SED-12 (480-86375-2), SED 12 (DUP) (480-86375-3), SED-15 (480-86375-4), SED-17 (480-86375-6), REF-SED-01 (480-86375-9), REF-SED-02 (480-86375-13), REF-SED-03 (480-86375-16), REF-SED-04 (480-86375-18), SED-13 (480-86375-19), SED-14 (480-86375-20), SED-16 (480-86375-21), TB-03 (480-86375-23) and TB-04 (480-86375-24).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-261236 exceeded control limits for 2-Butanone and Tetrahydrofuran. Unlike the calibration standards, this is due to the co-elution with Ethyl Acetate and Methacrylonitrile, respectively, in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were impacted: SED-12

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Laboratory: TestAmerica Buffalo (Continued)

(480-86375-2), SED 12 (DUP) (480-86375-3), SED-15 (480-86375-4), SED-17 (480-86375-6), REF-SED-01 (480-86375-9), REF-SED-02 (480-86375-13), REF-SED-03 (480-86375-16), REF-SED-04 (480-86375-18), SED-13 (480-86375-19), SED-14 (480-86375-20), SED-16 (480-86375-21), TB-03 (480-86375-23) and TB-04 (480-86375-24).

Method 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 480-261236 recovered outside control limits for Ethyl Ether and Bromomethane.

Method 8260C: The following samples were received and frozen outside of the 48 hour preparation holding time : SED-12 (480-86375-2), SED 12 (DUP) (480-86375-3) and TB-03 (480-86375-23).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-261576 exceeded control limits for 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were impacted: SED-12 (480-86375-2), SED 12 (DUP) (480-86375-3) and SED-15 (480-86375-4).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-261576 exceeded control limits for Chloroethane and Dichlorodifluoromethane . MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were impacted: SED-12 (480-86375-2), SED 12 (DUP) (480-86375-3) and SED-15 (480-86375-4).

Method 8260C: The following sample was diluted to medium level analysis to bring the concentration of target analytes within the calibration range: SED-15 (480-86375-4) for Chloroethane only, all other compounds reported from low level vial. Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) for Acetone and Dichlorodifluoromethane associated with batch 480-261728 recovered outside the MCP control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples were impacted: SED-12 (480-86375-2) and SED 12 (DUP) (480-86375-3).

Method 8260C: The following samples were received with low level vials that were outside of preparation holding time: SED-12 (480-86375-2) and SED 12 (DUP) (480-86375-3). These samples were analyzed in preparation batch 480-261608 and analytical batch 480-261728 within holding time using medium level analysis and have elevated reporting limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SED 12 (DUP) (480-86375-3), REF-SED-01 (480-86375-9), REF-SED-02 (480-86375-13), REF-SED-04 (480-86375-18), SED-13 (480-86375-19) and SED-16 (480-86375-21).

Method 8082: Per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits after moisture correction do not achieve the CAM reporting limits specified in this CAM protocol; however they do achieve method 1 S1 standards.

Method 8082: The following samples appear to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: SED-12 (480-86375-2), SED 12 (DUP) (480-86375-3), REF-SED-02 (480-86375-13) and SED-16 (480-86375-21). The samples have been quantified and reported as Aroclor 1232. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

Method 8082: The following samples were diluted due to the nature of the sample matrix: SED-17 (480-86375-6), REF-SED-04 (480-86375-18), SED-13 (480-86375-19) and SED-14 (480-86375-20). Elevated reporting limits (RLs) are provided.

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by

Job ID: 480-86375-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

sulfur: SED-15 (480-86375-4).

Method 8082: The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: SED-15 (480-86375-4). The sample has been quantified and reported as Aroclor 1232. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010: The ICSA (ICSA 480-261549/9) exhibited a result outside the project established control limits for Dissolved Antimony. However, the result was within the laboratory's standard quality control limits, therefore no corrective action was necessary.

Method 6010: The following sample was diluted due to the nature of the sample matrix: REF-SED-04 (480-86375-18). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Geotechnical
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3540C: Due to the matrix, the following samples could not be concentrated to the final method required volume: SED-12 (480-86375-2), SED-17 (480-86375-6), REF-SED-01 (480-86375-9), REF-SED-02 (480-86375-13), REF-SED-04 (480-86375-18), SED-16 (480-86375-21). The reporting limits (RLs) are elevated proportionately.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 480-261294.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-86375-1**

Project Location: **Lewis Chemical Project** RTN:

This form provides certifications for the data set for the following Laboratory Sample ID Number(s):

480-86375-1 [1-24]

Matrices: ■ Groundwater/Surface Water ■ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	7470/7471 Hg CAM III B ■	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ■	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350**

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	■ Yes ☐ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Position: Technical Director, TestAmerica Westfield

Printed Name: Richard Emerich Date: 9/9/15 16:21

This form has been electronically signed and approved.

Detection Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: TB-03 — Lab Sample ID: 480-86375-1

No Detections.

Client Sample ID: SED-12 — Lab Sample ID: 480-86375-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	9.1				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.129	J	1.55	0.113	mg/Kg	1	☼	8260C	Total/NA
1,2,4-Trichlorobenzene	0.101	J	1.55	0.0942	mg/Kg	1	☼	8260C	Total/NA
1,2-Dichlorobenzene	0.381	J	1.55	0.121	mg/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.469	J	1.55	0.198	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.191	J	1.55	0.117	mg/Kg	1	☼	8260C	Total/NA
Silver	1.14	J	1.52	0.610	mg/Kg	1	☼	6010	Total/NA
Arsenic	11.1		3.05	1.22	mg/Kg	1	☼	6010	Total/NA
Barium	246		1.52	0.335	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.896		0.610	0.0853	mg/Kg	1	☼	6010	Total/NA
Cadmium	4.57		0.610	0.0914	mg/Kg	1	☼	6010	Total/NA
Chromium	167		1.52	0.610	mg/Kg	1	☼	6010	Total/NA
Nickel	28.3		3.05	0.701	mg/Kg	1	☼	6010	Total/NA
Vanadium	68.4		1.52	0.335	mg/Kg	1	☼	6010	Total/NA
Zinc	474		7.62	1.95	mg/Kg	1	☼	6010	Total/NA
Lead	544		1.52	0.732	mg/Kg	1	☼	6010	Total/NA
Antimony	2.34		1.52	1.22	mg/Kg	1	☼	6010	Total/NA
Copper	164		3.05	0.640	mg/Kg	1	☼	6010	Total/NA
Mercury	2.01		0.298	0.0241	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0635	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
Freon 113	0.0903	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
1,1-Dichloroethane	0.0725	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
1,2-Dichlorobenzene	0.156	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
Chloroethane	0.130	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.0272	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.0311	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.0498	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.0790	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.0195	H	0.0152	0.0152	mg/Kg	1	☼	8260C	Total/NA
Aroclor-1232	768		151	151	mg/Kg	50	☼	8082	Total/NA

Client Sample ID: SED-12 (DUP) — Lab Sample ID: 480-86375-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	9.2				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0952	J	1.28	0.0928	mg/Kg	1	☼	8260C	Total/NA
1,2-Dichlorobenzene	0.320	J	1.28	0.100	mg/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.398	J	1.28	0.164	mg/Kg	1	☼	8260C	Total/NA
Silver	0.721	J	1.52	0.609	mg/Kg	1	☼	6010	Total/NA
Arsenic	8.87		3.04	1.22	mg/Kg	1	☼	6010	Total/NA
Barium	164		1.52	0.335	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.606	J	0.609	0.0852	mg/Kg	1	☼	6010	Total/NA
Cadmium	3.18		0.609	0.0913	mg/Kg	1	☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SED-12 (DUP) (Continued) — Lab Sample ID: 480-86375-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	112		1.52	0.609	mg/Kg	1	☼	6010	Total/NA
Nickel	19.3		3.04	0.700	mg/Kg	1	☼	6010	Total/NA
Vanadium	47.7		1.52	0.335	mg/Kg	1	☼	6010	Total/NA
Zinc	323		7.61	1.95	mg/Kg	1	☼	6010	Total/NA
Lead	366		1.52	0.731	mg/Kg	1	☼	6010	Total/NA
Antimony	2.27		1.52	1.22	mg/Kg	1	☼	6010	Total/NA
Copper	153		3.04	0.639	mg/Kg	1	☼	6010	Total/NA
Mercury	1.76		0.311	0.0252	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0705	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
Freon 113	0.132	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
1,1-Dichloroethane	0.0845	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
1,2-Dichlorobenzene	0.0890	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
Chloroethane	0.0651	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.0310	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.0234	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.0251	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
Trichloroethene	0.0228	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
Vinyl chloride	0.0171	H	0.0154	0.0154	mg/Kg	1	☼	8260C	Total/NA
Aroclor-1232	963		129	129	mg/Kg	50	☼	8082	Total/NA

Client Sample ID: SED-15 — Lab Sample ID: 480-86375-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	2.6				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	1.18	J *	1.44	0.325	mg/Kg	1	☼	8260C	Total/NA
Arsenic	7.99		3.12	1.25	mg/Kg	1	☼	6010	Total/NA
Barium	123	F1	1.56	0.343	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.517	J	0.623	0.0873	mg/Kg	1	☼	6010	Total/NA
Cadmium	2.57		0.623	0.0935	mg/Kg	1	☼	6010	Total/NA
Chromium	91.4		1.56	0.623	mg/Kg	1	☼	6010	Total/NA
Nickel	22.9		3.12	0.717	mg/Kg	1	☼	6010	Total/NA
Vanadium	35.8		1.56	0.343	mg/Kg	1	☼	6010	Total/NA
Zinc	398	F1	7.79	1.99	mg/Kg	1	☼	6010	Total/NA
Lead	427	F1	1.56	0.748	mg/Kg	1	☼	6010	Total/NA
Antimony	2.44		1.56	1.25	mg/Kg	1	☼	6010	Total/NA
Copper	146		3.12	0.654	mg/Kg	1	☼	6010	Total/NA
Mercury	1.16	F1	0.589	0.0477	mg/Kg	2	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.312	*	0.0924	0.0924	mg/Kg	1	☼	8260C	Total/NA
Acetone	1.07		0.924	0.924	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.0202		0.0185	0.0185	mg/Kg	1	☼	8260C	Total/NA
Aroclor-1232	218		28.8	28.8	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: SW-17 — Lab Sample ID: 480-86375-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	64.4		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	5.57	J	50.0	1.50	ug/L	1		6010	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: SW-17 (Continued) — Lab Sample ID: 480-86375-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	2.44	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	90.0		10.0	2.63	mg/L	1		SM 2340C	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	0.292		0.231	0.231	ug/L	1		8082	Total/NA

Client Sample ID: SED-17 — Lab Sample ID: 480-86375-6

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	10.8				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.00		3.33	1.33	mg/Kg	1	☼	6010	Total/NA
Barium	127		1.66	0.366	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.475	J	0.665	0.0931	mg/Kg	1	☼	6010	Total/NA
Cadmium	1.87		0.665	0.0998	mg/Kg	1	☼	6010	Total/NA
Chromium	46.0		1.66	0.665	mg/Kg	1	☼	6010	Total/NA
Nickel	13.9		3.33	0.765	mg/Kg	1	☼	6010	Total/NA
Vanadium	25.5		1.66	0.366	mg/Kg	1	☼	6010	Total/NA
Zinc	342		8.31	2.13	mg/Kg	1	☼	6010	Total/NA
Lead	131		1.66	0.798	mg/Kg	1	☼	6010	Total/NA
Selenium	1.63	J	1.66	1.33	mg/Kg	1	☼	6010	Total/NA
Antimony	1.61	J	1.66	1.33	mg/Kg	1	☼	6010	Total/NA
Copper	69.0		3.33	0.698	mg/Kg	1	☼	6010	Total/NA
Mercury	0.495		0.360	0.0292	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: REF-SW-01 — Lab Sample ID: 480-86375-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	60.1		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	1.27	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	9.17	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.74	J	10.0	1.60	ug/L	1		6010	Dissolved
Mercury	0.142	J	0.200	0.120	ug/L	1		7470A	Dissolved
Hardness as calcium carbonate	88.0		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	1.25		0.239	0.239	ug/L	1		8082	Total/NA

Client Sample ID: REF-PW-01 — Lab Sample ID: 480-86375-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	234		10.0	0.700	ug/L	1		6010	Dissolved
Cadmium	0.630	J	1.00	0.500	ug/L	1		6010	Dissolved
Nickel	15.4		10.0	1.26	ug/L	1		6010	Dissolved
Zinc	440		50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	348		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	9.57		1.00	1.00	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	9.87		1.00	1.00	ug/L	1		8260C	Total/NA
Trichloroethene	4.38		1.00	1.00	ug/L	1		8260C	Total/NA
Vinyl chloride	3.55		1.00	1.00	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: REF-PW-01 (Continued) — Lab Sample ID: 480-86375-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	9.11		0.238	0.238	ug/L	1		8082	Total/NA

Client Sample ID: REF-SED-01 — Lab Sample ID: 480-86375-9

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	5.3				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.29		1.61	0.643	mg/Kg	1	☼	6010	Total/NA
Barium	40.1		0.804	0.177	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.230	J	0.322	0.0450	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.500		0.322	0.0483	mg/Kg	1	☼	6010	Total/NA
Chromium	25.1		0.804	0.322	mg/Kg	1	☼	6010	Total/NA
Nickel	11.5		1.61	0.370	mg/Kg	1	☼	6010	Total/NA
Vanadium	16.6		0.804	0.177	mg/Kg	1	☼	6010	Total/NA
Zinc	206		4.02	1.03	mg/Kg	1	☼	6010	Total/NA
Lead	212		0.804	0.386	mg/Kg	1	☼	6010	Total/NA
Copper	55.9		1.61	0.338	mg/Kg	1	☼	6010	Total/NA
Mercury	0.138	J	0.167	0.0136	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1232	8.40		1.42	1.42	mg/Kg	1	☼	8082	Total/NA

Client Sample ID: REF-SW-02 — Lab Sample ID: 480-86375-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	67.9		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	1.42	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	6.53	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	1.60	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	84.0		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Client Sample ID: REF-PW-02 — Lab Sample ID: 480-86375-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	98.7		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	1.40	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	7.99	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	112		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	1.70		0.236	0.236	ug/L	1		8082	Total/NA

Client Sample ID: TB-04 — Lab Sample ID: 480-86375-12

No Detections.

Client Sample ID: REF-SED-02 — Lab Sample ID: 480-86375-13

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	16.5				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.81		4.56	1.82	mg/Kg	1	☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: REF-SED-02 (Continued) — Lab Sample ID: 480-86375-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	103		2.28	0.501	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.551	J	0.911	0.128	mg/Kg	1	☼	6010	Total/NA
Cadmium	1.82		0.911	0.137	mg/Kg	1	☼	6010	Total/NA
Chromium	47.3		2.28	0.911	mg/Kg	1	☼	6010	Total/NA
Nickel	15.8		4.56	1.05	mg/Kg	1	☼	6010	Total/NA
Vanadium	30.4		2.28	0.501	mg/Kg	1	☼	6010	Total/NA
Zinc	333		11.4	2.92	mg/Kg	1	☼	6010	Total/NA
Lead	144		2.28	1.09	mg/Kg	1	☼	6010	Total/NA
Copper	75.3		4.56	0.957	mg/Kg	1	☼	6010	Total/NA
Mercury	0.464		0.449	0.0364	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1232	47.4		18.9	18.9	mg/Kg	5	☼	8082	Total/NA

Client Sample ID: REF-SW-03 — Lab Sample ID: 480-86375-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	62.5		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	4.12	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.31	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	80.0		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Client Sample ID: REF-PW-03 — Lab Sample ID: 480-86375-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.66	J	10.0	5.55	ug/L	1		6010	Dissolved
Barium	42.3		10.0	0.700	ug/L	1		6010	Dissolved
Chromium	2.57	J	5.00	1.00	ug/L	1		6010	Dissolved
Vanadium	2.67	J	10.0	1.50	ug/L	1		6010	Dissolved
Zinc	3.35	J	50.0	1.50	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	20.0		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
PCB-1242	1.15		0.234	0.234	ug/L	1		8082	Total/NA
PCB-1254	0.272		0.234	0.234	ug/L	1		8082	Total/NA

Client Sample ID: REF-SED-03 — Lab Sample ID: 480-86375-16

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	1.4				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.74		1.13	0.450	mg/Kg	1	☼	6010	Total/NA
Barium	16.7		0.563	0.124	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.127	J	0.225	0.0315	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.146	J	0.225	0.0338	mg/Kg	1	☼	6010	Total/NA
Chromium	6.65		0.563	0.225	mg/Kg	1	☼	6010	Total/NA
Nickel	5.97		1.13	0.259	mg/Kg	1	☼	6010	Total/NA
Vanadium	12.2		0.563	0.124	mg/Kg	1	☼	6010	Total/NA
Zinc	73.1		2.81	0.720	mg/Kg	1	☼	6010	Total/NA
Lead	50.7		0.563	0.270	mg/Kg	1	☼	6010	Total/NA
Copper	17.0		1.13	0.236	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0266	J	0.114	0.00922	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: REF-SED-03 (Continued) — Lab Sample ID: 480-86375-16

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Tetrahydrofuran	0.0561	*	0.0431	0.0431	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: REF-SW-04 — Lab Sample ID: 480-86375-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	59.0		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	5.02	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.20	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	32.0		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Client Sample ID: REF-SED-04 — Lab Sample ID: 480-86375-18

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	4.3				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	48.7		1.11	0.245	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.757	J	2.23	0.334	mg/Kg	5	☼	6010	Total/NA
Chromium	31.5		5.56	2.23	mg/Kg	5	☼	6010	Total/NA
Nickel	7.25	J	11.1	2.56	mg/Kg	5	☼	6010	Total/NA
Vanadium	16.1		5.56	1.22	mg/Kg	5	☼	6010	Total/NA
Zinc	134		27.8	7.12	mg/Kg	5	☼	6010	Total/NA
Lead	60.5		5.56	2.67	mg/Kg	5	☼	6010	Total/NA
Copper	26.1		11.1	2.34	mg/Kg	5	☼	6010	Total/NA
Mercury	0.198	J	0.216	0.0175	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SED-13 — Lab Sample ID: 480-86375-19

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	8.1				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.56		2.97	1.19	mg/Kg	1	☼	6010	Total/NA
Barium	78.0		1.49	0.327	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.315	J	0.594	0.0832	mg/Kg	1	☼	6010	Total/NA
Cadmium	1.05		0.594	0.0891	mg/Kg	1	☼	6010	Total/NA
Chromium	29.3		1.49	0.594	mg/Kg	1	☼	6010	Total/NA
Nickel	10.1		2.97	0.683	mg/Kg	1	☼	6010	Total/NA
Vanadium	20.6		1.49	0.327	mg/Kg	1	☼	6010	Total/NA
Zinc	224		7.43	1.90	mg/Kg	1	☼	6010	Total/NA
Lead	88.0		1.49	0.713	mg/Kg	1	☼	6010	Total/NA
Copper	39.9		2.97	0.624	mg/Kg	1	☼	6010	Total/NA
Mercury	0.213	J	0.285	0.0231	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.274		0.0166	0.0166	mg/Kg	1	☼	8260C	Total/NA
2-Butanone (MEK)	0.177	*	0.0831	0.0831	mg/Kg	1	☼	8260C	Total/NA
Chlorobenzene	0.0527		0.0166	0.0166	mg/Kg	1	☼	8260C	Total/NA
Chloroethane	0.0198		0.0166	0.0166	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: SED-14 — Lab Sample ID: 480-86375-20

This Detection Summary does not include radiochemical test results.

Client Sample ID: SED-14 (Continued) — Lab Sample ID: 480-86375-20

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	3.0				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.82		1.97	0.790	mg/Kg	1	☼	6010	Total/NA
Barium	51.6		0.987	0.217	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.257	J	0.395	0.0553	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.699		0.395	0.0592	mg/Kg	1	☼	6010	Total/NA
Chromium	24.1		0.987	0.395	mg/Kg	1	☼	6010	Total/NA
Nickel	18.9		1.97	0.454	mg/Kg	1	☼	6010	Total/NA
Vanadium	16.9		0.987	0.217	mg/Kg	1	☼	6010	Total/NA
Zinc	207		4.94	1.26	mg/Kg	1	☼	6010	Total/NA
Lead	79.9		0.987	0.474	mg/Kg	1	☼	6010	Total/NA
Copper	41.3		1.97	0.415	mg/Kg	1	☼	6010	Total/NA
Mercury	0.309		0.200	0.0162	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00948		0.00936	0.00936	mg/Kg	1	☼	8260C	Total/NA
2-Butanone (MEK)	0.167	*	0.0468	0.0468	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.553		0.468	0.468	mg/Kg	1	☼	8260C	Total/NA
Chloroethane	0.0665		0.00936	0.00936	mg/Kg	1	☼	8260C	Total/NA
Tetrahydrofuran	0.112	*	0.0936	0.0936	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: SED-16 — Lab Sample ID: 480-86375-21

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Fractional Organic Carbon	8.7				%	1		D2974	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.36		2.27	0.907	mg/Kg	1	☼	6010	Total/NA
Barium	113		1.13	0.249	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.428	J	0.453	0.0635	mg/Kg	1	☼	6010	Total/NA
Cadmium	1.94		0.453	0.0680	mg/Kg	1	☼	6010	Total/NA
Chromium	71.3		1.13	0.453	mg/Kg	1	☼	6010	Total/NA
Nickel	18.4		2.27	0.521	mg/Kg	1	☼	6010	Total/NA
Vanadium	26.9		1.13	0.249	mg/Kg	1	☼	6010	Total/NA
Zinc	335		5.67	1.45	mg/Kg	1	☼	6010	Total/NA
Lead	378		1.13	0.544	mg/Kg	1	☼	6010	Total/NA
Antimony	1.97		1.13	0.907	mg/Kg	1	☼	6010	Total/NA
Copper	110		2.27	0.476	mg/Kg	1	☼	6010	Total/NA
Mercury	0.844		0.244	0.0198	mg/Kg	1	☼	7471A	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.0153		0.0116	0.0116	mg/Kg	1	☼	8260C	Total/NA
2-Butanone (MEK)	0.153	*	0.0580	0.0580	mg/Kg	1	☼	8260C	Total/NA
Chloroethane	0.228		0.0116	0.0116	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.0178		0.0116	0.0116	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.0285		0.0116	0.0116	mg/Kg	1	☼	8260C	Total/NA
Tetrahydrofuran	0.131	*	0.116	0.116	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.0128		0.0116	0.0116	mg/Kg	1	☼	8260C	Total/NA
Aroclor-1232	128		9.03	9.03	mg/Kg	5	☼	8082	Total/NA

Client Sample ID: SW-18 — Lab Sample ID: 480-86375-22

This Detection Summary does not include radiochemical test results.

Client Sample ID: SW-18 (Continued) — Lab Sample ID: 480-86375-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	60.7		10.0	0.700	ug/L	1		6010	Dissolved
Zinc	5.18	J	50.0	1.50	ug/L	1		6010	Dissolved
Copper	2.48	J	10.0	1.60	ug/L	1		6010	Dissolved
Hardness as calcium carbonate	88.0		4.00	1.05	mg/L	1		SM 2340C	Dissolved

Client Sample ID: TB-03 — Lab Sample ID: 480-86375-23

No Detections.

Client Sample ID: TB-04 — Lab Sample ID: 480-86375-24

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-03
Date Collected: 08/26/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 12:07	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 12:07	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 12:07	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 12:07	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 12:07	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 12:07	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 12:07	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 12:07	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 12:07	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 12:07	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 12:07	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 12:07	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 12:07	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 12:07	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 12:07	1

Client Sample ID: TB-03

Date Collected: 08/26/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 12:07	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 12:07	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 12:07	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 12:07	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 12:07	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 12:07	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 12:07	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/31/15 12:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*08/31/15 12:07*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/31/15 12:07*	*1*

Client Sample ID: SED-12

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2
Matrix: Solid
Percent Solids: 31.3

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.155		1.55	0.155	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,1,1-Trichloroethane	**0.129**	**J**	1.55	0.113	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,1,2,2-Tetrachloroethane	<0.251		1.55	0.251	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Freon 113	<0.353		1.55	0.353	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,1,2-Trichloroethane	<0.202		1.55	0.202	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,1-Dichloroethane	<0.189		1.55	0.189	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,1-Dichloroethene	<0.190		1.55	0.190	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,1-Dichloropropene	<0.220		1.55	0.220	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2,3-Trichlorobenzene	<0.165		1.55	0.165	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2,3-Trichloropropane	<0.158		1.55	0.158	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2,4-Trichlorobenzene	**0.101**	**J**	1.55	0.0942	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2,4-Trimethylbenzene	<0.298		1.55	0.298	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2-Dibromo-3-Chloropropane	<0.775		7.75	0.775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2-Dichlorobenzene	**0.381**	**J**	1.55	0.121	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,2-Dichloroethane	<0.0778		1.55	0.0778	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1

Client Sample ID: SED-12

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2

Matrix: Solid
Percent Solids: 31.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.775		1.55	0.775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,3,5-Trimethylbenzene	<0.0998		1.55	0.0998	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,3-Dichlorobenzene	<0.0797		1.55	0.0797	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,3-Dichloropropane	<0.0930		1.55	0.0930	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,4-Dichlorobenzene	<0.217		1.55	0.217	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
1,4-Dioxane	<7.47		77.5	7.47	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
2,2-Dichloropropane	<0.264		1.55	0.264	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
2-Butanone (MEK)	<0.567	*	7.75	0.567	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
2-Chlorotoluene	<0.102		1.55	0.102	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
2-Hexanone	<0.775		7.75	0.775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
4-Chlorotoluene	<0.183		1.55	0.183	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
4-Isopropyltoluene	<0.124		1.55	0.124	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
4-Methyl-2-pentanone (MIBK)	<0.508		7.75	0.508	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Acetone	<1.31		77.5	1.31	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Benzene	<0.0760		1.55	0.0760	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Bromobenzene	<0.273		1.55	0.273	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Bromoform	<0.775		1.55	0.775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Bromomethane	<0.140		1.55	0.140	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Carbon disulfide	<0.775		1.55	0.775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Carbon tetrachloride	<0.150		1.55	0.150	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Chlorobenzene	<0.205		1.55	0.205	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Chlorobromomethane	<0.112		1.55	0.112	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Chlorodibromomethane	<0.198		1.55	0.198	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Chloroethane	<0.350	*	1.55	0.350	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Chloroform	<0.0958		1.55	0.0958	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Chloromethane	<0.0936		1.55	0.0936	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
cis-1,2-Dichloroethene	**0.469**	**J**	1.55	0.198	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
cis-1,3-Dichloropropene	<0.223		1.55	0.223	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Dibromomethane	<0.160		1.55	0.160	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Dichlorobromomethane	<0.208		1.55	0.208	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Dichlorodifluoromethane	<0.128	*	1.55	0.128	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Ethyl ether	<0.651		1.55	0.651	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Ethylbenzene	<0.107		1.55	0.107	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Ethylene Dibromide	<0.199		1.55	0.199	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Hexachlorobutadiene	<0.182		1.55	0.182	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Isopropyl ether	<0.775		1.55	0.775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Isopropylbenzene	<0.234		1.55	0.234	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Methyl tert-butyl ether	<0.152		1.55	0.152	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Methylene Chloride	<0.713		1.55	0.713	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
m-Xylene & p-Xylene	<0.260		1.55	0.260	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Naphthalene	<0.208		7.75	0.208	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
n-Butylbenzene	<0.135		1.55	0.135	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
N-Propylbenzene	<0.124		1.55	0.124	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
o-Xylene	<0.202		1.55	0.202	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
sec-Butylbenzene	<0.135		1.55	0.135	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Styrene	<0.0775		1.55	0.0775	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Tert-amyl methyl ether	<0.397		1.55	0.397	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Tert-butyl ethyl ether	<0.682		1.55	0.682	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
tert-Butylbenzene	<0.161		1.55	0.161	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1

