TETRA TECH

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Program Manager

October 30, 2013

Mr. Francis Egbo
Environmental Specialist
District Department of the Environment
Land Remediation and Development Branch
Brownfield/Voluntary Cleanup Division
1200 First Street, N.E. 5th Floor
Washington, DC 20002

Subject: Subsurface Environmental Site Assessment
Long Brothers Cleaners
655 Lebaum Street, SE
Washington, DC 20032
Project Code: 103S2930.03

Dear Mr. Egbo:

Tetra Tech, Inc. (Tetra Tech) is pleased to provide the District of Columbia Department of the Environment (DDOE) with the results of the subsurface assessment conducted at Long Brothers Cleaners in Southeast Washington, DC (Subject Property). The findings of the Subsurface Environmental Site Assessment (SESA) are presented below. Attachment 1 presents the Soil Boring Location Map; Attachment 2 presents the Analytical Summary Tables for Soil and Groundwater; Attachment 3 presents the complete Laboratory Analytical Results for Soil and Groundwater; Attachment 4 present the Analytical Summary Tables for Soil Vapor, Indoor Air, and Ambient Air Samples; and Attachment 5 presents the complete Laboratory Analytical Results for Soil Vapor, Indoor Air, and Ambient Air.

TERMS AND CONDITIONS OF THIS PROJECT

Specific terms and conditions were detailed in the proposal, which was authorized by DDOE on September 17, 2013 with the request that one boring be relocated and two borings be removed from the scope of services at the request of Mr. Francis Egbo with the DDOE. The findings and conclusions of this report are not scientific certainties, but rather, probabilities based on professional judgment concerning the significance of the data gathered during the course of the assessment. Tetra Tech is not able to verify that the site or adjoining land contains no hazardous substances, petroleum products, or other latent conditions beyond that detected or observed during the assessment. The possibility always exists for contaminants to migrate through surface water, air, soil, or groundwater. The ability to accurately address the environmental risks associated with transport in these media is beyond the scope of this assessment. The opinions expressed by Tetra Tech with reference to the Subject Property only pertain to conditions that existed at the

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site during the time the inspection was conducted. No guarantees or warranties are either expressed or implied.

Potential areas of concern were based on the Preliminary Assessment[1] previously completed by Apex Companies, LLC (Apex). The SESA was not designed to delineate any environmental impacts but to identify whether the potential for subsurface impacts exist.

OBJECTIVE OF THIS PROJECT

The objective of the SESA was to evaluate if previous dry cleaning activities conducted at the Subject Property have adversely affected the subsurface and/or the indoor air quality of the Subject Property and provide insight regarding the potential for contamination to affect the adjacent child care facility. The previous Preliminary Assessment performed by Apex identified that the Subject Property had reportedly been used as a dry cleaning facility for approximately 60 years. Operations observed at the time of Tetra Tech's Phase II activities indicated the Subject Property was currently performing dry cleaning activities with the chemical DF-2000, a hydrocarbon-based cleaner. However, other unlabeled containers, presumably containing some type of solvent, were also observed. SESA activities included conducting a subsurface assessment of the areas surrounding the building and identifying utilities in the vicinity of the subsurface assessment. In addition to the subsurface assessment, a limited soil vapor assessment was performed along the northern, western, and southern exteriors of the building footprint and beneath the slab along the eastern interior wall of the Subject Property building. Because the Subject Property is an active dry cleaning facility and the owner of the Subject Property granted access contingent on the fact that operations would not be disturbed, Tetra Tech was limited with regard to the locations available to collected sub slab soil vapor samples. The soil vapor samples were collected due to concerns regarding the potential presence of dry-cleaning solvents such as trichloroethene (TCE) and tetrachloroethene (PCE) in subsurface soils and groundwater at the Subject Property that could potentially affect the indoor air quality at the Subject property or adjacent child care facility. Indoor and ambient air samples were also collected during this assessment.

Evaluation of the potential for environmental impacts was undertaken at the request of the DDOE to evaluate the potential for the historical dry cleaning operations to have adversely affected the Subject Property, adjacent properties, and/or the surrounding community. SESA activities were completed in general conformance with the proposal submitted to DDOE on September 13, 2013, and a follow up email from Mr. Francis Egbo of DDOE on September 17, 2013. Each boring encountered refusal during the sub-surface activities. Soil boring SB-1 encountered refusal at 11.5 feet below ground

[1] *Apex Companies LLC. June 15, 2013. Preliminary Assessment, Long Brother's Cleaners, 655 Lebaum Street, SE, Washington, DC.*

surface (bgs); soil boring SB-2 encountered refusal at 17.5 feet bgs; soil boring SB-3 encountered refusal at 10.5 feet bgs; soil boring SB-4 encountered refusal at 10 feet bgs; soil boring SB-5 encountered refusal at 10.5 feet bgs; and soil boring SB-6 encountered refusal at 9.5 feet bgs. A water bearing zone was not encountered between ground surface and the maximum proposed boring depth with the exception of SB-1, where perched water was encountered at approximately 6 feet bgs. There were no additional significant deviations from this proposal.

SITE DESCRIPTION

SUBJECT PROPERTY LOCATION

The Subject Property is located at 655 Lebaum Street, SE, in Washington, DC 20032.

SUBJECT PROPERTY USE

According to the previous Preliminary Assessment performed by Apex, the Subject Property is an approximate 2,500-square foot parcel that consists of one building constructed prior to 1950 with an addition added in the late 1950s. Long Brother's Cleaners was identified on the Resource Conservation and Recovery Act (RCRA) Conditionally Exempt Small Quantity Generator (CESQG) database and operated a PCE-based dry cleaning facility for approximately 60 years. Apex also indicated that a PCE-based dry cleaning agent was used on site at the time of site reconnaissance in early 2012. Based on the use of PCE in relation to dry cleaning activities for 60 years, Apex considered the use of PCE at Long Brother's Cleaners to be a recognized environmental condition (REC).

According to Apex, Newnam and Lunson Dry Cleaners, located at 653 Lebaum Street, SE was located adjacent to the west of the Subject Property and identified on the Historical Cleaners database in 1954, 1960, and 1964. Based on the fact that PCE was used at the Subject Property during the same time period and historical use of PCE in dry cleaning activities was formerly a common practice, Apex considered the adjacent historical dry cleaning facility to be a REC.

The closest child care facility to the Subject Property is Dawn to Dusk Child Development Center located at 657 Lebaum Street, SE, Washington, DC. The childcare facility shares its western wall with the Subject Property. Due to the close proximity to the Subject Property and the number of historical dry cleaners in the area, a potential vapor encroachment condition (VEC) for Dawn to Dusk Child Development Center exists. In addition, according to the guidance for Performing Preliminary Assessments under CERCLA, this childcare facility is considered to be a primary target due to its close proximity to the Subject Property.

UTILITY LOCATION

Prior to conducting the subsurface assessment, Tetra Tech contacted the Washington, DC One-Call utility locator service to request identification of buried utilities on and around the Subject Property. Tetra Tech also contracted Mid-Atlantic Utility Location, LLC (Mid-Atlantic) of Chantilly, Virginia, to locate utilities in the vicinity of the boring locations. The utility location was performed for health and safety purposes to ensure personnel completing the subsurface assessment discussed below did not encounter utility lines.

SUBSURFACE INVESTIGATION

FIELD METHODS

Six soil borings (SB-1 through SB-6) were completed on the Subject Property. SB-1 was advanced adjacent to the western side of the Subject Property building; SB-2 was advanced adjacent to the north side of the Subject Property building; SB-3 was advanced adjacent to the southwest corner of the Subject Property building on the western side; SB-4 was advanced adjacent to the southwest corner of the Subject Property building on the southern side; SB-5 was advanced adjacent to the southern exterior wall of the Subject Property building; and SB-6 was advanced adjacent to the south of the southeastern corner of the Subject Property building (see Figure 1 in Attachment 1). One soil sample was collected from each boring. Groundwater was not encountered in the soil borings, with the exception of a thin layer of wet soil in SB-1 between six and seven feet bgs. Moisture below eight feet bgs in the boring was not observed. Monitoring wells were placed in soil borings SB-1, SB-2, SB-4, and SB-6; however, groundwater accumulation did not occur in SB-2, SB-4, or SB-6. One groundwater sample was collected from SB-1; however, this water may be perched and not indicative of conditions in the shallow aquifer beneath the Subject Property.

SAMPLING PLAN

Soil Sampling Activities

Prior to conducting the subsurface assessment, Tetra Tech contacted the Washington, DC One-Call utility locator service to request identification of buried utilities on the Subject Property. Tetra Tech also contracted Mid-Atlantic for identification of buried utilities inside the Subject Property boundaries. Tetra Tech observed utilities to be marked prior to the commencement of the subsurface assessment.

To evaluate subsurface conditions on the Subject Property, six soil borings (SB-1 through SB-6) were advanced as directed by Tetra Tech, by Green Services, Inc. (Green Services) of Bel Air, Maryland using a truck-mounted direct-push soil probing rig. The locations of the borings are described below:

Borings SB-1 through SB-6 were advanced to evaluate the area adjacent to the Subject Property building. Soil boring SB-1 encountered refusal at 11.5 feet bgs adjacent to the west of the Subject Property building; soil boring SB-2 encountered refusal at 17.5 feet bgs adjacent to the north side of the Subject Property building; soil boring SB-3 encountered refusal at 10.5 feet bgs adjacent to the southwest corner of the Subject Property building on the western side; soil boring SB-4 encountered refusal at 10 feet bgs at the southwest corner of the Subject Property building on the southern side; soil boring SB-5 encountered refusal at 10.5 feet bgs on the southern side of the Subject Property building; and soil boring SB-6 encountered refusal at 9.5 feet bgs at the south of the southeastern corner of the Subject Property building.

Subsurface soil samples were selected based on field evidence, including visual, olfactory, or elevated photoionization detector (PID) readings. A solvent odor was observed in soil borings SB-3, SB-4, SB-5, and SB-6 and elevated PID readings were observed in each of the borings. The highest PID reading observed from each soil boring is as follows in parts per million (ppm):

PID Readings in Soil Borings

Soil Boring	PID Reading	Depth (bgs)
SB-1	173	6-8 feet
SB-2	230	6-8 feet
SB-3	2,638	8-10 feet
SB-4	9,999+	8-10 feet
SB-5	7,754	8-10 feet
SB-6	78.3	8-10 feet

Subsurface soil samples were collected at the interval of the highest PID reading in each of the soil borings including between 6 to 8 feet bgs in SB-1 and SB-2, between 8 to 10 feet bgs in SB-3 through SB-5, and between 8 and 9.5 feet bgs in SB-6.

Soil samples were continuously collected for lithologic classification and profiling of potential impacts by a Tetra Tech scientist. Following soil sampling activities, each boring was backfilled with soil cuttings and hydrated bentonite pellets and resurfaced.

Tetra Tech personnel performed sample handling and soil classification. All soil samples intended for laboratory analysis were packaged, labeled, placed on ice in a cooler, and shipped via Federal Express (FedEx) to TestAmerica Laboratories, Inc., (TestAmerica) in Nashville, Tennessee. Chain-of-custody documentation was initiated in the field and accompanied the samples to the laboratory. Soil and groundwater analytical laboratory results are summarized in Tables 1 and 2 in Attachment 2. The complete laboratory analytical report is presented in Attachment 3.

Groundwater Sampling Activities

Groundwater was not encountered in the soil borings, with the exception of a thin, wet layer of soil in SB-1 between six and seven feet bgs. One groundwater sample was collected from SB-1; however, this water may be perched and not indicative of conditions in the shallow aquifer beneath the Subject Property. A few thin, very moist intervals were encountered during drilling activities. In an attempt to obtain a groundwater sample, temporary wells were installed in borings SB-1, SB-2, SB-4, and SB-6 and left in place until the end of the day. All temporary wells were verified to be dry prior to removing the poly-vinyl chloride (PVC) well material.

Field Observations

Soil lithologies encountered at the boring locations consisted of fine to medium brown sand and gravel with little silt to approximately 4 feet bgs. Beyond 4 feet bgs, the lithology tends to be dominated by brown clayey sand with silts until refusal which tended to be coarse gravel with little coarse sand. Borings SB-1 and SB-2 were found to contain larger amounts of sand and gravel. PID readings ranged from 7.0 to 9,999+ ppm.

Laboratory Analyses

Based on past uses of the Subject Property, soil and groundwater samples were analyzed for the following parameters in accordance with the approved scope-of-work:

- Volatile Organic Compounds (VOCs) per U.S. Environmental Protection Agency (EPA) Method 8260B.

Analytical Results

Tetra Tech compared the analytical results of the soil and groundwater samples to the DDOE Toxic Substances Division Underground Storage Tank Branch, *District of Columbia Risk-Based Corrective Action Technical Guidance (Risk-Based Decision Making) Table 5-8, Risk-Based Screening Levels (RBSLs) for a Residential Child and Table 5-10, RBSLs for a Commercial Worker for indoor soil and groundwater inhalation*, dated June 2011. In addition, soil samples were compared to the *EPA Region 3 Regional Screening Level (RSL) for Industrial Soil and Residential Soil*, dated May 2013 and groundwater was compared to the *EPA Maximum Contaminant Levels (MCLs) for Drinking Water*, dated May 2009. The analytical data summary and regulary standard

comparison is provided in Table 1: Soil Sample Analytical Results – VOCs and Table 2: Groundwater Sample Analytical Results – VOCs of Attachment 2.

Based on the analytical results, a total of 29 VOC constituents including benzene, cis-1,2-dichloroethene, PCE, and TCE were detected at concentrations above the laboratory reporting limits (RL) in the soil samples, with the majority of the detections in SB-4. Each of the VOC detections was below the applicable EPA and DDOE standards with the exception of PCE which exceeded both the Industrial RSL of 110 milligrams per kilogram (mg/kg) and Residential RSL of 22 mg/kg in SB-3, SB-4, and SB-5. The results of PCE included 2,000 mg/kg at SB-3, 2,180 mg/kg at SB-4, and 3,720 mg/kg at SB-5. Results of VOC analysis of the soil samples are summarized in Table 1 of Attachment 2.

Based on the analytical results from the groundwater collected at SB-1, a total of five VOC constituents including acetone, benzene, cis-1,2-dichloroethene, PCE, and TCE were detected at concentrations above the RL. The concentrations of acetone, benzene, cis-1,2-dichloroethene were below the applicable DDOE RBSLs and EPA MCLs. However, both PCE and TCE concentrations exceeded the EPA MCL of 5 micrograms per liter (µg/L). The results included the following: 191 µg/L for PCE and 8.03 µg/L of TCE. Results of VOC analysis of the groundwater sample are summarized in Table 2 of Attachment 2.

SOIL VAPOR SAMPLING

FIELD METHODS

In accordance with Tetra Tech standard operating procedures, a hammer drill was utilized to drive through the concrete inside the building and core into the native soil to a depth of approximately 1.5 to 2 feet below grade. Once coring was completed, a soil gas probe was inserted into each boring. During the installation of each probe, hydrated bentonite was used to seal around the probe at the ground surface to prevent ambient air intrusion. In addition, to prevent ambient air infiltration, the inner soil gas pathway from the probe tip to the surface was also continuously sealed (i.e., the sampling tube was attached to a screw adapter fitted with an o-ring and connected to the probe tip). One soil vapor sample was collected from the exterior of the north side of the building (VP-1), one soil vapor sample was collected beneath the building through the slab along the eastern interior wall of the building adjacent to the child care facility (VP-2), one soil vapor sample was collected at the exterior of the southwest corner of the building (VP-3), one soil vapor sample was collected at the exterior of the southeast corner of the building (VP-4), and one soil vapor sample was collected from the exterior of the west side of the building (VP-5).

In accordance with the EPA's guidance document, the sampling tubes were small in diameter (1/8-inch inside diameter) and made of polyethylene, which would not react or interact with the suspected site contaminants. In addition, to avoid any cross-

contamination, non-reusable (sample-dedicated) sampling tubing was discarded after the collection of each sample.

Tetra Tech applied the EPA's recommended purging or sampling rate of 0.1 to 0.2 liters per minute (L/min) to limit stripping, prevent ambient air from diluting soil vapor samples, and to reduce the variability of purging rates. The low flow purge rate increased the likelihood that representative samples were collected. Tetra Tech used an eight-hour period of time in order to simulate worker exposure in the event of a vapor intrusion issue.

LABORATORY ANALYSES

To prevent the photodegradation of halogenated VOCs, soil vapor samples were collected in a Summa canister, which is a gas tight and opaque/dark container. A regulator was attached to each summa canister to allow for a consistent intake of air over the course of eight hours. The samples were submitted under chain of custody to TestAmerica laboratory in Knoxville, Tennessee and analyzed for VOCs by EPA Method TO-15 in accordance with the approved proposal.

ANALYTICAL RESULTS

Tetra Tech reviewed the EPA's Office of Solid Waste and Emergency Response (OSWER) *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils* (2002) (Subsurface Vapor Intrusion Guidance) for applicability regarding the soil vapor samples collected at the Subject Property. Specifically, sample concentrations were compared to the Generic Screening Levels for Target Shallow Soil Gas Corresponding to Target Indoor Air Concentration where the soil gas to indoor air attenuation factor is 0.1 and the risk factor is 1×10^{-4} which is indicative of an industrial facility; 1×10^{-5} which is indicative of a commercial facility; and 1×10^{-6}, which is indicative of a residential facility. According to EPA Guidance, the residential facility risk factor can also be used for. In addition, results were compared to the DDOE Toxic Substances Division Underground Storage Tank Branch, *District of Columbia Risk-Based Corrective Action Technical Guidance (Risk-Based Decision Making) Table 5-8, RBSLs for a Residential Child and Table 5-10, RBSLs for a Commercial Worker for soil gas inhalation*, dated June 2011.

Based on analytical results, VOC constituents were present in concentrations above laboratory RLs in each of the soil vapor samples. The contaminants m- and p-xylenes, toluene, and methylene chloride were detected at concentrations below the regulatory guidelines in each of the samples. Benzene concentration did not exceed the DDOE action levels; however, it exceeded the EPA residential risk level of 3 micrograms per cubic meter ($\mu g/m^3$) in VP-2 (25 $\mu g/m^3$) and VP-5 (7.6 $\mu g/m^3$).

The contaminant cis-1,2-dichloroethene was detected in concentration above the regulatory guidelines at each of the EPA soil gas risk levels in VP-2 (2,000 $\mu g/m^3$), VP-3

(7,400 µg/m^3), and VP-4 (2,700 µg/m^3). There is no published DDOE standard for cis-1,2-dichloroethene.

The contaminant PCE was observed in concentrations exceeding the EPA residential risk level (8.1 µg/m^3) in each of the soil vapor samples. PCE exceedances included 45 µg/m^3 in VP-1, 4,900 µg/m^3 in VP-2, 20,000 µg/m^3 in VP-3, 22,000 µg/m^3 in VP-4, and 380 µg/m^3 in VP-5. There is no published DDOE standard for PCE.

The contaminant TCE was observed in concentrations exceeding each of the EPA soil gas risk levels in each of the soil vapor samples with the exception of VP-1. TCE exceedances included 1,550 µg/m^3 in VP-2, 3,400 µg/m^3 in VP-3, 7,400 µg/m^3 in VP-4, and 83 µg/m^3 in VP-5. There is no published DDOE standard for TCE.

The contaminant vinyl chloride was observed in concentrations above the EPA residential risk level in each of the soil vapor samples with the exception of VP-1 and VP-4. Vinyl chloride exceedances included 70 µg/m^3 in VP-2, 320 µg/m^3 in VP-3, and 83 µg/m^3 in VP-5. There is no published DDOE standard for vinyl chloride. These results are summarized in Table 3 in Attachment 4.

INDOOR AIR SAMPLING

FIELD METHODS

Two indoor air samples were collected from inside the building on the Subject Property over an eight-hour period of time in order to simulate the conditions experienced by employees during a full work day. Sample IA-1 was located in the northern portion of the Subject Property building and sample IA-2 was located in the southwest portion of the Subject Property building in the area of the dry cleaning plant. These samples were collected utilizing Summa canisters with an intake elevated to approximately five feet above grade to simulate a worker's breathing zone. Tetra Tech surveyed the area in order to attempt to inventory any sources of VOCs that could represent potential background contamination sources in the indoor samples. Tetra Tech observed the use of the dry cleaning chemical DL-2000 in association with current dry cleaning activities ongoing at the Subject Property. In addition, various cleaners were observed in the dry cleaning area of the Subject Property.

LABORATORY ANALYSES

To prevent the photodegradation of halogenated VOCs, the indoor air samples were collected in a Summa canister, which is a gas tight and opaque/dark container. The samples were submitted under chain of custody to TestAmerica laboratory in Knoxville, Tennessee and analyzed for VOCs by EPA Method TO-15 in accordance with the approved proposal.