Client Sample ID: SED-12

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2

Matrix: Solid
Percent Solids: 31.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.208		1.55	0.208	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Tetrahydrofuran	<1.43		15.5	1.43	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Toluene	**0.191**	**J**	1.55	0.117	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
trans-1,2-Dichloroethene	<0.160		1.55	0.160	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
trans-1,3-Dichloropropene	<0.682		1.55	0.682	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Trichloroethene	<0.341		1.55	0.341	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Trichlorofluoromethane	<0.147		1.55	0.147	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1
Vinyl chloride	<0.189		1.55	0.189	mg/Kg	☼	08/29/15 04:10	09/03/15 00:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,1,1-Trichloroethane	**0.0635**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,1,2,2-Tetrachloroethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,1,2-Trichloroethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Freon 113	**0.0903**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,1-Dichloroethane	**0.0725**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,1-Dichloroethene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,1-Dichloropropene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2,3-Trichlorobenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2,3-Trichloropropane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2,4-Trichlorobenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2,4-Trimethylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2-Dibromo-3-Chloropropane	<0.0762	H	0.0762	0.0762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2-Dichlorobenzene	**0.156**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2-Dichloroethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,2-Dichloropropane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,3,5-Trimethylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,3-Dichlorobenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,3-Dichloropropane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,4-Dichlorobenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
1,4-Dioxane	<0.762	H	0.762	0.762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
2,2-Dichloropropane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
2-Butanone (MEK)	<0.0762	H *	0.0762	0.0762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
2-Chlorotoluene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
2-Hexanone	<0.0762	H	0.0762	0.0762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
4-Chlorotoluene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
4-Isopropyltoluene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
4-Methyl-2-pentanone (MIBK)	<0.0762	H	0.0762	0.0762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Acetone	<0.762	H	0.762	0.762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Benzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Bromobenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Bromoform	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Bromomethane	<0.0152	H *	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Carbon disulfide	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Carbon tetrachloride	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Chlorobenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Chlorobromomethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Chlorodibromomethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Chloroethane	**0.130**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Chloroform	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1

Client Sample ID: SED-12
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2
Matrix: Solid
Percent Solids: 31.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
cis-1,2-Dichloroethene	**0.0272**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
cis-1,3-Dichloropropene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Dichlorobromomethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Dichlorodifluoromethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Ethyl ether	<0.0152	H *	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Ethylbenzene	**0.0311**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Ethylene Dibromide	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Hexachlorobutadiene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Isopropyl ether	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Isopropylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Methyl tert-butyl ether	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Methylene Chloride	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
m-Xylene & p-Xylene	**0.0498**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Naphthalene	<0.0762	H	0.0762	0.0762	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
n-Butylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
N-Propylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
o-Xylene	**0.0790**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
sec-Butylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Styrene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Tert-amyl methyl ether	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Tert-butyl ethyl ether	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
tert-Butylbenzene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Tetrachloroethene	**0.0195**	**H**	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Tetrahydrofuran	<0.152	H *	0.152	0.152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Toluene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
trans-1,2-Dichloroethene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
trans-1,3-Dichloropropene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Trichloroethene	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Trichlorofluoromethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Vinyl chloride	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1
Dibromomethane	<0.0152	H	0.0152	0.0152	mg/Kg	☼	08/29/15 04:10	08/31/15 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/29/15 04:10*	*09/03/15 00:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*	*08/29/15 04:10*	*09/03/15 00:15*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*08/29/15 04:10*	*09/03/15 00:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*70 - 130*	*08/29/15 04:10*	*08/31/15 13:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*	*08/29/15 04:10*	*08/31/15 13:53*	*1*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*08/29/15 04:10*	*08/31/15 13:53*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1221	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1232	**768**		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1242	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1248	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50

Client Sample ID: SED-12

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2

Matrix: Solid
Percent Solids: 31.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1254	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1260	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1262	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50
Aroclor-1268	<151		151	151	mg/Kg	☼	09/03/15 08:19	09/08/15 11:33	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*392*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 11:33*	*50*
Tetrachloro-m-xylene	*32*	*p*	*30 - 150*	*09/03/15 08:19*	*09/08/15 11:33*	*50*
DCB Decachlorobiphenyl	*1613*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 11:33*	*50*
DCB Decachlorobiphenyl	*1454*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 11:33*	*50*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**1.14**	**J**	1.52	0.610	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Arsenic	**11.1**		3.05	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Barium	**246**		1.52	0.335	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Beryllium	**0.896**		0.610	0.0853	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Cadmium	**4.57**		0.610	0.0914	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Chromium	**167**		1.52	0.610	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Nickel	**28.3**		3.05	0.701	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Thallium	<0.914		3.05	0.914	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Vanadium	**68.4**		1.52	0.335	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Zinc	**474**		7.62	1.95	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Lead	**544**		1.52	0.732	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Selenium	<1.22		1.52	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Antimony	**2.34**		1.52	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1
Copper	**164**		3.05	0.640	mg/Kg	☼	09/01/15 09:27	09/02/15 14:32	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**2.01**		0.298	0.0241	mg/Kg	☼	09/01/15 08:30	09/01/15 12:05	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**9.1**				%			09/01/15 15:42	1

Client Sample ID: SED-12 (DUP)

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3

Matrix: Solid
Percent Solids: 32.6

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.128		1.28	0.128	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,1,1-Trichloroethane	**0.0952**	**J**	1.28	0.0928	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,1,2,2-Tetrachloroethane	<0.207		1.28	0.207	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Freon 113	<0.292		1.28	0.292	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,1,2-Trichloroethane	<0.166		1.28	0.166	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,1-Dichloroethane	<0.156		1.28	0.156	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,1-Dichloroethene	<0.157		1.28	0.157	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,1-Dichloropropene	<0.182		1.28	0.182	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2,3-Trichlorobenzene	<0.136		1.28	0.136	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: SED-12 (DUP)
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3
Matrix: Solid
Percent Solids: 32.6

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.130		1.28	0.130	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2,4-Trichlorobenzene	<0.0778		1.28	0.0778	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2,4-Trimethylbenzene	<0.246		1.28	0.246	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2-Dibromo-3-Chloropropane	<0.639		6.39	0.639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2-Dichlorobenzene	**0.320**	**J**	1.28	0.100	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2-Dichloroethane	<0.0642		1.28	0.0642	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,2-Dichloropropane	<0.639		1.28	0.639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,3,5-Trimethylbenzene	<0.0824		1.28	0.0824	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,3-Dichlorobenzene	<0.0657		1.28	0.0657	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,3-Dichloropropane	<0.0767		1.28	0.0767	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,4-Dichlorobenzene	<0.179		1.28	0.179	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
1,4-Dioxane	<6.16		63.9	6.16	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
2,2-Dichloropropane	<0.217		1.28	0.217	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
2-Butanone (MEK)	<0.468	*	6.39	0.468	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
2-Chlorotoluene	<0.0839		1.28	0.0839	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
2-Hexanone	<0.639		6.39	0.639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
4-Chlorotoluene	<0.151		1.28	0.151	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
4-Isopropyltoluene	<0.103		1.28	0.103	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
4-Methyl-2-pentanone (MIBK)	<0.419		6.39	0.419	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Acetone	<1.08		63.9	1.08	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Benzene	<0.0627		1.28	0.0627	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Bromobenzene	<0.225		1.28	0.225	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Bromoform	<0.639		1.28	0.639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Bromomethane	<0.115		1.28	0.115	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Carbon disulfide	<0.639		1.28	0.639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Carbon tetrachloride	<0.124		1.28	0.124	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Chlorobenzene	<0.169		1.28	0.169	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Chlorobromomethane	<0.0923		1.28	0.0923	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Chlorodibromomethane	<0.164		1.28	0.164	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Chloroethane	<0.289	*	1.28	0.289	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Chloroform	<0.0790		1.28	0.0790	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Chloromethane	<0.0772		1.28	0.0772	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
cis-1,2-Dichloroethene	**0.398**	**J**	1.28	0.164	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
cis-1,3-Dichloropropene	<0.184		1.28	0.184	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Dibromomethane	<0.132		1.28	0.132	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Dichlorobromomethane	<0.171		1.28	0.171	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Dichlorodifluoromethane	<0.106	*	1.28	0.106	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Ethyl ether	<0.537		1.28	0.537	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Ethylbenzene	<0.0882		1.28	0.0882	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Ethylene Dibromide	<0.164		1.28	0.164	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Hexachlorobutadiene	<0.150		1.28	0.150	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Isopropyl ether	<0.639		1.28	0.639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Isopropylbenzene	<0.193		1.28	0.193	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Methyl tert-butyl ether	<0.126		1.28	0.126	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Methylene Chloride	<0.588		1.28	0.588	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
m-Xylene & p-Xylene	<0.215		1.28	0.215	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Naphthalene	<0.171		6.39	0.171	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
n-Butylbenzene	<0.111		1.28	0.111	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
N-Propylbenzene	<0.102		1.28	0.102	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1

Client Sample ID: SED-12 (DUP)
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3
Matrix: Solid
Percent Solids: 32.6

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.167		1.28	0.167	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
sec-Butylbenzene	<0.111		1.28	0.111	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Styrene	<0.0639		1.28	0.0639	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Tert-amyl methyl ether	<0.327		1.28	0.327	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Tert-butyl ethyl ether	<0.563		1.28	0.563	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
tert-Butylbenzene	<0.133		1.28	0.133	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Tetrachloroethene	<0.172		1.28	0.172	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Tetrahydrofuran	<1.18		12.8	1.18	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Toluene	<0.0967		1.28	0.0967	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
trans-1,2-Dichloroethene	<0.132		1.28	0.132	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
trans-1,3-Dichloropropene	<0.563		1.28	0.563	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Trichloroethene	<0.281		1.28	0.281	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Trichlorofluoromethane	<0.121		1.28	0.121	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1
Vinyl chloride	<0.156		1.28	0.156	mg/Kg	☼	08/29/15 04:10	09/03/15 00:39	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,1,1-Trichloroethane	**0.0705**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,1,2,2-Tetrachloroethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,1,2-Trichloroethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Freon 113	**0.132**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,1-Dichloroethane	**0.0845**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,1-Dichloroethene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,1-Dichloropropene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2,3-Trichlorobenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2,3-Trichloropropane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2,4-Trichlorobenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2,4-Trimethylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2-Dibromo-3-Chloropropane	<0.0772	H	0.0772	0.0772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2-Dichlorobenzene	**0.0890**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2-Dichloroethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,2-Dichloropropane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,3,5-Trimethylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,3-Dichlorobenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,3-Dichloropropane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,4-Dichlorobenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
1,4-Dioxane	<0.772	H	0.772	0.772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
2,2-Dichloropropane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
2-Butanone (MEK)	<0.0772	H *	0.0772	0.0772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
2-Chlorotoluene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
2-Hexanone	<0.0772	H	0.0772	0.0772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
4-Chlorotoluene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
4-Isopropyltoluene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
4-Methyl-2-pentanone (MIBK)	<0.0772	H	0.0772	0.0772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Acetone	<0.772	H	0.772	0.772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Benzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Bromobenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Bromoform	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Bromomethane	<0.0154	H *	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Carbon disulfide	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1

Client Sample ID: SED-12 (DUP)

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3

Matrix: Solid
Percent Solids: 32.6

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Chlorobenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Chlorobromomethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Chlorodibromomethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Chloroethane	**0.0651**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Chloroform	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Chloromethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
cis-1,2-Dichloroethene	**0.0310**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
cis-1,3-Dichloropropene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Dichlorobromomethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Dichlorodifluoromethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Ethyl ether	<0.0154	H *	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Ethylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Ethylene Dibromide	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Hexachlorobutadiene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Isopropyl ether	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Isopropylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Methyl tert-butyl ether	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Methylene Chloride	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
m-Xylene & p-Xylene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Naphthalene	<0.0772	H	0.0772	0.0772	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
n-Butylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
N-Propylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
o-Xylene	**0.0234**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
sec-Butylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Styrene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Tert-amyl methyl ether	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Tert-butyl ethyl ether	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
tert-Butylbenzene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Tetrachloroethene	**0.0251**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Tetrahydrofuran	<0.154	H *	0.154	0.154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Toluene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
trans-1,2-Dichloroethene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
trans-1,3-Dichloropropene	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Trichloroethene	**0.0228**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Trichlorofluoromethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Vinyl chloride	**0.0171**	**H**	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1
Dibromomethane	<0.0154	H	0.0154	0.0154	mg/Kg	☼	08/29/15 04:10	08/31/15 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 130*	*08/29/15 04:10*	*09/03/15 00:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*	*08/29/15 04:10*	*09/03/15 00:39*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*08/29/15 04:10*	*09/03/15 00:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/29/15 04:10*	*08/31/15 14:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*	*08/29/15 04:10*	*08/31/15 14:19*	*1*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*08/29/15 04:10*	*08/31/15 14:19*	*1*

Client Sample ID: SED-12 (DUP)

Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3

Matrix: Solid
Percent Solids: 32.6

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1221	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1232	**963**		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1242	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1248	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1254	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1260	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1262	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50
Aroclor-1268	<129		129	129	mg/Kg	☼	09/03/15 08:19	09/08/15 12:11	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*696*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 12:11*	*50*
Tetrachloro-m-xylene	*30*	*p*	*30 - 150*	*09/03/15 08:19*	*09/08/15 12:11*	*50*
DCB Decachlorobiphenyl	*875*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 12:11*	*50*
DCB Decachlorobiphenyl	*1258*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 12:11*	*50*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.721**	**J**	1.52	0.609	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Arsenic	**8.87**		3.04	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Barium	**164**		1.52	0.335	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Beryllium	**0.606**	**J**	0.609	0.0852	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Cadmium	**3.18**		0.609	0.0913	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Chromium	**112**		1.52	0.609	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Nickel	**19.3**		3.04	0.700	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Thallium	<0.913		3.04	0.913	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Vanadium	**47.7**		1.52	0.335	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Zinc	**323**		7.61	1.95	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Lead	**366**		1.52	0.731	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Selenium	<1.22		1.52	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Antimony	**2.27**		1.52	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1
Copper	**153**		3.04	0.639	mg/Kg	☼	09/01/15 09:27	09/02/15 14:35	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.76**		0.311	0.0252	mg/Kg	☼	09/01/15 08:30	09/01/15 12:11	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**9.2**				%			09/01/15 15:42	1

Client Sample ID: SED-15

Date Collected: 08/27/15 08:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-4

Matrix: Solid
Percent Solids: 31.0

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	**1.18**	**J ***	1.44	0.325	mg/Kg	☼	08/29/15 04:10	09/02/15 13:20	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1

Client Sample ID: SED-15
Date Collected: 08/27/15 08:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-4
Matrix: Solid
Percent Solids: 31.0

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,1,2,2-Tetrachloroethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,1,2-Trichloroethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Freon 113	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,1-Dichloroethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,1-Dichloroethene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,1-Dichloropropene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2,3-Trichlorobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2,3-Trichloropropane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2,4-Trichlorobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2,4-Trimethylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2-Dibromo-3-Chloropropane	<0.0924		0.0924	0.0924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2-Dichlorobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2-Dichloroethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,2-Dichloropropane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,3,5-Trimethylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,3-Dichlorobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,3-Dichloropropane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,4-Dichlorobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
1,4-Dioxane	<0.924		0.924	0.924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
2,2-Dichloropropane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
2-Butanone (MEK)	**0.312**	*	0.0924	0.0924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
2-Chlorotoluene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
2-Hexanone	<0.0924		0.0924	0.0924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
4-Chlorotoluene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
4-Isopropyltoluene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
4-Methyl-2-pentanone (MIBK)	<0.0924		0.0924	0.0924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Acetone	**1.07**		0.924	0.924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Benzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Bromobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Bromoform	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Bromomethane	<0.0185	*	0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Carbon disulfide	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Carbon tetrachloride	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Chlorobenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Chlorobromomethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Chlorodibromomethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Chloroform	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Chloromethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
cis-1,2-Dichloroethene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
cis-1,3-Dichloropropene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Dichlorobromomethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Dichlorodifluoromethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Ethyl ether	<0.0185	*	0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Ethylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Ethylene Dibromide	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Hexachlorobutadiene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Isopropyl ether	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Isopropylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1

Client Sample ID: SED-15
Date Collected: 08/27/15 08:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-4
Matrix: Solid
Percent Solids: 31.0

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Methylene Chloride	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
m-Xylene & p-Xylene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Naphthalene	<0.0924		0.0924	0.0924	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
n-Butylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
N-Propylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
o-Xylene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
sec-Butylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Styrene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Tert-amyl methyl ether	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Tert-butyl ethyl ether	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
tert-Butylbenzene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Tetrachloroethene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Tetrahydrofuran	<0.185	*	0.185	0.185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Toluene	**0.0202**		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
trans-1,2-Dichloroethene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
trans-1,3-Dichloropropene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Trichloroethene	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Trichlorofluoromethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Vinyl chloride	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1
Dibromomethane	<0.0185		0.0185	0.0185	mg/Kg	☼	08/29/15 04:10	08/31/15 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/29/15 04:10*	*09/02/15 13:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*	*08/29/15 04:10*	*09/02/15 13:20*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*08/29/15 04:10*	*09/02/15 13:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*70 - 130*	*08/29/15 04:10*	*08/31/15 14:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*	*08/29/15 04:10*	*08/31/15 14:45*	*1*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*08/29/15 04:10*	*08/31/15 14:45*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1221	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1232	**218**		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1242	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1248	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1254	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1260	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1262	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10
Aroclor-1268	<28.8		28.8	28.8	mg/Kg	☼	09/03/15 08:19	09/09/15 09:06	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*176*	*X*	*30 - 150*	*09/03/15 08:19*	*09/09/15 09:06*	*10*
Tetrachloro-m-xylene	*67*	*p*	*30 - 150*	*09/03/15 08:19*	*09/09/15 09:06*	*10*
DCB Decachlorobiphenyl	*74*		*30 - 150*	*09/03/15 08:19*	*09/09/15 09:06*	*10*
DCB Decachlorobiphenyl	*58*		*30 - 150*	*09/03/15 08:19*	*09/09/15 09:06*	*10*

Client Sample ID: SED-15

Date Collected: 08/27/15 08:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-4

Matrix: Solid
Percent Solids: 31.0

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.623		1.56	0.623	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Arsenic	**7.99**		3.12	1.25	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Barium	**123**	**F1**	1.56	0.343	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Beryllium	**0.517**	**J**	0.623	0.0873	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Cadmium	**2.57**		0.623	0.0935	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Chromium	**91.4**		1.56	0.623	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Nickel	**22.9**		3.12	0.717	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Thallium	<0.935		3.12	0.935	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Vanadium	**35.8**		1.56	0.343	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Zinc	**398**	**F1**	7.79	1.99	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Lead	**427**	**F1**	1.56	0.748	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Selenium	<1.25		1.56	1.25	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Antimony	**2.44**		1.56	1.25	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1
Copper	**146**		3.12	0.654	mg/Kg	☼	09/01/15 09:27	09/02/15 14:38	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.16**	**F1**	0.589	0.0477	mg/Kg	☼	09/01/15 08:30	09/01/15 13:10	2

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**2.6**				%			09/01/15 15:42	1

Client Sample ID: SW-17

Date Collected: 08/27/15 08:50
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 12:55	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 12:55	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 12:55	1

Client Sample ID: SW-17
Date Collected: 08/27/15 08:50
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 12:55	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 12:55	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 12:55	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 12:55	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 12:55	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 12:55	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 12:55	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 12:55	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 12:55	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 12:55	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 12:55	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 12:55	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 12:55	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 12:55	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 12:55	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 12:55	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 12:55	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 12:55	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 12:55	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1

Client Sample ID: SW-17

Date Collected: 08/27/15 08:50
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/31/15 12:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*08/31/15 12:55*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/31/15 12:55*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1221	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1232	**0.292**		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1242	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1248	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1254	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1260	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1262	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1
PCB-1268	<0.231		0.231	0.231	ug/L		08/31/15 14:23	09/01/15 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:59*	*1*
Tetrachloro-m-xylene	*95*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:59*	*1*
DCB Decachlorobiphenyl	*59*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:59*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:59*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 17:48	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 17:48	1
Barium	**64.4**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 17:48	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 17:48	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 17:48	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 17:48	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 17:48	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 17:48	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 17:48	1
Zinc	**5.57**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 17:48	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 17:48	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 17:48	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 17:48	1
Copper	**2.44**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 17:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:07	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**90.0**		10.0	2.63	mg/L			09/04/15 10:30	1

Client Sample ID: SED-17
Date Collected: 08/27/15 09:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-6
Matrix: Solid
Percent Solids: 28.2

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,1,1-Trichloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,1,2,2-Tetrachloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,1,2-Trichloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Freon 113	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,1-Dichloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,1-Dichloroethene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,1-Dichloropropene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2,3-Trichlorobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2,3-Trichloropropane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2,4-Trichlorobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2,4-Trimethylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2-Dibromo-3-Chloropropane	<0.0968		0.0968	0.0968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2-Dichlorobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2-Dichloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,2-Dichloropropane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,3,5-Trimethylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,3-Dichlorobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,3-Dichloropropane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,4-Dichlorobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
1,4-Dioxane	<0.968		0.968	0.968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
2,2-Dichloropropane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
2-Butanone (MEK)	<0.0968	*	0.0968	0.0968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
2-Chlorotoluene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
2-Hexanone	<0.0968		0.0968	0.0968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
4-Chlorotoluene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
4-Isopropyltoluene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
4-Methyl-2-pentanone (MIBK)	<0.0968		0.0968	0.0968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Acetone	<0.968		0.968	0.968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Benzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Bromobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Bromoform	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Bromomethane	<0.0194	*	0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Carbon disulfide	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Carbon tetrachloride	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Chlorobenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Chlorobromomethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Chlorodibromomethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Chloroethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Chloroform	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Chloromethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
cis-1,2-Dichloroethene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
cis-1,3-Dichloropropene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Dichlorobromomethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Dichlorodifluoromethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Ethyl ether	<0.0194	*	0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Ethylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Ethylene Dibromide	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Hexachlorobutadiene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1

Client Sample ID: SED-17
Date Collected: 08/27/15 09:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-6
Matrix: Solid
Percent Solids: 28.2

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Isopropylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Methyl tert-butyl ether	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Methylene Chloride	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
m-Xylene & p-Xylene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Naphthalene	<0.0968		0.0968	0.0968	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
n-Butylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
N-Propylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
o-Xylene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
sec-Butylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Styrene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Tert-amyl methyl ether	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Tert-butyl ethyl ether	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
tert-Butylbenzene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Tetrachloroethene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Tetrahydrofuran	<0.194	*	0.194	0.194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Toluene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
trans-1,2-Dichloroethene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
trans-1,3-Dichloropropene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Trichloroethene	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Trichlorofluoromethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Vinyl chloride	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1
Dibromomethane	<0.0194		0.0194	0.0194	mg/Kg	☼	08/29/15 04:10	08/31/15 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*108*		*70 - 130*	*08/29/15 04:10*	*08/31/15 15:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*	*08/29/15 04:10*	*08/31/15 15:11*	*1*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*08/29/15 04:10*	*08/31/15 15:11*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1221	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1232	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1242	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1248	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1254	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1260	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1262	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5
Aroclor-1268	<15.8		15.8	15.8	mg/Kg	☼	09/03/15 08:19	09/08/15 12:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*30 - 150*	*09/03/15 08:19*	*09/08/15 12:30*	*5*
Tetrachloro-m-xylene	*76*		*30 - 150*	*09/03/15 08:19*	*09/08/15 12:30*	*5*
DCB Decachlorobiphenyl	*95*	*p*	*30 - 150*	*09/03/15 08:19*	*09/08/15 12:30*	*5*
DCB Decachlorobiphenyl	*192*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 12:30*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.665		1.66	0.665	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1

Client Sample ID: SED-17

Date Collected: 08/27/15 09:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-6
Matrix: Solid
Percent Solids: 28.2

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.00		3.33	1.33	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Barium	127		1.66	0.366	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Beryllium	0.475	J	0.665	0.0931	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Cadmium	1.87		0.665	0.0998	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Chromium	46.0		1.66	0.665	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Nickel	13.9		3.33	0.765	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Thallium	<0.998		3.33	0.998	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Vanadium	25.5		1.66	0.366	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Zinc	342		8.31	2.13	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Lead	131		1.66	0.798	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Selenium	1.63	J	1.66	1.33	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Antimony	1.61	J	1.66	1.33	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1
Copper	69.0		3.33	0.698	mg/Kg	☼	09/01/15 09:27	09/02/15 15:01	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.495		0.360	0.0292	mg/Kg	☼	09/01/15 08:30	09/01/15 12:20	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	10.8				%			09/01/15 15:42	1

Client Sample ID: REF-SW-01

Date Collected: 08/27/15 09:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 13:19	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 13:19	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 13:19	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1

Client Sample ID: REF-SW-01
Date Collected: 08/27/15 09:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 13:19	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 13:19	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 13:19	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 13:19	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 13:19	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 13:19	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 13:19	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 13:19	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 13:19	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 13:19	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 13:19	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 13:19	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 13:19	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 13:19	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 13:19	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 13:19	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 13:19	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 13:19	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 13:19	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1

Client Sample ID: REF-SW-01

Date Collected: 08/27/15 09:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/31/15 13:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/31/15 13:19*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/31/15 13:19*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1221	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1232	**1.25**		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1242	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1248	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1254	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1260	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1262	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1
PCB-1268	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 12:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:15*	*1*
Tetrachloro-m-xylene	*99*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:15*	*1*
DCB Decachlorobiphenyl	*58*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:15*	*1*
DCB Decachlorobiphenyl	*66*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:15*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:11	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:11	1
Barium	**60.1**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:11	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:11	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:11	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:11	1
Nickel	**1.27**	**J**	10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:11	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:11	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:11	1
Zinc	**9.17**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:11	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:11	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:11	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:11	1
Copper	**2.74**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:11	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.142**	**J**	0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**88.0**		4.00	1.05	mg/L			09/04/15 10:30	1

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: REF-PW-01
Date Collected: 08/27/15 09:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 13:43	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,1-Dichloroethane	**9.57**		1.00	1.00	ug/L			08/31/15 13:43	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 13:43	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 13:43	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 13:43	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 13:43	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 13:43	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 13:43	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 13:43	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 13:43	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 13:43	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 13:43	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 13:43	1
cis-1,2-Dichloroethene	**9.87**		1.00	1.00	ug/L			08/31/15 13:43	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 13:43	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 13:43	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 13:43	1

Client Sample ID: REF-PW-01

Date Collected: 08/27/15 09:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 13:43	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 13:43	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 13:43	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 13:43	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 13:43	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 13:43	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 13:43	1
Trichloroethene	**4.38**		1.00	1.00	ug/L			08/31/15 13:43	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1
Vinyl chloride	**3.55**		1.00	1.00	ug/L			08/31/15 13:43	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/31/15 13:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*08/31/15 13:43*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/31/15 13:43*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1221	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1232	**9.11**		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1242	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1248	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1254	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1260	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1262	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1
PCB-1268	<0.238		0.238	0.238	ug/L		08/31/15 14:23	09/01/15 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:31*	*1*
Tetrachloro-m-xylene	*100*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:31*	*1*
DCB Decachlorobiphenyl	*61*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:31*	*1*
DCB Decachlorobiphenyl	*67*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:31*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:14	1