ANALYTICAL RESULTS

Tetra Tech reviewed the EPA's OSWER *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils* (2002) (Subsurface Vapor Intrusion Guidance) for applicability regarding the indoor air samples collected at the Subject Property. Specifically, sample concentrations were compared to the Generic Screening Levels for Target Indoor Air Concentration where the attenuation factor is 0.1 and the risk factor is 1×10^{-4} which is indicative of an industrial facility; 1×10^{-5} which is indicative of a commercial facility; and 1×10^{-6}, which is indicative of a residential facility. According to EPA Guidance, the residential facility risk factor can also be used for child care facilities. In addition, results were compared to the DDOE Toxic Substances Division Underground Storage Tank Branch, *District of Columbia Risk-Based Corrective Action Technical Guidance (Risk-Based Decision Making) Table 5-8, RBSLs for a Residential Child and Table 5-10, RBSLs for a Commercial Worker for indoor air inhalation*, dated June 2011.

Based on analytical results, VOC constituents chloromethane, dichlorodifluoromethane, methylene chloride, m- and –p xylene, o-xylene, toluene, trichlorofluoromethane, and 1,2,4-trimethylbenzene were present above laboratory RLs in the indoor air samples, but below the EPA and DDOE regulatory limits. The VOC constituents benzene, ethylbenzene, PCE, and TCE were detected above the laboratory RL and were identified in concentrations above either the EPA or DDOE regulatory limits.

Benzene was observed at a concentration of 4.4 $\mu g/m^3$ in IA-2 which exceeded the DDOE RBSLs for both a resident child and a commercial worker and the EPA commercial and residential risk levels.

Ethylbenzene concentration also exceeded both the resident child and commercial worker RBSLs and EPA residential risk level with a concentration of 7.9 $\mu g/m^3$ in IA-2.

PCE was observed in concentrations exceeding each EPA indoor air risk level with concentrations of 170 $\mu g/m^3$ in IA-1 and 4,400 $\mu g/m^3$ in IA-2. There are no published RBSLs for PCE.

TCE concentration also exceeded the EPA commercial and residential risk levels with a concentration of 1.3 $\mu g/m^3$ in IA-2. There no published RBSLs for TCE. The indoor air results are summarized in Table 4 in Attachment 4.

AMBIENT AIR SAMPLING

FIELD METHODS

One ambient air sample was collected from a location outside the building along the Subject Property's western boundary over an eight-hour period of time in order to serve as a control sample. This sample was collected utilizing a Summa canister.

LABORATORY ANALYSES

To prevent the photodegradation of halogenated VOCs, the ambient air sample was collected in a Summa canister, which is a gas tight and opaque/dark container. The sample was submitted under chain of custody to TestAmerica laboratory in Knoxville, Tennessee and analyzed for VOCs by EPA Method TO-15.

ANALYTICAL RESULTS

Tetra Tech utilized DDOE and EPA's guidance to compare with the Subject Property-specific data collected. Specifically, sample concentrations were compared to the *EPA Region 3 Residential Air and Industrial Air RSLs*, dated May 2013 and the DDOE Toxic Substances Division Underground Storage Tank Branch, *District of Columbia Risk-Based Corrective Action Technical Guidance (Risk-Based Decision Making) Table 5-8, RBSLs for a Residential Child and Table 5-10, RBSLs for a Commercial Worker for outdoor air inhalation*, dated June 2011.

Based on analytical results, VOC constituents were present in concentrations above laboratory RLs in the ambient air sample. Benzene was observed at a concentration of 0.72 $\mu g/m^3$ in AM-1 which exceeded the the EPA residential air RSL. It should also be noted that the concentrations of benzene detected in the ambient sample was lower than the concentration detetced in the indoor air sample IA-2. VOCs PCE, TCE, and ethylbenzene, which were detected in the indoor air samples at concentrations exceeding regulatory standards, were not detected above the laboratory RL in the ambient air sample. The other detected VOCs concentrations did not exceed the aforementioned EPA RSLs or DDOE RBSLs. The ambient air sample results are summarized in Table 5 in Attachment 4.

CONCLUSIONS BASED ON THE PHASE II ESA

SUBSURFACE INVESTIGATION RESULTS

Tetra Tech performed a subsurface assessment of the Long Brothers Cleaners located at 655 Lebaum Street, SE, in Washington, DC in an effort to evaluate if environmental impacts on the Subject Property have resulted from past dry cleaning activities conducted on the property. A subsurface assessment that included the completion of soil borings at three locations was conducted on the Subject Property. One soil sample was collected for laboratory analysis from each boring. One groundwater sample was collected from SB-1,

which was the only soil boring in which groundwater was observed.

The soil sample analytical results indicated that concentrations of PCE exceed the EPA industrial and residential soil screening levels by at least an order of magnitude, indicating a significant release of PCE in the area of the Subject Property. In addition to the soil samples, the single groundwater sample captured at the Subject Property contained concentrations of PCE and TCE above the EPA MCL for both contaminants. The groundwater sample was collected in a boring where the PCE concentrations in soil did not exceed the regulatory limits and may indicate the presence of PCE contamination in groundwater beneath the Subject Property.

SOIL VAPOR AND INDOOR AIR RESULTS

Tetra Tech performed soil vapor and indoor air sampling activities at Long Brothers Cleaners located at 655 Lebaum Street, SE, in Washington, DC. Four soil vapor samples were collected from beneath the exterior perimeter of the building located on the Subject Property, one soil vapor sample was collected beneath the slab of the Subject Property building, and two indoor air samples were collected from the tenant occupied space inside the building. In addition, one ambient air sample was also collected outside of the Subject Property building.

The results of the soil vapor and indoor air samples indicate a significant release of solvents at the Subject Property. The analytes benzene, cis-1,2-dichloroethene, PCE, TCE, and vinyl chloride were detected in concentrations above the EPA screening levels or DDOE RBSLs for each of the contaminants in soil vapor samples. The results of cis-1,2-dichloroethene, PCE, and TCE were orders of magnitude above their respective screening levels in the soil gas samples. The indoor air samples indicate that benzene, ethylbenzene, PCE, and TCE were each identified in concentrations above EPA or DDOE screening levels with significant levels of PCE identified inside the building. In addition, benzene was observed above concentrations of the EPA Industrial Air RSL in the ambient air sample.

RECOMMENDATIONS

Detected concentrations of the analytes discussed above appear to suggest a significant impact to soil and potentially groundwater are present at the sampling locations performed on the Subject Property. Additional sampling is recommended in order to better characterize the potential contamination around the building. Tetra Tech also recommends using a drill rig equipped with a hollow stem auger or air rotary hammer to attempt to advance past encountered refusal and determine if the contamination has affected groundwater in the vicinity of the Subject Property. Tetra Tech recommends additional soil borings be advanced on the child care property adjacent to the east of the Subject Property and adjacent to the south and west of the Subject Property to determine the extent of potential PCE contamination.

The elevated soil vapor sample detections adjacent to the child care facility wall (VP-2) indicate that potentially impacted soil may exist beneath the Subject Property building; however, additional sampling would be required to confirm and delineate impacted soil beneath the Subject Property building. In addition, additional soil vapor sampling points should be advanced through the slab of the adjacent child care facility to assess potential vapor intrusion concerns and to determine the extent of a PCE vapors located beneath the slab of the building. Indoor air sampling of the adjacent child care facility is also strongly recommended.

It is likely the exceedances identified in the indoor air samples are occurring from a combination of vapor intrusion, and the use of certain chemicals associated with dry cleaning equipment located in the Subject Property building. Indoor air samples should be collected in the adjacent child care facility immediately. The Subject Property and the child care facility should also have indoor air sampled again in the winter months when the likelihood of vapor intrusion is highest.

Sincerely,

(b) (4) [redacted]

Environmental Scientist

(b) (4) [redacted]

Technical Reviewer

(b) (4) [redacted]

Technical Reviewer

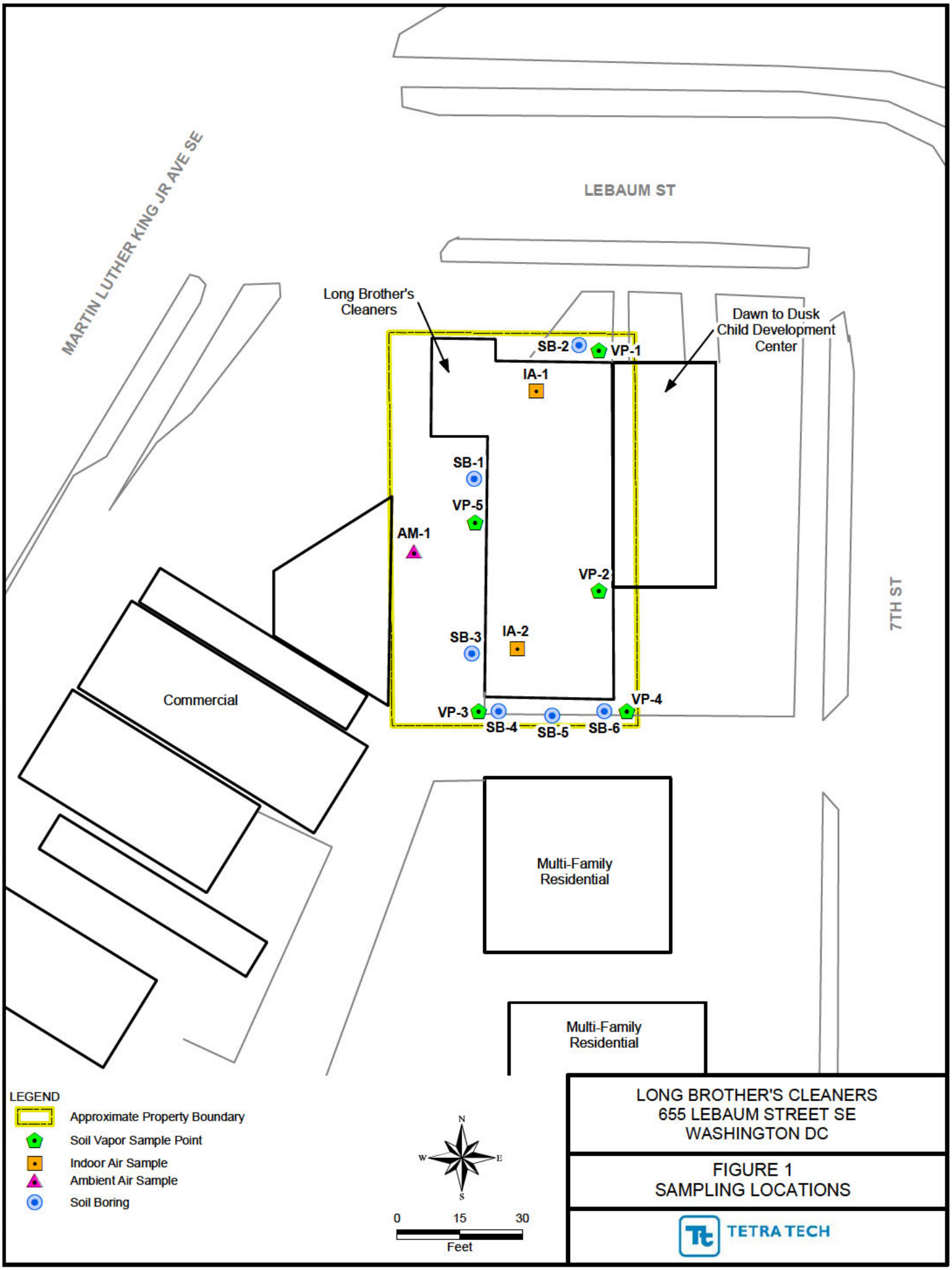
(b) (4) [redacted]

Program Manager

Attachment 1:	Figure 1 - Sampling Locations
Attachment 2:	Analytical Summary Tables for Soil and Groundwater Samples
Attachment 3:	Soil and Groundwater Laboratory Analytical Results
Attachment 4:	Analytical Summary Tables for Soil Vapor, Indoor Air, and Ambient Air Samples
Attachment 5:	Soil Vapor, Indoor Air, and Ambient Air Laboratory Analytical Results

Attachment 1

Figure 1 – Sampling Locations


MARTIN LUTHER KING JR AVE SE
LEBAUM ST
7TH ST
Long Brother's Cleaners
Dawn to Dusk Child Development Center
SB-2
VP-1
IA-1
SB-1
VP-5
AM-1
VP-2
SB-3
IA-2
VP-3
SB-4
SB-5
SB-6
VP-4
Commercial
Multi-Family Residential
Multi-Family Residential
LEGEND
Approximate Property Boundary
Soil Vapor Sample Point
Indoor Air Sample
Ambient Air Sample
Soil Boring
N
W
E
S
0
15
30
Feet
LONG BROTHER'S CLEANERS
655 LEBAUM STREET SE
WASHINGTON DC
FIGURE 1
SAMPLING LOCATIONS
TETRA TECH
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ATTACHMENT 2

ANALYTICAL SUMMARY TABLES FOR SOIL AND GROUNDWATER SAMPLES

TABLE 1: SOIL SAMPLE ANALYTICAL RESULTS VOCs
LONG BROTHERS CLEANERS
655 LEBAUM STREET, SE
WASHINGTON, DC 20032

Boring ID	Sample ID	Sample Depth	Boring Location	VOCs (mg/kg) by EPA Method 8260B																												
				2-Butanone (MEK)	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroform	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethene	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene	Methylene Chloride	Naphthalene	n-Butylbenzene	N-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	1,2,4-Trichlorobenzene	Tetrachloroethene	Toluene	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
SB-1	*SB-1*	6-8 feet	Western side of the Subject Property building	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00155 J	ND	ND	ND	ND	ND	ND	ND	0.0254	0.00117 J	ND	ND	ND	ND	ND
SB-2	*SB-2*	6-8 feet	Adjacent to the north of the Subject Property building	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00140 J	ND	ND	ND	ND	ND	ND	ND	0.00599	ND	ND	ND	ND	ND	ND
SB-3	*SB-3*	8-10 feet	Adjacent to the southwest of the Subject Property building on the western side	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	67.1 J	ND	ND	ND	ND	ND	ND	ND	**2,000**	ND	ND	ND	ND	ND	ND
SB-4	*SB-4*	8-10 feet	Adjacent to the southwest of the Subject Property building on the southern side	0.0149 J	ND	0.0266	0.0172	0.00182 J	0.129	ND	0.000779 J	0.000900 J	0.0068	0.00101 J	0.000749 J	0.00544	0.0136	0.00182 J	0.00799	0.00492	0.044	0.00413	0.00281	0.00715	0.00168 J	**2,180**	0.00306	0.707 E	0.263 E	0.0947	ND	0.0257
SB-5	*SB-5*	8-10 feet	Adjacent to the south of the Subject Property building	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	79.9 J	ND	ND	ND	ND	ND	ND	ND	**3,720**	ND	ND	ND	ND	ND	ND
SB-6	*SB-6*	8-9.5 feet	Adjacent to the southeast of the Subject Property building	ND	0.00390 J	ND	ND	ND	0.137	0.00151	ND	ND	ND	ND	ND	ND	ND	0.00197 J	ND	ND	ND	ND	ND	ND	ND	2.16	ND	0.0700	0.00133 J	ND	0.00473	ND
EPA Residential Soil RSL*				**28,000**	**820**	**0.61**	**290**	**0.29**	**160**	**150**	**1,900**	**NS**	**2.4**	**240**	**5.4**	**6.2**	**NS**	**56**	**3.6**	**3,900**	**3,400**	**NS**	**7,800**	**7,800**	**22**	**22**	**5,000**	**0.91**	**62**	**780**	**0.06**	**630**
EPA Industrial Soil RSL*				**200,000**	**3,700**	**3**	**1,400**	**1.5**	**2,000**	**690**	**9,800**	**NS**	**12**	**1,100**	**27**	**22**	**NS**	**960**	**18**	**51,000**	**21,000**	**NS**	**310,000**	**310,000**	**99**	**110**	**45,000**	**6.4**	**260**	**10,000**	**2**	**2,700**
DDOE RBSLs for a Resident Child*				**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**0.163**	**NS**	**NS**	**NS**	**0.754**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**100**	**NS**	**NS**	**NS**	**NS**	**3.86**
DDOE RBSLs for a Commercial Worker*				**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**0 27**	**NS**	**NS**	**NS**	**1.25**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**691**	**NS**	**NS**	**NS**	**NS**	**26.7**

Only detected analytes are presented

Notes

Bold results indicate the sample was abo e regulatory limits
DDOE - District Department of the En ironment
EPA - United States En ironmental Protection Agency
J - Result s less than the report ng lim t but greater than or equal to the me hod detection lim t and the concentrat on s an approx mate alue.
mg/kg - Mill grams per kilogram
ND - Not Detected at or abo e the Laboratory Detection Limit
NS - No Standard
RBSL - Risk-Based Screen ng Le el
* Regulatory Values obta ned from the DDOE Toxic Substances Di ision Underground Storage Tank Branch *Dist ict of Columbia Risk-Based Co ective Action Technical Guidance (Risk-Based Decision Making) Table 5-8 RBSLs fo a Residential Child and Table 5-10 RBSLs fo a Comme cial Wo ke* dated June 2011 and the *EPA Region 3 RSL fo Indust ial Soil and Residential Soil* dated May 2013.
RSL - Regional Screening Le el
VOC - Volatile Organic Compound

TABLE 2: GROUNDWATER SAMPLE ANALYTICAL RESULTS - VOCs
LONG BROTHERS CLEANERS
655 LEBAUM STREET, SE
WASHINGTON, DC 20032

Boring ID	Sample ID	Boring Location	VOCs (µg/L) by EPA Method 8260B				
			Acetone	Benzene	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene
SB-1	*SB-1-GW*	Western side of the Subject Property building	4.95 J	0.751 J	6.01	**191**	**8.03**
EPA MCL*			**NS**	**5.00**	**70**	**5.00**	**5.00**
DDOE RBSLs for Residential Child*			**NS**	**5.00**	**NS**	**NS**	**NS**
DDOE RBSLs for Commercial Worker*			**NS**	**448**	**NS**	**NS**	**NS**

Only detected analytes are presented

Notes:

Bold results indicate the sample was above regulatory limits
DDOE - District Department of the Environment
EPA - United States Environmental Protection Agency
J - Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
MCL - Maximum Contaminant Level
ND - Not Detected at or above the Laboratory Detection Limit
NS - No Standard
RBSL - Risk Based Screening Level
* Regulatory Values obtained from the DDOE Toxic Substances Division Underground Storage Tank Branch, *District of Columbia Risk-Based Corrective Action Technical Guidance (Risk-Based Decision Making) Table 5-8, RBSLs for a Residential Child Domestic Use of Water and Table 5-10, RBSLs for a Commercial Worker Indoor Air Inhalation* , dated June 2011 and the EPA MCLs.
µg/L - Micrograms per Liter
VOC - Volatile Organic Compound

ATTACHMENT 3

LABORATORY ANALYTICAL RESULTS FOR SOIL AND GROUNDWATER

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-36505-1
TestAmerica Sample Delivery Group: 10352930.02
Client Project/Site: Long Brother's Clnr

For:
Tetra Tech EM Inc.
1881 Campus Commons Drive, Suite 200
Reston, Virginia 20191

(b) (4) [redacted]

Authorized for release by:
10/7/2013 2:08:46 PM

(b) (4) [redacted]

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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Sample Summary

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-36505-1	SB-2	Solid	09/27/13 09:30	09/28/13 08:25
490-36505-2	SB-1	Solid	09/27/13 10:15	09/28/13 08:25
490-36505-3	SB-3	Solid	09/27/13 10:45	09/28/13 08:25
490-36505-4	SB-4	Solid	09/27/13 11:20	09/28/13 08:25
490-36505-5	SB-5	Solid	09/27/13 11:45	09/28/13 08:25
490-36505-6	SB-6	Solid	09/27/13 12:30	09/28/13 08:25
490-36505-7	SB-1-GW	Water	09/27/13 10:25	09/28/13 08:25
490-36505-8	Trip Blank	Water	09/27/13 00:01	09/28/13 08:25

Job ID: 490-36505-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Tetra Tech EM Inc.

Project: Long Brother's Clnr

Report Number: 490-36505-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures descr bed in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 09/28/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.9 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SB-2 (490-36505-1), SB-1 (490-36505-2), SB-3 (490-36505-3), SB-4 (490-36505-4), SB-5 (490-36505-5) and SB-6 (490-36505-6) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/30/2013, 10/01/2013 and 10/04/2013.

Method(s) 8260B: The following sample(s) were collected in properly preserved vials, however, the pH was outside the required criteria when verified by the laboratory: SB-1-GW (490-36505-7).