Client Sample ID: REF-PW-01

Date Collected: 08/27/15 09:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-8
Matrix: Water

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:14	1
Barium	**234**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:14	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:14	1
Cadmium	**0.630**	**J**	1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:14	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:14	1
Nickel	**15.4**		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:14	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:14	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:14	1
Zinc	**440**		50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:14	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:14	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:14	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:14	1
Copper	<1.60		10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:14	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:19	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**348**		4.00	1.05	mg/L			09/04/15 10:30	1

Client Sample ID: REF-SED-01

Date Collected: 08/27/15 10:10
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-9
Matrix: Solid
Percent Solids: 60.1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,1,1-Trichloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,1,2,2-Tetrachloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,1,2-Trichloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Freon 113	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,1-Dichloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,1-Dichloroethene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,1-Dichloropropene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2,3-Trichlorobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2,3-Trichloropropane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2,4-Trichlorobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2,4-Trimethylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2-Dibromo-3-Chloropropane	<0.0474		0.0474	0.0474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2-Dichlorobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2-Dichloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,2-Dichloropropane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,3,5-Trimethylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,3-Dichlorobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,3-Dichloropropane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,4-Dichlorobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
1,4-Dioxane	<0.474		0.474	0.474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
2,2-Dichloropropane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1

Client Sample ID: REF-SED-01
Date Collected: 08/27/15 10:10
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-9
Matrix: Solid
Percent Solids: 60.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<0.0474	*	0.0474	0.0474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
2-Chlorotoluene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
2-Hexanone	<0.0474		0.0474	0.0474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
4-Chlorotoluene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
4-Isopropyltoluene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
4-Methyl-2-pentanone (MIBK)	<0.0474		0.0474	0.0474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Acetone	<0.474		0.474	0.474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Benzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Bromobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Bromoform	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Bromomethane	<0.00948	*	0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Carbon disulfide	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Carbon tetrachloride	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Chlorobenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Chlorobromomethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Chlorodibromomethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Chloroethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Chloroform	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Chloromethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
cis-1,2-Dichloroethene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
cis-1,3-Dichloropropene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Dichlorobromomethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Dichlorodifluoromethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Ethyl ether	<0.00948	*	0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Ethylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Ethylene Dibromide	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Hexachlorobutadiene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Isopropyl ether	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Isopropylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Methyl tert-butyl ether	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Methylene Chloride	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
m-Xylene & p-Xylene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Naphthalene	<0.0474		0.0474	0.0474	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
n-Butylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
N-Propylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
o-Xylene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
sec-Butylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Styrene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Tert-amyl methyl ether	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Tert-butyl ethyl ether	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
tert-Butylbenzene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Tetrachloroethene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Tetrahydrofuran	<0.0948	*	0.0948	0.0948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Toluene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
trans-1,2-Dichloroethene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
trans-1,3-Dichloropropene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Trichloroethene	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Trichlorofluoromethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1
Vinyl chloride	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1

Client Sample ID: REF-SED-01

Date Collected: 08/27/15 10:10
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-9

Matrix: Solid
Percent Solids: 60.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.00948		0.00948	0.00948	mg/Kg	☼	08/29/15 04:10	08/31/15 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*70 - 130*	*08/29/15 04:10*	*08/31/15 15:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*	*08/29/15 04:10*	*08/31/15 15:37*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*08/29/15 04:10*	*08/31/15 15:37*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1221	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1232	**8.40**		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1242	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1248	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1254	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1260	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1262	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1
Aroclor-1268	<1.42		1.42	1.42	mg/Kg	☼	09/03/15 08:19	09/08/15 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*30 - 150*	*09/03/15 08:19*	*09/08/15 12:49*	*1*
Tetrachloro-m-xylene	*68*		*30 - 150*	*09/03/15 08:19*	*09/08/15 12:49*	*1*
DCB Decachlorobiphenyl	*72*		*30 - 150*	*09/03/15 08:19*	*09/08/15 12:49*	*1*
DCB Decachlorobiphenyl	*69*		*30 - 150*	*09/03/15 08:19*	*09/08/15 12:49*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.322		0.804	0.322	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Arsenic	**3.29**		1.61	0.643	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Barium	**40.1**		0.804	0.177	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Beryllium	**0.230**	**J**	0.322	0.0450	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Cadmium	**0.500**		0.322	0.0483	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Chromium	**25.1**		0.804	0.322	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Nickel	**11.5**		1.61	0.370	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Thallium	<0.483		1.61	0.483	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Vanadium	**16.6**		0.804	0.177	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Zinc	**206**		4.02	1.03	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Lead	**212**		0.804	0.386	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Selenium	<0.643		0.804	0.643	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Antimony	<0.643		0.804	0.643	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1
Copper	**55.9**		1.61	0.338	mg/Kg	☼	09/01/15 09:27	09/02/15 15:03	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.138**	**J**	0.167	0.0136	mg/Kg	☼	09/01/15 08:30	09/01/15 12:22	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**5.3**				%			09/01/15 15:42	1

Client Sample ID: REF-SW-02

Date Collected: 08/27/15 10:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 14:06	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 14:06	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 14:06	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 14:06	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 14:06	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 14:06	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 14:06	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 14:06	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 14:06	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 14:06	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 14:06	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 14:06	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 14:06	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 14:06	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 14:06	1

Client Sample ID: REF-SW-02

Date Collected: 08/27/15 10:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 14:06	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 14:06	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 14:06	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 14:06	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 14:06	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 14:06	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 14:06	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/31/15 14:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*08/31/15 14:06*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/31/15 14:06*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1221	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1232	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1242	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1248	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1254	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1260	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1262	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1
PCB-1268	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:47*	*1*
Tetrachloro-m-xylene	*96*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:47*	*1*
DCB Decachlorobiphenyl	*51*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:47*	*1*
DCB Decachlorobiphenyl	*59*		*30 - 150*	*08/31/15 14:23*	*09/01/15 12:47*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:17	1

Client Sample ID: REF-SW-02

Lab Sample ID: 480-86375-10

Date Collected: 08/27/15 10:55
Matrix: Water
Date Received: 08/29/15 02:15

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:17	1
Barium	**67.9**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:17	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:17	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:17	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:17	1
Nickel	**1.42**	**J**	10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:17	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:17	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:17	1
Zinc	**6.53**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:17	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:17	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:17	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:17	1
Copper	**1.60**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:17	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**84.0**		4.00	1.05	mg/L			09/04/15 10:30	1

Client Sample ID: REF-PW-02

Lab Sample ID: 480-86375-11

Date Collected: 08/27/15 11:30
Matrix: Water
Date Received: 08/29/15 02:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 14:30	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 14:30	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 14:30	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1

Client Sample ID: REF-PW-02
Date Collected: 08/27/15 11:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 14:30	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 14:30	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 14:30	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 14:30	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 14:30	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 14:30	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 14:30	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 14:30	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 14:30	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 14:30	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 14:30	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 14:30	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 14:30	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 14:30	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 14:30	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 14:30	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 14:30	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 14:30	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 14:30	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1

Client Sample ID: REF-PW-02

Date Collected: 08/27/15 11:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/31/15 14:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/31/15 14:30*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/31/15 14:30*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1221	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1232	**1.70**		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1242	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1248	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1254	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1260	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1262	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1
PCB-1268	<0.236		0.236	0.236	ug/L		08/31/15 14:23	09/01/15 13:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:03*	*1*
Tetrachloro-m-xylene	*97*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:03*	*1*
DCB Decachlorobiphenyl	*54*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:03*	*1*
DCB Decachlorobiphenyl	*60*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:03*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:19	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:19	1
Barium	**98.7**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:19	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:19	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:19	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:19	1
Nickel	**1.40**	**J**	10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:19	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:19	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:19	1
Zinc	**7.99**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:19	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:19	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:19	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:19	1
Copper	<1.60		10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:19	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:22	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**112**		4.00	1.05	mg/L			09/04/15 10:30	1

Client Sample ID: TB-04

Date Collected: 08/27/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-12

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 12:31	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 12:31	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 12:31	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 12:31	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 12:31	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 12:31	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 12:31	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 12:31	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 12:31	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 12:31	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 12:31	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 12:31	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 12:31	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 12:31	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 12:31	1

Client Sample ID: TB-04

Date Collected: 08/27/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 12:31	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 12:31	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 12:31	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 12:31	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 12:31	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 12:31	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 12:31	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/31/15 12:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*08/31/15 12:31*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/31/15 12:31*	*1*

Client Sample ID: REF-SED-02

Date Collected: 08/27/15 11:50
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-13
Matrix: Solid
Percent Solids: 22.1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,1,1-Trichloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,1,2,2-Tetrachloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,1,2-Trichloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Freon 113	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,1-Dichloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,1-Dichloroethene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,1-Dichloropropene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2,3-Trichlorobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2,3-Trichloropropane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2,4-Trichlorobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2,4-Trimethylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2-Dibromo-3-Chloropropane	<0.125		0.125	0.125	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2-Dichlorobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,2-Dichloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1

Client Sample ID: REF-SED-02
Date Collected: 08/27/15 11:50
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-13
Matrix: Solid
Percent Solids: 22.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,3,5-Trimethylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,3-Dichlorobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,3-Dichloropropane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,4-Dichlorobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
1,4-Dioxane	<1.25		1.25	1.25	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
2,2-Dichloropropane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
2-Butanone (MEK)	<0.125	*	0.125	0.125	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
2-Chlorotoluene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
2-Hexanone	<0.125		0.125	0.125	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
4-Chlorotoluene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
4-Isopropyltoluene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
4-Methyl-2-pentanone (MIBK)	<0.125		0.125	0.125	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Acetone	<1.25		1.25	1.25	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Benzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Bromobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Bromoform	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Bromomethane	<0.0250	*	0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Carbon disulfide	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Carbon tetrachloride	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Chlorobenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Chlorobromomethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Chlorodibromomethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Chloroethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Chloroform	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Chloromethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
cis-1,2-Dichloroethene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
cis-1,3-Dichloropropene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Dichlorobromomethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Dichlorodifluoromethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Ethyl ether	<0.0250	*	0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Ethylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Ethylene Dibromide	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Hexachlorobutadiene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Isopropyl ether	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Isopropylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Methyl tert-butyl ether	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Methylene Chloride	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
m-Xylene & p-Xylene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Naphthalene	<0.125		0.125	0.125	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
n-Butylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
N-Propylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
o-Xylene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
sec-Butylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Styrene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Tert-amyl methyl ether	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Tert-butyl ethyl ether	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
tert-Butylbenzene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Tetrachloroethene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1

Client Sample ID: REF-SED-02

Date Collected: 08/27/15 11:50
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-13

Matrix: Solid
Percent Solids: 22.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<0.250	*	0.250	0.250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Toluene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
trans-1,2-Dichloroethene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
trans-1,3-Dichloropropene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Trichloroethene	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Trichlorofluoromethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Vinyl chloride	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1
Dibromomethane	<0.0250		0.0250	0.0250	mg/Kg	☼	08/29/15 04:10	08/31/15 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:03*	*1*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:03*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1221	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1232	**47.4**		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1242	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1248	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1254	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1260	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1262	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5
Aroclor-1268	<18.9		18.9	18.9	mg/Kg	☼	09/03/15 08:19	09/08/15 13:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:09*	*5*
Tetrachloro-m-xylene	*81*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:09*	*5*
DCB Decachlorobiphenyl	*80*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:09*	*5*
DCB Decachlorobiphenyl	*91*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:09*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.911		2.28	0.911	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Arsenic	**7.81**		4.56	1.82	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Barium	**103**		2.28	0.501	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Beryllium	**0.551**	**J**	0.911	0.128	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Cadmium	**1.82**		0.911	0.137	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Chromium	**47.3**		2.28	0.911	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Nickel	**15.8**		4.56	1.05	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Thallium	<1.37		4.56	1.37	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Vanadium	**30.4**		2.28	0.501	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Zinc	**333**		11.4	2.92	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Lead	**144**		2.28	1.09	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Selenium	<1.82		2.28	1.82	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Antimony	<1.82		2.28	1.82	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1
Copper	**75.3**		4.56	0.957	mg/Kg	☼	09/01/15 09:27	09/02/15 15:06	1

Client Sample ID: REF-SED-02

Lab Sample ID: 480-86375-13
Date Collected: 08/27/15 11:50
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 22.1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.464		0.449	0.0364	mg/Kg	☼	09/01/15 08:30	09/01/15 12:25	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	16.5				%			09/01/15 15:42	1

Client Sample ID: REF-SW-03

Lab Sample ID: 480-86375-14
Date Collected: 08/27/15 12:10
Matrix: Water
Date Received: 08/29/15 02:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 14:54	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 14:54	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 14:54	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 14:54	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 14:54	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 14:54	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 14:54	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 14:54	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 14:54	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 14:54	1

Client Sample ID: REF-SW-03

Date Collected: 08/27/15 12:10
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-14

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 14:54	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 14:54	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 14:54	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 14:54	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 14:54	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 14:54	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 14:54	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 14:54	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 14:54	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 14:54	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 14:54	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 14:54	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/31/15 14:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/31/15 14:54*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/31/15 14:54*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1221	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1232	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1242	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1248	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1254	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1260	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1
PCB-1262	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1

Client Sample ID: REF-SW-03

Date Collected: 08/27/15 12:10
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-14
Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	<0.239		0.239	0.239	ug/L		08/31/15 14:23	09/01/15 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:19*	*1*
Tetrachloro-m-xylene	*96*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:19*	*1*
DCB Decachlorobiphenyl	*59*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:19*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:19*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:22	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:22	1
Barium	**62.5**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:22	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:22	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:22	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:22	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:22	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:22	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:22	1
Zinc	**4.12**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:22	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:22	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:22	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:22	1
Copper	**2.31**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:22	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:24	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**80.0**		4.00	1.05	mg/L			09/02/15 11:30	1

Client Sample ID: REF-PW-03

Date Collected: 08/27/15 12:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-15
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 15:42	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1

Client Sample ID: REF-PW-03
Date Collected: 08/27/15 12:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-15
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 15:42	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 15:42	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 15:42	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 15:42	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 15:42	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 15:42	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 15:42	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 15:42	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 15:42	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 15:42	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 15:42	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 15:42	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 15:42	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 15:42	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 15:42	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 15:42	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 15:42	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 15:42	1

Client Sample ID: REF-PW-03

Date Collected: 08/27/15 12:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-15

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 15:42	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 15:42	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 15:42	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/31/15 15:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/31/15 15:42*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/31/15 15:42*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1221	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1232	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1242	**1.15**		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1248	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1254	**0.272**		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1260	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1262	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1
PCB-1268	<0.234		0.234	0.234	ug/L		08/31/15 14:23	09/01/15 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:35*	*1*
Tetrachloro-m-xylene	*100*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:35*	*1*
DCB Decachlorobiphenyl	*40*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:35*	*1*
DCB Decachlorobiphenyl	*45*		*30 - 150*	*08/31/15 14:23*	*09/01/15 13:35*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:25	1
Arsenic	**5.66**	**J**	10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:25	1
Barium	**42.3**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:25	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:25	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:25	1
Chromium	**2.57**	**J**	5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:25	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:25	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:25	1
Vanadium	**2.67**	**J**	10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:25	1
Zinc	**3.35**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:25	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:25	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:25	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:25	1

Client Sample ID: REF-PW-03

Date Collected: 08/27/15 12:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-15
Matrix: Water

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	<1.60		10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:25	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:25	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	20.0		4.00	1.05	mg/L			09/02/15 11:30	1

Client Sample ID: REF-SED-03

Date Collected: 08/27/15 12:45
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-16
Matrix: Solid
Percent Solids: 82.0

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,1,1-Trichloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,1,2,2-Tetrachloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,1,2-Trichloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Freon 113	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,1-Dichloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,1-Dichloroethene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,1-Dichloropropene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2,3-Trichlorobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2,3-Trichloropropane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2,4-Trichlorobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2,4-Trimethylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2-Dibromo-3-Chloropropane	<0.0216		0.0216	0.0216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2-Dichlorobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2-Dichloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,2-Dichloropropane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,3,5-Trimethylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,3-Dichlorobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,3-Dichloropropane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,4-Dichlorobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
1,4-Dioxane	<0.216		0.216	0.216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
2,2-Dichloropropane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
2-Butanone (MEK)	<0.0216	*	0.0216	0.0216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
2-Chlorotoluene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
2-Hexanone	<0.0216		0.0216	0.0216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
4-Chlorotoluene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
4-Isopropyltoluene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
4-Methyl-2-pentanone (MIBK)	<0.0216		0.0216	0.0216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Acetone	<0.216		0.216	0.216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Benzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Bromobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Bromoform	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Bromomethane	<0.00431	*	0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Carbon disulfide	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1

Client Sample ID: REF-SED-03
Date Collected: 08/27/15 12:45
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-16
Matrix: Solid
Percent Solids: 82.0

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Chlorobenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Chlorobromomethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Chlorodibromomethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Chloroethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Chloroform	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Chloromethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
cis-1,2-Dichloroethene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
cis-1,3-Dichloropropene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Dichlorobromomethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Dichlorodifluoromethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Ethyl ether	<0.00431	*	0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Ethylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Ethylene Dibromide	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Hexachlorobutadiene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Isopropyl ether	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Isopropylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Methyl tert-butyl ether	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Methylene Chloride	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
m-Xylene & p-Xylene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Naphthalene	<0.0216		0.0216	0.0216	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
n-Butylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
N-Propylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
o-Xylene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
sec-Butylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Styrene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Tert-amyl methyl ether	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Tert-butyl ethyl ether	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
tert-Butylbenzene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Tetrachloroethene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Tetrahydrofuran	**0.0561**	*	0.0431	0.0431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Toluene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
trans-1,2-Dichloroethene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
trans-1,3-Dichloropropene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Trichloroethene	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Trichlorofluoromethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Vinyl chloride	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1
Dibromomethane	<0.00431		0.00431	0.00431	mg/Kg	☼	08/29/15 04:10	08/31/15 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:29*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:29*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1221	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1232	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1242	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1

Client Sample ID: REF-SED-03

Date Collected: 08/27/15 12:45
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-16

Matrix: Solid
Percent Solids: 82.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1248	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1254	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1260	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1262	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1
Aroclor-1268	<0.974		0.974	0.974	mg/Kg	☼	09/03/15 08:19	09/08/15 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:28*	*1*
Tetrachloro-m-xylene	*74*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:28*	*1*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:28*	*1*
DCB Decachlorobiphenyl	*83*		*30 - 150*	*09/03/15 08:19*	*09/08/15 13:28*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.225		0.563	0.225	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Arsenic	**1.74**		1.13	0.450	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Barium	**16.7**		0.563	0.124	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Beryllium	**0.127**	**J**	0.225	0.0315	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Cadmium	**0.146**	**J**	0.225	0.0338	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Chromium	**6.65**		0.563	0.225	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Nickel	**5.97**		1.13	0.259	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Thallium	<0.338		1.13	0.338	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Vanadium	**12.2**		0.563	0.124	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Zinc	**73.1**		2.81	0.720	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Lead	**50.7**		0.563	0.270	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Selenium	<0.450		0.563	0.450	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Antimony	<0.450		0.563	0.450	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1
Copper	**17.0**		1.13	0.236	mg/Kg	☼	09/01/15 09:27	09/02/15 15:09	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0266**	**J**	0.114	0.00922	mg/Kg	☼	09/01/15 08:30	09/01/15 12:27	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**1.4**				%			09/01/15 15:42	1

Client Sample ID: REF-SW-04

Date Collected: 08/27/15 13:05
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-17

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 16:06	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1

Client Sample ID: REF-SW-04
Date Collected: 08/27/15 13:05
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-17
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 16:06	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 16:06	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 16:06	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 16:06	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 16:06	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 16:06	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 16:06	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 16:06	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 16:06	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 16:06	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 16:06	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 16:06	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 16:06	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 16:06	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 16:06	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 16:06	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 16:06	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1

Client Sample ID: REF-SW-04

Date Collected: 08/27/15 13:05
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-17

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 16:06	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 16:06	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 16:06	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 16:06	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/31/15 16:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/31/15 16:06*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/31/15 16:06*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1221	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1232	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1242	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1248	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1254	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1260	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1262	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1
PCB-1268	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:22*	*1*
Tetrachloro-m-xylene	*100*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:22*	*1*
DCB Decachlorobiphenyl	*60*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:22*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:22*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:37	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:37	1
Barium	**59.0**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:37	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:37	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:37	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:37	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:37	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:37	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:37	1

Client Sample ID: REF-SW-04

Lab Sample ID: 480-86375-17

Date Collected: 08/27/15 13:05

Matrix: Water

Date Received: 08/29/15 02:15

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	**5.02**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:37	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:37	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:37	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:37	1
Copper	**2.20**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**32.0**		4.00	1.05	mg/L			09/02/15 11:30	1

Client Sample ID: REF-SED-04

Lab Sample ID: 480-86375-18

Date Collected: 08/27/15 13:20

Matrix: Solid

Date Received: 08/29/15 02:15

Percent Solids: 46.3

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,1,1-Trichloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,1,2,2-Tetrachloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,1,2-Trichloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Freon 113	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,1-Dichloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,1-Dichloroethene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,1-Dichloropropene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2,3-Trichlorobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2,3-Trichloropropane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2,4-Trichlorobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2,4-Trimethylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2-Dibromo-3-Chloropropane	<0.0563		0.0563	0.0563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2-Dichlorobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2-Dichloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,2-Dichloropropane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,3,5-Trimethylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,3-Dichlorobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,3-Dichloropropane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,4-Dichlorobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
1,4-Dioxane	<0.563		0.563	0.563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
2,2-Dichloropropane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
2-Butanone (MEK)	<0.0563	*	0.0563	0.0563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
2-Chlorotoluene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
2-Hexanone	<0.0563		0.0563	0.0563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
4-Chlorotoluene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
4-Isopropyltoluene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
4-Methyl-2-pentanone (MIBK)	<0.0563		0.0563	0.0563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Acetone	<0.563		0.563	0.563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Benzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1

Client Sample ID: REF-SED-04
Date Collected: 08/27/15 13:20
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-18
Matrix: Solid
Percent Solids: 46.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Bromoform	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Bromomethane	<0.0113	*	0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Carbon disulfide	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Carbon tetrachloride	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Chlorobenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Chlorobromomethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Chlorodibromomethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Chloroethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Chloroform	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Chloromethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
cis-1,2-Dichloroethene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
cis-1,3-Dichloropropene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Dichlorobromomethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Dichlorodifluoromethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Ethyl ether	<0.0113	*	0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Ethylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Ethylene Dibromide	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Hexachlorobutadiene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Isopropyl ether	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Isopropylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Methyl tert-butyl ether	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Methylene Chloride	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
m-Xylene & p-Xylene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Naphthalene	<0.0563		0.0563	0.0563	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
n-Butylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
N-Propylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
o-Xylene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
sec-Butylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Styrene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Tert-amyl methyl ether	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Tert-butyl ethyl ether	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
tert-Butylbenzene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Tetrachloroethene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Tetrahydrofuran	<0.113	*	0.113	0.113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Toluene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
trans-1,2-Dichloroethene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
trans-1,3-Dichloropropene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Trichloroethene	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Trichlorofluoromethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Vinyl chloride	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1
Dibromomethane	<0.0113		0.0113	0.0113	mg/Kg	☼	08/29/15 04:10	08/31/15 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:55*	*1*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*08/29/15 04:10*	*08/31/15 16:55*	*1*

Client Sample ID: REF-SED-04

Date Collected: 08/27/15 13:20
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-18

Matrix: Solid
Percent Solids: 46.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1221	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1232	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1242	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1248	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1254	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1260	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1262	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5
Aroclor-1268	<7.63		7.63	7.63	mg/Kg	☼	09/03/15 08:19	09/08/15 15:22	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:22*	*5*
Tetrachloro-m-xylene	*75*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:22*	*5*
DCB Decachlorobiphenyl	*78*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:22*	*5*
DCB Decachlorobiphenyl	*75*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:22*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<2.23		5.56	2.23	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Arsenic	<4.45		11.1	4.45	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Barium	**48.7**		1.11	0.245	mg/Kg	☼	09/01/15 09:27	09/02/15 15:30	1
Beryllium	<0.312		2.23	0.312	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Cadmium	**0.757**	**J**	2.23	0.334	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Chromium	**31.5**		5.56	2.23	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Nickel	**7.25**	**J**	11.1	2.56	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Thallium	<3.34		11.1	3.34	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Vanadium	**16.1**		5.56	1.22	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Zinc	**134**		27.8	7.12	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Lead	**60.5**		5.56	2.67	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Selenium	<4.45		5.56	4.45	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Antimony	<4.45		5.56	4.45	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5
Copper	**26.1**		11.1	2.34	mg/Kg	☼	09/01/15 09:27	09/02/15 15:32	5

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.198**	**J**	0.216	0.0175	mg/Kg	☼	09/01/15 08:30	09/01/15 12:29	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**4.3**				%			09/01/15 15:42	1

Client Sample ID: SED-13

Date Collected: 08/27/15 14:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-19

Matrix: Solid
Percent Solids: 35.1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,1,1-Trichloroethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,1,2,2-Tetrachloroethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,1,2-Trichloroethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1

Client Sample ID: SED-13
Date Collected: 08/27/15 14:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-19
Matrix: Solid
Percent Solids: 35.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,1-Dichloroethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,1-Dichloroethene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,1-Dichloropropene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2,3-Trichlorobenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2,3-Trichloropropane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2,4-Trichlorobenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2,4-Trimethylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2-Dibromo-3-Chloropropane	<0.0831		0.0831	0.0831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2-Dichlorobenzene	**0.274**		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2-Dichloroethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,2-Dichloropropane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,3,5-Trimethylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,3-Dichlorobenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,3-Dichloropropane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,4-Dichlorobenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
1,4-Dioxane	<0.831		0.831	0.831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
2,2-Dichloropropane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
2-Butanone (MEK)	**0.177**	*	0.0831	0.0831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
2-Chlorotoluene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
2-Hexanone	<0.0831		0.0831	0.0831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
4-Chlorotoluene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
4-Isopropyltoluene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
4-Methyl-2-pentanone (MIBK)	<0.0831		0.0831	0.0831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Acetone	<0.831		0.831	0.831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Benzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Bromobenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Bromoform	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Bromomethane	<0.0166	*	0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Carbon disulfide	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Carbon tetrachloride	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Chlorobenzene	**0.0527**		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Chlorobromomethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Chlorodibromomethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Chloroethane	**0.0198**		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Chloroform	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Chloromethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
cis-1,2-Dichloroethene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
cis-1,3-Dichloropropene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Dichlorobromomethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Dichlorodifluoromethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Ethyl ether	<0.0166	*	0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Ethylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Ethylene Dibromide	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Hexachlorobutadiene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Isopropyl ether	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Isopropylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Methyl tert-butyl ether	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Methylene Chloride	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1