Toluene-d8 (Surr) failed the surrogate recovery criteria high for SB-4 (490-36505-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Chloroform and Methylene Chloride were detected in method blank MB 490-110732/7 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Job ID: 490-36505-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Carbon tetrachloride and Methylene Chloride were detected in method blank MB 490-110959/6 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

1,2,3-Trichlorobenzene, 1,2,4-trichlorobenzene, Methylene chloride and total xylenes were detected in method blank MB 490-111289 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

1,2,3-Trichlorobenzene, 1,2,4-trichlorobenzene and Methylene Chloride were detected in method blank MB 490-111912/7 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Method(s) 8260B: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 111289 recovered outside control limits for the following analytes: dibromomethane and 1,2-dichloropropane. However, these compounds are not being reported, there fore the data is not impacted.

Method(s) 8260B: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample(s): SB-3 (490-36505-3), SB-5 (490-36505-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix sp ke/matrix spike duplicate (MS/MSD) associated with batches 110959 and 111912. See LCS/LCSD

Method(s) 8260B: Trichloroethene and 1,2,4-trimethylbenze on sample SB-4 (490-36505-4) is being reported with an e-flag. These compounds were below the report limit in the dilution.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SB-1-GW (490-36505-7) and Trip Blank (490-36505-8) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/03/2013 and 10/04/2013.

Acetone was detected in method blank MB 490-111503/7 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Toluene was detected in method blank MB 490-111503/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Acetone and Toluene were detected in method blank MB 490-111840/7 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Sample SB-1-GW (490-36505-7)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix sp ke/matrix spike duplicate (MS/MSD) associated with batch 111503.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

VOA Prep

Job ID: 490-36505-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

No analytical or quality issues were noted.

Comments

No additional comments.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less han the RL but greater han or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.
X	Surrogate is outside control 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
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 ra io
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)

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-2

Date Collected: 09/27/13 09:30
Date Received: 09/28/13 08:25

Lab Sample ID: 490-36505-1

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0433	0.0346	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Benzene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Bromobenzene	ND		0.00173	0.000623	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Bromochloromethane	ND		0.00173	0.000476	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Bromodichloromethane	ND		0.00173	0.000476	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Bromoform	ND		0.00173	0.000476	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Bromomethane	ND		0.00173	0.00104	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
2-Butanone (MEK)	ND		0.0433	0.00441	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Carbon disulfide	ND		0.00433	0.00311	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Carbon tetrachloride	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Chlorobenzene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Chlorodibromomethane	ND		0.00173	0.000294	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Chloroethane	ND		0.00433	0.00164	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Chloroform	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Chloromethane	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
2-Chlorotoluene	ND		0.00173	0.000770	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
4-Chlorotoluene	ND		0.00173	0.000727	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
cis-1,2-Dichloroethene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
cis-1,3-Dichloropropene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,2-Dibromo-3-Chloropropane	ND		0.00433	0.000606	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,2-Dibromoethane (EDB)	ND		0.00173	0.000865	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Dibromomethane	ND		0.00173	0.000484	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,2-Dichlorobenzene	ND		0.00173	0.000294	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,3-Dichlorobenzene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,4-Dichlorobenzene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Dichlorodifluoromethane	ND		0.00173	0.000865	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,1-Dichloroethane	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,2-Dichloroethane	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,1-Dichloroethene	ND		0.00173	0.000493	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,2-Dichloropropane	ND		0.00173	0.000813	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,3-Dichloropropane	ND		0.00173	0.000813	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
2,2-Dichloropropane	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,1-Dichloropropene	ND		0.00173	0.000441	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Ethylbenzene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Hexachlorobutadiene	ND		0.00433	0.000986	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
2-Hexanone	ND		0.0433	0.0144	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Isopropylbenzene	ND		0.00173	0.000355	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Methylene Chloride	**0.00140**	**J B**	0.00865	0.000744	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
4-Methyl-2-pentanone (MIBK)	ND		0.0433	0.0147	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Methyl tert-butyl ether	ND		0.00173	0.000830	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Naphthalene	ND		0.00433	0.00147	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
n-Butylbenzene	ND		0.00173	0.000848	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
N-Propylbenzene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
p-Isopropyltoluene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
sec-Butylbenzene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Styrene	ND		0.00173	0.000952	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
tert-Butylbenzene	ND		0.00173	0.000779	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,1,1,2-Tetrachloroethane	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,1,2,2-Tetrachloroethane	ND		0.00173	0.000865	mg/Kg		09/28/13 13:55	09/30/13 15:22	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-2

Date Collected: 09/27/13 09:30
Date Received: 09/28/13 08:25

Lab Sample ID: 490-36505-1

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.00599**		0.00173	0.000631	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Toluene	ND		0.00173	0.000640	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
trans-1,2-Dichloroethene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
trans-1,3-Dichloropropene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,2,3-Trichlorobenzene	ND		0.00173	0.000329	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,2,4-Trichlorobenzene	ND		0.00173	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,1,1-Trichloroethane	ND		0.00173	0.000796	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,1,2-Trichloroethane	ND		0.00433	0.00121	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Trichloroethene	ND		0.00173	0.000830	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Trichlorofluoromethane	ND		0.00173	0.000865	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,2,3-Trichloropropane	ND		0.00173	0.000476	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,2,4-Trimethylbenzene	ND		0.00173	0.000865	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
1,3,5-Trimethylbenzene	ND		0.00173	0.000649	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Vinyl chloride	ND		0.00173	0.000952	mg/Kg		09/28/13 13:55	09/30/13 15:22	1
Xylenes, Total	ND		0.00260	0.000580	mg/Kg		09/28/13 13:55	09/30/13 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/28/13 13:55*	*09/30/13 15:22*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*	*09/28/13 13:55*	*09/30/13 15:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*	*09/28/13 13:55*	*09/30/13 15:22*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*	*09/28/13 13:55*	*09/30/13 15:22*	*1*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-1

Date Collected: 09/27/13 10:15
Date Received: 09/28/13 08:25

Lab Sample ID: 490-36505-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0449	0.0359	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Benzene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Bromobenzene	ND		0.00180	0.000646	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Bromochloromethane	ND		0.00180	0.000494	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Bromodichloromethane	ND		0.00180	0.000494	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Bromoform	ND		0.00180	0.000494	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Bromomethane	ND		0.00180	0.00108	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
2-Butanone (MEK)	ND		0.0449	0.00458	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Carbon disulfide	ND		0.00449	0.00323	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Carbon tetrachloride	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Chlorobenzene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Chlorodibromomethane	ND		0.00180	0.000305	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Chloroethane	ND		0.00449	0.00171	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Chloroform	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Chloromethane	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
2-Chlorotoluene	ND		0.00180	0.000799	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
4-Chlorotoluene	ND		0.00180	0.000754	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
cis-1,2-Dichloroethene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
cis-1,3-Dichloropropene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,2-Dibromo-3-Chloropropane	ND		0.00449	0.000628	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,2-Dibromoethane (EDB)	ND		0.00180	0.000898	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Dibromomethane	ND		0.00180	0.000503	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,2-Dichlorobenzene	ND		0.00180	0.000305	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,3-Dichlorobenzene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,4-Dichlorobenzene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Dichlorodifluoromethane	ND		0.00180	0.000898	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,1-Dichloroethane	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,2-Dichloroethane	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,1-Dichloroethene	ND		0.00180	0.000512	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,2-Dichloropropane	ND		0.00180	0.000844	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,3-Dichloropropane	ND		0.00180	0.000844	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
2,2-Dichloropropane	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,1-Dichloropropene	ND		0.00180	0.000458	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Ethylbenzene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Hexachlorobutadiene	ND		0.00449	0.00102	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
2-Hexanone	ND		0.0449	0.0150	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Isopropylbenzene	ND		0.00180	0.000368	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Methylene Chloride	**0.00155**	**J B**	0.00898	0.000772	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
4-Methyl-2-pentanone (MIBK)	ND		0.0449	0.0153	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Methyl tert-butyl ether	ND		0.00180	0.000862	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Naphthalene	ND		0.00449	0.00153	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
n-Butylbenzene	ND		0.00180	0.000880	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
N-Propylbenzene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
p-Isopropyltoluene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
sec-Butylbenzene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Styrene	ND		0.00180	0.000987	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
tert-Butylbenzene	ND		0.00180	0.000808	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,1,1,2-Tetrachloroethane	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,1,2,2-Tetrachloroethane	ND		0.00180	0.000898	mg/Kg		09/28/13 13:55	09/30/13 15:52	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-1

Date Collected: 09/27/13 10:15
Date Received: 09/28/13 08:25

Lab Sample ID: 490-36505-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.0254**		0.00180	0.000655	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Toluene	**0.00117**	**J**	0.00180	0.000664	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
trans-1,2-Dichloroethene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
trans-1,3-Dichloropropene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,2,3-Trichlorobenzene	ND		0.00180	0.000341	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,2,4-Trichlorobenzene	ND		0.00180	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,1,1-Trichloroethane	ND		0.00180	0.000826	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,1,2-Trichloroethane	ND		0.00449	0.00126	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Trichloroethene	ND		0.00180	0.000862	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Trichlorofluoromethane	ND		0.00180	0.000898	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,2,3-Trichloropropane	ND		0.00180	0.000494	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,2,4-Trimethylbenzene	ND		0.00180	0.000898	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
1,3,5-Trimethylbenzene	ND		0.00180	0.000673	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Vinyl chloride	ND		0.00180	0.000987	mg/Kg		09/28/13 13:55	09/30/13 15:52	1
Xylenes, Total	ND		0.00269	0.000601	mg/Kg		09/28/13 13:55	09/30/13 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*09/28/13 13:55*	*09/30/13 15:52*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*	*09/28/13 13:55*	*09/30/13 15:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*	*09/28/13 13:55*	*09/30/13 15:52*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*09/28/13 13:55*	*09/30/13 15:52*	*1*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-3

Lab Sample ID: 490-36505-3

Date Collected: 09/27/13 10:45
Date Received: 09/28/13 08:25

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		97.5	32.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,1,1-Trichloroethane	ND		97.5	44.8	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,1,2,2-Tetrachloroethane	ND		97.5	48.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,1,2-Trichloroethane	ND		244	68.2	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,1-Dichloroethane	ND		97.5	32.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,1-Dichloroethene	ND		97.5	28.3	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,1-Dichloropropene	ND		97.5	25.3	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,2,3-Trichlorobenzene	ND		97.5	18.5	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,2,3-Trichloropropane	ND		97.5	27.3	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,2,4-Trichlorobenzene	ND		97.5	32.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,2,4-Trimethylbenzene	ND		97.5	48.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,2-Dibromo-3-Chloropropane	ND		244	34.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,2-Dibromoethane (EDB)	ND		97.5	48.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,2-Dichlorobenzene	ND		97.5	16.6	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,2-Dichloroethane	ND		97.5	32.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,2-Dichloropropane	ND		97.5	45.8	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,3,5-Trimethylbenzene	ND		97.5	37.0	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,3-Dichlorobenzene	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,3-Dichloropropane	ND		97.5	45.8	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
1,4-Dichlorobenzene	ND		97.5	45.8	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
2,2-Dichloropropane	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
2-Butanone (MEK)	ND		2440	253	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
2-Chlorotoluene	ND		97.5	44.8	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
2-Hexanone	ND		2440	819	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
4-Chlorotoluene	ND		97.5	40.9	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
4-Methyl-2-pentanone (MIBK)	ND		2440	828	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Acetone	ND		2440	1950	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Benzene	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Bromobenzene	ND		97.5	35.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Bromochloromethane	ND		97.5	27.3	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Bromodichloromethane	ND		97.5	27.3	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Bromoform	ND		97.5	27.3	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Bromomethane	ND		97.5	58.5	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Carbon disulfide	ND		244	175	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Carbon tetrachloride	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Chlorobenzene	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Chlorodibromomethane	ND		97.5	16.6	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Chloroethane	ND		244	92.6	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Chloroform	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Chloromethane	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
cis-1,2-Dichloroethene	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
cis-1,3-Dichloropropene	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Dibromomethane	ND		97.5	27.3	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Dichlorodifluoromethane	ND		97.5	48.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Ethylbenzene	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Hexachlorobutadiene	ND		244	53.6	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Isopropylbenzene	ND		97.5	20.5	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Methyl tert-butyl ether	ND		97.5	48.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Methylene Chloride	**67.1**	**J B**	487	48.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-3

Date Collected: 09/27/13 10:45
Date Received: 09/28/13 08:25

Lab Sample ID: 490-36505-3

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		244	82.8	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
n-Butylbenzene	ND		97.5	48.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
N-Propylbenzene	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
p-Isopropyltoluene	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
sec-Butylbenzene	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Styrene	ND		97.5	53.6	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
tert-Butylbenzene	ND		97.5	48.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Tetrachloroethene	**2000**		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Toluene	ND		97.5	36.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
trans-1,2-Dichloroethene	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
trans-1,3-Dichloropropene	ND		97.5	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Trichloroethene	ND		97.5	48.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Trichlorofluoromethane	ND		97.5	48.7	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Vinyl chloride	ND		97.5	53.6	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000
Xylenes, Total	ND		146	33.1	mg/Kg		09/28/13 13:54	10/01/13 14:51	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*	*09/28/13 13:54*	*10/01/13 14:51*	*1000*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*09/28/13 13:54*	*10/01/13 14:51*	*1000*
Dibromofluoromethane (Surr)	*91*		*70 - 130*	*09/28/13 13:54*	*10/01/13 14:51*	*1000*
Toluene-d8 (Surr)	*108*		*70 - 130*	*09/28/13 13:54*	*10/01/13 14:51*	*1000*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-4

Date Collected: 09/27/13 11:20
Date Received: 09/28/13 08:25

Lab Sample ID: 490-36505-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0466	0.0372	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Benzene	ND		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Bromobenzene	ND		0.00186	0.000670	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Bromochloromethane	ND		0.00186	0.000512	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Bromodichloromethane	ND		0.00186	0.000512	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Bromoform	ND		0.00186	0.000512	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Bromomethane	ND		0.00186	0.00112	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
2-Butanone (MEK)	**0.0149**	**J**	0.0466	0.00475	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Carbon disulfide	ND		0.00466	0.00335	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Carbon tetrachloride	**0.0266**		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Chlorobenzene	**0.0172**		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Chlorodibromomethane	ND		0.00186	0.000317	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Chloroethane	ND		0.00466	0.00177	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Chloroform	**0.00182**	**J B**	0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Chloromethane	ND		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
2-Chlorotoluene	ND		0.00186	0.000829	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
4-Chlorotoluene	ND		0.00186	0.000782	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
cis-1,2-Dichloroethene	**0.129**		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
cis-1,3-Dichloropropene	ND		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,2-Dibromo-3-Chloropropane	ND		0.00466	0.000652	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,2-Dibromoethane (EDB)	ND		0.00186	0.000931	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Dibromomethane	ND		0.00186	0.000521	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,2-Dichlorobenzene	**0.000779**	**J**	0.00186	0.000317	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,3-Dichlorobenzene	**0.000900**	**J**	0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,4-Dichlorobenzene	**0.00680**		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Dichlorodifluoromethane	ND		0.00186	0.000931	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,1-Dichloroethane	ND		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,2-Dichloroethane	ND		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,1-Dichloroethene	**0.00101**	**J**	0.00186	0.000531	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,2-Dichloropropane	ND		0.00186	0.000875	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,3-Dichloropropane	ND		0.00186	0.000875	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
2,2-Dichloropropane	ND		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,1-Dichloropropene	ND		0.00186	0.000475	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Ethylbenzene	**0.000749**	**J**	0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Hexachlorobutadiene	**0.00544**		0.00466	0.00106	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
2-Hexanone	ND		0.0466	0.0155	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Isopropylbenzene	**0.0136**		0.00186	0.000382	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Methylene Chloride	**0.00182**	**J B**	0.00931	0.000801	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
4-Methyl-2-pentanone (MIBK)	ND		0.0466	0.0158	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Methyl tert-butyl ether	ND		0.00186	0.000894	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Naphthalene	**0.00799**		0.00466	0.00158	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
n-Butylbenzene	**0.00492**		0.00186	0.000912	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
N-Propylbenzene	**0.0440**		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
p-Isopropyltoluene	**0.00413**		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
sec-Butylbenzene	**0.00281**		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Styrene	ND		0.00186	0.00102	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
tert-Butylbenzene	**0.00715**		0.00186	0.000838	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,1,1,2-Tetrachloroethane	ND		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,1,2,2-Tetrachloroethane	ND		0.00186	0.000931	mg/Kg		09/28/13 13:55	09/30/13 16:53	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-4

Date Collected: 09/27/13 11:20
Date Received: 09/28/13 08:25

Lab Sample ID: 490-36505-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**0.00306**		0.00186	0.000689	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
trans-1,2-Dichloroethene	ND		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
trans-1,3-Dichloropropene	ND		0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,2,3-Trichlorobenzene	ND		0.00186	0.000354	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,2,4-Trichlorobenzene	**0.00168**	**J**	0.00186	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,1,1-Trichloroethane	ND		0.00186	0.000857	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Tetrachloroethene	**2180**		99.0	33.7	mg/Kg		09/28/13 13:54	10/04/13 12:40	1000
1,1,2-Trichloroethane	ND		0.00466	0.00130	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Trichloroethene	**0.707**	**E**	0.00186	0.000894	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Trichlorofluoromethane	ND		0.00186	0.000931	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,2,3-Trichloropropane	ND		0.00186	0.000512	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,2,4-Trimethylbenzene	**0.263**	**E**	0.00186	0.000931	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
1,3,5-Trimethylbenzene	**0.0947**		0.00186	0.000698	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Vinyl chloride	ND		0.00186	0.00102	mg/Kg		09/28/13 13:55	09/30/13 16:53	1
Xylenes, Total	**0.0257**		0.00279	0.000624	mg/Kg		09/28/13 13:55	09/30/13 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*09/28/13 13:55*	*09/30/13 16:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*	*09/28/13 13:54*	*10/01/13 13:51*	*20*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*	*09/28/13 13:54*	*10/04/13 12:40*	*1000*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*09/28/13 13:55*	*09/30/13 16:53*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*09/28/13 13:54*	*10/01/13 13:51*	*20*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/28/13 13:54*	*10/04/13 12:40*	*1000*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*	*09/28/13 13:55*	*09/30/13 16:53*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*	*09/28/13 13:54*	*10/01/13 13:51*	*20*
Dibromofluoromethane (Surr)	*97*		*70 - 130*	*09/28/13 13:54*	*10/04/13 12:40*	*1000*
Toluene-d8 (Surr)	*139*	*X*	*70 - 130*	*09/28/13 13:55*	*09/30/13 16:53*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*	*09/28/13 13:54*	*10/01/13 13:51*	*20*
Toluene-d8 (Surr)	*106*		*70 - 130*	*09/28/13 13:54*	*10/04/13 12:40*	*1000*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-5

Lab Sample ID: 490-36505-5

Date Collected: 09/27/13 11:45
Date Received: 09/28/13 08:25

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		96.9	32.5	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,1,1-Trichloroethane	ND		96.9	44.6	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,1,2,2-Tetrachloroethane	ND		96.9	48.4	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,1,2-Trichloroethane	ND		242	67.8	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,1-Dichloroethane	ND		96.9	32.5	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,1-Dichloroethene	ND		96.9	28.1	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,1-Dichloropropene	ND		96.9	25.2	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,2,3-Trichlorobenzene	ND		96.9	18.4	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,2,3-Trichloropropane	ND		96.9	27.1	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,2,4-Trichlorobenzene	ND		96.9	32.5	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,2,4-Trimethylbenzene	ND		96.9	48.4	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,2-Dibromo-3-Chloropropane	ND		242	33.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,2-Dibromoethane (EDB)	ND		96.9	48.4	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,2-Dichlorobenzene	ND		96.9	16.5	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,2-Dichloroethane	ND		96.9	32.5	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,2-Dichloropropane	ND		96.9	45.5	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,3,5-Trimethylbenzene	ND		96.9	36.8	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,3-Dichlorobenzene	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,3-Dichloropropane	ND		96.9	45.5	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
1,4-Dichlorobenzene	ND		96.9	45.5	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
2,2-Dichloropropane	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
2-Butanone (MEK)	ND		2420	252	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
2-Chlorotoluene	ND		96.9	44.6	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
2-Hexanone	ND		2420	814	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
4-Chlorotoluene	ND		96.9	40.7	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
4-Methyl-2-pentanone (MIBK)	ND		2420	824	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Acetone	ND		2420	1940	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Benzene	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Bromobenzene	ND		96.9	34.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Bromochloromethane	ND		96.9	27.1	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Bromodichloromethane	ND		96.9	27.1	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Bromoform	ND		96.9	27.1	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Bromomethane	ND		96.9	58.1	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Carbon disulfide	ND		242	174	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Carbon tetrachloride	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Chlorobenzene	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Chlorodibromomethane	ND		96.9	16.5	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Chloroethane	ND		242	92.1	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Chloroform	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Chloromethane	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
cis-1,2-Dichloroethene	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
cis-1,3-Dichloropropene	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Dibromomethane	ND		96.9	27.1	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Dichlorodifluoromethane	ND		96.9	48.4	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Ethylbenzene	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Hexachlorobutadiene	ND		242	53.3	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Isopropylbenzene	ND		96.9	20.3	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Methyl tert-butyl ether	ND		96.9	48.4	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Methylene Chloride	**79.9**	**J B**	484	48.4	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-5

Lab Sample ID: 490-36505-5

Date Collected: 09/27/13 11:45
Matrix: Solid
Date Received: 09/28/13 08:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		242	82.4	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
n-Butylbenzene	ND		96.9	48.4	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
N-Propylbenzene	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
p-Isopropyltoluene	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
sec-Butylbenzene	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Styrene	ND		96.9	53.3	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
tert-Butylbenzene	ND		96.9	48.4	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Tetrachloroethene	**3720**		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Toluene	ND		96.9	35.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
trans-1,2-Dichloroethene	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
trans-1,3-Dichloropropene	ND		96.9	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Trichloroethene	ND		96.9	48.4	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Trichlorofluoromethane	ND		96.9	48.4	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Vinyl chloride	ND		96.9	53.3	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000
Xylenes, Total	ND		145	32.9	mg/Kg		09/28/13 13:54	10/01/13 14:21	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 130*	*09/28/13 13:54*	*10/01/13 14:21*	*1000*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*09/28/13 13:54*	*10/01/13 14:21*	*1000*
Dibromofluoromethane (Surr)	*91*		*70 - 130*	*09/28/13 13:54*	*10/01/13 14:21*	*1000*
Toluene-d8 (Surr)	*107*		*70 - 130*	*09/28/13 13:54*	*10/01/13 14:21*	*1000*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-6

Date Collected: 09/27/13 12:30
Date Received: 09/28/13 08:25

Lab Sample ID: 490-36505-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0475	0.0380	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Benzene	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Bromobenzene	ND		0.00190	0.000684	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Bromochloromethane	ND		0.00190	0.000523	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Bromodichloromethane	ND		0.00190	0.000523	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Bromoform	ND		0.00190	0.000523	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Bromomethane	ND		0.00190	0.00114	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
2-Butanone (MEK)	ND		0.0475	0.00485	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Carbon disulfide	**0.00390**	**J**	0.00475	0.00342	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Carbon tetrachloride	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Chlorobenzene	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Chlorodibromomethane	ND		0.00190	0.000323	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Chloroethane	ND		0.00475	0.00181	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Chloroform	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Chloromethane	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
2-Chlorotoluene	ND		0.00190	0.000846	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
4-Chlorotoluene	ND		0.00190	0.000798	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
cis-1,2-Dichloroethene	**0.137**		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
cis-1,3-Dichloropropene	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,2-Dibromo-3-Chloropropane	ND		0.00475	0.000665	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,2-Dibromoethane (EDB)	ND		0.00190	0.000951	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Dibromomethane	ND		0.00190	0.000532	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,2-Dichlorobenzene	ND		0.00190	0.000323	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,3-Dichlorobenzene	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,4-Dichlorobenzene	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Dichlorodifluoromethane	ND		0.00190	0.000951	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,1-Dichloroethane	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,2-Dichloroethane	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,1-Dichloroethene	ND		0.00190	0.000542	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,2-Dichloropropane	ND		0.00190	0.000894	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,3-Dichloropropane	ND		0.00190	0.000894	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
2,2-Dichloropropane	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,1-Dichloropropene	ND		0.00190	0.000485	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Ethylbenzene	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Hexachlorobutadiene	ND		0.00475	0.00108	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
2-Hexanone	ND		0.0475	0.0159	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Isopropylbenzene	ND		0.00190	0.000390	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Methylene Chloride	**0.00197**	**J B**	0.00951	0.000817	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
4-Methyl-2-pentanone (MIBK)	ND		0.0475	0.0162	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Methyl tert-butyl ether	ND		0.00190	0.000913	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Naphthalene	ND		0.00475	0.00162	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
n-Butylbenzene	ND		0.00190	0.000932	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
N-Propylbenzene	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
p-Isopropyltoluene	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
sec-Butylbenzene	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Styrene	ND		0.00190	0.00105	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
tert-Butylbenzene	ND		0.00190	0.000856	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,1,1,2-Tetrachloroethane	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,1,2,2-Tetrachloroethane	ND		0.00190	0.000951	mg/Kg		09/28/13 13:55	09/30/13 17:53	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-6

Date Collected: 09/27/13 12:30
Date Received: 09/28/13 08:25

Lab Sample ID: 490-36505-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.00190	0.000703	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
trans-1,2-Dichloroethene	**0.00151**	**J**	0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
trans-1,3-Dichloropropene	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,2,3-Trichlorobenzene	ND		0.00190	0.000361	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,2,4-Trichlorobenzene	ND		0.00190	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,1,1-Trichloroethane	ND		0.00190	0.000875	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Tetrachloroethene	**2.16**		0.0845	0.0287	mg/Kg		09/28/13 13:54	10/01/13 13:22	1
1,1,2-Trichloroethane	ND		0.00475	0.00133	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Trichloroethene	**0.0700**		0.00190	0.000913	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Trichlorofluoromethane	ND		0.00190	0.000951	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,2,3-Trichloropropane	ND		0.00190	0.000523	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,2,4-Trimethylbenzene	**0.00133**	**J**	0.00190	0.000951	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
1,3,5-Trimethylbenzene	ND		0.00190	0.000713	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Vinyl chloride	**0.00473**		0.00190	0.00105	mg/Kg		09/28/13 13:55	09/30/13 17:53	1
Xylenes, Total	ND		0.00285	0.000637	mg/Kg		09/28/13 13:55	09/30/13 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*09/28/13 13:55*	*09/30/13 17:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*	*09/28/13 13:54*	*10/01/13 13:22*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*09/28/13 13:55*	*09/30/13 17:53*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/28/13 13:54*	*10/01/13 13:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*	*09/28/13 13:55*	*09/30/13 17:53*	*1*
Dibromofluoromethane (Surr)	*86*		*70 - 130*	*09/28/13 13:54*	*10/01/13 13:22*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*	*09/28/13 13:55*	*09/30/13 17:53*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*	*09/28/13 13:54*	*10/01/13 13:22*	*1*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-1-GW

Lab Sample ID: 490-36505-7

Date Collected: 09/27/13 10:25
Date Received: 09/28/13 08:25

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			10/03/13 08:15	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			10/03/13 08:15	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			10/03/13 08:15	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			10/03/13 08:15	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			10/03/13 08:15	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			10/03/13 08:15	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			10/03/13 08:15	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			10/03/13 08:15	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			10/03/13 08:15	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			10/03/13 08:15	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			10/03/13 08:15	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			10/03/13 08:15	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			10/03/13 08:15	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			10/03/13 08:15	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			10/03/13 08:15	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			10/03/13 08:15	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			10/03/13 08:15	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			10/03/13 08:15	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			10/03/13 08:15	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			10/03/13 08:15	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			10/03/13 08:15	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/03/13 08:15	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			10/03/13 08:15	1
2-Hexanone	ND		5.00	1.28	ug/L			10/03/13 08:15	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			10/03/13 08:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/03/13 08:15	1
Acetone	**4.95**	**J B**	5.00	2.66	ug/L			10/03/13 08:15	1
Benzene	**0.751**	**J**	1.00	0.200	ug/L			10/03/13 08:15	1
Bromobenzene	ND		1.00	0.210	ug/L			10/03/13 08:15	1
Bromochloromethane	ND		1.00	0.150	ug/L			10/03/13 08:15	1
Bromodichloromethane	ND		1.00	0.170	ug/L			10/03/13 08:15	1
Bromoform	ND		1.00	0.290	ug/L			10/03/13 08:15	1
Bromomethane	ND		1.00	0.350	ug/L			10/03/13 08:15	1
Carbon disulfide	ND		1.00	0.220	ug/L			10/03/13 08:15	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			10/03/13 08:15	1
Chlorobenzene	ND		1.00	0.180	ug/L			10/03/13 08:15	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			10/03/13 08:15	1
Chloroethane	ND		1.00	0.360	ug/L			10/03/13 08:15	1
Chloroform	ND		1.00	0.230	ug/L			10/03/13 08:15	1
Chloromethane	ND		1.00	0.360	ug/L			10/03/13 08:15	1
cis-1,2-Dichloroethene	**6.01**		1.00	0.210	ug/L			10/03/13 08:15	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			10/03/13 08:15	1
Dibromomethane	ND		1.00	0.450	ug/L			10/03/13 08:15	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			10/03/13 08:15	1
Ethylbenzene	ND		1.00	0.190	ug/L			10/03/13 08:15	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			10/03/13 08:15	1
Isopropylbenzene	ND		1.00	0.330	ug/L			10/03/13 08:15	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			10/03/13 08:15	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/03/13 08:15	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-1-GW

Date Collected: 09/27/13 10:25
Date Received: 09/28/13 08:25

Lab Sample ID: 490-36505-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00	0.210	ug/L			10/03/13 08:15	1
n-Butylbenzene	ND		1.00	0.240	ug/L			10/03/13 08:15	1
N-Propylbenzene	ND		1.00	0.170	ug/L			10/03/13 08:15	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			10/03/13 08:15	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			10/03/13 08:15	1
Styrene	ND		1.00	0.280	ug/L			10/03/13 08:15	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			10/03/13 08:15	1
Tetrachloroethene	**191**		5.00	0.700	ug/L			10/04/13 06:40	5
Toluene	ND		1.00	0.170	ug/L			10/03/13 08:15	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			10/03/13 08:15	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			10/03/13 08:15	1
Trichloroethene	**8.03**		1.00	0.200	ug/L			10/03/13 08:15	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			10/03/13 08:15	1
Vinyl chloride	ND		1.00	0.180	ug/L			10/03/13 08:15	1
Xylenes, Total	ND		2.00	0.380	ug/L			10/03/13 08:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*10/03/13 08:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*10/04/13 06:40*	*5*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/03/13 08:15*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*10/04/13 06:40*	*5*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*10/03/13 08:15*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*10/04/13 06:40*	*5*
Toluene-d8 (Surr)	*105*		*70 - 130*		*10/03/13 08:15*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*10/04/13 06:40*	*5*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: Trip Blank

Lab Sample ID: 490-36505-8

Date Collected: 09/27/13 00:01
Matrix: Water
Date Received: 09/28/13 08:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			10/03/13 02:24	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			10/03/13 02:24	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			10/03/13 02:24	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			10/03/13 02:24	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			10/03/13 02:24	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			10/03/13 02:24	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			10/03/13 02:24	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			10/03/13 02:24	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			10/03/13 02:24	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			10/03/13 02:24	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			10/03/13 02:24	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			10/03/13 02:24	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			10/03/13 02:24	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			10/03/13 02:24	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			10/03/13 02:24	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			10/03/13 02:24	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			10/03/13 02:24	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			10/03/13 02:24	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			10/03/13 02:24	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			10/03/13 02:24	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			10/03/13 02:24	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/03/13 02:24	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			10/03/13 02:24	1
2-Hexanone	ND		5.00	1.28	ug/L			10/03/13 02:24	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			10/03/13 02:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/03/13 02:24	1
Acetone	ND		5.00	2.66	ug/L			10/03/13 02:24	1
Benzene	ND		1.00	0.200	ug/L			10/03/13 02:24	1
Bromobenzene	ND		1.00	0.210	ug/L			10/03/13 02:24	1
Bromochloromethane	ND		1.00	0.150	ug/L			10/03/13 02:24	1
Bromodichloromethane	ND		1.00	0.170	ug/L			10/03/13 02:24	1
Bromoform	ND		1.00	0.290	ug/L			10/03/13 02:24	1
Bromomethane	ND		1.00	0.350	ug/L			10/03/13 02:24	1
Carbon disulfide	ND		1.00	0.220	ug/L			10/03/13 02:24	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			10/03/13 02:24	1
Chlorobenzene	ND		1.00	0.180	ug/L			10/03/13 02:24	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			10/03/13 02:24	1
Chloroethane	ND		1.00	0.360	ug/L			10/03/13 02:24	1
Chloroform	ND		1.00	0.230	ug/L			10/03/13 02:24	1
Chloromethane	ND		1.00	0.360	ug/L			10/03/13 02:24	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			10/03/13 02:24	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			10/03/13 02:24	1
Dibromomethane	ND		1.00	0.450	ug/L			10/03/13 02:24	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			10/03/13 02:24	1
Ethylbenzene	ND		1.00	0.190	ug/L			10/03/13 02:24	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			10/03/13 02:24	1
Isopropylbenzene	ND		1.00	0.330	ug/L			10/03/13 02:24	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			10/03/13 02:24	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/03/13 02:24	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: Trip Blank

Lab Sample ID: 490-36505-8

Date Collected: 09/27/13 00:01
Matrix: Water
Date Received: 09/28/13 08:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00	0.210	ug/L			10/03/13 02:24	1
n-Butylbenzene	ND		1.00	0.240	ug/L			10/03/13 02:24	1
N-Propylbenzene	ND		1.00	0.170	ug/L			10/03/13 02:24	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			10/03/13 02:24	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			10/03/13 02:24	1
Styrene	ND		1.00	0.280	ug/L			10/03/13 02:24	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			10/03/13 02:24	1
Tetrachloroethene	ND		1.00	0.140	ug/L			10/03/13 02:24	1
Toluene	ND		1.00	0.170	ug/L			10/03/13 02:24	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			10/03/13 02:24	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			10/03/13 02:24	1
Trichloroethene	ND		1.00	0.200	ug/L			10/03/13 02:24	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			10/03/13 02:24	1
Vinyl chloride	ND		1.00	0.180	ug/L			10/03/13 02:24	1
Xylenes, Total	ND		2.00	0.380	ug/L			10/03/13 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*10/03/13 02:24*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*10/03/13 02:24*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*10/03/13 02:24*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*		*10/03/13 02:24*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-110732/7
Matrix: Solid
Analysis Batch: 110732

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.00500	0.000700	mg/Kg			09/30/13 12:51	1
1,2-Dibromoethane (EDB)	ND		0.00200	0.00100	mg/Kg			09/30/13 12:51	1
2-Butanone (MEK)	ND		0.0500	0.00510	mg/Kg			09/30/13 12:51	1
2-Chlorotoluene	ND		0.00200	0.000890	mg/Kg			09/30/13 12:51	1
1,2-Dichlorobenzene	ND		0.00200	0.000340	mg/Kg			09/30/13 12:51	1
1,3-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
1,4-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
4-Chlorotoluene	ND		0.00200	0.000840	mg/Kg			09/30/13 12:51	1
1,1-Dichloroethane	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
Acetone	ND		0.0500	0.0400	mg/Kg			09/30/13 12:51	1
1,2-Dichloroethane	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
Benzene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
Bromobenzene	ND		0.00200	0.000720	mg/Kg			09/30/13 12:51	1
1,1-Dichloroethene	ND		0.00200	0.000570	mg/Kg			09/30/13 12:51	1
Bromochloromethane	ND		0.00200	0.000550	mg/Kg			09/30/13 12:51	1
1,2-Dichloropropane	ND		0.00200	0.000940	mg/Kg			09/30/13 12:51	1
Bromodichloromethane	ND		0.00200	0.000550	mg/Kg			09/30/13 12:51	1
1,3-Dichloropropane	ND		0.00200	0.000940	mg/Kg			09/30/13 12:51	1
Bromoform	ND		0.00200	0.000550	mg/Kg			09/30/13 12:51	1
2,2-Dichloropropane	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
Bromomethane	ND		0.00200	0.00120	mg/Kg			09/30/13 12:51	1
1,1-Dichloropropene	ND		0.00200	0.000510	mg/Kg			09/30/13 12:51	1
Carbon disulfide	ND		0.00500	0.00360	mg/Kg			09/30/13 12:51	1
Carbon tetrachloride	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
Chlorobenzene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
2-Hexanone	ND		0.0500	0.0167	mg/Kg			09/30/13 12:51	1
Chlorodibromomethane	ND		0.00200	0.000340	mg/Kg			09/30/13 12:51	1
Chloroethane	ND		0.00500	0.00190	mg/Kg			09/30/13 12:51	1
Chloroform	0.0006939	J	0.00200	0.000670	mg/Kg			09/30/13 12:51	1
4-Methyl-2-pentanone (MIBK)	ND		0.0500	0.0170	mg/Kg			09/30/13 12:51	1
Chloromethane	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
cis-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
cis-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
Dibromomethane	ND		0.00200	0.000560	mg/Kg			09/30/13 12:51	1
Dichlorodifluoromethane	ND		0.00200	0.00100	mg/Kg			09/30/13 12:51	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
Hexachlorobutadiene	ND		0.00500	0.00114	mg/Kg			09/30/13 12:51	1
Isopropylbenzene	ND		0.00200	0.000410	mg/Kg			09/30/13 12:51	1
1,1,1,2-Tetrachloroethane	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
Methyl tert-butyl ether	ND		0.00200	0.000960	mg/Kg			09/30/13 12:51	1
1,1,2,2-Tetrachloroethane	ND		0.00200	0.00100	mg/Kg			09/30/13 12:51	1
Methylene Chloride	0.001578	J	0.0100	0.000860	mg/Kg			09/30/13 12:51	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			09/30/13 12:51	1
n-Butylbenzene	ND		0.00200	0.000980	mg/Kg			09/30/13 12:51	1
N-Propylbenzene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
p-Isopropyltoluene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
sec-Butylbenzene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
1,2,3-Trichlorobenzene	ND		0.00200	0.000380	mg/Kg			09/30/13 12:51	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-110732/7
Matrix: Solid
Analysis Batch: 110732

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.00200	0.00110	mg/Kg			09/30/13 12:51	1
1,2,4-Trichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
tert-Butylbenzene	ND		0.00200	0.000900	mg/Kg			09/30/13 12:51	1
1,1,1-Trichloroethane	ND		0.00200	0.000920	mg/Kg			09/30/13 12:51	1
Tetrachloroethene	ND		0.00200	0.000730	mg/Kg			09/30/13 12:51	1
1,1,2-Trichloroethane	ND		0.00500	0.00140	mg/Kg			09/30/13 12:51	1
Toluene	ND		0.00200	0.000740	mg/Kg			09/30/13 12:51	1
trans-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
1,2,3-Trichloropropane	ND		0.00200	0.000550	mg/Kg			09/30/13 12:51	1
trans-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg			09/30/13 12:51	1
1,2,4-Trimethylbenzene	ND		0.00200	0.00100	mg/Kg			09/30/13 12:51	1
Trichloroethene	ND		0.00200	0.000960	mg/Kg			09/30/13 12:51	1
1,3,5-Trimethylbenzene	ND		0.00200	0.000750	mg/Kg			09/30/13 12:51	1
Trichlorofluoromethane	ND		0.00200	0.00100	mg/Kg			09/30/13 12:51	1
Vinyl chloride	ND		0.00200	0.00110	mg/Kg			09/30/13 12:51	1
Xylenes, Total	ND		0.00300	0.000670	mg/Kg			09/30/13 12:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*09/30/13 12:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*09/30/13 12:51*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*09/30/13 12:51*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/30/13 12:51*	*1*

Lab Sample ID: LCS 490-110732/3
Matrix: Solid
Analysis Batch: 110732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.0500	0.05433		mg/Kg		109	49 - 142
1,2-Dibromoethane (EDB)	0.0500	0.05293		mg/Kg		106	80 - 135
2-Butanone (MEK)	0.250	0.2237		mg/Kg		89	61 - 132
2-Chlorotoluene	0.0500	0.05780		mg/Kg		116	78 - 132
1,2-Dichlorobenzene	0.0500	0.05581		mg/Kg		112	80 - 134
1,3-Dichlorobenzene	0.0500	0.05854		mg/Kg		117	79 - 137
1,4-Dichlorobenzene	0.0500	0.05726		mg/Kg		115	77 - 139
4-Chlorotoluene	0.0500	0.05813		mg/Kg		116	77 - 138
1,1-Dichloroethane	0.0500	0.05060		mg/Kg		101	75 - 124
Acetone	0.250	0.2295		mg/Kg		92	51 - 149
1,2-Dichloroethane	0.0500	0.05273		mg/Kg		105	65 - 134
Benzene	0.0500	0.04668		mg/Kg		93	75 - 127
Bromobenzene	0.0500	0.05749		mg/Kg		115	75 - 130
1,1-Dichloroethene	0.0500	0.04998		mg/Kg		100	75 - 131
Bromochloromethane	0.0500	0.04765		mg/Kg		95	70 - 132
1,2-Dichloropropane	0.0500	0.04678		mg/Kg		94	69 - 120
Bromodichloromethane	0.0500	0.04629		mg/Kg		93	68 - 135
1,3-Dichloropropane	0.0500	0.05467		mg/Kg		109	78 - 126
Bromoform	0.0500	0.04884		mg/Kg		98	36 - 150
2,2-Dichloropropane	0.0500	0.04762		mg/Kg		95	68 - 145