Client Sample ID: SED-13
Date Collected: 08/27/15 14:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-19
Matrix: Solid
Percent Solids: 35.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Naphthalene	<0.0831		0.0831	0.0831	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
n-Butylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
N-Propylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
o-Xylene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
sec-Butylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Styrene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Tert-amyl methyl ether	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Tert-butyl ethyl ether	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
tert-Butylbenzene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Tetrachloroethene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Tetrahydrofuran	<0.166	*	0.166	0.166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Toluene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
trans-1,2-Dichloroethene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
trans-1,3-Dichloropropene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Trichloroethene	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Trichlorofluoromethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Vinyl chloride	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1
Dibromomethane	<0.0166		0.0166	0.0166	mg/Kg	☼	08/29/15 04:10	08/31/15 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/29/15 04:10*	*08/31/15 17:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*	*08/29/15 04:10*	*08/31/15 17:21*	*1*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*08/29/15 04:10*	*08/31/15 17:21*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1221	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1232	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1242	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1248	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1254	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1260	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1262	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5
Aroclor-1268	<12.8		12.8	12.8	mg/Kg	☼	09/03/15 08:19	09/08/15 15:41	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:41*	*5*
Tetrachloro-m-xylene	*74*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:41*	*5*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:41*	*5*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*09/03/15 08:19*	*09/08/15 15:41*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.594		1.49	0.594	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Arsenic	**3.56**		2.97	1.19	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Barium	**78.0**		1.49	0.327	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Beryllium	**0.315**	**J**	0.594	0.0832	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Cadmium	**1.05**		0.594	0.0891	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1

Client Sample ID: SED-13

Date Collected: 08/27/15 14:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-19

Matrix: Solid
Percent Solids: 35.1

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**29.3**		1.49	0.594	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Nickel	**10.1**		2.97	0.683	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Thallium	<0.891		2.97	0.891	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Vanadium	**20.6**		1.49	0.327	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Zinc	**224**		7.43	1.90	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Lead	**88.0**		1.49	0.713	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Selenium	<1.19		1.49	1.19	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Antimony	<1.19		1.49	1.19	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1
Copper	**39.9**		2.97	0.624	mg/Kg	☼	09/01/15 09:27	09/02/15 12:33	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.213**	**J**	0.285	0.0231	mg/Kg	☼	09/01/15 08:30	09/01/15 12:35	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**8.1**				%			09/01/15 15:42	1

Client Sample ID: SED-14

Date Collected: 08/27/15 14:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-20

Matrix: Solid
Percent Solids: 50.8

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,1,1-Trichloroethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,1,2,2-Tetrachloroethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,1,2-Trichloroethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Freon 113	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,1-Dichloroethane	**0.00948**		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,1-Dichloroethene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,1-Dichloropropene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2,3-Trichlorobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2,3-Trichloropropane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2,4-Trichlorobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2,4-Trimethylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2-Dibromo-3-Chloropropane	<0.0468		0.0468	0.0468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2-Dichlorobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2-Dichloroethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,2-Dichloropropane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,3,5-Trimethylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,3-Dichlorobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,3-Dichloropropane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,4-Dichlorobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
1,4-Dioxane	<0.468		0.468	0.468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
2,2-Dichloropropane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
2-Butanone (MEK)	**0.167**	*	0.0468	0.0468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
2-Chlorotoluene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
2-Hexanone	<0.0468		0.0468	0.0468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
4-Chlorotoluene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1

Client Sample ID: SED-14
Date Collected: 08/27/15 14:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-20
Matrix: Solid
Percent Solids: 50.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
4-Methyl-2-pentanone (MIBK)	<0.0468		0.0468	0.0468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Acetone	**0.553**		0.468	0.468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Benzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Bromobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Bromoform	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Bromomethane	<0.00936	*	0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Carbon disulfide	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Carbon tetrachloride	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Chlorobenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Chlorobromomethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Chlorodibromomethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Chloroethane	**0.0665**		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Chloroform	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Chloromethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
cis-1,2-Dichloroethene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
cis-1,3-Dichloropropene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Dichlorobromomethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Dichlorodifluoromethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Ethyl ether	<0.00936	*	0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Ethylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Ethylene Dibromide	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Hexachlorobutadiene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Isopropyl ether	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Isopropylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Methyl tert-butyl ether	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Methylene Chloride	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
m-Xylene & p-Xylene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Naphthalene	<0.0468		0.0468	0.0468	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
n-Butylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
N-Propylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
o-Xylene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
sec-Butylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Styrene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Tert-amyl methyl ether	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Tert-butyl ethyl ether	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
tert-Butylbenzene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Tetrachloroethene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Tetrahydrofuran	**0.112**	*	0.0936	0.0936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Toluene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
trans-1,2-Dichloroethene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
trans-1,3-Dichloropropene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Trichloroethene	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Trichlorofluoromethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Vinyl chloride	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1
Dibromomethane	<0.00936		0.00936	0.00936	mg/Kg	☼	08/29/15 04:10	08/31/15 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/29/15 04:10*	*08/31/15 17:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*	*08/29/15 04:10*	*08/31/15 17:47*	*1*

Client Sample ID: SED-14

Date Collected: 08/27/15 14:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-20

Matrix: Solid
Percent Solids: 50.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*08/29/15 04:10*	*08/31/15 17:47*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1221	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1232	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1242	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1248	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1254	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1260	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1262	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5
Aroclor-1268	<8.18		8.18	8.18	mg/Kg	☼	09/03/15 08:19	09/08/15 16:00	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*52*		*30 - 150*	*09/03/15 08:19*	*09/08/15 16:00*	*5*
Tetrachloro-m-xylene	*60*		*30 - 150*	*09/03/15 08:19*	*09/08/15 16:00*	*5*
DCB Decachlorobiphenyl	*70*		*30 - 150*	*09/03/15 08:19*	*09/08/15 16:00*	*5*
DCB Decachlorobiphenyl	*65*		*30 - 150*	*09/03/15 08:19*	*09/08/15 16:00*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.395		0.987	0.395	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Arsenic	**3.82**		1.97	0.790	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Barium	**51.6**		0.987	0.217	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Beryllium	**0.257**	**J**	0.395	0.0553	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Cadmium	**0.699**		0.395	0.0592	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Chromium	**24.1**		0.987	0.395	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Nickel	**18.9**		1.97	0.454	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Thallium	<0.592		1.97	0.592	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Vanadium	**16.9**		0.987	0.217	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Zinc	**207**		4.94	1.26	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Lead	**79.9**		0.987	0.474	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Selenium	<0.790		0.987	0.790	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Antimony	<0.790		0.987	0.790	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1
Copper	**41.3**		1.97	0.415	mg/Kg	☼	09/01/15 09:27	09/02/15 12:36	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.309**		0.200	0.0162	mg/Kg	☼	09/01/15 08:30	09/01/15 12:37	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	**3.0**				%			09/01/15 15:42	1

Client Sample ID: SED-16
Date Collected: 08/27/15 14:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-21
Matrix: Solid
Percent Solids: 40.3

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,1,1-Trichloroethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,1,2,2-Tetrachloroethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,1,2-Trichloroethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Freon 113	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,1-Dichloroethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,1-Dichloroethene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,1-Dichloropropene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2,3-Trichlorobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2,3-Trichloropropane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2,4-Trichlorobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2,4-Trimethylbenzene	**0.0153**		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2-Dibromo-3-Chloropropane	<0.0580		0.0580	0.0580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2-Dichlorobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2-Dichloroethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,2-Dichloropropane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,3,5-Trimethylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,3-Dichlorobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,3-Dichloropropane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,4-Dichlorobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
1,4-Dioxane	<0.580		0.580	0.580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
2,2-Dichloropropane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
2-Butanone (MEK)	**0.153**	*	0.0580	0.0580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
2-Chlorotoluene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
2-Hexanone	<0.0580		0.0580	0.0580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
4-Chlorotoluene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
4-Isopropyltoluene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
4-Methyl-2-pentanone (MIBK)	<0.0580		0.0580	0.0580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Acetone	<0.580		0.580	0.580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Benzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Bromobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Bromoform	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Bromomethane	<0.0116	*	0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Carbon disulfide	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Carbon tetrachloride	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Chlorobenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Chlorobromomethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Chlorodibromomethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Chloroethane	**0.228**		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Chloroform	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Chloromethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
cis-1,2-Dichloroethene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
cis-1,3-Dichloropropene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Dichlorobromomethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Dichlorodifluoromethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Ethyl ether	<0.0116	*	0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Ethylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Ethylene Dibromide	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Hexachlorobutadiene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1

Client Sample ID: SED-16
Date Collected: 08/27/15 14:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-21
Matrix: Solid
Percent Solids: 40.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Isopropylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Methyl tert-butyl ether	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Methylene Chloride	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
m-Xylene & p-Xylene	**0.0178**		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Naphthalene	<0.0580		0.0580	0.0580	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
n-Butylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
N-Propylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
o-Xylene	**0.0285**		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
sec-Butylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Styrene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Tert-amyl methyl ether	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Tert-butyl ethyl ether	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
tert-Butylbenzene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Tetrachloroethene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Tetrahydrofuran	**0.131**	*	0.116	0.116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Toluene	**0.0128**		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
trans-1,2-Dichloroethene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
trans-1,3-Dichloropropene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Trichloroethene	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Trichlorofluoromethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Vinyl chloride	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1
Dibromomethane	<0.0116		0.0116	0.0116	mg/Kg	☼	08/29/15 04:10	08/31/15 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*70 - 130*	*08/29/15 04:10*	*08/31/15 18:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*	*08/29/15 04:10*	*08/31/15 18:12*	*1*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*08/29/15 04:10*	*08/31/15 18:12*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1221	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1232	**128**		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1242	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1248	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1254	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1260	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1262	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5
Aroclor-1268	<9.03		9.03	9.03	mg/Kg	☼	09/03/15 08:19	09/08/15 16:20	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*173*	*X*	*30 - 150*	*09/03/15 08:19*	*09/08/15 16:20*	*5*
Tetrachloro-m-xylene	*61*	*p*	*30 - 150*	*09/03/15 08:19*	*09/08/15 16:20*	*5*
DCB Decachlorobiphenyl	*75*		*30 - 150*	*09/03/15 08:19*	*09/08/15 16:20*	*5*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*09/03/15 08:19*	*09/08/15 16:20*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.453		1.13	0.453	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1

Client Sample ID: SED-16

Date Collected: 08/27/15 14:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-21

Matrix: Solid
Percent Solids: 40.3

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.36		2.27	0.907	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Barium	113		1.13	0.249	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Beryllium	0.428	J	0.453	0.0635	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Cadmium	1.94		0.453	0.0680	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Chromium	71.3		1.13	0.453	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Nickel	18.4		2.27	0.521	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Thallium	<0.680		2.27	0.680	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Vanadium	26.9		1.13	0.249	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Zinc	335		5.67	1.45	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Lead	378		1.13	0.544	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Selenium	<0.907		1.13	0.907	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Antimony	1.97		1.13	0.907	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1
Copper	110		2.27	0.476	mg/Kg	☼	09/01/15 09:27	09/02/15 12:38	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.844		0.244	0.0198	mg/Kg	☼	09/01/15 08:30	09/01/15 12:39	1

Method: D2974 - Moisture, Ash and Organic Matter

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	8.7				%			09/01/15 15:42	1

Client Sample ID: SW-18

Date Collected: 08/27/15 15:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-22

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 16:30	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 16:30	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
1,4-Dioxane	<50.0	*	50.0	50.0	ug/L			08/31/15 16:30	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1

Client Sample ID: SW-18
Date Collected: 08/27/15 15:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-22
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<10.0	*	10.0	10.0	ug/L			08/31/15 16:30	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 16:30	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 16:30	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 16:30	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 16:30	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 16:30	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 16:30	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 16:30	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 16:30	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 16:30	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 16:30	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 16:30	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 16:30	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 16:30	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 16:30	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 16:30	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 16:30	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 16:30	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 16:30	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1

Client Sample ID: SW-18

Date Collected: 08/27/15 15:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-22

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/31/15 16:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*08/31/15 16:30*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/31/15 16:30*	*1*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1221	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1232	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1242	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1248	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1254	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1260	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1262	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1
PCB-1268	<0.235		0.235	0.235	ug/L		08/31/15 14:23	09/01/15 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:38*	*1*
Tetrachloro-m-xylene	*102*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:38*	*1*
DCB Decachlorobiphenyl	*57*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:38*	*1*
DCB Decachlorobiphenyl	*64*		*30 - 150*	*08/31/15 14:23*	*09/01/15 14:38*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 18:40	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 18:40	1
Barium	**60.7**		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 18:40	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 18:40	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 18:40	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 18:40	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 18:40	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 18:40	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:40	1
Zinc	**5.18**	**J**	50.0	1.50	ug/L		08/31/15 11:31	09/01/15 18:40	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 18:40	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 18:40	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 18:40	1
Copper	**2.48**	**J**	10.0	1.60	ug/L		08/31/15 11:31	09/01/15 18:40	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:29	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**88.0**		4.00	1.05	mg/L			09/02/15 11:30	1

Client Sample ID: TB-03

Date Collected: 08/26/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-23

Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,1,1-Trichloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,1,2,2-Tetrachloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,1,2-Trichloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Freon 113	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,1-Dichloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,1-Dichloroethene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,1-Dichloropropene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2,3-Trichlorobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2,3-Trichloropropane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2,4-Trichlorobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2,4-Trimethylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2-Dibromo-3-Chloropropane	<0.0250	H	0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2-Dichlorobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2-Dichloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,2-Dichloropropane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,3,5-Trimethylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,3-Dichlorobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,3-Dichloropropane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,4-Dichlorobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
1,4-Dioxane	<0.250	H	0.250	0.250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
2,2-Dichloropropane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
2-Butanone (MEK)	<0.0250	H *	0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
2-Chlorotoluene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
2-Hexanone	<0.0250	H	0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
4-Chlorotoluene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
4-Isopropyltoluene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
4-Methyl-2-pentanone (MIBK)	<0.0250	H	0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Acetone	<0.250	H	0.250	0.250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Benzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Bromobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Bromoform	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Bromomethane	<0.00500	H *	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Carbon disulfide	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Carbon tetrachloride	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Chlorobenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Chlorobromomethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Chlorodibromomethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Chloroethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Chloroform	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Chloromethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
cis-1,2-Dichloroethene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
cis-1,3-Dichloropropene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Dichlorobromomethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Dichlorodifluoromethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Ethyl ether	<0.00500	H *	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Ethylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Ethylene Dibromide	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Hexachlorobutadiene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1

Client Sample ID: TB-03

Date Collected: 08/26/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-23
Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Isopropylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Methyl tert-butyl ether	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Methylene Chloride	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
m-Xylene & p-Xylene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Naphthalene	<0.0250	H	0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
n-Butylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
N-Propylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
o-Xylene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
sec-Butylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Styrene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Tert-amyl methyl ether	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Tert-butyl ethyl ether	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
tert-Butylbenzene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Tetrachloroethene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Tetrahydrofuran	<0.0500	H *	0.0500	0.0500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Toluene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
trans-1,2-Dichloroethene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
trans-1,3-Dichloropropene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Trichloroethene	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Trichlorofluoromethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Vinyl chloride	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1
Dibromomethane	<0.00500	H	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/29/15 04:10*	*08/31/15 18:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*125*		*70 - 130*	*08/29/15 04:10*	*08/31/15 18:39*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/29/15 04:10*	*08/31/15 18:39*	*1*

Client Sample ID: TB-04

Date Collected: 08/27/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-24
Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,1,1-Trichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,1,2,2-Tetrachloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,1,2-Trichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Freon 113	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,1-Dichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,1-Dichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,1-Dichloropropene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2,3-Trichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2,3-Trichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2,4-Trichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2,4-Trimethylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2-Dibromo-3-Chloropropane	<0.0250		0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2-Dichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,2-Dichloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1

Client Sample ID: TB-04
Date Collected: 08/27/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-24
Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,3,5-Trimethylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,3-Dichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,3-Dichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,4-Dichlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
1,4-Dioxane	<0.250		0.250	0.250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
2,2-Dichloropropane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
2-Butanone (MEK)	<0.0250	*	0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
2-Chlorotoluene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
2-Hexanone	<0.0250		0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
4-Chlorotoluene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
4-Isopropyltoluene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
4-Methyl-2-pentanone (MIBK)	<0.0250		0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Acetone	<0.250		0.250	0.250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Benzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Bromobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Bromoform	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Bromomethane	<0.00500	*	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Carbon disulfide	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Carbon tetrachloride	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Chlorobenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Chlorobromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Chlorodibromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Chloroethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Chloroform	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Chloromethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
cis-1,2-Dichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
cis-1,3-Dichloropropene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Dichlorobromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Dichlorodifluoromethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Ethyl ether	<0.00500	*	0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Ethylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Ethylene Dibromide	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Hexachlorobutadiene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Isopropyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Isopropylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Methyl tert-butyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Methylene Chloride	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
m-Xylene & p-Xylene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Naphthalene	<0.0250		0.0250	0.0250	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
n-Butylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
N-Propylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
o-Xylene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
sec-Butylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Styrene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Tert-amyl methyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Tert-butyl ethyl ether	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
tert-Butylbenzene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Tetrachloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: TB-04
Date Collected: 08/27/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-24
Matrix: Solid

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<0.0500	*	0.0500	0.0500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Toluene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
trans-1,2-Dichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
trans-1,3-Dichloropropene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Trichloroethene	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Trichlorofluoromethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Vinyl chloride	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1
Dibromomethane	<0.00500		0.00500	0.00500	mg/Kg		08/29/15 04:10	08/31/15 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/29/15 04:10*	*08/31/15 19:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*	*08/29/15 04:10*	*08/31/15 19:05*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/29/15 04:10*	*08/31/15 19:05*	*1*

Surrogate Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
480-86375-2	SED-12	105	117	80
480-86375-2	SED-12	95	91	95
480-86375-3	SED-12 (DUP)	106	113	79
480-86375-3	SED-12 (DUP)	93	91	94
480-86375-4	SED-15	107	112	72
480-86375-4	SED-15	95	88	93
480-86375-6	SED-17	108	112	77
480-86375-9	REF-SED-01	104	119	90
480-86375-13	REF-SED-02	109	111	80
480-86375-16	REF-SED-03	102	123	100
480-86375-18	REF-SED-04	107	116	76
480-86375-19	SED-13	106	113	74
480-86375-20	SED-14	106	113	75
480-86375-21	SED-16	110	114	72
480-86375-23	TB-03	100	125	101
480-86375-24	TB-04	100	123	99
LCS 480-261236/1-A	Lab Control Sample	100	129	102
LCS 480-261608/1-A	Lab Control Sample	95	89	97
LCSD 480-261236/2-A	Lab Control Sample Dup	99	129	100
LCSD 480-261608/2-A	Lab Control Sample Dup	94	88	97
MB 480-261236/3-A	Method Blank	101	119	101
MB 480-261608/3-A	Method Blank	95	92	96

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
480-86375-1	TB-03	94	90	94
480-86375-5	SW-17	95	93	94
480-86375-7	REF-SW-01	96	96	98
480-86375-8	REF-PW-01	94	92	95
480-86375-10	REF-SW-02	95	94	93
480-86375-11	REF-PW-02	96	99	97
480-86375-12	TB-04	96	95	95
480-86375-14	REF-SW-03	94	99	94
480-86375-15	REF-PW-03	96	98	95
480-86375-17	REF-SW-04	95	97	95
480-86375-22	SW-18	93	94	93
LCS 480-261184/5	Lab Control Sample	94	91	97
LCSD 480-261184/41	Lab Control Sample Dup	94	89	98
MB 480-261184/7	Method Blank	94	90	94

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
480-86375-2	SED-12	392 X	32 p	1613 X	1454 X
480-86375-3	SED-12 (DUP)	696 X	30 p	875 X	1258 X
480-86375-4	SED-15	176 X	67 p	74	58
480-86375-6	SED-17	76	76	95 p	192 X
480-86375-9	REF-SED-01	80	68	72	69
480-86375-13	REF-SED-02	77	81	80	91
480-86375-16	REF-SED-03	73	74	77	83
480-86375-18	REF-SED-04	65	75	78	75
480-86375-19	SED-13	66	74	77	77
480-86375-20	SED-14	52	60	70	65
480-86375-21	SED-16	173 X	61 p	75	82
LCS 240-196101/7-A	Lab Control Sample	99	90	109	107
LCSD 240-196101/20-A	Lab Control Sample Dup	104	95	116	111
MB 240-196101/6-A	Method Blank	61	59	82	81

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
480-86375-5	SW-17	80	95	59	68
480-86375-7	REF-SW-01	84	99	58	66
480-86375-8	REF-PW-01	85	100	61	67
480-86375-10	REF-SW-02	78	96	51	59
480-86375-11	REF-PW-02	83	97	54	60
480-86375-14	REF-SW-03	81	96	59	68
480-86375-15	REF-PW-03	82	100	40	45
480-86375-17	REF-SW-04	84	100	60	68
480-86375-22	SW-18	86	102	57	64
LCS 480-261294/2-A	Lab Control Sample	89	99	50	57
LCSD 480-261294/3-A	Lab Control Sample Dup	89	102	50	57
MB 480-261294/1-A	Method Blank	83	100	60	70

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-261184/7
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,1,1-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.500	ug/L			08/31/15 11:03	1
1,1,2-Trichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Freon 113	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,1-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,1-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,1-Dichloropropene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2,3-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2,3-Trichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2,4-Trichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2,4-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	5.00	ug/L			08/31/15 11:03	1
1,2-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2-Dichloroethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,3,5-Trimethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,3-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,3-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,4-Dichlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
1,4-Dioxane	<50.0		50.0	50.0	ug/L			08/31/15 11:03	1
2,2-Dichloropropane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
2-Butanone (MEK)	<10.0		10.0	10.0	ug/L			08/31/15 11:03	1
2-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
2-Hexanone	<10.0		10.0	10.0	ug/L			08/31/15 11:03	1
4-Chlorotoluene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
4-Isopropyltoluene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	10.0	ug/L			08/31/15 11:03	1
Acetone	<50.0		50.0	50.0	ug/L			08/31/15 11:03	1
Benzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Bromobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Bromoform	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Bromomethane	<2.00		2.00	2.00	ug/L			08/31/15 11:03	1
Carbon disulfide	<10.0		10.0	10.0	ug/L			08/31/15 11:03	1
Carbon tetrachloride	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Chlorobenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Chlorobromomethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Chlorodibromomethane	<0.500		0.500	0.500	ug/L			08/31/15 11:03	1
Chloroethane	<2.00		2.00	2.00	ug/L			08/31/15 11:03	1
Chloroform	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Chloromethane	<2.00		2.00	2.00	ug/L			08/31/15 11:03	1
cis-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
cis-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 11:03	1
Dichlorobromomethane	<0.500		0.500	0.500	ug/L			08/31/15 11:03	1
Dichlorodifluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Ethyl ether	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Ethylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Ethylene Dibromide	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-261184/7
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	<0.400		0.400	0.400	ug/L			08/31/15 11:03	1
Isopropyl ether	<10.0		10.0	10.0	ug/L			08/31/15 11:03	1
Isopropylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Methyl tert-butyl ether	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Methylene Chloride	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
m-Xylene & p-Xylene	<2.00		2.00	2.00	ug/L			08/31/15 11:03	1
Naphthalene	<5.00		5.00	5.00	ug/L			08/31/15 11:03	1
n-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
N-Propylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
o-Xylene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
sec-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Styrene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Tert-amyl methyl ether	<5.00		5.00	5.00	ug/L			08/31/15 11:03	1
Tert-butyl ethyl ether	<5.00		5.00	5.00	ug/L			08/31/15 11:03	1
tert-Butylbenzene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Tetrachloroethene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Tetrahydrofuran	<10.0		10.0	10.0	ug/L			08/31/15 11:03	1
Toluene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
trans-1,2-Dichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
trans-1,3-Dichloropropene	<0.400		0.400	0.400	ug/L			08/31/15 11:03	1
Trichloroethene	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Trichlorofluoromethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Vinyl chloride	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1
Dibromomethane	<1.00		1.00	1.00	ug/L			08/31/15 11:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/31/15 11:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*08/31/15 11:03*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/31/15 11:03*	*1*