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-110732/3
Matrix: Solid
Analysis Batch: 110732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	0.0500	0.03945		mg/Kg		79	43 - 142
1,1-Dichloropropene	0.0500	0.05008		mg/Kg		100	79 - 127
Carbon disulfide	0.0500	0.05034		mg/Kg		101	74 - 135
Carbon tetrachloride	0.0500	0.04955		mg/Kg		99	70 - 141
Chlorobenzene	0.0500	0.05295		mg/Kg		106	84 - 125
2-Hexanone	0.250	0.2633		mg/Kg		105	57 - 148
Chlorodibromomethane	0.0500	0.05083		mg/Kg		102	66 - 134
Chloroethane	0.0500	0.04956		mg/Kg		99	53 - 144
Chloroform	0.0500	0.04748		mg/Kg		95	76 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2106		mg/Kg		84	59 - 138
Chloromethane	0.0500	0.05504		mg/Kg		110	23 - 150
cis-1,2-Dichloroethene	0.0500	0.05098		mg/Kg		102	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04500		mg/Kg		90	73 - 148
Dibromomethane	0.0500	0.04645		mg/Kg		93	71 - 130
Dichlorodifluoromethane	0.0500	0.05398		mg/Kg		108	12 - 144
Ethylbenzene	0.0500	0.05306		mg/Kg		106	80 - 134
Hexachlorobutadiene	0.0500	0.06589		mg/Kg		132	65 - 148
Isopropylbenzene	0.0500	0.05379		mg/Kg		108	80 - 150
1,1,1,2-Tetrachloroethane	0.0500	0.05130		mg/Kg		103	80 - 136
Methyl tert-butyl ether	0.0500	0.04815		mg/Kg		96	70 - 136
1,1,2,2-Tetrachloroethane	0.0500	0.05497		mg/Kg		110	66 - 134
Methylene Chloride	0.0500	0.04653		mg/Kg		93	68 - 144
Naphthalene	0.0500	0.05631		mg/Kg		113	69 - 150
n-Butylbenzene	0.0500	0.05884		mg/Kg		118	72 - 152
N-Propylbenzene	0.0500	0.05834		mg/Kg		117	75 - 137
p-Isopropyltoluene	0.0500	0.05794		mg/Kg		116	77 - 141
sec-Butylbenzene	0.0500	0.05772		mg/Kg		115	79 - 141
1,2,3-Trichlorobenzene	0.0500	0.06405		mg/Kg		128	70 - 150
Styrene	0.0500	0.05317		mg/Kg		106	82 - 137
1,2,4-Trichlorobenzene	0.0500	0.06598		mg/Kg		132	62 - 150
tert-Butylbenzene	0.0500	0.05118		mg/Kg		102	80 - 132
1,1,1-Trichloroethane	0.0500	0.05001		mg/Kg		100	72 - 140
Tetrachloroethene	0.0500	0.05585		mg/Kg		112	78 - 140
1,1,2-Trichloroethane	0.0500	0.05106		mg/Kg		102	78 - 128
Toluene	0.0500	0.05201		mg/Kg		104	80 - 132
trans-1,2-Dichloroethene	0.0500	0.05291		mg/Kg		106	76 - 128
1,2,3-Trichloropropane	0.0500	0.05217		mg/Kg		104	65 - 139
trans-1,3-Dichloropropene	0.0500	0.05243		mg/Kg		105	62 - 139
1,2,4-Trimethylbenzene	0.0500	0.05653		mg/Kg		113	77 - 139
Trichloroethene	0.0500	0.04890		mg/Kg		98	77 - 127
1,3,5-Trimethylbenzene	0.0500	0.05701		mg/Kg		114	78 - 138
Trichlorofluoromethane	0.0500	0.05245		mg/Kg		105	50 - 140
Vinyl chloride	0.0500	0.05563		mg/Kg		111	47 - 136
Xylenes, Total	0.100	0.1029		mg/Kg		103	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-110732/3
Matrix: Solid
Analysis Batch: 110732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 490-110732/4
Matrix: Solid
Analysis Batch: 110732

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
1,2-Dibromo-3-Chloropropane	0.0500	0.05651		mg/Kg		113	49 - 142	4	50
1,2-Dibromoethane (EDB)	0.0500	0.05439		mg/Kg		109	80 - 135	3	50
2-Butanone (MEK)	0.250	0.2313		mg/Kg		93	61 - 132	3	50
2-Chlorotoluene	0.0500	0.05846		mg/Kg		117	78 - 132	1	50
1,2-Dichlorobenzene	0.0500	0.05610		mg/Kg		112	80 - 134	1	50
1,3-Dichlorobenzene	0.0500	0.05885		mg/Kg		118	79 - 137	1	50
1,4-Dichlorobenzene	0.0500	0.05661		mg/Kg		113	77 - 139	1	50
4-Chlorotoluene	0.0500	0.05855		mg/Kg		117	77 - 138	1	50
1,1-Dichloroethane	0.0500	0.04876		mg/Kg		98	75 - 124	4	50
Acetone	0.250	0.2513		mg/Kg		101	51 - 149	9	50
1,2-Dichloroethane	0.0500	0.05300		mg/Kg		106	65 - 134	1	50
Benzene	0.0500	0.04660		mg/Kg		93	75 - 127	0	50
Bromobenzene	0.0500	0.05851		mg/Kg		117	75 - 130	2	50
1,1-Dichloroethene	0.0500	0.04942		mg/Kg		99	75 - 131	1	50
Bromochloromethane	0.0500	0.04730		mg/Kg		95	70 - 132	1	50
1,2-Dichloropropane	0.0500	0.04728		mg/Kg		95	69 - 120	1	50
Bromodichloromethane	0.0500	0.04641		mg/Kg		93	68 - 135	0	50
1,3-Dichloropropane	0.0500	0.05521		mg/Kg		110	78 - 126	1	42
Bromoform	0.0500	0.05006		mg/Kg		100	36 - 150	2	50
2,2-Dichloropropane	0.0500	0.04671		mg/Kg		93	68 - 145	2	50
Bromomethane	0.0500	0.04053		mg/Kg		81	43 - 142	3	50
1,1-Dichloropropene	0.0500	0.04937		mg/Kg		99	79 - 127	1	50
Carbon disulfide	0.0500	0.04926		mg/Kg		99	74 - 135	2	50
Carbon tetrachloride	0.0500	0.04913		mg/Kg		98	70 - 141	1	50
Chlorobenzene	0.0500	0.05337		mg/Kg		107	84 - 125	1	50
2-Hexanone	0.250	0.2716		mg/Kg		109	57 - 148	3	50
Chlorodibromomethane	0.0500	0.05189		mg/Kg		104	66 - 134	2	50
Chloroethane	0.0500	0.04903		mg/Kg		98	53 - 144	1	50
Chloroform	0.0500	0.04708		mg/Kg		94	76 - 130	1	49
4-Methyl-2-pentanone (MIBK)	0.250	0.2191		mg/Kg		88	59 - 138	4	50
Chloromethane	0.0500	0.05358		mg/Kg		107	23 - 150	3	50
cis-1,2-Dichloroethene	0.0500	0.05073		mg/Kg		101	75 - 125	0	50
cis-1,3-Dichloropropene	0.0500	0.04572		mg/Kg		91	73 - 148	2	50
Dibromomethane	0.0500	0.04711		mg/Kg		94	71 - 130	1	50
Dichlorodifluoromethane	0.0500	0.05319		mg/Kg		106	12 - 144	1	50
Ethylbenzene	0.0500	0.05342		mg/Kg		107	80 - 134	1	50
Hexachlorobutadiene	0.0500	0.06651		mg/Kg		133	65 - 148	1	50
Isopropylbenzene	0.0500	0.05366		mg/Kg		107	80 - 150	0	50
1,1,1,2-Tetrachloroethane	0.0500	0.05215		mg/Kg		104	80 - 136	2	50
Methyl tert-butyl ether	0.0500	0.04868		mg/Kg		97	70 - 136	1	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-110732/4
Matrix: Solid
Analysis Batch: 110732

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
1,1,2,2-Tetrachloroethane	0.0500	0.05636		mg/Kg		113	66 - 134	3	50
Methylene Chloride	0.0500	0.04656		mg/Kg		93	68 - 144	0	50
Naphthalene	0.0500	0.05806		mg/Kg		116	69 - 150	3	50
n-Butylbenzene	0.0500	0.05868		mg/Kg		117	72 - 152	0	50
N-Propylbenzene	0.0500	0.05865		mg/Kg		117	75 - 137	1	50
p-Isopropyltoluene	0.0500	0.05805		mg/Kg		116	77 - 141	0	50
sec-Butylbenzene	0.0500	0.05804		mg/Kg		116	79 - 141	1	50
1,2,3-Trichlorobenzene	0.0500	0.06539		mg/Kg		131	70 - 150	2	50
Styrene	0.0500	0.05355		mg/Kg		107	82 - 137	1	50
1,2,4-Trichlorobenzene	0.0500	0.06660		mg/Kg		133	62 - 150	1	50
tert-Butylbenzene	0.0500	0.05104		mg/Kg		102	80 - 132	0	50
1,1,1-Trichloroethane	0.0500	0.04904		mg/Kg		98	72 - 140	2	50
Tetrachloroethene	0.0500	0.05596		mg/Kg		112	78 - 140	0	50
1,1,2-Trichloroethane	0.0500	0.05193		mg/Kg		104	78 - 128	2	50
Toluene	0.0500	0.05267		mg/Kg		105	80 - 132	1	50
trans-1,2-Dichloroethene	0.0500	0.05198		mg/Kg		104	76 - 128	2	50
1,2,3-Trichloropropane	0.0500	0.05394		mg/Kg		108	65 - 139	3	50
trans-1,3-Dichloropropene	0.0500	0.05342		mg/Kg		107	62 - 139	2	50
1,2,4-Trimethylbenzene	0.0500	0.05648		mg/Kg		113	77 - 139	0	50
Trichloroethene	0.0500	0.04927		mg/Kg		99	77 - 127	1	50
1,3,5-Trimethylbenzene	0.0500	0.05716		mg/Kg		114	78 - 138	0	50
Trichlorofluoromethane	0.0500	0.05134		mg/Kg		103	50 - 140	2	50
Vinyl chloride	0.0500	0.05523		mg/Kg		110	47 - 136	1	50
Xylenes, Total	0.100	0.1039		mg/Kg		104	80 - 137	1	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 490-110959/6
Matrix: Solid
Analysis Batch: 110959

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.250	0.0350	mg/Kg			10/01/13 12:19	1
1,2-Dibromoethane (EDB)	ND		0.100	0.0500	mg/Kg			10/01/13 12:19	1
2-Butanone (MEK)	ND		2.50	0.260	mg/Kg			10/01/13 12:19	1
2-Chlorotoluene	ND		0.100	0.0460	mg/Kg			10/01/13 12:19	1
1,2-Dichlorobenzene	ND		0.100	0.0170	mg/Kg			10/01/13 12:19	1
1,3-Dichlorobenzene	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
1,4-Dichlorobenzene	ND		0.100	0.0470	mg/Kg			10/01/13 12:19	1
4-Chlorotoluene	ND		0.100	0.0420	mg/Kg			10/01/13 12:19	1
1,1-Dichloroethane	ND		0.100	0.0335	mg/Kg			10/01/13 12:19	1
Acetone	ND		2.50	2.00	mg/Kg			10/01/13 12:19	1
1,2-Dichloroethane	ND		0.100	0.0335	mg/Kg			10/01/13 12:19	1
Benzene	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-110959/6
Matrix: Solid
Analysis Batch: 110959

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		0.100	0.0360	mg/Kg			10/01/13 12:19	1
1,1-Dichloroethene	ND		0.100	0.0290	mg/Kg			10/01/13 12:19	1
Bromochloromethane	ND		0.100	0.0280	mg/Kg			10/01/13 12:19	1
1,2-Dichloropropane	ND		0.100	0.0470	mg/Kg			10/01/13 12:19	1
Bromodichloromethane	ND		0.100	0.0280	mg/Kg			10/01/13 12:19	1
1,3-Dichloropropane	ND		0.100	0.0470	mg/Kg			10/01/13 12:19	1
Bromoform	ND		0.100	0.0280	mg/Kg			10/01/13 12:19	1
2,2-Dichloropropane	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
Bromomethane	ND		0.100	0.0600	mg/Kg			10/01/13 12:19	1
1,1-Dichloropropene	ND		0.100	0.0260	mg/Kg			10/01/13 12:19	1
Carbon disulfide	ND		0.250	0.180	mg/Kg			10/01/13 12:19	1
Carbon tetrachloride	0.05958	J	0.100	0.0340	mg/Kg			10/01/13 12:19	1
Chlorobenzene	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
2-Hexanone	ND		2.50	0.840	mg/Kg			10/01/13 12:19	1
Chlorodibromomethane	ND		0.100	0.0170	mg/Kg			10/01/13 12:19	1
Chloroethane	ND		0.250	0.0950	mg/Kg			10/01/13 12:19	1
Chloroform	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.850	mg/Kg			10/01/13 12:19	1
Chloromethane	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
cis-1,2-Dichloroethene	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
cis-1,3-Dichloropropene	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
Dibromomethane	ND		0.100	0.0280	mg/Kg			10/01/13 12:19	1
Dichlorodifluoromethane	ND		0.100	0.0500	mg/Kg			10/01/13 12:19	1
Ethylbenzene	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
Hexachlorobutadiene	ND		0.250	0.0550	mg/Kg			10/01/13 12:19	1
Isopropylbenzene	ND		0.100	0.0210	mg/Kg			10/01/13 12:19	1
1,1,1,2-Tetrachloroethane	ND		0.100	0.0335	mg/Kg			10/01/13 12:19	1
Methyl tert-butyl ether	ND		0.100	0.0500	mg/Kg			10/01/13 12:19	1
1,1,2,2-Tetrachloroethane	ND		0.100	0.0500	mg/Kg			10/01/13 12:19	1
Methylene Chloride	0.08413	J	0.500	0.0500	mg/Kg			10/01/13 12:19	1
Naphthalene	ND		0.250	0.0850	mg/Kg			10/01/13 12:19	1
n-Butylbenzene	ND		0.100	0.0500	mg/Kg			10/01/13 12:19	1
N-Propylbenzene	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
p-Isopropyltoluene	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
sec-Butylbenzene	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
1,2,3-Trichlorobenzene	0.05735	J	0.100	0.0190	mg/Kg			10/01/13 12:19	1
Styrene	ND		0.100	0.0550	mg/Kg			10/01/13 12:19	1
1,2,4-Trichlorobenzene	0.06653	J	0.100	0.0335	mg/Kg			10/01/13 12:19	1
tert-Butylbenzene	ND		0.100	0.0500	mg/Kg			10/01/13 12:19	1
1,1,1-Trichloroethane	ND		0.100	0.0460	mg/Kg			10/01/13 12:19	1
Tetrachloroethene	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
1,1,2-Trichloroethane	ND		0.250	0.0700	mg/Kg			10/01/13 12:19	1
Toluene	ND		0.100	0.0370	mg/Kg			10/01/13 12:19	1
trans-1,2-Dichloroethene	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
1,2,3-Trichloropropane	ND		0.100	0.0280	mg/Kg			10/01/13 12:19	1
trans-1,3-Dichloropropene	ND		0.100	0.0340	mg/Kg			10/01/13 12:19	1
1,2,4-Trimethylbenzene	ND		0.100	0.0500	mg/Kg			10/01/13 12:19	1
Trichloroethene	ND		0.100	0.0500	mg/Kg			10/01/13 12:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-110959/6
Matrix: Solid
Analysis Batch: 110959

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.100	0.0380	mg/Kg			10/01/13 12:19	1
Trichlorofluoromethane	ND		0.100	0.0500	mg/Kg			10/01/13 12:19	1
Vinyl chloride	ND		0.100	0.0550	mg/Kg			10/01/13 12:19	1
Xylenes, Total	ND		0.150	0.0340	mg/Kg			10/01/13 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*10/01/13 12:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*10/01/13 12:19*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*10/01/13 12:19*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*		*10/01/13 12:19*	*1*

Lab Sample ID: LCS 490-110959/3
Matrix: Solid
Analysis Batch: 110959

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.0500	0.04421		mg/Kg		88	49 - 142
1,2-Dibromoethane (EDB)	0.0500	0.04611		mg/Kg		92	80 - 135
2-Butanone (MEK)	0.250	0.2116		mg/Kg		85	61 - 132
2-Chlorotoluene	0.0500	0.05365		mg/Kg		107	78 - 132
1,2-Dichlorobenzene	0.0500	0.05077		mg/Kg		102	80 - 134
1,3-Dichlorobenzene	0.0500	0.05135		mg/Kg		103	79 - 137
1,4-Dichlorobenzene	0.0500	0.05015		mg/Kg		100	77 - 139
4-Chlorotoluene	0.0500	0.05571		mg/Kg		111	77 - 138
1,1-Dichloroethane	0.0500	0.04520		mg/Kg		90	75 - 124
Acetone	0.250	0.1963		mg/Kg		79	51 - 149
1,2-Dichloroethane	0.0500	0.03990		mg/Kg		80	65 - 134
Benzene	0.0500	0.04583		mg/Kg		92	75 - 127
Bromobenzene	0.0500	0.04908		mg/Kg		98	75 - 130
1,1-Dichloroethene	0.0500	0.04637		mg/Kg		93	75 - 131
Bromochloromethane	0.0500	0.04390		mg/Kg		88	70 - 132
1,2-Dichloropropane	0.0500	0.04619		mg/Kg		92	69 - 120
Bromodichloromethane	0.0500	0.04409		mg/Kg		88	68 - 135
1,3-Dichloropropane	0.0500	0.04669		mg/Kg		93	78 - 126
Bromoform	0.0500	0.04489		mg/Kg		90	36 - 150
2,2-Dichloropropane	0.0500	0.04373		mg/Kg		87	68 - 145
Bromomethane	0.0500	0.04377		mg/Kg		88	43 - 142
1,1-Dichloropropene	0.0500	0.04770		mg/Kg		95	79 - 127
Carbon disulfide	0.0500	0.04613		mg/Kg		92	74 - 135
Carbon tetrachloride	0.0500	0.04373		mg/Kg		87	70 - 141
Chlorobenzene	0.0500	0.04880		mg/Kg		98	84 - 125
2-Hexanone	0.250	0.2186		mg/Kg		87	57 - 148
Chlorodibromomethane	0.0500	0.04725		mg/Kg		95	66 - 134
Chloroethane	0.0500	0.04649		mg/Kg		93	53 - 144
Chloroform	0.0500	0.04257		mg/Kg		85	76 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2440		mg/Kg		98	59 - 138
Chloromethane	0.0500	0.05223		mg/Kg		104	23 - 150
cis-1,2-Dichloroethene	0.0500	0.04692		mg/Kg		94	75 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-110959/3
Matrix: Solid
Analysis Batch: 110959

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	0.0500	0.05284		mg/Kg		106	73 - 148
Dibromomethane	0.0500	0.04222		mg/Kg		84	71 - 130
Dichlorodifluoromethane	0.0500	0.05264		mg/Kg		105	12 - 144
Ethylbenzene	0.0500	0.05312		mg/Kg		106	80 - 134
Hexachlorobutadiene	0.0500	0.04816		mg/Kg		96	65 - 148
Isopropylbenzene	0.0500	0.05660		mg/Kg		113	80 - 150
1,1,1,2-Tetrachloroethane	0.0500	0.04524		mg/Kg		90	80 - 136
Methyl tert-butyl ether	0.0500	0.04653		mg/Kg		93	70 - 136
1,1,2,2-Tetrachloroethane	0.0500	0.04364		mg/Kg		87	66 - 134
Methylene Chloride	0.0500	0.04290		mg/Kg		86	68 - 144
Naphthalene	0.0500	0.05815		mg/Kg		116	69 - 150
n-Butylbenzene	0.0500	0.05957		mg/Kg		119	72 - 152
N-Propylbenzene	0.0500	0.05585		mg/Kg		112	75 - 137
p-Isopropyltoluene	0.0500	0.05959		mg/Kg		119	77 - 141
sec-Butylbenzene	0.0500	0.05824		mg/Kg		116	79 - 141
1,2,3-Trichlorobenzene	0.0500	0.05506		mg/Kg		110	70 - 150
Styrene	0.0500	0.05498		mg/Kg		110	82 - 137
1,2,4-Trichlorobenzene	0.0500	0.06169		mg/Kg		123	62 - 150
tert-Butylbenzene	0.0500	0.05518		mg/Kg		110	80 - 132
1,1,1-Trichloroethane	0.0500	0.04318		mg/Kg		86	72 - 140
Tetrachloroethene	0.0500	0.04666		mg/Kg		93	78 - 140
1,1,2-Trichloroethane	0.0500	0.04480		mg/Kg		90	78 - 128
Toluene	0.0500	0.04923		mg/Kg		98	80 - 132
trans-1,2-Dichloroethene	0.0500	0.04650		mg/Kg		93	76 - 128
1,2,3-Trichloropropane	0.0500	0.04735		mg/Kg		95	65 - 139
trans-1,3-Dichloropropene	0.0500	0.05163		mg/Kg		103	62 - 139
1,2,4-Trimethylbenzene	0.0500	0.05714		mg/Kg		114	77 - 139
Trichloroethene	0.0500	0.04541		mg/Kg		91	77 - 127
1,3,5-Trimethylbenzene	0.0500	0.05718		mg/Kg		114	78 - 138
Trichlorofluoromethane	0.0500	0.04380		mg/Kg		88	50 - 140
Vinyl chloride	0.0500	0.05371		mg/Kg		107	47 - 136
Xylenes, Total	0.100	0.1072		mg/Kg		107	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
Dibromofluoromethane (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 490-110959/4
Matrix: Solid
Analysis Batch: 110959

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
1,2-Dibromo-3-Chloropropane	0.0500	0.04724		mg/Kg		94	49 - 142	7	50
1,2-Dibromoethane (EDB)	0.0500	0.04592		mg/Kg		92	80 - 135	0	50
2-Butanone (MEK)	0.250	0.2234		mg/Kg		89	61 - 132	5	50
2-Chlorotoluene	0.0500	0.05080		mg/Kg		102	78 - 132	5	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-110959/4
Matrix: Solid
Analysis Batch: 110959

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
1,2-Dichlorobenzene	0.0500	0.04897		mg/Kg		98	80 - 134	4	50
1,3-Dichlorobenzene	0.0500	0.05056		mg/Kg		101	79 - 137	2	50
1,4-Dichlorobenzene	0.0500	0.04784		mg/Kg		96	77 - 139	5	50
4-Chlorotoluene	0.0500	0.05085		mg/Kg		102	77 - 138	9	50
1,1-Dichloroethane	0.0500	0.04489		mg/Kg		90	75 - 124	1	50
Acetone	0.250	0.2096		mg/Kg		84	51 - 149	7	50
1,2-Dichloroethane	0.0500	0.03916		mg/Kg		78	65 - 134	2	50
Benzene	0.0500	0.04513		mg/Kg		90	75 - 127	2	50
Bromobenzene	0.0500	0.04892		mg/Kg		98	75 - 130	0	50
1,1-Dichloroethene	0.0500	0.04473		mg/Kg		89	75 - 131	4	50
Bromochloromethane	0.0500	0.04250		mg/Kg		85	70 - 132	3	50
1,2-Dichloropropane	0.0500	0.04497		mg/Kg		90	69 - 120	3	50
Bromodichloromethane	0.0500	0.04303		mg/Kg		86	68 - 135	2	50
1,3-Dichloropropane	0.0500	0.04619		mg/Kg		92	78 - 126	1	42
Bromoform	0.0500	0.04435		mg/Kg		89	36 - 150	1	50
2,2-Dichloropropane	0.0500	0.04251		mg/Kg		85	68 - 145	3	50
Bromomethane	0.0500	0.04309		mg/Kg		86	43 - 142	2	50
1,1-Dichloropropene	0.0500	0.04734		mg/Kg		95	79 - 127	1	50
Carbon disulfide	0.0500	0.04542		mg/Kg		91	74 - 135	2	50
Carbon tetrachloride	0.0500	0.04239		mg/Kg		85	70 - 141	3	50
Chlorobenzene	0.0500	0.04789		mg/Kg		96	84 - 125	2	50
2-Hexanone	0.250	0.2259		mg/Kg		90	57 - 148	3	50
Chlorodibromomethane	0.0500	0.04675		mg/Kg		94	66 - 134	1	50
Chloroethane	0.0500	0.04633		mg/Kg		93	53 - 144	0	50
Chloroform	0.0500	0.04227		mg/Kg		85	76 - 130	1	49
4-Methyl-2-pentanone (MIBK)	0.250	0.2517		mg/Kg		101	59 - 138	3	50
Chloromethane	0.0500	0.05239		mg/Kg		105	23 - 150	0	50
cis-1,2-Dichloroethene	0.0500	0.04620		mg/Kg		92	75 - 125	2	50
cis-1,3-Dichloropropene	0.0500	0.05189		mg/Kg		104	73 - 148	2	50
Dibromomethane	0.0500	0.04097		mg/Kg		82	71 - 130	3	50
Dichlorodifluoromethane	0.0500	0.05113		mg/Kg		102	12 - 144	3	50
Ethylbenzene	0.0500	0.05155		mg/Kg		103	80 - 134	3	50
Hexachlorobutadiene	0.0500	0.04654		mg/Kg		93	65 - 148	3	50
Isopropylbenzene	0.0500	0.05454		mg/Kg		109	80 - 150	4	50
1,1,1,2-Tetrachloroethane	0.0500	0.04438		mg/Kg		89	80 - 136	2	50
Methyl tert-butyl ether	0.0500	0.04585		mg/Kg		92	70 - 136	1	50
1,1,2,2-Tetrachloroethane	0.0500	0.04564		mg/Kg		91	66 - 134	4	50
Methylene Chloride	0.0500	0.04166		mg/Kg		83	68 - 144	3	50
Naphthalene	0.0500	0.05765		mg/Kg		115	69 - 150	1	50
n-Butylbenzene	0.0500	0.05699		mg/Kg		114	72 - 152	4	50
N-Propylbenzene	0.0500	0.05369		mg/Kg		107	75 - 137	4	50
p-Isopropyltoluene	0.0500	0.05727		mg/Kg		115	77 - 141	4	50
sec-Butylbenzene	0.0500	0.05549		mg/Kg		111	79 - 141	5	50
1,2,3-Trichlorobenzene	0.0500	0.05348		mg/Kg		107	70 - 150	3	50
Styrene	0.0500	0.05387		mg/Kg		108	82 - 137	2	50
1,2,4-Trichlorobenzene	0.0500	0.05848		mg/Kg		117	62 - 150	5	50
tert-Butylbenzene	0.0500	0.05354		mg/Kg		107	80 - 132	3	50
1,1,1-Trichloroethane	0.0500	0.04263		mg/Kg		85	72 - 140	1	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-110959/4
Matrix: Solid
Analysis Batch: 110959

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
Tetrachloroethene	0.0500	0.04559		mg/Kg		91	78 - 140	2	50
1,1,2-Trichloroethane	0.0500	0.04478		mg/Kg		90	78 - 128	0	50
Toluene	0.0500	0.04882		mg/Kg		98	80 - 132	1	50
trans-1,2-Dichloroethene	0.0500	0.04593		mg/Kg		92	76 - 128	1	50
1,2,3-Trichloropropane	0.0500	0.04789		mg/Kg		96	65 - 139	1	50
trans-1,3-Dichloropropene	0.0500	0.05103		mg/Kg		102	62 - 139	1	50
1,2,4-Trimethylbenzene	0.0500	0.05528		mg/Kg		111	77 - 139	3	50
Trichloroethene	0.0500	0.04477		mg/Kg		90	77 - 127	1	50
1,3,5-Trimethylbenzene	0.0500	0.05531		mg/Kg		111	78 - 138	3	50
Trichlorofluoromethane	0.0500	0.04403		mg/Kg		88	50 - 140	1	50
Vinyl chloride	0.0500	0.05231		mg/Kg		105	47 - 136	3	50
Xylenes, Total	0.100	0.1027		mg/Kg		103	80 - 137	4	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
Dibromofluoromethane (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*

Lab Sample ID: MB 490-111503/7
Matrix: Water
Analysis Batch: 111503

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			10/03/13 01:30	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			10/03/13 01:30	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/03/13 01:30	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			10/03/13 01:30	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			10/03/13 01:30	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			10/03/13 01:30	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			10/03/13 01:30	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			10/03/13 01:30	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			10/03/13 01:30	1
Acetone	5.950		5.00	2.66	ug/L			10/03/13 01:30	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			10/03/13 01:30	1
Benzene	ND		1.00	0.200	ug/L			10/03/13 01:30	1
Bromobenzene	ND		1.00	0.210	ug/L			10/03/13 01:30	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			10/03/13 01:30	1
Bromochloromethane	ND		1.00	0.150	ug/L			10/03/13 01:30	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			10/03/13 01:30	1
Bromodichloromethane	ND		1.00	0.170	ug/L			10/03/13 01:30	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			10/03/13 01:30	1
Bromoform	ND		1.00	0.290	ug/L			10/03/13 01:30	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			10/03/13 01:30	1
Bromomethane	ND		1.00	0.350	ug/L			10/03/13 01:30	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			10/03/13 01:30	1
Carbon disulfide	ND		1.00	0.220	ug/L			10/03/13 01:30	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			10/03/13 01:30	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-111503/7
Matrix: Water
Analysis Batch: 111503

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.00	0.180	ug/L			10/03/13 01:30	1
2-Hexanone	ND		5.00	1.28	ug/L			10/03/13 01:30	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			10/03/13 01:30	1
Chloroethane	ND		1.00	0.360	ug/L			10/03/13 01:30	1
Chloroform	ND		1.00	0.230	ug/L			10/03/13 01:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/03/13 01:30	1
Chloromethane	ND		1.00	0.360	ug/L			10/03/13 01:30	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			10/03/13 01:30	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			10/03/13 01:30	1
Dibromomethane	ND		1.00	0.450	ug/L			10/03/13 01:30	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			10/03/13 01:30	1
Ethylbenzene	ND		1.00	0.190	ug/L			10/03/13 01:30	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			10/03/13 01:30	1
Isopropylbenzene	ND		1.00	0.330	ug/L			10/03/13 01:30	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			10/03/13 01:30	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			10/03/13 01:30	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			10/03/13 01:30	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/03/13 01:30	1
Naphthalene	ND		5.00	0.210	ug/L			10/03/13 01:30	1
n-Butylbenzene	ND		1.00	0.240	ug/L			10/03/13 01:30	1
N-Propylbenzene	ND		1.00	0.170	ug/L			10/03/13 01:30	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			10/03/13 01:30	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			10/03/13 01:30	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			10/03/13 01:30	1
Styrene	ND		1.00	0.280	ug/L			10/03/13 01:30	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			10/03/13 01:30	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			10/03/13 01:30	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			10/03/13 01:30	1
Tetrachloroethene	ND		1.00	0.140	ug/L			10/03/13 01:30	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			10/03/13 01:30	1
Toluene	0.1894	J	1.00	0.170	ug/L			10/03/13 01:30	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			10/03/13 01:30	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			10/03/13 01:30	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			10/03/13 01:30	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			10/03/13 01:30	1
Trichloroethene	ND		1.00	0.200	ug/L			10/03/13 01:30	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			10/03/13 01:30	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			10/03/13 01:30	1
Vinyl chloride	ND		1.00	0.180	ug/L			10/03/13 01:30	1
Xylenes, Total	ND		2.00	0.380	ug/L			10/03/13 01:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*10/03/13 01:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*10/03/13 01:30*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*10/03/13 01:30*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*10/03/13 01:30*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-111503/3
Matrix: Water
Analysis Batch: 111503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	50.0	52.38		ug/L		105	54 - 125
1,2-Dibromoethane (EDB)	50.0	55.30		ug/L		111	80 - 129
2-Butanone (MEK)	250	289.9		ug/L		116	62 - 133
2-Chlorotoluene	50.0	54.76		ug/L		110	75 - 126
1,2-Dichlorobenzene	50.0	53.28		ug/L		107	80 - 121
1,3-Dichlorobenzene	50.0	53.48		ug/L		107	80 - 122
1,4-Dichlorobenzene	50.0	53.18		ug/L		106	80 - 120
4-Chlorotoluene	50.0	57.56		ug/L		115	75 - 130
1,1-Dichloroethane	50.0	56.03		ug/L		112	78 - 125
Acetone	250	282.1		ug/L		113	54 - 145
1,2-Dichloroethane	50.0	55.21		ug/L		110	77 - 121
Benzene	50.0	54.61		ug/L		109	80 - 121
Bromobenzene	50.0	54.95		ug/L		110	68 - 130
1,1-Dichloroethene	50.0	55.95		ug/L		112	79 - 124
Bromochloromethane	50.0	51.95		ug/L		104	78 - 129
1,2-Dichloropropane	50.0	55.77		ug/L		112	75 - 120
Bromodichloromethane	50.0	55.94		ug/L		112	75 - 129
1,3-Dichloropropane	50.0	56.33		ug/L		113	80 - 125
Bromoform	50.0	52.81		ug/L		106	46 - 145
2,2-Dichloropropane	50.0	47.30		ug/L		95	43 - 161
Bromomethane	50.0	55.84		ug/L		112	41 - 150
1,1-Dichloropropene	50.0	54.65		ug/L		109	80 - 122
Carbon disulfide	50.0	56.97		ug/L		114	77 - 126
Carbon tetrachloride	50.0	53.59		ug/L		107	64 - 147
Chlorobenzene	50.0	51.62		ug/L		103	80 - 120
2-Hexanone	250	300.2		ug/L		120	60 - 142
Chlorodibromomethane	50.0	53.30		ug/L		107	69 - 133
Chloroethane	50.0	58.37		ug/L		117	72 - 120
Chloroform	50.0	55.38		ug/L		111	73 - 129
4-Methyl-2-pentanone (MIBK)	250	290.4		ug/L		116	60 - 137
Chloromethane	50.0	54.15		ug/L		108	12 - 150
cis-1,2-Dichloroethene	50.0	55.31		ug/L		111	76 - 125
cis-1,3-Dichloropropene	50.0	54.30		ug/L		109	74 - 140
Dibromomethane	50.0	55.65		ug/L		111	71 - 125
Dichlorodifluoromethane	50.0	57.66		ug/L		115	37 - 127
Ethylbenzene	50.0	53.38		ug/L		107	80 - 130
Hexachlorobutadiene	50.0	49.04		ug/L		98	49 - 146
Isopropylbenzene	50.0	52.60		ug/L		105	80 - 141
1,1,1,2-Tetrachloroethane	50.0	52.04		ug/L		104	74 - 135
Methyl tert-butyl ether	50.0	55.62		ug/L		111	72 - 133
1,1,2,2-Tetrachloroethane	50.0	55.75		ug/L		111	69 - 131
Methylene Chloride	50.0	53.69		ug/L		107	79 - 123
Naphthalene	50.0	54.47		ug/L		109	62 - 138
n-Butylbenzene	50.0	60.53		ug/L		121	68 - 132
N-Propylbenzene	50.0	57.68		ug/L		115	75 - 129
p-Isopropyltoluene	50.0	56.55		ug/L		113	75 - 128
sec-Butylbenzene	50.0	57.75		ug/L		115	76 - 128
1,2,3-Trichlorobenzene	50.0	51.03		ug/L		102	62 - 133

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-111503/3
Matrix: Water
Analysis Batch: 111503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	50.0	57.30		ug/L		115	80 - 127
1,2,4-Trichlorobenzene	50.0	52.43		ug/L		105	63 - 133
tert-Butylbenzene	50.0	48.81		ug/L		98	76 - 126
1,1,1-Trichloroethane	50.0	53.54		ug/L		107	78 - 135
Tetrachloroethene	50.0	48.09		ug/L		96	80 - 126
1,1,2-Trichloroethane	50.0	54.50		ug/L		109	80 - 124
Toluene	50.0	54.14		ug/L		108	80 - 126
trans-1,2-Dichloroethene	50.0	56.94		ug/L		114	79 - 126
1,2,3-Trichloropropane	50.0	53.29		ug/L		107	70 - 131
trans-1,3-Dichloropropene	50.0	53.35		ug/L		107	63 - 134
1,2,4-Trimethylbenzene	50.0	55.16		ug/L		110	77 - 126
Trichloroethene	50.0	54.70		ug/L		109	80 - 123
1,3,5-Trimethylbenzene	50.0	57.17		ug/L		114	77 - 127
Trichlorofluoromethane	50.0	54.72		ug/L		109	65 - 124
Vinyl chloride	50.0	57.44		ug/L		115	68 - 120
Xylenes, Total	100	106.2		ug/L		106	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 490-111503/4
Matrix: Water
Analysis Batch: 111503

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
1,2-Dibromo-3-Chloropropane	50.0	51.95		ug/L		104	54 - 125	1	24
1,2-Dibromoethane (EDB)	50.0	55.33		ug/L		111	80 - 129	0	15
2-Butanone (MEK)	250	294.7		ug/L		118	62 - 133	2	19
2-Chlorotoluene	50.0	55.30		ug/L		111	75 - 126	1	17
1,2-Dichlorobenzene	50.0	53.55		ug/L		107	80 - 121	1	15
1,3-Dichlorobenzene	50.0	53.68		ug/L		107	80 - 122	0	15
1,4-Dichlorobenzene	50.0	52.62		ug/L		105	80 - 120	1	15
4-Chlorotoluene	50.0	57.58		ug/L		115	75 - 130	0	18
1,1-Dichloroethane	50.0	56.06		ug/L		112	78 - 125	0	17
Acetone	250	307.5		ug/L		123	54 - 145	9	21
1,2-Dichloroethane	50.0	56.91		ug/L		114	77 - 121	3	17
Benzene	50.0	55.52		ug/L		111	80 - 121	2	17
Bromobenzene	50.0	54.76		ug/L		110	68 - 130	0	20
1,1-Dichloroethene	50.0	55.84		ug/L		112	79 - 124	0	17
Bromochloromethane	50.0	52.88		ug/L		106	78 - 129	2	17
1,2-Dichloropropane	50.0	57.20		ug/L		114	75 - 120	3	17
Bromodichloromethane	50.0	56.93		ug/L		114	75 - 129	2	18
1,3-Dichloropropane	50.0	57.49		ug/L		115	80 - 125	2	14
Bromoform	50.0	52.97		ug/L		106	46 - 145	0	16
2,2-Dichloropropane	50.0	46.33		ug/L		93	43 - 161	2	18

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-111503/4
Matrix: Water
Analysis Batch: 111503

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
Bromomethane	50.0	57.37		ug/L		115	41 - 150	3	50
1,1-Dichloropropene	50.0	54.90		ug/L		110	80 - 122	0	17
Carbon disulfide	50.0	57.69		ug/L		115	77 - 126	1	21
Carbon tetrachloride	50.0	52.92		ug/L		106	64 - 147	1	19
Chlorobenzene	50.0	52.29		ug/L		105	80 - 120	1	14
2-Hexanone	250	305.9		ug/L		122	60 - 142	2	15
Chlorodibromomethane	50.0	53.79		ug/L		108	69 - 133	1	15
Chloroethane	50.0	58.45		ug/L		117	72 - 120	0	20
Chloroform	50.0	55.96		ug/L		112	73 - 129	1	18
4-Methyl-2-pentanone (MIBK)	250	298.0		ug/L		119	60 - 137	3	17
Chloromethane	50.0	55.01		ug/L		110	12 - 150	2	31
cis-1,2-Dichloroethene	50.0	56.19		ug/L		112	76 - 125	2	17
cis-1,3-Dichloropropene	50.0	54.29		ug/L		109	74 - 140	0	15
Dibromomethane	50.0	57.71		ug/L		115	71 - 125	4	16
Dichlorodifluoromethane	50.0	58.79		ug/L		118	37 - 127	2	18
Ethylbenzene	50.0	53.28		ug/L		107	80 - 130	0	15
Hexachlorobutadiene	50.0	48.29		ug/L		97	49 - 146	2	23
Isopropylbenzene	50.0	53.15		ug/L		106	80 - 141	1	16
1,1,1,2-Tetrachloroethane	50.0	52.44		ug/L		105	74 - 135	1	16
Methyl tert-butyl ether	50.0	56.61		ug/L		113	72 - 133	2	16
1,1,2,2-Tetrachloroethane	50.0	54.95		ug/L		110	69 - 131	1	20
Methylene Chloride	50.0	54.39		ug/L		109	79 - 123	1	17
Naphthalene	50.0	55.83		ug/L		112	62 - 138	2	26
n-Butylbenzene	50.0	60.65		ug/L		121	68 - 132	0	18
N-Propylbenzene	50.0	56.46		ug/L		113	75 - 129	2	17
p-Isopropyltoluene	50.0	55.97		ug/L		112	75 - 128	1	16
sec-Butylbenzene	50.0	57.26		ug/L		115	76 - 128	1	16
1,2,3-Trichlorobenzene	50.0	51.28		ug/L		103	62 - 133	0	25
Styrene	50.0	57.39		ug/L		115	80 - 127	0	24
1,2,4-Trichlorobenzene	50.0	51.70		ug/L		103	63 - 133	1	19
tert-Butylbenzene	50.0	48.05		ug/L		96	76 - 126	2	16
1,1,1-Trichloroethane	50.0	54.35		ug/L		109	78 - 135	1	17
Tetrachloroethene	50.0	46.69		ug/L		93	80 - 126	3	16
1,1,2-Trichloroethane	50.0	55.02		ug/L		110	80 - 124	1	15
Toluene	50.0	54.07		ug/L		108	80 - 126	0	15
trans-1,2-Dichloroethene	50.0	56.63		ug/L		113	79 - 126	1	16
1,2,3-Trichloropropane	50.0	53.73		ug/L		107	70 - 131	1	19
trans-1,3-Dichloropropene	50.0	54.71		ug/L		109	63 - 134	3	14
1,2,4-Trimethylbenzene	50.0	55.45		ug/L		111	77 - 126	1	16
Trichloroethene	50.0	54.14		ug/L		108	80 - 123	1	17
1,3,5-Trimethylbenzene	50.0	56.83		ug/L		114	77 - 127	1	17
Trichlorofluoromethane	50.0	55.43		ug/L		111	65 - 124	1	18
Vinyl chloride	50.0	58.48		ug/L		117	68 - 120	2	17
Xylenes, Total	100	105.9		ug/L		106	80 - 132	0	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-111503/4
Matrix: Water
Analysis Batch: 111503