Lab Sample ID: LCS 480-261184/5
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.27		ug/L		101	70 - 130
1,1,1-Trichloroethane	25.0	24.53		ug/L		98	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.14		ug/L		101	70 - 130
1,1,2-Trichloroethane	25.0	25.70		ug/L		103	70 - 130
Freon 113	25.0	24.85		ug/L		99	70 - 130
1,1-Dichloroethane	25.0	27.04		ug/L		108	70 - 130
1,1-Dichloroethene	25.0	24.40		ug/L		98	70 - 130
1,1-Dichloropropene	25.0	26.46		ug/L		106	70 - 130
1,2,3-Trichlorobenzene	25.0	24.86		ug/L		99	70 - 130
1,2,3-Trichloropropane	25.0	24.64		ug/L		99	70 - 130
1,2,4-Trichlorobenzene	25.0	25.47		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	25.0	26.40		ug/L		106	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	23.31		ug/L		93	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-261184/5
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	25.0	25.89		ug/L		104	70 - 130
1,2-Dichloroethane	25.0	23.95		ug/L		96	70 - 130
1,2-Dichloropropane	25.0	25.90		ug/L		104	70 - 130
1,3,5-Trimethylbenzene	25.0	26.57		ug/L		106	70 - 130
1,3-Dichlorobenzene	25.0	25.73		ug/L		103	70 - 130
1,3-Dichloropropane	25.0	24.72		ug/L		99	70 - 130
1,4-Dichlorobenzene	25.0	25.63		ug/L		103	70 - 130
1,4-Dioxane	500	496.7		ug/L		99	70 - 130
2,2-Dichloropropane	25.0	24.07		ug/L		96	70 - 130
2-Butanone (MEK)	125	232.1	*	ug/L		186	70 - 130
2-Chlorotoluene	25.0	26.25		ug/L		105	70 - 130
2-Hexanone	125	127.9		ug/L		102	70 - 130
4-Chlorotoluene	25.0	26.62		ug/L		106	70 - 130
4-Isopropyltoluene	25.0	26.85		ug/L		107	70 - 130
4-Methyl-2-pentanone (MIBK)	125	125.1		ug/L		100	70 - 130
Acetone	125	136.3		ug/L		109	70 - 130
Benzene	25.0	25.42		ug/L		102	70 - 130
Bromobenzene	25.0	25.99		ug/L		104	70 - 130
Bromoform	25.0	23.91		ug/L		96	70 - 130
Bromomethane	25.0	23.42		ug/L		94	70 - 130
Carbon disulfide	25.0	24.98		ug/L		100	70 - 130
Carbon tetrachloride	25.0	24.53		ug/L		98	70 - 130
Chlorobenzene	25.0	25.77		ug/L		103	70 - 130
Chlorobromomethane	25.0	24.37		ug/L		97	70 - 130
Chlorodibromomethane	25.0	24.90		ug/L		100	70 - 130
Chloroethane	25.0	25.07		ug/L		100	70 - 130
Chloroform	25.0	24.79		ug/L		99	70 - 130
Chloromethane	25.0	28.89		ug/L		116	70 - 130
cis-1,2-Dichloroethene	25.0	24.97		ug/L		100	70 - 130
cis-1,3-Dichloropropene	25.0	24.97		ug/L		100	70 - 130
Dichlorobromomethane	25.0	24.76		ug/L		99	70 - 130
Dichlorodifluoromethane	25.0	28.56		ug/L		114	70 - 130
Ethyl ether	25.0	24.18		ug/L		97	70 - 130
Ethylbenzene	25.0	26.17		ug/L		105	70 - 130
Ethylene Dibromide	25.0	24.81		ug/L		99	70 - 130
Hexachlorobutadiene	25.0	27.11		ug/L		108	70 - 130
Isopropyl ether	25.0	24.92		ug/L		100	70 - 130
Isopropylbenzene	25.0	26.56		ug/L		106	70 - 130
Methyl tert-butyl ether	25.0	22.91		ug/L		92	70 - 130
Methylene Chloride	25.0	24.43		ug/L		98	70 - 130
m-Xylene & p-Xylene	25.0	25.19		ug/L		101	70 - 130
Naphthalene	25.0	23.73		ug/L		95	70 - 130
n-Butylbenzene	25.0	27.26		ug/L		109	70 - 130
N-Propylbenzene	25.0	26.86		ug/L		107	70 - 130
o-Xylene	25.0	24.71		ug/L		99	70 - 130
sec-Butylbenzene	25.0	27.28		ug/L		109	70 - 130
Styrene	25.0	26.03		ug/L		104	70 - 130
Tert-amyl methyl ether	25.0	22.20		ug/L		89	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-261184/5
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tert-butyl ethyl ether	25.0	22.66		ug/L		91	70 - 130
tert-Butylbenzene	25.0	26.60		ug/L		106	70 - 130
Tetrachloroethene	25.0	26.17		ug/L		105	70 - 130
Tetrahydrofuran	50.0	62.30		ug/L		125	70 - 130
Toluene	25.0	25.93		ug/L		104	70 - 130
trans-1,2-Dichloroethene	25.0	25.49		ug/L		102	70 - 130
trans-1,3-Dichloropropene	25.0	25.17		ug/L		101	70 - 130
Trichloroethene	25.0	25.33		ug/L		101	70 - 130
Trichlorofluoromethane	25.0	25.30		ug/L		101	70 - 130
Vinyl chloride	25.0	26.99		ug/L		108	70 - 130
Dibromomethane	25.0	23.40		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 480-261184/41
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.64		ug/L		99	70 - 130	3	20
1,1,1-Trichloroethane	25.0	22.51		ug/L		90	70 - 130	9	20
1,1,2,2-Tetrachloroethane	25.0	25.07		ug/L		100	70 - 130	0	20
1,1,2-Trichloroethane	25.0	24.94		ug/L		100	70 - 130	3	20
Freon 113	25.0	23.38		ug/L		94	70 - 130	6	20
1,1-Dichloroethane	25.0	25.05		ug/L		100	70 - 130	8	20
1,1-Dichloroethene	25.0	22.29		ug/L		89	70 - 130	9	20
1,1-Dichloropropene	25.0	24.03		ug/L		96	70 - 130	10	20
1,2,3-Trichlorobenzene	25.0	24.52		ug/L		98	70 - 130	1	20
1,2,3-Trichloropropane	25.0	24.53		ug/L		98	70 - 130	0	20
1,2,4-Trichlorobenzene	25.0	25.32		ug/L		101	70 - 130	1	20
1,2,4-Trimethylbenzene	25.0	25.54		ug/L		102	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	24.71		ug/L		99	70 - 130	6	20
1,2-Dichlorobenzene	25.0	25.56		ug/L		102	70 - 130	1	20
1,2-Dichloroethane	25.0	22.62		ug/L		90	70 - 130	6	20
1,2-Dichloropropane	25.0	24.97		ug/L		100	70 - 130	4	20
1,3,5-Trimethylbenzene	25.0	25.80		ug/L		103	70 - 130	3	20
1,3-Dichlorobenzene	25.0	25.74		ug/L		103	70 - 130	0	20
1,3-Dichloropropane	25.0	24.98		ug/L		100	70 - 130	1	20
1,4-Dichlorobenzene	25.0	25.27		ug/L		101	70 - 130	1	20
1,4-Dioxane	500	715.2	*	ug/L		143	70 - 130	36	20
2,2-Dichloropropane	25.0	22.74		ug/L		91	70 - 130	6	20
2-Butanone (MEK)	125	228.8	*	ug/L		183	70 - 130	1	20
2-Chlorotoluene	25.0	25.88		ug/L		104	70 - 130	1	20
2-Hexanone	125	131.0		ug/L		105	70 - 130	2	20
4-Chlorotoluene	25.0	26.23		ug/L		105	70 - 130	1	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-261184/41
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Isopropyltoluene	25.0	25.68		ug/L		103	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	125	125.4		ug/L		100	70 - 130	0	20
Acetone	125	132.8		ug/L		106	70 - 130	3	20
Benzene	25.0	24.02		ug/L		96	70 - 130	6	20
Bromobenzene	25.0	25.28		ug/L		101	70 - 130	3	20
Bromoform	25.0	24.43		ug/L		98	70 - 130	2	20
Bromomethane	25.0	21.65		ug/L		87	70 - 130	8	20
Carbon disulfide	25.0	22.82		ug/L		91	70 - 130	9	20
Carbon tetrachloride	25.0	22.56		ug/L		90	70 - 130	8	20
Chlorobenzene	25.0	25.14		ug/L		101	70 - 130	2	20
Chlorobromomethane	25.0	23.15		ug/L		93	70 - 130	5	20
Chlorodibromomethane	25.0	24.30		ug/L		97	70 - 130	2	20
Chloroethane	25.0	21.52		ug/L		86	70 - 130	15	20
Chloroform	25.0	22.95		ug/L		92	70 - 130	8	20
Chloromethane	25.0	26.49		ug/L		106	70 - 130	9	20
cis-1,2-Dichloroethene	25.0	23.63		ug/L		95	70 - 130	6	20
cis-1,3-Dichloropropene	25.0	23.72		ug/L		95	70 - 130	5	20
Dichlorobromomethane	25.0	23.21		ug/L		93	70 - 130	6	20
Dichlorodifluoromethane	25.0	25.81		ug/L		103	70 - 130	10	20
Ethyl ether	25.0	22.66		ug/L		91	70 - 130	6	20
Ethylbenzene	25.0	24.98		ug/L		100	70 - 130	5	20
Ethylene Dibromide	25.0	24.23		ug/L		97	70 - 130	2	20
Hexachlorobutadiene	25.0	26.28		ug/L		105	70 - 130	3	20
Isopropyl ether	25.0	23.48		ug/L		94	70 - 130	6	20
Isopropylbenzene	25.0	25.31		ug/L		101	70 - 130	5	20
Methyl tert-butyl ether	25.0	22.70		ug/L		91	70 - 130	1	20
Methylene Chloride	25.0	23.40		ug/L		94	70 - 130	4	20
m-Xylene & p-Xylene	25.0	23.98		ug/L		96	70 - 130	5	20
Naphthalene	25.0	24.07		ug/L		96	70 - 130	1	20
n-Butylbenzene	25.0	26.47		ug/L		106	70 - 130	3	20
N-Propylbenzene	25.0	25.83		ug/L		103	70 - 130	4	20
o-Xylene	25.0	24.57		ug/L		98	70 - 130	1	20
sec-Butylbenzene	25.0	26.16		ug/L		105	70 - 130	4	20
Styrene	25.0	25.04		ug/L		100	70 - 130	4	20
Tert-amyl methyl ether	25.0	21.81		ug/L		87	70 - 130	2	20
Tert-butyl ethyl ether	25.0	21.91		ug/L		88	70 - 130	3	20
tert-Butylbenzene	25.0	25.21		ug/L		101	70 - 130	5	20
Tetrachloroethene	25.0	25.34		ug/L		101	70 - 130	3	20
Tetrahydrofuran	50.0	64.51		ug/L		129	70 - 130	3	20
Toluene	25.0	25.21		ug/L		101	70 - 130	3	20
trans-1,2-Dichloroethene	25.0	23.45		ug/L		94	70 - 130	8	20
trans-1,3-Dichloropropene	25.0	24.29		ug/L		97	70 - 130	4	20
Trichloroethene	25.0	24.44		ug/L		98	70 - 130	4	20
Trichlorofluoromethane	25.0	22.67		ug/L		91	70 - 130	11	20
Vinyl chloride	25.0	25.11		ug/L		100	70 - 130	7	20
Dibromomethane	25.0	23.27		ug/L		93	70 - 130	1	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-261184/41
Matrix: Water
Analysis Batch: 261184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 480-261236/3-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261236

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,1,1-Trichloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,1,2,2-Tetrachloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,1,2-Trichloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Freon 113	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,1-Dichloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,1-Dichloroethene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,1-Dichloropropene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2,3-Trichlorobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2,3-Trichloropropane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2,4-Trichlorobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2,4-Trimethylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2-Dibromo-3-Chloropropane	<0.0252		0.0252	0.0252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2-Dichlorobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2-Dichloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,2-Dichloropropane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,3,5-Trimethylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,3-Dichlorobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,3-Dichloropropane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,4-Dichlorobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
1,4-Dioxane	<0.252		0.252	0.252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
2,2-Dichloropropane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
2-Butanone (MEK)	<0.0252		0.0252	0.0252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
2-Chlorotoluene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
2-Hexanone	<0.0252		0.0252	0.0252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
4-Chlorotoluene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
4-Isopropyltoluene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
4-Methyl-2-pentanone (MIBK)	<0.0252		0.0252	0.0252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Acetone	<0.252		0.252	0.252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Benzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Bromobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Bromoform	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Bromomethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Carbon disulfide	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Carbon tetrachloride	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Chlorobenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Chlorobromomethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Chlorodibromomethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Chloroethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-261236/3-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261236

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Chloromethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
cis-1,2-Dichloroethene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
cis-1,3-Dichloropropene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Dichlorobromomethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Dichlorodifluoromethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Ethyl ether	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Ethylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Ethylene Dibromide	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Hexachlorobutadiene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Isopropyl ether	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Isopropylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Methyl tert-butyl ether	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Methylene Chloride	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
m-Xylene & p-Xylene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Naphthalene	<0.0252		0.0252	0.0252	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
n-Butylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
N-Propylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
o-Xylene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
sec-Butylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Styrene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Tert-amyl methyl ether	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Tert-butyl ethyl ether	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
tert-Butylbenzene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Tetrachloroethene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Tetrahydrofuran	<0.0503		0.0503	0.0503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Toluene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
trans-1,2-Dichloroethene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
trans-1,3-Dichloropropene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Trichloroethene	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Trichlorofluoromethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Vinyl chloride	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1
Dibromomethane	<0.00503		0.00503	0.00503	mg/Kg		08/31/15 10:48	08/31/15 13:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/31/15 10:48*	*08/31/15 13:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*	*08/31/15 10:48*	*08/31/15 13:13*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/31/15 10:48*	*08/31/15 13:13*	*1*

Lab Sample ID: LCS 480-261236/1-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261236

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0499	0.04937		mg/Kg		99	70 - 130
1,1,1-Trichloroethane	0.0499	0.05245		mg/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	0.0499	0.05183		mg/Kg		104	70 - 130
1,1,2-Trichloroethane	0.0499	0.04958		mg/Kg		99	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-261236/1-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261236

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Freon 113	0.0499	0.04748		mg/Kg		95	70 - 130
1,1-Dichloroethane	0.0499	0.05402		mg/Kg		108	70 - 130
1,1-Dichloroethene	0.0499	0.04996		mg/Kg		100	70 - 130
1,1-Dichloropropene	0.0499	0.05232		mg/Kg		105	70 - 130
1,2,3-Trichlorobenzene	0.0499	0.04608		mg/Kg		92	70 - 130
1,2,3-Trichloropropane	0.0499	0.05199		mg/Kg		104	70 - 130
1,2,4-Trichlorobenzene	0.0499	0.04654		mg/Kg		93	70 - 130
1,2,4-Trimethylbenzene	0.0499	0.04789		mg/Kg		96	70 - 130
1,2-Dibromo-3-Chloropropane	0.0499	0.05758		mg/Kg		115	70 - 130
1,2-Dichlorobenzene	0.0499	0.04654		mg/Kg		93	70 - 130
1,2-Dichloroethane	0.0499	0.05470		mg/Kg		110	70 - 130
1,2-Dichloropropane	0.0499	0.05503		mg/Kg		110	70 - 130
1,3,5-Trimethylbenzene	0.0499	0.04735		mg/Kg		95	70 - 130
1,3-Dichlorobenzene	0.0499	0.04649		mg/Kg		93	70 - 130
1,3-Dichloropropane	0.0499	0.04888		mg/Kg		98	70 - 130
1,4-Dichlorobenzene	0.0499	0.04623		mg/Kg		93	70 - 130
1,4-Dioxane	0.998	1.079		mg/Kg		108	70 - 130
2,2-Dichloropropane	0.0499	0.05421		mg/Kg		109	70 - 130
2-Butanone (MEK)	0.250	0.6236	*	mg/Kg		250	70 - 130
2-Chlorotoluene	0.0499	0.04756		mg/Kg		95	70 - 130
2-Hexanone	0.250	0.2873		mg/Kg		115	70 - 130
4-Chlorotoluene	0.0499	0.05071		mg/Kg		102	70 - 130
4-Isopropyltoluene	0.0499	0.04780		mg/Kg		96	70 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2773		mg/Kg		111	70 - 130
Acetone	0.250	0.3022		mg/Kg		121	70 - 130
Benzene	0.0499	0.05331		mg/Kg		107	70 - 130
Bromobenzene	0.0499	0.04629		mg/Kg		93	70 - 130
Bromoform	0.0499	0.04865		mg/Kg		97	70 - 130
Bromomethane	0.0499	0.04878		mg/Kg		98	70 - 130
Carbon disulfide	0.0499	0.05286		mg/Kg		106	70 - 130
Carbon tetrachloride	0.0499	0.05249		mg/Kg		105	70 - 130
Chlorobenzene	0.0499	0.04690		mg/Kg		94	70 - 130
Chlorobromomethane	0.0499	0.05466		mg/Kg		110	70 - 130
Chlorodibromomethane	0.0499	0.05397		mg/Kg		108	70 - 130
Chloroethane	0.0499	0.04945		mg/Kg		99	70 - 130
Chloroform	0.0499	0.05311		mg/Kg		106	70 - 130
Chloromethane	0.0499	0.05337		mg/Kg		107	70 - 130
cis-1,2-Dichloroethene	0.0499	0.05360		mg/Kg		107	70 - 130
cis-1,3-Dichloropropene	0.0499	0.06144		mg/Kg		123	70 - 130
Dichlorobromomethane	0.0499	0.05887		mg/Kg		118	70 - 130
Dichlorodifluoromethane	0.0499	0.04931		mg/Kg		99	70 - 130
Ethyl ether	0.0499	0.06057		mg/Kg		121	70 - 130
Ethylbenzene	0.0499	0.04745		mg/Kg		95	70 - 130
Ethylene Dibromide	0.0499	0.05012		mg/Kg		100	70 - 130
Hexachlorobutadiene	0.0499	0.04242		mg/Kg		85	70 - 130
Isopropyl ether	0.0499	0.05661		mg/Kg		113	70 - 130
Isopropylbenzene	0.0499	0.04663		mg/Kg		93	70 - 130
Methyl tert-butyl ether	0.0499	0.05776		mg/Kg		116	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-261236/1-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261236

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	0.0499	0.05396		mg/Kg		108	70 - 130
m-Xylene & p-Xylene	0.0499	0.04777		mg/Kg		96	70 - 130
Naphthalene	0.0499	0.04914		mg/Kg		98	70 - 130
n-Butylbenzene	0.0499	0.04738		mg/Kg		95	70 - 130
N-Propylbenzene	0.0499	0.04641		mg/Kg		93	70 - 130
o-Xylene	0.0499	0.04792		mg/Kg		96	70 - 130
sec-Butylbenzene	0.0499	0.04593		mg/Kg		92	70 - 130
Styrene	0.0499	0.04937		mg/Kg		99	70 - 130
Tert-amyl methyl ether	0.0499	0.06044		mg/Kg		121	70 - 130
Tert-butyl ethyl ether	0.0499	0.05679		mg/Kg		114	70 - 130
tert-Butylbenzene	0.0499	0.04614		mg/Kg		92	70 - 130
Tetrachloroethene	0.0499	0.04737		mg/Kg		95	70 - 130
Tetrahydrofuran	0.0998	0.1469	*	mg/Kg		147	70 - 130
Toluene	0.0499	0.04671		mg/Kg		94	70 - 130
trans-1,2-Dichloroethene	0.0499	0.05192		mg/Kg		104	70 - 130
trans-1,3-Dichloropropene	0.0499	0.05328		mg/Kg		107	70 - 130
Trichloroethene	0.0499	0.05419		mg/Kg		109	70 - 130
Trichlorofluoromethane	0.0499	0.04694		mg/Kg		94	70 - 130
Vinyl chloride	0.0499	0.05197		mg/Kg		104	70 - 130
Dibromomethane	0.0499	0.05687		mg/Kg		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*129*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 480-261236/2-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261236

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0493	0.04880		mg/Kg		99	70 - 130	1	20
1,1,1-Trichloroethane	0.0493	0.05156		mg/Kg		105	70 - 130	2	20
1,1,2,2-Tetrachloroethane	0.0493	0.05107		mg/Kg		104	70 - 130	1	20
1,1,2-Trichloroethane	0.0493	0.04822		mg/Kg		98	70 - 130	3	20
Freon 113	0.0493	0.04526		mg/Kg		92	70 - 130	5	20
1,1-Dichloroethane	0.0493	0.05345		mg/Kg		108	70 - 130	1	20
1,1-Dichloroethene	0.0493	0.04860		mg/Kg		99	70 - 130	3	20
1,1-Dichloropropene	0.0493	0.05090		mg/Kg		103	70 - 130	3	20
1,2,3-Trichlorobenzene	0.0493	0.04583		mg/Kg		93	70 - 130	1	20
1,2,3-Trichloropropane	0.0493	0.05035		mg/Kg		102	70 - 130	3	20
1,2,4-Trichlorobenzene	0.0493	0.04570		mg/Kg		93	70 - 130	2	20
1,2,4-Trimethylbenzene	0.0493	0.04590		mg/Kg		93	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	0.0493	0.05822		mg/Kg		118	70 - 130	1	20
1,2-Dichlorobenzene	0.0493	0.04547		mg/Kg		92	70 - 130	2	20
1,2-Dichloroethane	0.0493	0.05400		mg/Kg		110	70 - 130	1	20
1,2-Dichloropropane	0.0493	0.05423		mg/Kg		110	70 - 130	1	20
1,3,5-Trimethylbenzene	0.0493	0.04533		mg/Kg		92	70 - 130	4	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-261236/2-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261236

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	0.0493	0.04490		mg/Kg		91	70 - 130	3	20
1,3-Dichloropropane	0.0493	0.04801		mg/Kg		97	70 - 130	2	20
1,4-Dichlorobenzene	0.0493	0.04452		mg/Kg		90	70 - 130	4	20
1,4-Dioxane	0.986	0.9549		mg/Kg		97	70 - 130	12	20
2,2-Dichloropropane	0.0493	0.05426		mg/Kg		110	70 - 130	0	20
2-Butanone (MEK)	0.247	0.6159	*	mg/Kg		250	70 - 130	1	20
2-Chlorotoluene	0.0493	0.04575		mg/Kg		93	70 - 130	4	20
2-Hexanone	0.247	0.2959		mg/Kg		120	70 - 130	3	20
4-Chlorotoluene	0.0493	0.04909		mg/Kg		100	70 - 130	3	20
4-Isopropyltoluene	0.0493	0.04574		mg/Kg		93	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	0.247	0.2815		mg/Kg		114	70 - 130	1	20
Acetone	0.247	0.3047		mg/Kg		124	70 - 130	1	20
Benzene	0.0493	0.05226		mg/Kg		106	70 - 130	2	20
Bromobenzene	0.0493	0.04533		mg/Kg		92	70 - 130	2	20
Bromoform	0.0493	0.04737		mg/Kg		96	70 - 130	3	20
Bromomethane	0.0493	0.06372	*	mg/Kg		129	70 - 130	27	20
Carbon disulfide	0.0493	0.05114		mg/Kg		104	70 - 130	3	20
Carbon tetrachloride	0.0493	0.05182		mg/Kg		105	70 - 130	1	20
Chlorobenzene	0.0493	0.04554		mg/Kg		92	70 - 130	3	20
Chlorobromomethane	0.0493	0.05479		mg/Kg		111	70 - 130	0	20
Chlorodibromomethane	0.0493	0.05287		mg/Kg		107	70 - 130	2	20
Chloroethane	0.0493	0.06050		mg/Kg		123	70 - 130	20	20
Chloroform	0.0493	0.05271		mg/Kg		107	70 - 130	1	20
Chloromethane	0.0493	0.05165		mg/Kg		105	70 - 130	3	20
cis-1,2-Dichloroethene	0.0493	0.05278		mg/Kg		107	70 - 130	2	20
cis-1,3-Dichloropropene	0.0493	0.06067		mg/Kg		123	70 - 130	1	20
Dichlorobromomethane	0.0493	0.05844		mg/Kg		119	70 - 130	1	20
Dichlorodifluoromethane	0.0493	0.04849		mg/Kg		98	70 - 130	2	20
Ethyl ether	0.0493	0.04846	*	mg/Kg		98	70 - 130	22	20
Ethylbenzene	0.0493	0.04551		mg/Kg		92	70 - 130	4	20
Ethylene Dibromide	0.0493	0.04954		mg/Kg		100	70 - 130	1	20
Hexachlorobutadiene	0.0493	0.04125		mg/Kg		84	70 - 130	3	20
Isopropyl ether	0.0493	0.05608		mg/Kg		114	70 - 130	1	20
Isopropylbenzene	0.0493	0.04485		mg/Kg		91	70 - 130	4	20
Methyl tert-butyl ether	0.0493	0.05815		mg/Kg		118	70 - 130	1	20
Methylene Chloride	0.0493	0.05442		mg/Kg		110	70 - 130	1	20
m-Xylene & p-Xylene	0.0493	0.04584		mg/Kg		93	70 - 130	4	20
Naphthalene	0.0493	0.05050		mg/Kg		102	70 - 130	3	20
n-Butylbenzene	0.0493	0.04530		mg/Kg		92	70 - 130	4	20
N-Propylbenzene	0.0493	0.04458		mg/Kg		90	70 - 130	4	20
o-Xylene	0.0493	0.04645		mg/Kg		94	70 - 130	3	20
sec-Butylbenzene	0.0493	0.04378		mg/Kg		89	70 - 130	5	20
Styrene	0.0493	0.04825		mg/Kg		98	70 - 130	2	20
Tert-amyl methyl ether	0.0493	0.06031		mg/Kg		122	70 - 130	0	20
Tert-butyl ethyl ether	0.0493	0.05713		mg/Kg		116	70 - 130	1	20
tert-Butylbenzene	0.0493	0.04442		mg/Kg		90	70 - 130	4	20
Tetrachloroethene	0.0493	0.04570		mg/Kg		93	70 - 130	4	20
Tetrahydrofuran	0.0986	0.1389	*	mg/Kg		141	70 - 130	6	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-261236/2-A
Matrix: Solid
Analysis Batch: 261208

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261236

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.0493	0.04525		mg/Kg		92	70 - 130	3	20
trans-1,2-Dichloroethene			0.0493	0.05207		mg/Kg		106	70 - 130	0	20
trans-1,3-Dichloropropene			0.0493	0.05263		mg/Kg		107	70 - 130	1	20
Trichloroethene			0.0493	0.05280		mg/Kg		107	70 - 130	3	20
Trichlorofluoromethane			0.0493	0.04553		mg/Kg		92	70 - 130	3	20
Vinyl chloride			0.0493	0.04937		mg/Kg		100	70 - 130	5	20
Dibromomethane			0.0493	0.05672		mg/Kg		115	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*129*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 480-261608/3-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0499		0.499	0.0499	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,1,1-Trichloroethane	<0.0362		0.499	0.0362	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,1,2,2-Tetrachloroethane	<0.0809		0.499	0.0809	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,1,2-Trichloroethane	<0.0649		0.499	0.0649	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Freon 113	<0.114		0.499	0.114	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,1-Dichloroethane	<0.0609		0.499	0.0609	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,1-Dichloroethene	<0.0611		0.499	0.0611	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,1-Dichloropropene	<0.0709		0.499	0.0709	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2,3-Trichlorobenzene	<0.0530		0.499	0.0530	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2,3-Trichloropropane	<0.0508		0.499	0.0508	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2,4-Trichlorobenzene	<0.0303		0.499	0.0303	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2,4-Trimethylbenzene	<0.0958		0.499	0.0958	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2-Dibromo-3-Chloropropane	<0.250		2.50	0.250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2-Dichlorobenzene	<0.0390		0.499	0.0390	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2-Dichloroethane	<0.0250		0.499	0.0250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,2-Dichloropropane	<0.250		0.499	0.250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,3,5-Trimethylbenzene	<0.0321		0.499	0.0321	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,3-Dichlorobenzene	<0.0256		0.499	0.0256	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,3-Dichloropropane	<0.0299		0.499	0.0299	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,4-Dichlorobenzene	<0.0699		0.499	0.0699	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
1,4-Dioxane	<2.41		25.0	2.41	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
2,2-Dichloropropane	<0.0848		0.499	0.0848	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
2-Butanone (MEK)	<0.183		2.50	0.183	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
2-Chlorotoluene	<0.0327		0.499	0.0327	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
2-Hexanone	<0.250		2.50	0.250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
4-Chlorotoluene	<0.0589		0.499	0.0589	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
4-Isopropyltoluene	<0.0400		0.499	0.0400	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
4-Methyl-2-pentanone (MIBK)	<0.164		2.50	0.164	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Acetone	<0.420		25.0	0.420	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Benzene	<0.0245		0.499	0.0245	mg/Kg		08/29/15 04:10	09/02/15 12:27	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-261608/3-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<0.0878		0.499	0.0878	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Bromoform	<0.250		0.499	0.250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Bromomethane	<0.0449		0.499	0.0449	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Carbon disulfide	<0.250		0.499	0.250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Carbon tetrachloride	<0.0483		0.499	0.0483	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Chlorobenzene	<0.0659		0.499	0.0659	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Chlorobromomethane	<0.0360		0.499	0.0360	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Chlorodibromomethane	<0.0639		0.499	0.0639	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Chloroethane	<0.113		0.499	0.113	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Chloroform	<0.0308		0.499	0.0308	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Chloromethane	<0.0301		0.499	0.0301	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
cis-1,2-Dichloroethene	<0.0639		0.499	0.0639	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
cis-1,3-Dichloropropene	<0.0719		0.499	0.0719	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Dichlorobromomethane	<0.0669		0.499	0.0669	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Dichlorodifluoromethane	<0.0412		0.499	0.0412	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Ethyl ether	<0.210		0.499	0.210	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Ethylbenzene	<0.0344		0.499	0.0344	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Ethylene Dibromide	<0.0641		0.499	0.0641	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Hexachlorobutadiene	<0.0585		0.499	0.0585	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Isopropyl ether	<0.250		0.499	0.250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Isopropylbenzene	<0.0752		0.499	0.0752	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Methyl tert-butyl ether	<0.0490		0.499	0.0490	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Methylene Chloride	<0.230		0.499	0.230	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
m-Xylene & p-Xylene	<0.0838		0.499	0.0838	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Naphthalene	<0.0669		2.50	0.0669	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
n-Butylbenzene	<0.0434		0.499	0.0434	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
N-Propylbenzene	<0.0399		0.499	0.0399	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
o-Xylene	<0.0652		0.499	0.0652	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
sec-Butylbenzene	<0.0434		0.499	0.0434	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Styrene	<0.0250		0.499	0.0250	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Tert-amyl methyl ether	<0.128		0.499	0.128	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Tert-butyl ethyl ether	<0.220		0.499	0.220	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
tert-Butylbenzene	<0.0519		0.499	0.0519	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Tetrachloroethene	<0.0670		0.499	0.0670	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Tetrahydrofuran	<0.459		4.99	0.459	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Toluene	<0.0377		0.499	0.0377	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
trans-1,2-Dichloroethene	<0.0515		0.499	0.0515	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
trans-1,3-Dichloropropene	<0.220		0.499	0.220	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Trichloroethene	<0.110		0.499	0.110	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Trichlorofluoromethane	<0.0472		0.499	0.0472	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Vinyl chloride	<0.0609		0.499	0.0609	mg/Kg		08/29/15 04:10	09/02/15 12:27	1
Dibromomethane	<0.0514		0.499	0.0514	mg/Kg		08/29/15 04:10	09/02/15 12:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/29/15 04:10*	*09/02/15 12:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*	*08/29/15 04:10*	*09/02/15 12:27*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*08/29/15 04:10*	*09/02/15 12:27*	*1*