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	102		70 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: MB 490-111840/7
Matrix: Water
Analysis Batch: 111840

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			10/04/13 01:44	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			10/04/13 01:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/04/13 01:44	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			10/04/13 01:44	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			10/04/13 01:44	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			10/04/13 01:44	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			10/04/13 01:44	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			10/04/13 01:44	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			10/04/13 01:44	1
Acetone	4.187	J	5.00	2.66	ug/L			10/04/13 01:44	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			10/04/13 01:44	1
Benzene	ND		1.00	0.200	ug/L			10/04/13 01:44	1
Bromobenzene	ND		1.00	0.210	ug/L			10/04/13 01:44	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			10/04/13 01:44	1
Bromochloromethane	ND		1.00	0.150	ug/L			10/04/13 01:44	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			10/04/13 01:44	1
Bromodichloromethane	ND		1.00	0.170	ug/L			10/04/13 01:44	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			10/04/13 01:44	1
Bromoform	ND		1.00	0.290	ug/L			10/04/13 01:44	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			10/04/13 01:44	1
Bromomethane	ND		1.00	0.350	ug/L			10/04/13 01:44	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			10/04/13 01:44	1
Carbon disulfide	ND		1.00	0.220	ug/L			10/04/13 01:44	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			10/04/13 01:44	1
Chlorobenzene	ND		1.00	0.180	ug/L			10/04/13 01:44	1
2-Hexanone	ND		5.00	1.28	ug/L			10/04/13 01:44	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			10/04/13 01:44	1
Chloroethane	ND		1.00	0.360	ug/L			10/04/13 01:44	1
Chloroform	ND		1.00	0.230	ug/L			10/04/13 01:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/04/13 01:44	1
Chloromethane	ND		1.00	0.360	ug/L			10/04/13 01:44	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			10/04/13 01:44	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			10/04/13 01:44	1
Dibromomethane	ND		1.00	0.450	ug/L			10/04/13 01:44	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			10/04/13 01:44	1
Ethylbenzene	ND		1.00	0.190	ug/L			10/04/13 01:44	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			10/04/13 01:44	1
Isopropylbenzene	ND		1.00	0.330	ug/L			10/04/13 01:44	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			10/04/13 01:44	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			10/04/13 01:44	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-111840/7
Matrix: Water
Analysis Batch: 111840

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			10/04/13 01:44	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/04/13 01:44	1
Naphthalene	ND		5.00	0.210	ug/L			10/04/13 01:44	1
n-Butylbenzene	ND		1.00	0.240	ug/L			10/04/13 01:44	1
N-Propylbenzene	ND		1.00	0.170	ug/L			10/04/13 01:44	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			10/04/13 01:44	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			10/04/13 01:44	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			10/04/13 01:44	1
Styrene	ND		1.00	0.280	ug/L			10/04/13 01:44	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			10/04/13 01:44	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			10/04/13 01:44	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			10/04/13 01:44	1
Tetrachloroethene	ND		1.00	0.140	ug/L			10/04/13 01:44	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			10/04/13 01:44	1
Toluene	0.2448	J	1.00	0.170	ug/L			10/04/13 01:44	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			10/04/13 01:44	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			10/04/13 01:44	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			10/04/13 01:44	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			10/04/13 01:44	1
Trichloroethene	ND		1.00	0.200	ug/L			10/04/13 01:44	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			10/04/13 01:44	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			10/04/13 01:44	1
Vinyl chloride	ND		1.00	0.180	ug/L			10/04/13 01:44	1
Xylenes, Total	ND		2.00	0.380	ug/L			10/04/13 01:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*10/04/13 01:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*10/04/13 01:44*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*10/04/13 01:44*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*10/04/13 01:44*	*1*

Lab Sample ID: LCS 490-111840/3
Matrix: Water
Analysis Batch: 111840

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	50.0	52.94		ug/L		106	54 - 125
1,2-Dibromoethane (EDB)	50.0	53.40		ug/L		107	80 - 129
2-Butanone (MEK)	250	279.6		ug/L		112	62 - 133
2-Chlorotoluene	50.0	51.26		ug/L		103	75 - 126
1,2-Dichlorobenzene	50.0	52.84		ug/L		106	80 - 121
1,3-Dichlorobenzene	50.0	51.98		ug/L		104	80 - 122
1,4-Dichlorobenzene	50.0	51.50		ug/L		103	80 - 120
4-Chlorotoluene	50.0	53.92		ug/L		108	75 - 130
1,1-Dichloroethane	50.0	51.23		ug/L		102	78 - 125
Acetone	250	303.9		ug/L		122	54 - 145
1,2-Dichloroethane	50.0	54.99		ug/L		110	77 - 121
Benzene	50.0	51.85		ug/L		104	80 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-111840/3
Matrix: Water
Analysis Batch: 111840

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	51.66		ug/L		103	68 - 130
1,1-Dichloroethene	50.0	51.35		ug/L		103	79 - 124
Bromochloromethane	50.0	50.49		ug/L		101	78 - 129
1,2-Dichloropropane	50.0	54.17		ug/L		108	75 - 120
Bromodichloromethane	50.0	53.61		ug/L		107	75 - 129
1,3-Dichloropropane	50.0	53.58		ug/L		107	80 - 125
Bromoform	50.0	53.92		ug/L		108	46 - 145
2,2-Dichloropropane	50.0	44.35		ug/L		89	43 - 161
Bromomethane	50.0	50.58		ug/L		101	41 - 150
1,1-Dichloropropene	50.0	50.53		ug/L		101	80 - 122
Carbon disulfide	50.0	53.32		ug/L		107	77 - 126
Carbon tetrachloride	50.0	50.28		ug/L		101	64 - 147
Chlorobenzene	50.0	49.09		ug/L		98	80 - 120
2-Hexanone	250	298.3		ug/L		119	60 - 142
Chlorodibromomethane	50.0	52.30		ug/L		105	69 - 133
Chloroethane	50.0	52.47		ug/L		105	72 - 120
Chloroform	50.0	51.58		ug/L		103	73 - 129
4-Methyl-2-pentanone (MIBK)	250	290.5		ug/L		116	60 - 137
Chloromethane	50.0	50.32		ug/L		101	12 - 150
cis-1,2-Dichloroethene	50.0	52.01		ug/L		104	76 - 125
cis-1,3-Dichloropropene	50.0	52.34		ug/L		105	74 - 140
Dibromomethane	50.0	53.90		ug/L		108	71 - 125
Dichlorodifluoromethane	50.0	54.36		ug/L		109	37 - 127
Ethylbenzene	50.0	50.04		ug/L		100	80 - 130
Hexachlorobutadiene	50.0	46.60		ug/L		93	49 - 146
Isopropylbenzene	50.0	50.79		ug/L		102	80 - 141
1,1,1,2-Tetrachloroethane	50.0	50.16		ug/L		100	74 - 135
Methyl tert-butyl ether	50.0	54.03		ug/L		108	72 - 133
1,1,2,2-Tetrachloroethane	50.0	54.32		ug/L		109	69 - 131
Methylene Chloride	50.0	51.11		ug/L		102	79 - 123
Naphthalene	50.0	54.30		ug/L		109	62 - 138
n-Butylbenzene	50.0	57.02		ug/L		114	68 - 132
N-Propylbenzene	50.0	52.34		ug/L		105	75 - 129
p-Isopropyltoluene	50.0	52.82		ug/L		106	75 - 128
sec-Butylbenzene	50.0	53.51		ug/L		107	76 - 128
1,2,3-Trichlorobenzene	50.0	51.94		ug/L		104	62 - 133
Styrene	50.0	54.50		ug/L		109	80 - 127
1,2,4-Trichlorobenzene	50.0	52.39		ug/L		105	63 - 133
tert-Butylbenzene	50.0	45.63		ug/L		91	76 - 126
1,1,1-Trichloroethane	50.0	49.47		ug/L		99	78 - 135
Tetrachloroethene	50.0	44.99		ug/L		90	80 - 126
1,1,2-Trichloroethane	50.0	53.05		ug/L		106	80 - 124
Toluene	50.0	49.66		ug/L		99	80 - 126
trans-1,2-Dichloroethene	50.0	51.99		ug/L		104	79 - 126
1,2,3-Trichloropropane	50.0	51.91		ug/L		104	70 - 131
trans-1,3-Dichloropropene	50.0	52.00		ug/L		104	63 - 134
1,2,4-Trimethylbenzene	50.0	52.56		ug/L		105	77 - 126
Trichloroethene	50.0	51.61		ug/L		103	80 - 123

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-111840/3
Matrix: Water
Analysis Batch: 111840

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	52.59		ug/L		105	77 - 127
Trichlorofluoromethane	50.0	51.58		ug/L		103	65 - 124
Vinyl chloride	50.0	52.47		ug/L		105	68 - 120
Xylenes, Total	100	100.7		ug/L		101	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 490-111840/4
Matrix: Water
Analysis Batch: 111840

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
1,2-Dibromo-3-Chloropropane	50.0	52.97		ug/L		106	54 - 125	0	24
1,2-Dibromoethane (EDB)	50.0	55.05		ug/L		110	80 - 129	3	15
2-Butanone (MEK)	250	292.7		ug/L		117	62 - 133	5	19
2-Chlorotoluene	50.0	56.00		ug/L		112	75 - 126	9	17
1,2-Dichlorobenzene	50.0	54.68		ug/L		109	80 - 121	3	15
1,3-Dichlorobenzene	50.0	54.99		ug/L		110	80 - 122	6	15
1,4-Dichlorobenzene	50.0	54.17		ug/L		108	80 - 120	5	15
4-Chlorotoluene	50.0	57.70		ug/L		115	75 - 130	7	18
1,1-Dichloroethane	50.0	55.80		ug/L		112	78 - 125	9	17
Acetone	250	310.5		ug/L		124	54 - 145	2	21
1,2-Dichloroethane	50.0	59.22		ug/L		118	77 - 121	7	17
Benzene	50.0	56.35		ug/L		113	80 - 121	8	17
Bromobenzene	50.0	55.69		ug/L		111	68 - 130	8	20
1,1-Dichloroethene	50.0	56.57		ug/L		113	79 - 124	10	17
Bromochloromethane	50.0	54.93		ug/L		110	78 - 129	8	17
1,2-Dichloropropane	50.0	57.55		ug/L		115	75 - 120	6	17
Bromodichloromethane	50.0	57.11		ug/L		114	75 - 129	6	18
1,3-Dichloropropane	50.0	55.23		ug/L		110	80 - 125	3	14
Bromoform	50.0	56.98		ug/L		114	46 - 145	6	16
2,2-Dichloropropane	50.0	47.63		ug/L		95	43 - 161	7	18
Bromomethane	50.0	57.62		ug/L		115	41 - 150	13	50
1,1-Dichloropropene	50.0	55.88		ug/L		112	80 - 122	10	17
Carbon disulfide	50.0	58.21		ug/L		116	77 - 126	9	21
Carbon tetrachloride	50.0	55.59		ug/L		111	64 - 147	10	19
Chlorobenzene	50.0	53.05		ug/L		106	80 - 120	8	14
2-Hexanone	250	294.6		ug/L		118	60 - 142	1	15
Chlorodibromomethane	50.0	53.49		ug/L		107	69 - 133	2	15
Chloroethane	50.0	59.14		ug/L		118	72 - 120	12	20
Chloroform	50.0	56.79		ug/L		114	73 - 129	10	18
4-Methyl-2-pentanone (MIBK)	250	285.5		ug/L		114	60 - 137	2	17
Chloromethane	50.0	56.37		ug/L		113	12 - 150	11	31
cis-1,2-Dichloroethene	50.0	57.18		ug/L		114	76 - 125	9	17

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-111840/4
Matrix: Water
Analysis Batch: 111840

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-1,3-Dichloropropene	50.0	53.18		ug/L		106	74 - 140	2	15
Dibromomethane	50.0	56.49		ug/L		113	71 - 125	5	16
Dichlorodifluoromethane	50.0	60.62		ug/L		121	37 - 127	11	18
Ethylbenzene	50.0	54.85		ug/L		110	80 - 130	9	15
Hexachlorobutadiene	50.0	49.34		ug/L		99	49 - 146	6	23
Isopropylbenzene	50.0	55.55		ug/L		111	80 - 141	9	16
1,1,1,2-Tetrachloroethane	50.0	54.20		ug/L		108	74 - 135	8	16
Methyl tert-butyl ether	50.0	55.36		ug/L		111	72 - 133	2	16
1,1,2,2-Tetrachloroethane	50.0	56.16		ug/L		112	69 - 131	3	20
Methylene Chloride	50.0	54.81		ug/L		110	79 - 123	7	17
Naphthalene	50.0	55.41		ug/L		111	62 - 138	2	26
n-Butylbenzene	50.0	60.74		ug/L		121	68 - 132	6	18
N-Propylbenzene	50.0	57.42		ug/L		115	75 - 129	9	17
p-Isopropyltoluene	50.0	56.14		ug/L		112	75 - 128	6	16
sec-Butylbenzene	50.0	57.37		ug/L		115	76 - 128	7	16
1,2,3-Trichlorobenzene	50.0	52.99		ug/L		106	62 - 133	2	25
Styrene	50.0	60.22		ug/L		120	80 - 127	10	24
1,2,4-Trichlorobenzene	50.0	55.52		ug/L		111	63 - 133	6	19
tert-Butylbenzene	50.0	48.62		ug/L		97	76 - 126	6	16
1,1,1-Trichloroethane	50.0	54.87		ug/L		110	78 - 135	10	17
Tetrachloroethene	50.0	47.50		ug/L		95	80 - 126	5	16
1,1,2-Trichloroethane	50.0	53.50		ug/L		107	80 - 124	1	15
Toluene	50.0	53.29		ug/L		107	80 - 126	7	15
trans-1,2-Dichloroethene	50.0	57.36		ug/L		115	79 - 126	10	16
1,2,3-Trichloropropane	50.0	54.74		ug/L		109	70 - 131	5	19
trans-1,3-Dichloropropene	50.0	53.01		ug/L		106	63 - 134	2	14
1,2,4-Trimethylbenzene	50.0	56.06		ug/L		112	77 - 126	6	16
Trichloroethene	50.0	55.30		ug/L		111	80 - 123	7	17
1,3,5-Trimethylbenzene	50.0	56.48		ug/L		113	77 - 127	7	17
Trichlorofluoromethane	50.0	56.83		ug/L		114	65 - 124	10	18
Vinyl chloride	50.0	58.65		ug/L		117	68 - 120	11	17
Xylenes, Total	100	111.4		ug/L		111	80 - 132	10	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: 240-29650-B-55 MS
Matrix: Water
Analysis Batch: 111840

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		50.0	47.99		ug/L		96	52 - 126
1,2-Dibromoethane (EDB)	ND		50.0	54.11		ug/L		108	75 - 137
2-Butanone (MEK)	ND		250	265.1		ug/L		106	50 - 138
2-Chlorotoluene	ND		50.0	53.77		ug/L		108	67 - 138

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-29650-B-55 MS
Matrix: Water
Analysis Batch: 111840

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		50.0	53.06		ug/L		106	79 - 128
1,3-Dichlorobenzene	ND		50.0	54.01		ug/L		108	77 - 131
1,4-Dichlorobenzene	ND		50.0	53.49		ug/L		107	78 - 126
4-Chlorotoluene	ND		50.0	56.27		ug/L		113	69 - 138
1,1-Dichloroethane	0.882	J	50.0	58.56		ug/L		115	71 - 139
Acetone	40.0	B	250	305.8		ug/L		106	45 - 141
1,2-Dichloroethane	ND		50.0	58.27		ug/L		117	64 - 136
Benzene	1.89		50.0	59.09		ug/L		114	75 - 133
Bromobenzene	ND		50.0	53.02		ug/L		106	60 - 138
1,1-Dichloroethene	ND		50.0	59.42		ug/L		119	70 - 142
Bromochloromethane	ND		50.0	53.77		ug/L		108	67 - 139
1,2-Dichloropropane	ND		50.0	56.98		ug/L		114	67 - 131
Bromodichloromethane	ND		50.0	56.89		ug/L		114	70 - 140
1,3-Dichloropropane	ND		50.0	57.24		ug/L		114	72 - 134
Bromoform	ND		50.0	55.68		ug/L		111	42 - 147
2,2-Dichloropropane	ND		50.0	56.43		ug/L		113	37 - 175
Bromomethane	ND		50.0	42.04		ug/L		84	16 - 163
1,1-Dichloropropene	ND		50.0	59.37		ug/L		119	76 - 139
Carbon disulfide	ND		50.0	58.87		ug/L		118	48 - 152
Carbon tetrachloride	ND		50.0	59.85		ug/L		120	62 - 164
Chlorobenzene	ND		50.0	53.49		ug/L		107	80 - 129
2-Hexanone	ND		250	294.9		ug/L		118	50 - 150
Chlorodibromomethane	ND		50.0	56.46		ug/L		113	66 - 140
Chloroethane	4.88		50.0	62.48		ug/L		115	58 - 137
Chloroform	ND		50.0	58.58		ug/L		117	66 - 138
4-Methyl-2-pentanone (MIBK)	ND		250	292.2		ug/L		117	50 - 147
Chloromethane	ND		50.0	50.46		ug/L		101	10 - 169
cis-1,2-Dichloroethene	0.274	J	50.0	60.24		ug/L		120	68 - 138
cis-1,3-Dichloropropene	ND		50.0	55.88		ug/L		112	71 - 141
Dibromomethane	ND		50.0	54.92		ug/L		110	58 - 140
Dichlorodifluoromethane	ND		50.0	53.47		ug/L		107	40 - 127
Ethylbenzene	ND		50.0	55.98		ug/L		112	79 - 139
Hexachlorobutadiene	ND		50.0	52.97		ug/L		106	45 - 155
Isopropylbenzene	0.457	J	50.0	58.44		ug/L		116	80 - 153
1,1,1,2-Tetrachloroethane	ND		50.0	54.62		ug/L		109	73 - 141
Methyl tert-butyl ether	ND		50.0	53.75		ug/L		108	66 - 141
1,1,2,2-Tetrachloroethane	ND		50.0	54.08		ug/L		108	56 - 143
Methylene Chloride	0.348	J	50.0	54.88		ug/L		109	64 - 139
Naphthalene	ND		50.0	52.46		ug/L		105	55 - 140
n-Butylbenzene	ND		50.0	63.67		ug/L		127	66 - 141
N-Propylbenzene	0.207	J	50.0	57.03		ug/L		114	69 - 142
p-Isopropyltoluene	ND		50.0	57.53		ug/L		115	71 - 137
sec-Butylbenzene	ND		50.0	58.11		ug/L		116	73 - 138
1,2,3-Trichlorobenzene	ND		50.0	52.04		ug/L		104	55 - 138
Styrene	ND		50.0	60.49		ug/L		121	61 - 148
1,2,4-Trichlorobenzene	ND		50.0	53.54		ug/L		107	60 - 136
tert-Butylbenzene	ND		50.0	48.58		ug/L		97	70 - 138
1,1,1-Trichloroethane	ND		50.0	56.68		ug/L		113	76 - 149