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-261608/1-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	2.50	2.389		mg/Kg		96	70 - 130
1,1,1-Trichloroethane	2.50	2.220		mg/Kg		89	70 - 130
1,1,2,2-Tetrachloroethane	2.50	2.336		mg/Kg		93	70 - 130
1,1,2-Trichloroethane	2.50	2.467		mg/Kg		99	70 - 130
Freon 113	2.50	2.166		mg/Kg		87	70 - 130
1,1-Dichloroethane	2.50	2.518		mg/Kg		101	70 - 130
1,1-Dichloroethene	2.50	2.282		mg/Kg		91	70 - 130
1,1-Dichloropropene	2.50	2.355		mg/Kg		94	70 - 130
1,2,3-Trichlorobenzene	2.50	2.319		mg/Kg		93	70 - 130
1,2,3-Trichloropropane	2.50	2.275		mg/Kg		91	70 - 130
1,2,4-Trichlorobenzene	2.50	2.378		mg/Kg		95	70 - 130
1,2,4-Trimethylbenzene	2.50	2.464		mg/Kg		99	70 - 130
1,2-Dibromo-3-Chloropropane	2.50	2.122	J	mg/Kg		85	70 - 130
1,2-Dichlorobenzene	2.50	2.388		mg/Kg		96	70 - 130
1,2-Dichloroethane	2.50	2.305		mg/Kg		92	70 - 130
1,2-Dichloropropane	2.50	2.527		mg/Kg		101	70 - 130
1,3,5-Trimethylbenzene	2.50	2.476		mg/Kg		99	70 - 130
1,3-Dichlorobenzene	2.50	2.469		mg/Kg		99	70 - 130
1,3-Dichloropropane	2.50	2.500		mg/Kg		100	70 - 130
1,4-Dichlorobenzene	2.50	2.430		mg/Kg		97	70 - 130
1,4-Dioxane	50.0	50.65		mg/Kg		101	70 - 130
2,2-Dichloropropane	2.50	2.245		mg/Kg		90	70 - 130
2-Butanone (MEK)	12.5	22.40	*	mg/Kg		179	70 - 130
2-Chlorotoluene	2.50	2.546		mg/Kg		102	70 - 130
2-Hexanone	12.5	11.93		mg/Kg		95	70 - 130
4-Chlorotoluene	2.50	2.480		mg/Kg		99	70 - 130
4-Isopropyltoluene	2.50	2.457		mg/Kg		98	70 - 130
4-Methyl-2-pentanone (MIBK)	12.5	11.75		mg/Kg		94	70 - 130
Acetone	12.5	12.85	J	mg/Kg		103	70 - 130
Benzene	2.50	2.475		mg/Kg		99	70 - 130
Bromobenzene	2.50	2.462		mg/Kg		98	70 - 130
Bromoform	2.50	2.198		mg/Kg		88	70 - 130
Bromomethane	2.50	1.765		mg/Kg		71	70 - 130
Carbon disulfide	2.50	2.443		mg/Kg		98	70 - 130
Carbon tetrachloride	2.50	2.130		mg/Kg		85	70 - 130
Chlorobenzene	2.50	2.548		mg/Kg		102	70 - 130
Chlorobromomethane	2.50	2.440		mg/Kg		98	70 - 130
Chlorodibromomethane	2.50	2.343		mg/Kg		94	70 - 130
Chloroethane	2.50	1.571	*	mg/Kg		63	70 - 130
Chloroform	2.50	2.380		mg/Kg		95	70 - 130
Chloromethane	2.50	2.267		mg/Kg		91	70 - 130
cis-1,2-Dichloroethene	2.50	2.410		mg/Kg		96	70 - 130
cis-1,3-Dichloropropene	2.50	2.406		mg/Kg		96	70 - 130
Dichlorobromomethane	2.50	2.330		mg/Kg		93	70 - 130
Dichlorodifluoromethane	2.50	1.310	*	mg/Kg		52	70 - 130
Ethyl ether	2.50	2.830		mg/Kg		113	70 - 130
Ethylbenzene	2.50	2.506		mg/Kg		100	70 - 130
Ethylene Dibromide	2.50	2.402		mg/Kg		96	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-261608/1-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobutadiene	2.50	2.480		mg/Kg		99	70 - 130
Isopropyl ether	2.50	2.458		mg/Kg		98	70 - 130
Isopropylbenzene	2.50	2.431		mg/Kg		97	70 - 130
Methyl tert-butyl ether	2.50	2.266		mg/Kg		91	70 - 130
Methylene Chloride	2.50	2.453		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	2.50	2.408		mg/Kg		96	70 - 130
Naphthalene	2.50	2.228	J	mg/Kg		89	70 - 130
n-Butylbenzene	2.50	2.448		mg/Kg		98	70 - 130
N-Propylbenzene	2.50	2.452		mg/Kg		98	70 - 130
o-Xylene	2.50	2.435		mg/Kg		97	70 - 130
sec-Butylbenzene	2.50	2.392		mg/Kg		96	70 - 130
Styrene	2.50	2.561		mg/Kg		102	70 - 130
Tert-amyl methyl ether	2.50	2.214		mg/Kg		89	70 - 130
Tert-butyl ethyl ether	2.50	2.274		mg/Kg		91	70 - 130
tert-Butylbenzene	2.50	2.407		mg/Kg		96	70 - 130
Tetrachloroethene	2.50	2.485		mg/Kg		99	70 - 130
Tetrahydrofuran	5.00	6.323		mg/Kg		126	70 - 130
Toluene	2.50	2.542		mg/Kg		102	70 - 130
trans-1,2-Dichloroethene	2.50	2.438		mg/Kg		98	70 - 130
trans-1,3-Dichloropropene	2.50	2.401		mg/Kg		96	70 - 130
Trichloroethene	2.50	2.451		mg/Kg		98	70 - 130
Trichlorofluoromethane	2.50	1.763		mg/Kg		71	70 - 130
Vinyl chloride	2.50	2.074		mg/Kg		83	70 - 130
Dibromomethane	2.50	2.347		mg/Kg		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 480-261608/2-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261608

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	2.52	2.333		mg/Kg		93	70 - 130	2	20
1,1,1-Trichloroethane	2.52	2.236		mg/Kg		89	70 - 130	1	20
1,1,2,2-Tetrachloroethane	2.52	2.311		mg/Kg		92	70 - 130	1	20
1,1,2-Trichloroethane	2.52	2.394		mg/Kg		95	70 - 130	3	20
Freon 113	2.52	2.156		mg/Kg		86	70 - 130	0	20
1,1-Dichloroethane	2.52	2.529		mg/Kg		101	70 - 130	0	20
1,1-Dichloroethene	2.52	2.331		mg/Kg		93	70 - 130	2	20
1,1-Dichloropropene	2.52	2.401		mg/Kg		95	70 - 130	2	20
1,2,3-Trichlorobenzene	2.52	2.302		mg/Kg		92	70 - 130	1	20
1,2,3-Trichloropropane	2.52	2.159		mg/Kg		86	70 - 130	5	20
1,2,4-Trichlorobenzene	2.52	2.412		mg/Kg		96	70 - 130	1	20
1,2,4-Trimethylbenzene	2.52	2.463		mg/Kg		98	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	2.52	1.937	J	mg/Kg		77	70 - 130	9	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-261608/2-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261608

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	2.52	2.448		mg/Kg		97	70 - 130	2	20
1,2-Dichloroethane	2.52	2.358		mg/Kg		94	70 - 130	2	20
1,2-Dichloropropane	2.52	2.665		mg/Kg		106	70 - 130	5	20
1,3,5-Trimethylbenzene	2.52	2.469		mg/Kg		98	70 - 130	0	20
1,3-Dichlorobenzene	2.52	2.483		mg/Kg		99	70 - 130	1	20
1,3-Dichloropropane	2.52	2.434		mg/Kg		97	70 - 130	3	20
1,4-Dichlorobenzene	2.52	2.459		mg/Kg		98	70 - 130	1	20
1,4-Dioxane	50.3	45.36		mg/Kg		90	70 - 130	11	20
2,2-Dichloropropane	2.52	2.249		mg/Kg		89	70 - 130	0	20
2-Butanone (MEK)	12.6	22.32	*	mg/Kg		177	70 - 130	0	20
2-Chlorotoluene	2.52	2.499		mg/Kg		99	70 - 130	2	20
2-Hexanone	12.6	11.37		mg/Kg		90	70 - 130	5	20
4-Chlorotoluene	2.52	2.508		mg/Kg		100	70 - 130	1	20
4-Isopropyltoluene	2.52	2.430		mg/Kg		97	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	12.6	11.11		mg/Kg		88	70 - 130	6	20
Acetone	12.6	12.81	J	mg/Kg		102	70 - 130	0	20
Benzene	2.52	2.500		mg/Kg		99	70 - 130	1	20
Bromobenzene	2.52	2.450		mg/Kg		97	70 - 130	0	20
Bromoform	2.52	2.037		mg/Kg		81	70 - 130	8	20
Bromomethane	2.52	1.810		mg/Kg		72	70 - 130	3	20
Carbon disulfide	2.52	2.415		mg/Kg		96	70 - 130	1	20
Carbon tetrachloride	2.52	2.108		mg/Kg		84	70 - 130	1	20
Chlorobenzene	2.52	2.486		mg/Kg		99	70 - 130	2	20
Chlorobromomethane	2.52	2.377		mg/Kg		95	70 - 130	3	20
Chlorodibromomethane	2.52	2.242		mg/Kg		89	70 - 130	4	20
Chloroethane	2.52	1.659	*	mg/Kg		66	70 - 130	5	20
Chloroform	2.52	2.401		mg/Kg		95	70 - 130	1	20
Chloromethane	2.52	2.221		mg/Kg		88	70 - 130	2	20
cis-1,2-Dichloroethene	2.52	2.462		mg/Kg		98	70 - 130	2	20
cis-1,3-Dichloropropene	2.52	2.471		mg/Kg		98	70 - 130	3	20
Dichlorobromomethane	2.52	2.309		mg/Kg		92	70 - 130	1	20
Dichlorodifluoromethane	2.52	1.324	*	mg/Kg		53	70 - 130	1	20
Ethyl ether	2.52	2.827		mg/Kg		112	70 - 130	0	20
Ethylbenzene	2.52	2.444		mg/Kg		97	70 - 130	2	20
Ethylene Dibromide	2.52	2.332		mg/Kg		93	70 - 130	3	20
Hexachlorobutadiene	2.52	2.390		mg/Kg		95	70 - 130	4	20
Isopropyl ether	2.52	2.498		mg/Kg		99	70 - 130	2	20
Isopropylbenzene	2.52	2.418		mg/Kg		96	70 - 130	1	20
Methyl tert-butyl ether	2.52	2.275		mg/Kg		90	70 - 130	0	20
Methylene Chloride	2.52	2.458		mg/Kg		98	70 - 130	0	20
m-Xylene & p-Xylene	2.52	2.331		mg/Kg		93	70 - 130	3	20
Naphthalene	2.52	2.182	J	mg/Kg		87	70 - 130	2	20
n-Butylbenzene	2.52	2.431		mg/Kg		97	70 - 130	1	20
N-Propylbenzene	2.52	2.424		mg/Kg		96	70 - 130	1	20
o-Xylene	2.52	2.387		mg/Kg		95	70 - 130	2	20
sec-Butylbenzene	2.52	2.436		mg/Kg		97	70 - 130	2	20
Styrene	2.52	2.505		mg/Kg		100	70 - 130	2	20
Tert-amyl methyl ether	2.52	2.197		mg/Kg		87	70 - 130	1	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-261608/2-A
Matrix: Solid
Analysis Batch: 261576

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261608

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tert-butyl ethyl ether			2.52	2.308		mg/Kg		92	70 - 130	1	20
tert-Butylbenzene			2.52	2.472		mg/Kg		98	70 - 130	3	20
Tetrachloroethene			2.52	2.394		mg/Kg		95	70 - 130	4	20
Tetrahydrofuran			5.03	6.469		mg/Kg		129	70 - 130	2	20
Toluene			2.52	2.436		mg/Kg		97	70 - 130	4	20
trans-1,2-Dichloroethene			2.52	2.464		mg/Kg		98	70 - 130	1	20
trans-1,3-Dichloropropene			2.52	2.306		mg/Kg		92	70 - 130	4	20
Trichloroethene			2.52	2.473		mg/Kg		98	70 - 130	1	20
Trichlorofluoromethane			2.52	1.996		mg/Kg		79	70 - 130	12	20
Vinyl chloride			2.52	2.031		mg/Kg		81	70 - 130	2	20
Dibromomethane			2.52	2.329		mg/Kg		93	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Lab Sample ID: MB 240-196101/6-A
Matrix: Solid
Analysis Batch: 196511

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196101

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1221	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1232	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1242	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1248	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1254	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1260	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1262	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1
Aroclor-1268	<0.0330		0.0330	0.0330	mg/Kg		09/03/15 07:28	09/08/15 09:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*30 - 150*	*09/03/15 07:28*	*09/08/15 09:00*	*1*
Tetrachloro-m-xylene	*59*		*30 - 150*	*09/03/15 07:28*	*09/08/15 09:00*	*1*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*09/03/15 07:28*	*09/08/15 09:00*	*1*
DCB Decachlorobiphenyl	*81*		*30 - 150*	*09/03/15 07:28*	*09/08/15 09:00*	*1*

Lab Sample ID: LCS 240-196101/7-A
Matrix: Solid
Analysis Batch: 196511

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196101

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016			0.333	0.2991		mg/Kg		90	40 - 140
Aroclor-1260			0.334	0.3306		mg/Kg		99	40 - 140

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: LCS 240-196101/7-A
Matrix: Solid
Analysis Batch: 196511

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196101

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*99*		*30 - 150*
Tetrachloro-m-xylene	*90*		*30 - 150*
DCB Decachlorobiphenyl	*109*		*30 - 150*
DCB Decachlorobiphenyl	*107*		*30 - 150*

Lab Sample ID: LCSD 240-196101/20-A
Matrix: Solid
Analysis Batch: 196511

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196101

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016			0.333	0.3104		mg/Kg		93	40 - 140	4	30
Aroclor-1260			0.334	0.3507		mg/Kg		105	40 - 140	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*104*		*30 - 150*
Tetrachloro-m-xylene	*95*		*30 - 150*
DCB Decachlorobiphenyl	*116*		*30 - 150*
DCB Decachlorobiphenyl	*111*		*30 - 150*

Lab Sample ID: MB 480-261294/1-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261294

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1221	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1232	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1242	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1248	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1254	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1260	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1262	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1
PCB-1268	<0.250		0.250	0.250	ug/L		08/31/15 14:23	09/01/15 11:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*
Tetrachloro-m-xylene	*100*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*
DCB Decachlorobiphenyl	*60*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*
DCB Decachlorobiphenyl	*70*		*30 - 150*	*08/31/15 14:23*	*09/01/15 11:12*	*1*

Lab Sample ID: LCS 480-261294/2-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261294

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016			4.00	3.703		ug/L		93	40 - 140
PCB-1260			4.00	3.634		ug/L		91	40 - 140

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: LCS 480-261294/2-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261294

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*30 - 150*
Tetrachloro-m-xylene	*99*		*30 - 150*
DCB Decachlorobiphenyl	*50*		*30 - 150*
DCB Decachlorobiphenyl	*57*		*30 - 150*

Lab Sample ID: LCSD 480-261294/3-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261294

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			4.00	3.692		ug/L		92	40 - 140	0	20
PCB-1260			4.00	3.594		ug/L		90	40 - 140	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*30 - 150*
Tetrachloro-m-xylene	*102*		*30 - 150*
DCB Decachlorobiphenyl	*50*		*30 - 150*
DCB Decachlorobiphenyl	*57*		*30 - 150*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-261388/1-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261388

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.186		0.466	0.186	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Arsenic	<0.373		0.932	0.373	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Barium	<0.103		0.466	0.103	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Beryllium	<0.0261		0.186	0.0261	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Cadmium	<0.0280		0.186	0.0280	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Chromium	<0.186		0.466	0.186	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Nickel	<0.214		0.932	0.214	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Thallium	<0.280		0.932	0.280	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Vanadium	<0.103		0.466	0.103	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Zinc	<0.596		2.33	0.596	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Lead	<0.224		0.466	0.224	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Selenium	<0.373		0.466	0.373	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Antimony	<0.373		0.466	0.373	mg/Kg		09/01/15 09:27	09/02/15 13:08	1
Copper	<0.196		0.932	0.196	mg/Kg		09/01/15 09:27	09/02/15 13:08	1

Lab Sample ID: LCDSRM 480-261388/3-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261388

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver			52.6	45.23		mg/Kg		86.0	66.7 - 133.5	4	30

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-261388/3-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261388

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	113	92.65		mg/Kg		82.0	69.7 - 142.5	2	30
Barium	155	145.5		mg/Kg		93.9	72.9 - 127.1	2	30
Beryllium	109	92.51		mg/Kg		84.9	74.7 - 124.8	3	30
Cadmium	67.5	58.73		mg/Kg		87.0	73.2 - 126.8	1	30
Chromium	164	149.6		mg/Kg		91.2	70.7 - 129.9	2	30
Nickel	89.3	86.93		mg/Kg		97.3	72.0 - 127.7	2	30
Thallium	116	114.7		mg/Kg		98.9	67.4 - 131.9	2	30
Vanadium	73.0	67.84		mg/Kg		92.9	59.7 - 139.7	4	30
Zinc	168	149.5		mg/Kg		89.0	69.0 - 131.5	4	30
Lead	90.1	86.91		mg/Kg		96.5	70.1 - 129.9	5	30
Selenium	156	136.9		mg/Kg		87.8	67.3 - 132.1	3	30
Antimony	94.0	70.75		mg/Kg		75.3	22.8 - 257.4	2	30
Copper	100	107.6		mg/Kg		107.6	96.2 - 161.0	2	30

Lab Sample ID: LCSSRM 480-261388/2-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261388

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	52.6	46.88		mg/Kg		89.1	66.7 - 133.5
Arsenic	113	94.92		mg/Kg		84.0	69.7 - 142.5
Barium	155	148.8		mg/Kg		96.0	72.9 - 127.1
Beryllium	109	95.09		mg/Kg		87.2	74.7 - 124.8
Cadmium	67.5	59.18		mg/Kg		87.7	73.2 - 126.8
Chromium	164	153.3		mg/Kg		93.5	70.7 - 129.9
Nickel	89.3	88.78		mg/Kg		99.4	72.0 - 127.7
Thallium	116	116.8		mg/Kg		100.7	67.4 - 131.9
Vanadium	73.0	70.49		mg/Kg		96.6	59.7 - 139.7
Zinc	168	155.1		mg/Kg		92.3	69.0 - 131.5
Lead	90.1	91.20		mg/Kg		101.2	70.1 - 129.9

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-261388/2-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261388

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Selenium			156	141.1		mg/Kg		90.5	67.3 - 132.1		
Antimony			94.0	71.91		mg/Kg		76.5	22.8 - 257.4		
Copper			100	110.2		mg/Kg		110.2	96.2 - 161.0		

Lab Sample ID: 480-86375-4 MS
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: SED-15
Prep Type: Total/NA
Prep Batch: 261388

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver	<0.623		31.0	28.85		mg/Kg	☼	93	75 - 125		
Arsenic	7.99		124	112.8		mg/Kg	☼	84	75 - 125		
Barium	123	F1	124	376.3	F1	mg/Kg	☼	204	75 - 125		
Beryllium	0.517	J	124	105.8		mg/Kg	☼	85	75 - 125		
Cadmium	2.57		124	112.6		mg/Kg	☼	89	75 - 125		
Chromium	91.4		124	208.1		mg/Kg	☼	94	75 - 125		
Nickel	22.9		124	137.5		mg/Kg	☼	92	75 - 125		
Thallium	<0.935		124	115.6		mg/Kg	☼	93	75 - 125		
Vanadium	35.8		124	162.1		mg/Kg	☼	102	75 - 125		
Zinc	398	F1	124	682.8	F1	mg/Kg	☼	230	75 - 125		
Lead	427	F1	124	538.1		mg/Kg	☼	89	75 - 125		
Selenium	<1.25		124	110.8		mg/Kg	☼	89	75 - 125		
Antimony	2.44		124	98.77		mg/Kg	☼	78	75 - 125		
Copper	146		124	279.3		mg/Kg	☼	107	75 - 125		

Lab Sample ID: 480-86375-4 MSD
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: SED-15
Prep Type: Total/NA
Prep Batch: 261388

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<0.623		30.0	28.09		mg/Kg	☼	94	75 - 125	3	35
Arsenic	7.99		120	108.5		mg/Kg	☼	84	75 - 125	4	35
Barium	123	F1	120	276.0	F1	mg/Kg	☼	128	75 - 125	31	35
Beryllium	0.517	J	120	102.2		mg/Kg	☼	85	75 - 125	3	35
Cadmium	2.57		120	108.3		mg/Kg	☼	88	75 - 125	4	35
Chromium	91.4		120	194.5		mg/Kg	☼	86	75 - 125	7	35
Nickel	22.9		120	132.3		mg/Kg	☼	91	75 - 125	4	35
Thallium	<0.935		120	111.2		mg/Kg	☼	93	75 - 125	4	35
Vanadium	35.8		120	153.1		mg/Kg	☼	98	75 - 125	6	35
Zinc	398	F1	120	608.4	F1	mg/Kg	☼	176	75 - 125	12	35
Lead	427	F1	120	437.6	F1	mg/Kg	☼	8	75 - 125	21	35
Selenium	<1.25		120	104.8		mg/Kg	☼	87	75 - 125	6	35
Antimony	2.44		120	98.63		mg/Kg	☼	80	75 - 125	0	35
Copper	146		120	287.0		mg/Kg	☼	117	75 - 125	3	35

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: MB 480-261392/1-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261392

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.188		0.470	0.188	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Arsenic	<0.376		0.940	0.376	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Barium	<0.103		0.470	0.103	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Beryllium	<0.0263		0.188	0.0263	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Cadmium	<0.0282		0.188	0.0282	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Chromium	<0.188		0.470	0.188	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Nickel	<0.216		0.940	0.216	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Thallium	<0.282		0.940	0.282	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Vanadium	<0.103		0.470	0.103	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Zinc	<0.602		2.35	0.602	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Lead	<0.226		0.470	0.226	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Selenium	<0.376		0.470	0.376	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Antimony	<0.376		0.470	0.376	mg/Kg		09/01/15 09:27	09/02/15 12:13	1
Copper	<0.197		0.940	0.197	mg/Kg		09/01/15 09:27	09/02/15 12:13	1

Lab Sample ID: LCDSRM 480-261392/3-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261392

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver			52.6	44.65		mg/Kg		84.9	66.7 - 133.5	4	30
Arsenic			113	92.66		mg/Kg		82.0	69.7 - 142.5	1	30
Barium			155	147.7		mg/Kg		95.3	72.9 - 127.1	0	30
Beryllium			109	92.45		mg/Kg		84.8	74.7 - 124.8	2	30
Cadmium			67.5	59.17		mg/Kg		87.7	73.2 - 126.8	2	30
Chromium			164	148.7		mg/Kg		90.7	70.7 - 129.9	1	30
Nickel			89.3	87.43		mg/Kg		97.9	72.0 - 127.7	0	30
Thallium			116	116.7		mg/Kg		100.6	67.4 - 131.9	1	30
Vanadium			73.0	67.39		mg/Kg		92.3	59.7 - 139.7	2	30
Zinc			168	147.8		mg/Kg		88.0	69.0 - 131.5	2	30
Lead			90.1	87.19		mg/Kg		96.8	70.1 - 129.9	3	30
Selenium			156	137.0		mg/Kg		87.8	67.3 - 132.1	0	30
Antimony			94.0	73.75		mg/Kg		78.5	22.8 - 257.4	3	30
Copper			100	105.8		mg/Kg		105.8	96.2 - 161.0	3	30

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-261392/2-A
Matrix: Solid
Analysis Batch: 261800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261392

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	52.6	46.38		mg/Kg		88.2	66.7 - 133.5
Arsenic	113	93.89		mg/Kg		83.1	69.7 - 142.5
Barium	155	147.0		mg/Kg		94.8	72.9 - 127.1
Beryllium	109	94.22		mg/Kg		86.4	74.7 - 124.8
Cadmium	67.5	58.08		mg/Kg		86.0	73.2 - 126.8
Chromium	164	150.5		mg/Kg		91.7	70.7 - 129.9
Nickel	89.3	87.28		mg/Kg		97.7	72.0 - 127.7
Thallium	116	115.9		mg/Kg		99.9	67.4 - 131.9
Vanadium	73.0	69.02		mg/Kg		94.5	59.7 - 139.7
Zinc	168	150.9		mg/Kg		89.8	69.0 - 131.5
Lead	90.1	89.60		mg/Kg		99.4	70.1 - 129.9
Selenium	156	136.3		mg/Kg		87.4	67.3 - 132.1
Antimony	94.0	71.49		mg/Kg		76.1	22.8 - 257.4
Copper	100	109.4		mg/Kg		109.4	96.2 - 161.0

Lab Sample ID: MB 480-261254/1-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		08/31/15 11:31	09/01/15 17:40	1
Arsenic	<5.55		10.0	5.55	ug/L		08/31/15 11:31	09/01/15 17:40	1
Barium	<0.700		10.0	0.700	ug/L		08/31/15 11:31	09/01/15 17:40	1
Beryllium	<0.300		1.00	0.300	ug/L		08/31/15 11:31	09/01/15 17:40	1
Cadmium	<0.500		1.00	0.500	ug/L		08/31/15 11:31	09/01/15 17:40	1
Chromium	<1.00		5.00	1.00	ug/L		08/31/15 11:31	09/01/15 17:40	1
Nickel	<1.26		10.0	1.26	ug/L		08/31/15 11:31	09/01/15 17:40	1
Thallium	<10.2		20.0	10.2	ug/L		08/31/15 11:31	09/01/15 17:40	1
Vanadium	<1.50		10.0	1.50	ug/L		08/31/15 11:31	09/01/15 17:40	1
Zinc	<1.50		50.0	1.50	ug/L		08/31/15 11:31	09/01/15 17:40	1
Lead	<3.00		5.00	3.00	ug/L		08/31/15 11:31	09/01/15 17:40	1
Selenium	<8.70		10.0	8.70	ug/L		08/31/15 11:31	09/01/15 17:40	1
Antimony	<6.79	^	6.00	6.79	ug/L		08/31/15 11:31	09/01/15 17:40	1
Copper	<1.60		10.0	1.60	ug/L		08/31/15 11:31	09/01/15 17:40	1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-261254/2-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	50.0	46.66		ug/L		93	80 - 120
Arsenic	200	193.2		ug/L		97	80 - 120
Barium	200	198.4		ug/L		99	80 - 120
Beryllium	200	200.2		ug/L		100	80 - 120
Cadmium	200	200.0		ug/L		100	80 - 120
Chromium	200	203.9		ug/L		102	80 - 120
Nickel	200	190.9		ug/L		95	80 - 120
Thallium	200	195.7		ug/L		98	80 - 120
Vanadium	200	198.2		ug/L		99	80 - 120
Zinc	200	194.5		ug/L		97	80 - 120
Lead	200	203.8		ug/L		102	80 - 120
Selenium	200	193.9		ug/L		97	80 - 120
Antimony	200	194.6	^	ug/L		97	80 - 120
Copper	200	194.6		ug/L		97	80 - 120

Lab Sample ID: LCSD 480-261254/3-A
Matrix: Water
Analysis Batch: 261549

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 261254

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	50.0	47.10		ug/L		94	80 - 120	1	20
Arsenic	200	190.7		ug/L		95	80 - 120	1	20
Barium	200	193.9		ug/L		97	80 - 120	2	20
Beryllium	200	196.6		ug/L		98	80 - 120	2	20
Cadmium	200	196.6		ug/L		98	80 - 120	2	20
Chromium	200	198.7		ug/L		99	80 - 120	3	20
Nickel	200	186.5		ug/L		93	80 - 120	2	20
Thallium	200	192.2		ug/L		96	80 - 120	2	20
Vanadium	200	192.6		ug/L		96	80 - 120	3	20
Zinc	200	192.1		ug/L		96	80 - 120	1	20
Lead	200	199.5		ug/L		100	80 - 120	2	20
Selenium	200	187.6		ug/L		94	80 - 120	3	20
Antimony	200	192.3	^	ug/L		96	80 - 120	1	20
Copper	200	191.8		ug/L		96	80 - 120	1	20

Lab Sample ID: 480-86375-5 MS
Matrix: Water
Analysis Batch: 261549

Client Sample ID: SW-17
Prep Type: Dissolved
Prep Batch: 261254

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<1.70		50.0	47.56		ug/L		95	75 - 125
Arsenic	<5.55		200	199.5		ug/L		100	75 - 125
Barium	64.4		200	254.5		ug/L		95	75 - 125
Beryllium	<0.300		200	201.2		ug/L		101	75 - 125
Cadmium	<0.500		200	201.2		ug/L		101	75 - 125
Chromium	<1.00		200	202.1		ug/L		101	75 - 125
Nickel	<1.26		200	193.8		ug/L		97	75 - 125
Thallium	<10.2		200	194.6		ug/L		97	75 - 125

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: 480-86375-5 MS
Matrix: Water
Analysis Batch: 261549

Client Sample ID: SW-17
Prep Type: Dissolved
Prep Batch: 261254

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	<1.50		200	197.0		ug/L		98	75 - 125
Zinc	5.57	J	200	199.2		ug/L		97	75 - 125
Lead	<3.00		200	205.4		ug/L		103	75 - 125
Selenium	<8.70		200	194.8		ug/L		97	75 - 125
Antimony	<6.79	^	200	194.7	^	ug/L		97	75 - 125
Copper	2.44	J	200	196.8		ug/L		97	75 - 125

Lab Sample ID: 480-86375-5 MSD
Matrix: Water
Analysis Batch: 261549

Client Sample ID: SW-17
Prep Type: Dissolved
Prep Batch: 261254

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<1.70		50.0	48.84		ug/L		98	75 - 125	3	20
Arsenic	<5.55		200	199.4		ug/L		100	75 - 125	0	20
Barium	64.4		200	257.7		ug/L		97	75 - 125	1	20
Beryllium	<0.300		200	203.6		ug/L		102	75 - 125	1	20
Cadmium	<0.500		200	203.0		ug/L		102	75 - 125	1	20
Chromium	<1.00		200	203.6		ug/L		102	75 - 125	1	20
Nickel	<1.26		200	195.2		ug/L		98	75 - 125	1	20
Thallium	<10.2		200	197.1		ug/L		99	75 - 125	1	20
Vanadium	<1.50		200	198.6		ug/L		99	75 - 125	1	20
Zinc	5.57	J	200	202.1		ug/L		98	75 - 125	1	20
Lead	<3.00		200	207.6		ug/L		104	75 - 125	1	20
Selenium	<8.70		200	199.3		ug/L		100	75 - 125	2	20
Antimony	<6.79	^	200	197.3	^	ug/L		99	75 - 125	1	20
Copper	2.44	J	200	198.0		ug/L		98	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-260081/1-D
Matrix: Water
Analysis Batch: 261361

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 261196

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		08/31/15 09:45	08/31/15 14:00	1

Lab Sample ID: LCS 480-260081/2-C
Matrix: Water
Analysis Batch: 261361

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 261196

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	6.67	6.350		ug/L		95	80 - 120

Lab Sample ID: LCSD 480-260081/3-C
Matrix: Water
Analysis Batch: 261361

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved
Prep Batch: 261196

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	6.67	6.300		ug/L		94	80 - 120	1	20

Lab Sample ID: 480-86375-7 MS
Matrix: Water
Analysis Batch: 261361

Client Sample ID: REF-SW-01
Prep Type: Dissolved
Prep Batch: 261196

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.142	J	6.67	6.783		ug/L		100	75 - 125

Lab Sample ID: 480-86375-7 MSD
Matrix: Water
Analysis Batch: 261361

Client Sample ID: REF-SW-01
Prep Type: Dissolved
Prep Batch: 261196

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.142	J	6.67	6.717		ug/L		99	75 - 125	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-261276/1-A
Matrix: Solid
Analysis Batch: 261461

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00814		0.101	0.00814	mg/Kg		09/01/15 08:30	09/01/15 11:46	1

Lab Sample ID: LCDSRM 480-261276/3-A
Matrix: Solid
Analysis Batch: 261461

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261276

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	8.37	8.411		mg/Kg		100.5	51.3 - 148.1	8	

Lab Sample ID: LCSSRM 480-261276/2-A
Matrix: Solid
Analysis Batch: 261461

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261276

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	8.37	9.093		mg/Kg		108.6	51.3 - 148.1

Lab Sample ID: 480-86375-4 MS
Matrix: Solid
Analysis Batch: 261461

Client Sample ID: SED-15
Prep Type: Total/NA
Prep Batch: 261276

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.16	F1	1.04	3.014	F1	mg/Kg	☼	178	75 - 125

Lab Sample ID: 480-86375-4 MSD
Matrix: Solid
Analysis Batch: 261461

Client Sample ID: SED-15
Prep Type: Total/NA
Prep Batch: 261276

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	1.16	F1	1.05	2.904	F1	mg/Kg	☼	167	75 - 125	4	35

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 480-261715/3
Matrix: Water
Analysis Batch: 261715

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<0.525		2.00	0.525	mg/L			09/02/15 11:30	1

Lab Sample ID: MB 480-261715/50
Matrix: Water
Analysis Batch: 261715

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<0.525		2.00	0.525	mg/L			09/02/15 11:30	1

Lab Sample ID: LCS 480-261715/4
Matrix: Water
Analysis Batch: 261715

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362	368.0		mg/L		102	90 - 110

Lab Sample ID: LCS 480-261715/51
Matrix: Water
Analysis Batch: 261715

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362	360.0		mg/L		99	90 - 110

Lab Sample ID: MB 480-262156/27
Matrix: Water
Analysis Batch: 262156

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<0.525		2.00	0.525	mg/L			09/04/15 10:30	1

Lab Sample ID: MB 480-262156/51
Matrix: Water
Analysis Batch: 262156

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	<0.525		2.00	0.525	mg/L			09/04/15 10:30	1

Lab Sample ID: LCS 480-262156/28
Matrix: Water
Analysis Batch: 262156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362	356.0		mg/L		98	90 - 110

Lab Sample ID: LCS 480-262156/52
Matrix: Water
Analysis Batch: 262156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	362	356.0		mg/L		98	90 - 110

Lab Sample ID: 480-86375-15 MS
Matrix: Water
Analysis Batch: 261715

Client Sample ID: REF-PW-03
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness as calcium carbonate	20.0		200	236.0		mg/L		108	74 - 130		

Lab Sample ID: 480-86375-14 DU
Matrix: Water
Analysis Batch: 261715

Client Sample ID: REF-SW-03
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hardness as calcium carbonate	80.0		80.00		mg/L		0	15

Lab Sample ID: 480-86375-8 MS
Matrix: Water
Analysis Batch: 262156

Client Sample ID: REF-PW-01
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness as calcium carbonate	348		200	560.0		mg/L		106	74 - 130		

Lab Sample ID: 480-86375-11 MS
Matrix: Water
Analysis Batch: 262156

Client Sample ID: REF-PW-02
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hardness as calcium carbonate	112		200	324.0		mg/L		106	74 - 130		

Lab Sample ID: 480-86375-7 DU
Matrix: Water
Analysis Batch: 262156

Client Sample ID: REF-SW-01
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hardness as calcium carbonate	88.0		84.00		mg/L		5	15

Lab Sample ID: 480-86375-11 DU
Matrix: Water
Analysis Batch: 262156

Client Sample ID: REF-PW-02
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hardness as calcium carbonate	112		116.0		mg/L		4	15

GC/MS VOA

Analysis Batch: 261184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-1	TB-03	Total/NA	Water	8260C	
480-86375-5	SW-17	Total/NA	Water	8260C	
480-86375-7	REF-SW-01	Total/NA	Water	8260C	
480-86375-8	REF-PW-01	Total/NA	Water	8260C	
480-86375-10	REF-SW-02	Total/NA	Water	8260C	
480-86375-11	REF-PW-02	Total/NA	Water	8260C	
480-86375-12	TB-04	Total/NA	Water	8260C	
480-86375-14	REF-SW-03	Total/NA	Water	8260C	
480-86375-15	REF-PW-03	Total/NA	Water	8260C	
480-86375-17	REF-SW-04	Total/NA	Water	8260C	
480-86375-22	SW-18	Total/NA	Water	8260C	
LCS 480-261184/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-261184/41	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-261184/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 261208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	8260C	261236
480-86375-3	SED-12 (DUP)	Total/NA	Solid	8260C	261236
480-86375-4	SED-15	Total/NA	Solid	8260C	261236
480-86375-6	SED-17	Total/NA	Solid	8260C	261236
480-86375-9	REF-SED-01	Total/NA	Solid	8260C	261236
480-86375-13	REF-SED-02	Total/NA	Solid	8260C	261236
480-86375-16	REF-SED-03	Total/NA	Solid	8260C	261236
480-86375-18	REF-SED-04	Total/NA	Solid	8260C	261236
480-86375-19	SED-13	Total/NA	Solid	8260C	261236
480-86375-20	SED-14	Total/NA	Solid	8260C	261236
480-86375-21	SED-16	Total/NA	Solid	8260C	261236
480-86375-23	TB-03	Total/NA	Solid	8260C	261236
480-86375-24	TB-04	Total/NA	Solid	8260C	261236
LCS 480-261236/1-A	Lab Control Sample	Total/NA	Solid	8260C	261236
LCSD 480-261236/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	261236
MB 480-261236/3-A	Method Blank	Total/NA	Solid	8260C	261236

Prep Batch: 261236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	5035A	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	5035A	
480-86375-4	SED-15	Total/NA	Solid	5035A	
480-86375-6	SED-17	Total/NA	Solid	5035A	
480-86375-9	REF-SED-01	Total/NA	Solid	5035A	
480-86375-13	REF-SED-02	Total/NA	Solid	5035A	
480-86375-16	REF-SED-03	Total/NA	Solid	5035A	
480-86375-18	REF-SED-04	Total/NA	Solid	5035A	
480-86375-19	SED-13	Total/NA	Solid	5035A	
480-86375-20	SED-14	Total/NA	Solid	5035A	
480-86375-21	SED-16	Total/NA	Solid	5035A	
480-86375-23	TB-03	Total/NA	Solid	5035A	
480-86375-24	TB-04	Total/NA	Solid	5035A	
LCS 480-261236/1-A	Lab Control Sample	Total/NA	Solid	5035A	
LCSD 480-261236/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A	

GC/MS VOA (Continued)

Prep Batch: 261236 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-261236/3-A	Method Blank	Total/NA	Solid	5035A	

Analysis Batch: 261576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-4	SED-15	Total/NA	Solid	8260C	261608
LCS 480-261608/1-A	Lab Control Sample	Total/NA	Solid	8260C	261608
LCSD 480-261608/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	261608
MB 480-261608/3-A	Method Blank	Total/NA	Solid	8260C	261608

Prep Batch: 261608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	5035A	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	5035A	
480-86375-4	SED-15	Total/NA	Solid	5035A	
LCS 480-261608/1-A	Lab Control Sample	Total/NA	Solid	5035A	
LCSD 480-261608/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A	
MB 480-261608/3-A	Method Blank	Total/NA	Solid	5035A	

Analysis Batch: 261728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	8260C	261608
480-86375-3	SED-12 (DUP)	Total/NA	Solid	8260C	261608

GC Semi VOA

Prep Batch: 196101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	3540C	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	3540C	
480-86375-4	SED-15	Total/NA	Solid	3540C	
480-86375-6	SED-17	Total/NA	Solid	3540C	
480-86375-9	REF-SED-01	Total/NA	Solid	3540C	
480-86375-13	REF-SED-02	Total/NA	Solid	3540C	
480-86375-16	REF-SED-03	Total/NA	Solid	3540C	
480-86375-18	REF-SED-04	Total/NA	Solid	3540C	
480-86375-19	SED-13	Total/NA	Solid	3540C	
480-86375-20	SED-14	Total/NA	Solid	3540C	
480-86375-21	SED-16	Total/NA	Solid	3540C	
LCS 240-196101/7-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-196101/20-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-196101/6-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 196511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	8082	196101
480-86375-3	SED-12 (DUP)	Total/NA	Solid	8082	196101
480-86375-6	SED-17	Total/NA	Solid	8082	196101
480-86375-9	REF-SED-01	Total/NA	Solid	8082	196101
480-86375-13	REF-SED-02	Total/NA	Solid	8082	196101
480-86375-16	REF-SED-03	Total/NA	Solid	8082	196101

GC Semi VOA (Continued)

Analysis Batch: 196511 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-18	REF-SED-04	Total/NA	Solid	8082	196101
480-86375-19	SED-13	Total/NA	Solid	8082	196101
480-86375-20	SED-14	Total/NA	Solid	8082	196101
480-86375-21	SED-16	Total/NA	Solid	8082	196101
LCS 240-196101/7-A	Lab Control Sample	Total/NA	Solid	8082	196101
LCSD 240-196101/20-A	Lab Control Sample Dup	Total/NA	Solid	8082	196101
MB 240-196101/6-A	Method Blank	Total/NA	Solid	8082	196101

Analysis Batch: 196704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-4	SED-15	Total/NA	Solid	8082	196101

Prep Batch: 261294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Total/NA	Water	3510C	
480-86375-7	REF-SW-01	Total/NA	Water	3510C	
480-86375-8	REF-PW-01	Total/NA	Water	3510C	
480-86375-10	REF-SW-02	Total/NA	Water	3510C	
480-86375-11	REF-PW-02	Total/NA	Water	3510C	
480-86375-14	REF-SW-03	Total/NA	Water	3510C	
480-86375-15	REF-PW-03	Total/NA	Water	3510C	
480-86375-17	REF-SW-04	Total/NA	Water	3510C	
480-86375-22	SW-18	Total/NA	Water	3510C	
LCS 480-261294/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-261294/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-261294/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 261409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Total/NA	Water	8082	261294
480-86375-7	REF-SW-01	Total/NA	Water	8082	261294
480-86375-8	REF-PW-01	Total/NA	Water	8082	261294
480-86375-10	REF-SW-02	Total/NA	Water	8082	261294
480-86375-11	REF-PW-02	Total/NA	Water	8082	261294
480-86375-14	REF-SW-03	Total/NA	Water	8082	261294
480-86375-15	REF-PW-03	Total/NA	Water	8082	261294
480-86375-17	REF-SW-04	Total/NA	Water	8082	261294
480-86375-22	SW-18	Total/NA	Water	8082	261294
LCS 480-261294/2-A	Lab Control Sample	Total/NA	Water	8082	261294
LCSD 480-261294/3-A	Lab Control Sample Dup	Total/NA	Water	8082	261294
MB 480-261294/1-A	Method Blank	Total/NA	Water	8082	261294

Metals

Filtration Batch: 260081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-260081/2-C	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 480-260081/3-C	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
MB 480-260081/1-D	Method Blank	Dissolved	Water	FILTRATION	

Metals (Continued)

Prep Batch: 261196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Dissolved	Water	7470A	
480-86375-7	REF-SW-01	Dissolved	Water	7470A	
480-86375-7 MS	REF-SW-01	Dissolved	Water	7470A	
480-86375-7 MSD	REF-SW-01	Dissolved	Water	7470A	
480-86375-8	REF-PW-01	Dissolved	Water	7470A	
480-86375-10	REF-SW-02	Dissolved	Water	7470A	
480-86375-11	REF-PW-02	Dissolved	Water	7470A	
480-86375-14	REF-SW-03	Dissolved	Water	7470A	
480-86375-15	REF-PW-03	Dissolved	Water	7470A	
480-86375-17	REF-SW-04	Dissolved	Water	7470A	
480-86375-22	SW-18	Dissolved	Water	7470A	
LCS 480-260081/2-C	Lab Control Sample	Dissolved	Water	7470A	260081
LCSD 480-260081/3-C	Lab Control Sample Dup	Dissolved	Water	7470A	260081
MB 480-260081/1-D	Method Blank	Dissolved	Water	7470A	260081

Prep Batch: 261254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Dissolved	Water	3005A	
480-86375-5 MS	SW-17	Dissolved	Water	3005A	
480-86375-5 MSD	SW-17	Dissolved	Water	3005A	
480-86375-7	REF-SW-01	Dissolved	Water	3005A	
480-86375-8	REF-PW-01	Dissolved	Water	3005A	
480-86375-10	REF-SW-02	Dissolved	Water	3005A	
480-86375-11	REF-PW-02	Dissolved	Water	3005A	
480-86375-14	REF-SW-03	Dissolved	Water	3005A	
480-86375-15	REF-PW-03	Dissolved	Water	3005A	
480-86375-17	REF-SW-04	Dissolved	Water	3005A	
480-86375-22	SW-18	Dissolved	Water	3005A	
LCS 480-261254/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 480-261254/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 480-261254/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 261276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	7471A	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	7471A	
480-86375-4	SED-15	Total/NA	Solid	7471A	
480-86375-4 MS	SED-15	Total/NA	Solid	7471A	
480-86375-4 MSD	SED-15	Total/NA	Solid	7471A	
480-86375-6	SED-17	Total/NA	Solid	7471A	
480-86375-9	REF-SED-01	Total/NA	Solid	7471A	
480-86375-13	REF-SED-02	Total/NA	Solid	7471A	
480-86375-16	REF-SED-03	Total/NA	Solid	7471A	
480-86375-18	REF-SED-04	Total/NA	Solid	7471A	
480-86375-19	SED-13	Total/NA	Solid	7471A	
480-86375-20	SED-14	Total/NA	Solid	7471A	
480-86375-21	SED-16	Total/NA	Solid	7471A	
LCDSRM 480-261276/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-261276/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-261276/1-A	Method Blank	Total/NA	Solid	7471A	

Metals (Continued)

Analysis Batch: 261361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Dissolved	Water	7470A	261196
480-86375-7	REF-SW-01	Dissolved	Water	7470A	261196
480-86375-7 MS	REF-SW-01	Dissolved	Water	7470A	261196
480-86375-7 MSD	REF-SW-01	Dissolved	Water	7470A	261196
480-86375-8	REF-PW-01	Dissolved	Water	7470A	261196
480-86375-10	REF-SW-02	Dissolved	Water	7470A	261196
480-86375-11	REF-PW-02	Dissolved	Water	7470A	261196
480-86375-14	REF-SW-03	Dissolved	Water	7470A	261196
480-86375-15	REF-PW-03	Dissolved	Water	7470A	261196
480-86375-17	REF-SW-04	Dissolved	Water	7470A	261196
480-86375-22	SW-18	Dissolved	Water	7470A	261196
LCS 480-260081/2-C	Lab Control Sample	Dissolved	Water	7470A	261196
LCSD 480-260081/3-C	Lab Control Sample Dup	Dissolved	Water	7470A	261196
MB 480-260081/1-D	Method Blank	Dissolved	Water	7470A	261196

Prep Batch: 261388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	3050B	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	3050B	
480-86375-4	SED-15	Total/NA	Solid	3050B	
480-86375-4 MS	SED-15	Total/NA	Solid	3050B	
480-86375-4 MSD	SED-15	Total/NA	Solid	3050B	
480-86375-6	SED-17	Total/NA	Solid	3050B	
480-86375-9	REF-SED-01	Total/NA	Solid	3050B	
480-86375-13	REF-SED-02	Total/NA	Solid	3050B	
480-86375-16	REF-SED-03	Total/NA	Solid	3050B	
LCDSRM 480-261388/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-261388/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-261388/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 261392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-18	REF-SED-04	Total/NA	Solid	3050B	
480-86375-19	SED-13	Total/NA	Solid	3050B	
480-86375-20	SED-14	Total/NA	Solid	3050B	
480-86375-21	SED-16	Total/NA	Solid	3050B	
LCDSRM 480-261392/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-261392/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-261392/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 261461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	7471A	261276
480-86375-3	SED-12 (DUP)	Total/NA	Solid	7471A	261276
480-86375-4	SED-15	Total/NA	Solid	7471A	261276
480-86375-4 MS	SED-15	Total/NA	Solid	7471A	261276
480-86375-4 MSD	SED-15	Total/NA	Solid	7471A	261276
480-86375-6	SED-17	Total/NA	Solid	7471A	261276
480-86375-9	REF-SED-01	Total/NA	Solid	7471A	261276
480-86375-13	REF-SED-02	Total/NA	Solid	7471A	261276
480-86375-16	REF-SED-03	Total/NA	Solid	7471A	261276

Metals (Continued)

Analysis Batch: 261461 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-18	REF-SED-04	Total/NA	Solid	7471A	261276
480-86375-19	SED-13	Total/NA	Solid	7471A	261276
480-86375-20	SED-14	Total/NA	Solid	7471A	261276
480-86375-21	SED-16	Total/NA	Solid	7471A	261276
LCDSRM 480-261276/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	261276
LCSSRM 480-261276/2-A	Lab Control Sample	Total/NA	Solid	7471A	261276
MB 480-261276/1-A	Method Blank	Total/NA	Solid	7471A	261276

Analysis Batch: 261549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Dissolved	Water	6010	261254
480-86375-5 MS	SW-17	Dissolved	Water	6010	261254
480-86375-5 MSD	SW-17	Dissolved	Water	6010	261254
480-86375-7	REF-SW-01	Dissolved	Water	6010	261254
480-86375-8	REF-PW-01	Dissolved	Water	6010	261254
480-86375-10	REF-SW-02	Dissolved	Water	6010	261254
480-86375-11	REF-PW-02	Dissolved	Water	6010	261254
480-86375-14	REF-SW-03	Dissolved	Water	6010	261254
480-86375-15	REF-PW-03	Dissolved	Water	6010	261254
480-86375-17	REF-SW-04	Dissolved	Water	6010	261254
480-86375-22	SW-18	Dissolved	Water	6010	261254
LCS 480-261254/2-A	Lab Control Sample	Total Recoverable	Water	6010	261254
LCSD 480-261254/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010	261254
MB 480-261254/1-A	Method Blank	Total Recoverable	Water	6010	261254

Analysis Batch: 261800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	6010	261388
480-86375-3	SED-12 (DUP)	Total/NA	Solid	6010	261388
480-86375-4	SED-15	Total/NA	Solid	6010	261388
480-86375-4 MS	SED-15	Total/NA	Solid	6010	261388
480-86375-4 MSD	SED-15	Total/NA	Solid	6010	261388
480-86375-6	SED-17	Total/NA	Solid	6010	261388
480-86375-9	REF-SED-01	Total/NA	Solid	6010	261388
480-86375-13	REF-SED-02	Total/NA	Solid	6010	261388
480-86375-16	REF-SED-03	Total/NA	Solid	6010	261388
480-86375-18	REF-SED-04	Total/NA	Solid	6010	261392
480-86375-18	REF-SED-04	Total/NA	Solid	6010	261392
480-86375-19	SED-13	Total/NA	Solid	6010	261392
480-86375-20	SED-14	Total/NA	Solid	6010	261392
480-86375-21	SED-16	Total/NA	Solid	6010	261392
LCDSRM 480-261388/3-A	Lab Control Sample Dup	Total/NA	Solid	6010	261388
LCDSRM 480-261392/3-A	Lab Control Sample Dup	Total/NA	Solid	6010	261392
LCSSRM 480-261388/2-A	Lab Control Sample	Total/NA	Solid	6010	261388
LCSSRM 480-261392/2-A	Lab Control Sample	Total/NA	Solid	6010	261392
MB 480-261388/1-A	Method Blank	Total/NA	Solid	6010	261388
MB 480-261392/1-A	Method Blank	Total/NA	Solid	6010	261392

General Chemistry

Analysis Batch: 261146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	Moisture	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	Moisture	
480-86375-4	SED-15	Total/NA	Solid	Moisture	
480-86375-4 MS	SED-15	Total/NA	Solid	Moisture	
480-86375-4 MSD	SED-15	Total/NA	Solid	Moisture	
480-86375-6	SED-17	Total/NA	Solid	Moisture	
480-86375-9	REF-SED-01	Total/NA	Solid	Moisture	
480-86375-13	REF-SED-02	Total/NA	Solid	Moisture	
480-86375-16	REF-SED-03	Total/NA	Solid	Moisture	
480-86375-18	REF-SED-04	Total/NA	Solid	Moisture	
480-86375-19	SED-13	Total/NA	Solid	Moisture	
480-86375-20	SED-14	Total/NA	Solid	Moisture	
480-86375-21	SED-16	Total/NA	Solid	Moisture	

Analysis Batch: 261715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-14	REF-SW-03	Dissolved	Water	SM 2340C	
480-86375-14 DU	REF-SW-03	Dissolved	Water	SM 2340C	
480-86375-15	REF-PW-03	Dissolved	Water	SM 2340C	
480-86375-15 MS	REF-PW-03	Dissolved	Water	SM 2340C	
480-86375-17	REF-SW-04	Dissolved	Water	SM 2340C	
480-86375-22	SW-18	Dissolved	Water	SM 2340C	
LCS 480-261715/4	Lab Control Sample	Total/NA	Water	SM 2340C	
LCS 480-261715/51	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 480-261715/3	Method Blank	Total/NA	Water	SM 2340C	
MB 480-261715/50	Method Blank	Total/NA	Water	SM 2340C	

Analysis Batch: 262156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-5	SW-17	Dissolved	Water	SM 2340C	
480-86375-7	REF-SW-01	Dissolved	Water	SM 2340C	
480-86375-7 DU	REF-SW-01	Dissolved	Water	SM 2340C	
480-86375-8	REF-PW-01	Dissolved	Water	SM 2340C	
480-86375-8 MS	REF-PW-01	Dissolved	Water	SM 2340C	
480-86375-10	REF-SW-02	Dissolved	Water	SM 2340C	
480-86375-11	REF-PW-02	Dissolved	Water	SM 2340C	
480-86375-11 DU	REF-PW-02	Dissolved	Water	SM 2340C	
480-86375-11 MS	REF-PW-02	Dissolved	Water	SM 2340C	
LCS 480-262156/28	Lab Control Sample	Total/NA	Water	SM 2340C	
LCS 480-262156/52	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 480-262156/27	Method Blank	Total/NA	Water	SM 2340C	
MB 480-262156/51	Method Blank	Total/NA	Water	SM 2340C	

Geotechnical

Analysis Batch: 93493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-2	SED-12	Total/NA	Solid	D2974	
480-86375-3	SED-12 (DUP)	Total/NA	Solid	D2974	
480-86375-4	SED-15	Total/NA	Solid	D2974	

Geotechnical (Continued)

Analysis Batch: 93493 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86375-6	SED-17	Total/NA	Solid	D2974	
480-86375-9	REF-SED-01	Total/NA	Solid	D2974	
480-86375-13	REF-SED-02	Total/NA	Solid	D2974	
480-86375-16	REF-SED-03	Total/NA	Solid	D2974	
480-86375-18	REF-SED-04	Total/NA	Solid	D2974	
480-86375-19	SED-13	Total/NA	Solid	D2974	
480-86375-20	SED-14	Total/NA	Solid	D2974	
480-86375-21	SED-16	Total/NA	Solid	D2974	

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: TB-03
Date Collected: 08/26/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 12:07	SWO	TAL BUF

Client Sample ID: SED-12
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-12
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-2
Matrix: Solid
Percent Solids: 31.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 13:53	NQN	TAL BUF
Total/NA	Prep	5035A			261608	08/29/15 04:10	GTG	TAL BUF
Total/NA	Analysis	8260C		1	261728	09/03/15 00:15	GTG	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		50	196511	09/08/15 11:33	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 14:32	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:05	TAS	TAL BUF

Client Sample ID: SED-12 (DUP)
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-12 (DUP)
Date Collected: 08/26/15 15:43
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-3
Matrix: Solid
Percent Solids: 32.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 14:19	NQN	TAL BUF
Total/NA	Prep	5035A			261608	08/29/15 04:10	GTG	TAL BUF

Client Sample ID: SED-12 (DUP)

Lab Sample ID: 480-86375-3
Date Collected: 08/26/15 15:43
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 32.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261728	09/03/15 00:39	GTG	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		50	196511	09/08/15 12:11	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 14:35	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:11	TAS	TAL BUF

Client Sample ID: SED-15

Lab Sample ID: 480-86375-4
Date Collected: 08/27/15 08:15
Matrix: Solid
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-15

Lab Sample ID: 480-86375-4
Date Collected: 08/27/15 08:15
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 31.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 14:45	NQN	TAL BUF
Total/NA	Prep	5035A			261608	08/29/15 04:10	GTG	TAL BUF
Total/NA	Analysis	8260C		1	261576	09/02/15 13:20	GTG	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		10	196704	09/09/15 09:06	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 14:38	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		2	261461	09/01/15 13:10	TAS	TAL BUF

Client Sample ID: SW-17

Lab Sample ID: 480-86375-5
Date Collected: 08/27/15 08:50
Matrix: Water
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 12:55	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 11:59	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 17:48	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF

Client Sample ID: SW-17

Lab Sample ID: 480-86375-5
Date Collected: 08/27/15 08:50
Matrix: Water
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	261361	08/31/15 14:07	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	262156	09/04/15 10:30	MDL	TAL BUF

Client Sample ID: SED-17

Lab Sample ID: 480-86375-6
Date Collected: 08/27/15 09:00
Matrix: Solid
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-17

Lab Sample ID: 480-86375-6
Date Collected: 08/27/15 09:00
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 28.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 15:11	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		5	196511	09/08/15 12:30	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 15:01	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:20	TAS	TAL BUF

Client Sample ID: REF-SW-01

Lab Sample ID: 480-86375-7
Date Collected: 08/27/15 09:40
Matrix: Water
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 13:19	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 12:15	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:11	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:08	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	262156	09/04/15 10:30	MDL	TAL BUF

Client Sample ID: REF-PW-01

Lab Sample ID: 480-86375-8
Matrix: Water
Date Collected: 08/27/15 09:55
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 13:43	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 12:31	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:14	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:19	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	262156	09/04/15 10:30	MDL	TAL BUF

Client Sample ID: REF-SED-01

Lab Sample ID: 480-86375-9
Matrix: Solid
Date Collected: 08/27/15 10:10
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: REF-SED-01

Lab Sample ID: 480-86375-9
Matrix: Solid
Date Collected: 08/27/15 10:10
Date Received: 08/29/15 02:15
Percent Solids: 60.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 15:37	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		1	196511	09/08/15 12:49	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 15:03	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:22	TAS	TAL BUF

Client Sample ID: REF-SW-02

Lab Sample ID: 480-86375-10
Matrix: Water
Date Collected: 08/27/15 10:55
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 14:06	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 12:47	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:17	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:20	TAS	TAL BUF

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	SM 2340C		1	262156	09/04/15 10:30	MDL	TAL BUF

Client Sample ID: REF-PW-02
Lab Sample ID: 480-86375-11
Date Collected: 08/27/15 11:30
Matrix: Water
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 14:30	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 13:03	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:19	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:22	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	262156	09/04/15 10:30	MDL	TAL BUF

Client Sample ID: TB-04
Lab Sample ID: 480-86375-12
Date Collected: 08/27/15 00:00
Matrix: Water
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 12:31	SWO	TAL BUF

Client Sample ID: REF-SED-02
Lab Sample ID: 480-86375-13
Date Collected: 08/27/15 11:50
Matrix: Solid
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: REF-SED-02
Lab Sample ID: 480-86375-13
Date Collected: 08/27/15 11:50
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 22.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 16:03	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		5	196511	09/08/15 13:09	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 15:06	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:25	TAS	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: REF-SW-03

Lab Sample ID: 480-86375-14
Matrix: Water
Date Collected: 08/27/15 12:10
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 14:54	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 13:19	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:22	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:24	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	261715	09/02/15 11:30	MDL	TAL BUF

Client Sample ID: REF-PW-03

Lab Sample ID: 480-86375-15
Matrix: Water
Date Collected: 08/27/15 12:30
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 15:42	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 13:35	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:25	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:25	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	261715	09/02/15 11:30	MDL	TAL BUF

Client Sample ID: REF-SED-03

Lab Sample ID: 480-86375-16
Matrix: Solid
Date Collected: 08/27/15 12:45
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: REF-SED-03

Lab Sample ID: 480-86375-16
Matrix: Solid
Date Collected: 08/27/15 12:45
Percent Solids: 82.0
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 16:29	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		1	196511	09/08/15 13:28	LSH	TAL CAN
Total/NA	Prep	3050B			261388	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 15:09	AMH	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: REF-SED-03

Lab Sample ID: 480-86375-16
Date Collected: 08/27/15 12:45
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:27	TAS	TAL BUF

Client Sample ID: REF-SW-04

Lab Sample ID: 480-86375-17
Date Collected: 08/27/15 13:05
Matrix: Water
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 16:06	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 14:22	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:37	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:27	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	261715	09/02/15 11:30	MDL	TAL BUF

Client Sample ID: REF-SED-04

Lab Sample ID: 480-86375-18
Date Collected: 08/27/15 13:20
Matrix: Solid
Date Received: 08/29/15 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: REF-SED-04

Lab Sample ID: 480-86375-18
Date Collected: 08/27/15 13:20
Matrix: Solid
Date Received: 08/29/15 02:15
Percent Solids: 46.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 16:55	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		5	196511	09/08/15 15:22	LSH	TAL CAN
Total/NA	Prep	3050B			261392	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 15:30	AMH	TAL BUF
Total/NA	Prep	3050B			261392	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		5	261800	09/02/15 15:32	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:29	TAS	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: SED-13
Date Collected: 08/27/15 14:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-13
Date Collected: 08/27/15 14:30
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-19
Matrix: Solid
Percent Solids: 35.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 17:21	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		5	196511	09/08/15 15:41	LSH	TAL CAN
Total/NA	Prep	3050B			261392	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 12:33	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:35	TAS	TAL BUF

Client Sample ID: SED-14
Date Collected: 08/27/15 14:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-14
Date Collected: 08/27/15 14:40
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-20
Matrix: Solid
Percent Solids: 50.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 17:47	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		5	196511	09/08/15 16:00	LSH	TAL CAN
Total/NA	Prep	3050B			261392	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 12:36	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:37	TAS	TAL BUF

Client Sample ID: SED-16
Date Collected: 08/27/15 14:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	261146	08/29/15 15:43	CMK	TAL BUF
Total/NA	Analysis	D2974		1	93493	09/01/15 15:42	VTP	TAL BUR

Client Sample ID: SED-16
Date Collected: 08/27/15 14:55
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-21
Matrix: Solid
Percent Solids: 40.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 18:12	NQN	TAL BUF
Total/NA	Prep	3540C			196101	09/03/15 08:19	NAK	TAL CAN
Total/NA	Analysis	8082		5	196511	09/08/15 16:20	LSH	TAL CAN
Total/NA	Prep	3050B			261392	09/01/15 09:27	CMM	TAL BUF
Total/NA	Analysis	6010		1	261800	09/02/15 12:38	AMH	TAL BUF
Total/NA	Prep	7471A			261276	09/01/15 08:30	TAS	TAL BUF
Total/NA	Analysis	7471A		1	261461	09/01/15 12:39	TAS	TAL BUF

Client Sample ID: SW-18
Date Collected: 08/27/15 15:15
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	261184	08/31/15 16:30	SWO	TAL BUF
Total/NA	Prep	3510C			261294	08/31/15 14:23	VNP	TAL BUF
Total/NA	Analysis	8082		1	261409	09/01/15 14:38	KS	TAL BUF
Dissolved	Prep	3005A			261254	08/31/15 11:31	KJ1	TAL BUF
Dissolved	Analysis	6010		1	261549	09/01/15 18:40	LMH	TAL BUF
Dissolved	Prep	7470A			261196	08/31/15 09:45	TAS	TAL BUF
Dissolved	Analysis	7470A		1	261361	08/31/15 14:29	TAS	TAL BUF
Dissolved	Analysis	SM 2340C		1	261715	09/02/15 11:30	MDL	TAL BUF

Client Sample ID: TB-03
Date Collected: 08/26/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 18:39	NQN	TAL BUF

Lab Chronicle

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Client Sample ID: TB-04

Date Collected: 08/27/15 00:00
Date Received: 08/29/15 02:15

Lab Sample ID: 480-86375-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			261236	08/29/15 04:10	NQN	TAL BUF
Total/NA	Analysis	8260C		1	261208	08/31/15 19:05	NQN	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010	3005A	Water	Antimony
6010	3005A	Water	Arsenic
6010	3005A	Water	Barium
6010	3005A	Water	Beryllium
6010	3005A	Water	Cadmium
6010	3005A	Water	Chromium
6010	3005A	Water	Copper
6010	3005A	Water	Lead
6010	3005A	Water	Nickel
6010	3005A	Water	Selenium
6010	3005A	Water	Silver
6010	3005A	Water	Thallium
6010	3005A	Water	Vanadium
6010	3005A	Water	Zinc
6010	3050B	Solid	Antimony
6010	3050B	Solid	Arsenic
6010	3050B	Solid	Barium
6010	3050B	Solid	Beryllium
6010	3050B	Solid	Cadmium
6010	3050B	Solid	Chromium
6010	3050B	Solid	Copper
6010	3050B	Solid	Lead
6010	3050B	Solid	Nickel
6010	3050B	Solid	Selenium
6010	3050B	Solid	Silver
6010	3050B	Solid	Thallium
6010	3050B	Solid	Vanadium
6010	3050B	Solid	Zinc
7470A	7470A	Water	Mercury
7471A	7471A	Solid	Mercury
8082	3510C	Water	PCB-1016
8082	3510C	Water	PCB-1221
8082	3510C	Water	PCB-1232
8082	3510C	Water	PCB-1242
8082	3510C	Water	PCB-1248
8082	3510C	Water	PCB-1254
8082	3510C	Water	PCB-1260
8082	3510C	Water	PCB-1262
8082	3510C	Water	PCB-1268
8260C		Water	1,1,1,2-Tetrachloroethane
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,1-Dichloropropene

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trichlorobenzene
8260C		Water	1,2,3-Trichloropropane
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2,4-Trimethylbenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dichlorobenzene
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloropropane
8260C		Water	1,3,5-Trimethylbenzene
8260C		Water	1,3-Dichlorobenzene
8260C		Water	1,3-Dichloropropane
8260C		Water	1,4-Dichlorobenzene
8260C		Water	1,4-Dioxane
8260C		Water	2,2-Dichloropropane
8260C		Water	2-Butanone (MEK)
8260C		Water	2-Chlorotoluene
8260C		Water	2-Hexanone
8260C		Water	4-Chlorotoluene
8260C		Water	4-Isopropyltoluene
8260C		Water	4-Methyl-2-pentanone (MIBK)
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromobenzene
8260C		Water	Bromoform
8260C		Water	Bromomethane
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorobromomethane
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Dibromomethane
8260C		Water	Dichlorobromomethane
8260C		Water	Dichlorodifluoromethane
8260C		Water	Ethyl ether
8260C		Water	Ethylbenzene
8260C		Water	Ethylene Dibromide
8260C		Water	Freon 113
8260C		Water	Hexachlorobutadiene
8260C		Water	Isopropyl ether
8260C		Water	Isopropylbenzene
8260C		Water	Methyl tert-butyl ether

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Methylene Chloride
8260C		Water	m-Xylene & p-Xylene
8260C		Water	Naphthalene
8260C		Water	n-Butylbenzene
8260C		Water	N-Propylbenzene
8260C		Water	o-Xylene
8260C		Water	sec-Butylbenzene
8260C		Water	Styrene
8260C		Water	Tert-amyl methyl ether
8260C		Water	Tert-butyl ethyl ether
8260C		Water	tert-Butylbenzene
8260C		Water	Tetrachloroethene
8260C		Water	Tetrahydrofuran
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Trichlorofluoromethane
8260C		Water	Vinyl chloride
8260C	5035A	Solid	1,1,1,2-Tetrachloroethane
8260C	5035A	Solid	1,1,1-Trichloroethane
8260C	5035A	Solid	1,1,2,2-Tetrachloroethane
8260C	5035A	Solid	1,1,2-Trichloroethane
8260C	5035A	Solid	1,1-Dichloroethane
8260C	5035A	Solid	1,1-Dichloroethene
8260C	5035A	Solid	1,1-Dichloropropene
8260C	5035A	Solid	1,2,3-Trichlorobenzene
8260C	5035A	Solid	1,2,3-Trichloropropane
8260C	5035A	Solid	1,2,4-Trichlorobenzene
8260C	5035A	Solid	1,2,4-Trimethylbenzene
8260C	5035A	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035A	Solid	1,2-Dichlorobenzene
8260C	5035A	Solid	1,2-Dichloroethane
8260C	5035A	Solid	1,2-Dichloropropane
8260C	5035A	Solid	1,3,5-Trimethylbenzene
8260C	5035A	Solid	1,3-Dichlorobenzene
8260C	5035A	Solid	1,3-Dichloropropane
8260C	5035A	Solid	1,4-Dichlorobenzene
8260C	5035A	Solid	1,4-Dioxane
8260C	5035A	Solid	2,2-Dichloropropane
8260C	5035A	Solid	2-Butanone (MEK)
8260C	5035A	Solid	2-Chlorotoluene
8260C	5035A	Solid	2-Hexanone
8260C	5035A	Solid	4-Chlorotoluene
8260C	5035A	Solid	4-Isopropyltoluene
8260C	5035A	Solid	4-Methyl-2-pentanone (MIBK)

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C	5035A	Solid	Acetone
8260C	5035A	Solid	Benzene
8260C	5035A	Solid	Bromobenzene
8260C	5035A	Solid	Bromoform
8260C	5035A	Solid	Bromomethane
8260C	5035A	Solid	Carbon disulfide
8260C	5035A	Solid	Carbon tetrachloride
8260C	5035A	Solid	Chlorobenzene
8260C	5035A	Solid	Chlorobromomethane
8260C	5035A	Solid	Chlorodibromomethane
8260C	5035A	Solid	Chloroethane
8260C	5035A	Solid	Chloroform
8260C	5035A	Solid	Chloromethane
8260C	5035A	Solid	cis-1,2-Dichloroethene
8260C	5035A	Solid	cis-1,3-Dichloropropene
8260C	5035A	Solid	Dibromomethane
8260C	5035A	Solid	Dichlorobromomethane
8260C	5035A	Solid	Dichlorodifluoromethane
8260C	5035A	Solid	Ethyl ether
8260C	5035A	Solid	Ethylbenzene
8260C	5035A	Solid	Ethylene Dibromide
8260C	5035A	Solid	Freon 113
8260C	5035A	Solid	Hexachlorobutadiene
8260C	5035A	Solid	Isopropyl ether
8260C	5035A	Solid	Isopropylbenzene
8260C	5035A	Solid	Methyl tert-butyl ether
8260C	5035A	Solid	Methylene Chloride
8260C	5035A	Solid	m-Xylene & p-Xylene
8260C	5035A	Solid	Naphthalene
8260C	5035A	Solid	n-Butylbenzene
8260C	5035A	Solid	N-Propylbenzene
8260C	5035A	Solid	o-Xylene
8260C	5035A	Solid	sec-Butylbenzene
8260C	5035A	Solid	Styrene
8260C	5035A	Solid	Tert-amyl methyl ether
8260C	5035A	Solid	Tert-butyl ethyl ether
8260C	5035A	Solid	tert-Butylbenzene
8260C	5035A	Solid	Tetrachloroethene
8260C	5035A	Solid	Tetrahydrofuran
8260C	5035A	Solid	Toluene
8260C	5035A	Solid	trans-1,2-Dichloroethene
8260C	5035A	Solid	trans-1,3-Dichloropropene
8260C	5035A	Solid	Trichloroethene
8260C	5035A	Solid	Trichlorofluoromethane
8260C	5035A	Solid	Vinyl chloride
Moisture		Solid	Percent Moisture

Certification Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-15
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-13-16
Florida	NELAP	4	E87467	06-30-16
L-A-B	DoD ELAP		L2336	02-26-17
Maine	State Program	1	VT00008	04-17-17
Minnesota	NELAP	5	050-999-436	12-31-15
New Hampshire	NELAP	1	2006	12-18-15
New Jersey	NELAP	2	VT972	09-30-15
New York	NELAP	2	10391	03-31-16
Pennsylvania	NELAP	3	68-00489	04-30-16
Rhode Island	State Program	1	LAO00298	12-30-15
US Fish & Wildlife	Federal		LE-058448-0	02-28-16
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-15
Virginia	NELAP	3	460209	12-14-15

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	09-30-15 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	10-31-15 *
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL CAN
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	TAL BUF
D2974	Moisture, Ash and Organic Matter	ASTM	TAL BUR

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
MA DEP = Massachusetts Department Of Environmental Protection
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Woodard & Curran, Inc.
Project/Site: Lewis Chemical Project

TestAmerica Job ID: 480-86375-1
SDG: #2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-86375-1	TB-03	Water	08/26/15 00:00	08/29/15 02:15
480-86375-2	SED-12	Solid	08/26/15 15:43	08/29/15 02:15
480-86375-3	SED-12 (DUP)	Solid	08/26/15 15:43	08/29/15 02:15
480-86375-4	SED-15	Solid	08/27/15 08:15	08/29/15 02:15
480-86375-5	SW-17	Water	08/27/15 08:50	08/29/15 02:15
480-86375-6	SED-17	Solid	08/27/15 09:00	08/29/15 02:15
480-86375-7	REF-SW-01	Water	08/27/15 09:40	08/29/15 02:15
480-86375-8	REF-PW-01	Water	08/27/15 09:55	08/29/15 02:15
480-86375-9	REF-SED-01	Solid	08/27/15 10:10	08/29/15 02:15
480-86375-10	REF-SW-02	Water	08/27/15 10:55	08/29/15 02:15
480-86375-11	REF-PW-02	Water	08/27/15 11:30	08/29/15 02:15
480-86375-12	TB-04	Water	08/27/15 00:00	08/29/15 02:15
480-86375-13	REF-SED-02	Solid	08/27/15 11:50	08/29/15 02:15
480-86375-14	REF-SW-03	Water	08/27/15 12:10	08/29/15 02:15
480-86375-15	REF-PW-03	Water	08/27/15 12:30	08/29/15 02:15
480-86375-16	REF-SED-03	Solid	08/27/15 12:45	08/29/15 02:15
480-86375-17	REF-SW-04	Water	08/27/15 13:05	08/29/15 02:15
480-86375-18	REF-SED-04	Solid	08/27/15 13:20	08/29/15 02:15
480-86375-19	SED-13	Solid	08/27/15 14:30	08/29/15 02:15
480-86375-20	SED-14	Solid	08/27/15 14:40	08/29/15 02:15
480-86375-21	SED-16	Solid	08/27/15 14:55	08/29/15 02:15
480-86375-22	SW-18	Water	08/27/15 15:15	08/29/15 02:15
480-86375-23	TB-03	Solid	08/26/15 00:00	08/29/15 02:15
480-86375-24	TB-04	Solid	08/27/15 00:00	08/29/15 02:15

Login Sample Receipt Checklist

Client: Woodard & Curran, Inc.

Job Number: 480-86375-1
SDG Number: #2

Login Number: 86375
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	8/29/2015 0410
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	W AND C
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Woodard & Curran, Inc.

Job Number: 480-86375-1
SDG Number: #2

Login Number: 86375
List Number: 2
Creator: Lavigne, Scott M

List Source: TestAmerica Burlington
List Creation: 09/01/15 11:32 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	651724
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

★SDG #2 start★

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road – Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:
Client Contact: Keri Stevers
Company: Woodard + Curran
Address: 40 Shattuck Rd Suite 110
City: Andover
State and Zip: MA, 01810
Client's Phone: 978-557-8150
Client's Contact Email: kstevers@
Client's Project Name/Number: 229286 Lewis Chem
Sample Collection Site Name & Location: Boston, MA

Sample Collector's Name (Please Print Neatly): Ben Gregory
Sample Collector's Phone: 781 801 2476
Lab PM: Becky Mason
E-Mail:
Lab COC Barcode Label

COC No: 33398
Page: 1 of 3
Job #:

Due Date Requested:
Turnaround Time (TAT) Requested (business days): 5 day per MSA
Quote # or Project #:
PO #:
WO #:
PWS ID #:

Analysis Requested

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	VOCs - 8260	VOCs - 8260	Total Metals MCP14+Cu	Diss. Metals MCP14+Cu	Hardness	Total PCBs 8082	total PCBs w/ soxhlet	FOC	% solids	Total Number of Containers (enter total for each line)
Preservation Codes →					A	F	D	D	D	N	N	N	N	
TB-03	8/26/15				X	X								5
SED-12	8/26/15	1543	G	S		X	X				X	X	X	7
SED-12 (DUP)	8/26/15	1543	G	S		X	X				X	X	X	7
SED-15	8/27/15	815	G	S		X	X				X	X	X	7
SED-15 (MS)	8/27/15	815	G	S			X							1
SW-17	8/27/15	850	G	W	X			X	X	X				5
SED-17	8/27/15	900	G	S		X	X				X	X	X	7
REF-SW-01	8/27/15	940	G	W	X			X	X	X				5
REF-PW-01	8/27/15	955	G	W	X			X	X	X				5
REF-SED-01	8/27/15	1010	G	S		X	X				X	X	Y	6

480-86375 Chain of Custody

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP [X] GW1/S1 [ ]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [ ]
eDEP Filing [ ] NPDES [ ]

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Special Instructions & Notes:
Dissolved metals + hardness are field filtered

Possible Hazard Identification (please check off each that may apply):
[ ] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [X] Unknown [ ] Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month) :
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

** **Matrix Types:** A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► **NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !!** ◄

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	8-28-15 - 14:10	WTC	Keri B. Lever	8-28-15 14:10	WTC
Relinquished by: Keri B. Lever	8-25-15 14:10		Received by:	8-28-15 1410	TAB
Relinquished by:	8-28-15 1701		Received by:	8-29-15 0215	TAB

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.4, 1.0 #1

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15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road – Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:
Client Contact: Keri Stevens
Company: Woodard + Curran
Address: 40 Shattuck Rd Suite 110
City: Andover
State and Zip: MA 01810
Client's Phone: 978 557 8150
Client's Contact Email: kstevens@
Client's Project Name/Number: 229286 Lewis Chen
Sample Collection Site Name & Location: Boston DND

Sample Collector's Name (Please Print Neatly): Ben Gregory
Sample Collector's Phone: 781-801-2776
Lab PM: Becky Mason
E-Mail:
Lab COC Barcode Label
COC No: 33403
Page: 2 of 3
Job #:

Due Date Requested:
Turnaround Time (TAT) Requested (business days): 5 day pre MSA
Quote # or Project #:
PO #:
WO #:
PWS ID #:

Analysis Requested

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP [X] GW1/S1 [ ]
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Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	VOCs-8260	VOCs-8260	Total Metals MCP14+Cu	Diss Metals MCP14+Cu	Hardness	Total PCBs 8082	Total PCBs w/ soxhlet	TOC	% Solids						Total Number of Containers (enter total for each line)	Special Instructions & Notes:
Preservation Codes →					A	F	D	D	D	W	N	N	N						↓	
REF-SW-02	8/27/15	1055	G	W	X			X	X	X									5	Dissolved metals + hardness field filtered.
REF-SW-02	8/27/15	1130	G	W	X			X	X	X									5	
TB-04	8/27/15				X	X													5	
REF-SED-02	8/27/15	1150	G	S		X	X				X	X	X						7	
REF-SW-03	8/27/15	1210	G	W	X			X	X	X									5	
REF-PW-03	8/27/15	1230	G	W	X			X	X	X									5	
REF-SED-03	8/27/15	1245	G	S		X	X				X	X	X						7	
REF-SW-04	8/27/15	1305	G	W	X			X	X	X									5	
REF-SED-04	8/27/15	1320	G	S		X	X				X	X	X						7	
SED-13	8/27/15	1430	G	S		X	X				X	X	X						7	

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Possible Hazard Identification (please check off each that may apply):
[ ] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [X] Unknown [ ] Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month) :
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

** **Matrix Types:** A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► **NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !!** ◄

	Date/Time:	Company		Date/Time:	Company
Relinquished by:	8-28-15 14:10	WTC	Received by: Kurt B. Lauer	8-28-15 14:10	
Relinquished by: Kurt B. Lauer	8-28-15 19:10	WTC	Received by:	8-28-15 1900	
Relinquished by:	8-28-15 1700	TA	Received by:	8-29-15 0215	TAB

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.4, 1.3 #1

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15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road – Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:
Client Contact: Keri Stevens
Company: Woodard + Curran
Address: 40 Shattuck Rd Suite 110
City: Andover
State and Zip: MA, 01810
Client's Phone: 978-557-8150
Client's Contact Email: kstevens@
Client's Project Name/Number: 229286 Lewis Chem
Sample Collection Site Name & Location: Boston DND

Sample Collector's Name (Please Print Neatly): Ben Gregory
Sample Collector's Phone: 781-801-2476
Lab PM: Becky Mason
E-Mail:
Lab COC Barcode Label

COC No: 33393
Page: 3 of 3
Job #:

Due Date Requested:
Turnaround Time (TAT) Requested (business days): 5 day per MSA
Quote # or Project #:
PO #:
WO #:
PWS ID #:

Analysis Requested

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	VOCs - 8260	VOCs - 8260	Total Metals MCP14 +Cu	Diss. Metals MCP14 +Cu	Hardness	Total PCBs 8082	Total PCB w/ Soxh ext	FOC	1 of 50 lids	Total Number of Containers (enter total for each line)	Special Instructions & Notes:
Preservation Codes →					A	F	D	D	D	N	N	N	N		
SED-14	8/27/15	1440	G	S		X	X				X	X	X	7	Dissolved Metals
SED-16	8/27/15	1455	G	S		X	X				X	X	X	7	+ hardness field
SW-18	8/27/15	1515	G	W	X			X	X	X				5	filtered

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
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Regulatory Programs:
MCP [X] GW1/S1 [ ]
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	Date/Time:	Company		Date/Time:	Company
Relinquished by:	8-28-15 14:10	WTC	Received by: Ken Blaver	8-28-15 14:10	WTC
Relinquished by: Mich Hart	8-28-15 19:10	WTC	Received by:	8-29-15 1410	TD
Relinquished by:	8-29-15 1700		Received by:	8/29/15 0215	TAO

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.4, 1.3 #1

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