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-29650-B-55 MS
Matrix: Water
Analysis Batch: 111840

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	ND		50.0	53.95		ug/L		108	72 - 145
1,1,2-Trichloroethane	ND		50.0	55.45		ug/L		111	74 - 134
Toluene	ND		50.0	57.00		ug/L		114	75 - 136
trans-1,2-Dichloroethene	ND		50.0	60.44		ug/L		121	66 - 143
1,2,3-Trichloropropane	ND		50.0	50.10		ug/L		100	53 - 144
trans-1,3-Dichloropropene	ND		50.0	55.68		ug/L		111	59 - 135
1,2,4-Trimethylbenzene	ND		50.0	55.10		ug/L		110	69 - 136
Trichloroethene	0.206	J	50.0	55.58		ug/L		111	73 - 144
1,3,5-Trimethylbenzene	ND		50.0	55.50		ug/L		111	69 - 139
Trichlorofluoromethane	ND		50.0	58.75		ug/L		118	58 - 139
Vinyl chloride	ND		50.0	55.71		ug/L		111	56 - 129
Xylenes, Total	ND		100	112.7		ug/L		113	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: 240-29650-C-55 MSD
Matrix: Water
Analysis Batch: 111840

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND		50.0	49.06		ug/L		98	52 - 126	2	24
1,2-Dibromoethane (EDB)	ND		50.0	55.76		ug/L		112	75 - 137	3	15
2-Butanone (MEK)	ND		250	279.2		ug/L		112	50 - 138	5	19
2-Chlorotoluene	ND		50.0	55.82		ug/L		112	67 - 138	4	17
1,2-Dichlorobenzene	ND		50.0	55.82		ug/L		112	79 - 128	5	15
1,3-Dichlorobenzene	ND		50.0	56.05		ug/L		112	77 - 131	4	15
1,4-Dichlorobenzene	ND		50.0	55.42		ug/L		111	78 - 126	4	15
4-Chlorotoluene	ND		50.0	58.52		ug/L		117	69 - 138	4	18
1,1-Dichloroethane	0.882	J	50.0	60.88		ug/L		120	71 - 139	4	17
Acetone	40.0	B	250	321.4		ug/L		113	45 - 141	5	21
1,2-Dichloroethane	ND		50.0	60.10		ug/L		120	64 - 136	3	17
Benzene	1.89		50.0	61.91		ug/L		120	75 - 133	5	17
Bromobenzene	ND		50.0	54.43		ug/L		109	60 - 138	3	20
1,1-Dichloroethene	ND		50.0	62.74		ug/L		125	70 - 142	5	17
Bromochloromethane	ND		50.0	56.35		ug/L		113	67 - 139	5	17
1,2-Dichloropropane	ND		50.0	61.72		ug/L		123	67 - 131	8	17
Bromodichloromethane	ND		50.0	59.42		ug/L		119	70 - 140	4	18
1,3-Dichloropropane	ND		50.0	59.86		ug/L		120	72 - 134	4	14
Bromoform	ND		50.0	59.06		ug/L		118	42 - 147	6	16
2,2-Dichloropropane	ND		50.0	58.91		ug/L		118	37 - 175	4	18
Bromomethane	ND		50.0	57.24		ug/L		114	16 - 163	31	50
1,1-Dichloropropene	ND		50.0	61.90		ug/L		124	76 - 139	4	17
Carbon disulfide	ND		50.0	65.24		ug/L		130	48 - 152	10	21
Carbon tetrachloride	ND		50.0	61.67		ug/L		123	62 - 164	3	19

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-29650-C-55 MSD
Matrix: Water
Analysis Batch: 111840

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	ND		50.0	56.74		ug/L		113	80 - 129	6	14
2-Hexanone	ND		250	305.0		ug/L		122	50 - 150	3	15
Chlorodibromomethane	ND		50.0	58.69		ug/L		117	66 - 140	4	15
Chloroethane	4.88		50.0	65.82		ug/L		122	58 - 137	5	20
Chloroform	ND		50.0	59.22		ug/L		118	66 - 138	1	18
4-Methyl-2-pentanone (MIBK)	ND		250	303.6		ug/L		121	50 - 147	4	17
Chloromethane	ND		50.0	53.53		ug/L		107	10 - 169	6	31
cis-1,2-Dichloroethene	0.274	J	50.0	62.04		ug/L		124	68 - 138	3	17
cis-1,3-Dichloropropene	ND		50.0	60.00		ug/L		120	71 - 141	7	15
Dibromomethane	ND		50.0	59.98		ug/L		120	58 - 140	9	16
Dichlorodifluoromethane	ND		50.0	57.85		ug/L		116	40 - 127	8	18
Ethylbenzene	ND		50.0	59.74		ug/L		119	79 - 139	6	15
Hexachlorobutadiene	ND		50.0	55.68		ug/L		111	45 - 155	5	23
Isopropylbenzene	0.457	J	50.0	62.43		ug/L		124	80 - 153	7	16
1,1,1,2-Tetrachloroethane	ND		50.0	57.99		ug/L		116	73 - 141	6	16
Methyl tert-butyl ether	ND		50.0	56.59		ug/L		113	66 - 141	5	16
1,1,2,2-Tetrachloroethane	ND		50.0	56.22		ug/L		112	56 - 143	4	20
Methylene Chloride	0.348	J	50.0	57.30		ug/L		114	64 - 139	4	17
Naphthalene	ND		50.0	54.61		ug/L		109	55 - 140	4	26
n-Butylbenzene	ND		50.0	66.18		ug/L		132	66 - 141	4	18
N-Propylbenzene	0.207	J	50.0	59.10		ug/L		118	69 - 142	4	17
p-Isopropyltoluene	ND		50.0	59.63		ug/L		119	71 - 137	4	16
sec-Butylbenzene	ND		50.0	61.45		ug/L		123	73 - 138	6	16
1,2,3-Trichlorobenzene	ND		50.0	53.53		ug/L		107	55 - 138	3	25
Styrene	ND		50.0	63.71		ug/L		127	61 - 148	5	24
1,2,4-Trichlorobenzene	ND		50.0	57.11		ug/L		114	60 - 136	6	19
tert-Butylbenzene	ND		50.0	49.88		ug/L		100	70 - 138	3	16
1,1,1-Trichloroethane	ND		50.0	59.22		ug/L		118	76 - 149	4	17
Tetrachloroethene	ND		50.0	54.90		ug/L		110	72 - 145	2	16
1,1,2-Trichloroethane	ND		50.0	58.07		ug/L		116	74 - 134	5	15
Toluene	ND		50.0	59.65		ug/L		119	75 - 136	5	15
trans-1,2-Dichloroethene	ND		50.0	62.85		ug/L		126	66 - 143	4	16
1,2,3-Trichloropropane	ND		50.0	51.08		ug/L		102	53 - 144	2	19
trans-1,3-Dichloropropene	ND		50.0	59.04		ug/L		118	59 - 135	6	14
1,2,4-Trimethylbenzene	ND		50.0	57.48		ug/L		115	69 - 136	4	16
Trichloroethene	0.206	J	50.0	57.79		ug/L		115	73 - 144	4	17
1,3,5-Trimethylbenzene	ND		50.0	57.49		ug/L		115	69 - 139	4	17
Trichlorofluoromethane	ND		50.0	63.17		ug/L		126	58 - 139	7	18
Vinyl chloride	ND		50.0	60.05		ug/L		120	56 - 129	7	17
Xylenes, Total	ND		100	119.9		ug/L		120	74 - 141	6	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-111912/7
Matrix: Solid
Analysis Batch: 111912

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.00500	0.000700	mg/Kg			10/04/13 12:12	1
1,2-Dibromoethane (EDB)	ND		0.00200	0.00100	mg/Kg			10/04/13 12:12	1
2-Butanone (MEK)	ND		0.0500	0.00520	mg/Kg			10/04/13 12:12	1
2-Chlorotoluene	ND		0.00200	0.000920	mg/Kg			10/04/13 12:12	1
1,2-Dichlorobenzene	ND		0.00200	0.000340	mg/Kg			10/04/13 12:12	1
1,3-Dichlorobenzene	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
1,4-Dichlorobenzene	ND		0.00200	0.000940	mg/Kg			10/04/13 12:12	1
4-Chlorotoluene	ND		0.00200	0.000840	mg/Kg			10/04/13 12:12	1
1,1-Dichloroethane	ND		0.00200	0.000670	mg/Kg			10/04/13 12:12	1
Acetone	ND		0.0500	0.0400	mg/Kg			10/04/13 12:12	1
1,2-Dichloroethane	ND		0.00200	0.000670	mg/Kg			10/04/13 12:12	1
Benzene	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
Bromobenzene	ND		0.00200	0.000720	mg/Kg			10/04/13 12:12	1
1,1-Dichloroethene	ND		0.00200	0.000580	mg/Kg			10/04/13 12:12	1
Bromochloromethane	ND		0.00200	0.000560	mg/Kg			10/04/13 12:12	1
1,2-Dichloropropane	ND		0.00200	0.000940	mg/Kg			10/04/13 12:12	1
Bromodichloromethane	ND		0.00200	0.000560	mg/Kg			10/04/13 12:12	1
1,3-Dichloropropane	ND		0.00200	0.000940	mg/Kg			10/04/13 12:12	1
Bromoform	ND		0.00200	0.000560	mg/Kg			10/04/13 12:12	1
2,2-Dichloropropane	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
Bromomethane	ND		0.00200	0.00120	mg/Kg			10/04/13 12:12	1
1,1-Dichloropropene	ND		0.00200	0.000520	mg/Kg			10/04/13 12:12	1
Carbon disulfide	ND		0.00500	0.00360	mg/Kg			10/04/13 12:12	1
Carbon tetrachloride	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
Chlorobenzene	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
2-Hexanone	ND		0.0500	0.0168	mg/Kg			10/04/13 12:12	1
Chlorodibromomethane	ND		0.00200	0.000340	mg/Kg			10/04/13 12:12	1
Chloroethane	ND		0.00500	0.00190	mg/Kg			10/04/13 12:12	1
Chloroform	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
4-Methyl-2-pentanone (MIBK)	ND		0.0500	0.0170	mg/Kg			10/04/13 12:12	1
Chloromethane	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
cis-1,2-Dichloroethene	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
cis-1,3-Dichloropropene	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
Dibromomethane	ND		0.00200	0.000560	mg/Kg			10/04/13 12:12	1
Dichlorodifluoromethane	ND		0.00200	0.00100	mg/Kg			10/04/13 12:12	1
Ethylbenzene	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
Hexachlorobutadiene	ND		0.00500	0.00110	mg/Kg			10/04/13 12:12	1
Isopropylbenzene	ND		0.00200	0.000420	mg/Kg			10/04/13 12:12	1
1,1,1,2-Tetrachloroethane	ND		0.00200	0.000670	mg/Kg			10/04/13 12:12	1
Methyl tert-butyl ether	ND		0.00200	0.00100	mg/Kg			10/04/13 12:12	1
1,1,2,2-Tetrachloroethane	ND		0.00200	0.00100	mg/Kg			10/04/13 12:12	1
Methylene Chloride	0.003493	J	0.0100	0.00100	mg/Kg			10/04/13 12:12	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			10/04/13 12:12	1
n-Butylbenzene	ND		0.00200	0.00100	mg/Kg			10/04/13 12:12	1
N-Propylbenzene	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
p-Isopropyltoluene	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
sec-Butylbenzene	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
1,2,3-Trichlorobenzene	0.0007343	J	0.00200	0.000380	mg/Kg			10/04/13 12:12	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-111912/7
Matrix: Solid
Analysis Batch: 111912

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.00200	0.00110	mg/Kg			10/04/13 12:12	1
1,2,4-Trichlorobenzene	ND		0.00200	0.000670	mg/Kg			10/04/13 12:12	1
tert-Butylbenzene	ND		0.00200	0.00100	mg/Kg			10/04/13 12:12	1
1,1,1-Trichloroethane	ND		0.00200	0.000920	mg/Kg			10/04/13 12:12	1
Tetrachloroethene	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
1,1,2-Trichloroethane	ND		0.00500	0.00140	mg/Kg			10/04/13 12:12	1
Toluene	ND		0.00200	0.000740	mg/Kg			10/04/13 12:12	1
trans-1,2-Dichloroethene	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
1,2,3-Trichloropropane	ND		0.00200	0.000560	mg/Kg			10/04/13 12:12	1
trans-1,3-Dichloropropene	ND		0.00200	0.000680	mg/Kg			10/04/13 12:12	1
1,2,4-Trimethylbenzene	ND		0.00200	0.00100	mg/Kg			10/04/13 12:12	1
Trichloroethene	ND		0.00200	0.00100	mg/Kg			10/04/13 12:12	1
1,3,5-Trimethylbenzene	ND		0.00200	0.000760	mg/Kg			10/04/13 12:12	1
Trichlorofluoromethane	ND		0.00200	0.00100	mg/Kg			10/04/13 12:12	1
Vinyl chloride	ND		0.00200	0.00110	mg/Kg			10/04/13 12:12	1
Xylenes, Total	ND		0.00300	0.000680	mg/Kg			10/04/13 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*10/04/13 12:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*10/04/13 12:12*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*10/04/13 12:12*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*10/04/13 12:12*	*1*

Lab Sample ID: LCS 490-111912/3
Matrix: Solid
Analysis Batch: 111912

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.0500	0.04237		mg/Kg		85	49 - 142
1,2-Dibromoethane (EDB)	0.0500	0.04502		mg/Kg		90	80 - 135
2-Butanone (MEK)	0.250	0.2064		mg/Kg		83	61 - 132
2-Chlorotoluene	0.0500	0.04944		mg/Kg		99	78 - 132
1,2-Dichlorobenzene	0.0500	0.04648		mg/Kg		93	80 - 134
1,3-Dichlorobenzene	0.0500	0.04854		mg/Kg		97	79 - 137
1,4-Dichlorobenzene	0.0500	0.04749		mg/Kg		95	77 - 139
4-Chlorotoluene	0.0500	0.05098		mg/Kg		102	77 - 138
1,1-Dichloroethane	0.0500	0.04494		mg/Kg		90	75 - 124
Acetone	0.250	0.2036		mg/Kg		81	51 - 149
1,2-Dichloroethane	0.0500	0.04098		mg/Kg		82	65 - 134
Benzene	0.0500	0.04478		mg/Kg		90	75 - 127
Bromobenzene	0.0500	0.04688		mg/Kg		94	75 - 130
1,1-Dichloroethene	0.0500	0.04443		mg/Kg		89	75 - 131
Bromochloromethane	0.0500	0.04373		mg/Kg		87	70 - 132
1,2-Dichloropropane	0.0500	0.04532		mg/Kg		91	69 - 120
Bromodichloromethane	0.0500	0.04422		mg/Kg		88	68 - 135
1,3-Dichloropropane	0.0500	0.04562		mg/Kg		91	78 - 126
Bromoform	0.0500	0.04473		mg/Kg		89	36 - 150
2,2-Dichloropropane	0.0500	0.04404		mg/Kg		88	68 - 145

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-111912/3
Matrix: Solid
Analysis Batch: 111912

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	0.0500	0.04578		mg/Kg		92	43 - 142
1,1-Dichloropropene	0.0500	0.04583		mg/Kg		92	79 - 127
Carbon disulfide	0.0500	0.04471		mg/Kg		89	74 - 135
Carbon tetrachloride	0.0500	0.04386		mg/Kg		88	70 - 141
Chlorobenzene	0.0500	0.04600		mg/Kg		92	84 - 125
2-Hexanone	0.250	0.2120		mg/Kg		85	57 - 148
Chlorodibromomethane	0.0500	0.04688		mg/Kg		94	66 - 134
Chloroethane	0.0500	0.04937		mg/Kg		99	53 - 144
Chloroform	0.0500	0.04280		mg/Kg		86	76 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2422		mg/Kg		97	59 - 138
Chloromethane	0.0500	0.05309		mg/Kg		106	23 - 150
cis-1,2-Dichloroethene	0.0500	0.04690		mg/Kg		94	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05003		mg/Kg		100	73 - 148
Dibromomethane	0.0500	0.04179		mg/Kg		84	71 - 130
Dichlorodifluoromethane	0.0500	0.05592		mg/Kg		112	12 - 144
Ethylbenzene	0.0500	0.05005		mg/Kg		100	80 - 134
Hexachlorobutadiene	0.0500	0.04428		mg/Kg		89	65 - 148
Isopropylbenzene	0.0500	0.05228		mg/Kg		105	80 - 150
1,1,1,2-Tetrachloroethane	0.0500	0.04495		mg/Kg		90	80 - 136
Methyl tert-butyl ether	0.0500	0.04513		mg/Kg		90	70 - 136
1,1,2,2-Tetrachloroethane	0.0500	0.04363		mg/Kg		87	66 - 134
Methylene Chloride	0.0500	0.04193		mg/Kg		84	68 - 144
Naphthalene	0.0500	0.05035		mg/Kg		101	69 - 150
n-Butylbenzene	0.0500	0.05423		mg/Kg		108	72 - 152
N-Propylbenzene	0.0500	0.05150		mg/Kg		103	75 - 137
p-Isopropyltoluene	0.0500	0.05417		mg/Kg		108	77 - 141
sec-Butylbenzene	0.0500	0.05202		mg/Kg		104	79 - 141
1,2,3-Trichlorobenzene	0.0500	0.04922		mg/Kg		98	70 - 150
Styrene	0.0500	0.05197		mg/Kg		104	82 - 137
1,2,4-Trichlorobenzene	0.0500	0.05268		mg/Kg		105	62 - 150
tert-Butylbenzene	0.0500	0.05048		mg/Kg		101	80 - 132
1,1,1-Trichloroethane	0.0500	0.04372		mg/Kg		87	72 - 140
Tetrachloroethene	0.0500	0.04529		mg/Kg		91	78 - 140
1,1,2-Trichloroethane	0.0500	0.04425		mg/Kg		89	78 - 128
Toluene	0.0500	0.04690		mg/Kg		94	80 - 132
trans-1,2-Dichloroethene	0.0500	0.04551		mg/Kg		91	76 - 128
1,2,3-Trichloropropane	0.0500	0.04477		mg/Kg		90	65 - 139
trans-1,3-Dichloropropene	0.0500	0.05088		mg/Kg		102	62 - 139
1,2,4-Trimethylbenzene	0.0500	0.05034		mg/Kg		101	77 - 139
Trichloroethene	0.0500	0.04387		mg/Kg		88	77 - 127
1,3,5-Trimethylbenzene	0.0500	0.05221		mg/Kg		104	78 - 138
Trichlorofluoromethane	0.0500	0.04576		mg/Kg		92	50 - 140
Vinyl chloride	0.0500	0.05468		mg/Kg		109	47 - 136
Xylenes, Total	0.100	0.1001		mg/Kg		100	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-111912/3
Matrix: Solid
Analysis Batch: 111912

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	95		70 - 130
Toluene-d8 (Surr)	105		70 - 130

Lab Sample ID: LCSD 490-111912/4
Matrix: Solid
Analysis Batch: 111912

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
1,2-Dibromo-3-Chloropropane	0.0500	0.04669		mg/Kg		93	49 - 142	10	50
1,2-Dibromoethane (EDB)	0.0500	0.04473		mg/Kg		89	80 - 135	1	50
2-Butanone (MEK)	0.250	0.2151		mg/Kg		86	61 - 132	4	50
2-Chlorotoluene	0.0500	0.05002		mg/Kg		100	78 - 132	1	50
1,2-Dichlorobenzene	0.0500	0.04802		mg/Kg		96	80 - 134	3	50
1,3-Dichlorobenzene	0.0500	0.04955		mg/Kg		99	79 - 137	2	50
1,4-Dichlorobenzene	0.0500	0.04741		mg/Kg		95	77 - 139	0	50
4-Chlorotoluene	0.0500	0.05290		mg/Kg		106	77 - 138	4	50
1,1-Dichloroethane	0.0500	0.04556		mg/Kg		91	75 - 124	1	50
Acetone	0.250	0.2063		mg/Kg		83	51 - 149	1	50
1,2-Dichloroethane	0.0500	0.04094		mg/Kg		82	65 - 134	0	50
Benzene	0.0500	0.04429		mg/Kg		89	75 - 127	1	50
Bromobenzene	0.0500	0.04748		mg/Kg		95	75 - 130	1	50
1,1-Dichloroethene	0.0500	0.04506		mg/Kg		90	75 - 131	1	50
Bromochloromethane	0.0500	0.04306		mg/Kg		86	70 - 132	2	50
1,2-Dichloropropane	0.0500	0.04498		mg/Kg		90	69 - 120	1	50
Bromodichloromethane	0.0500	0.04421		mg/Kg		88	68 - 135	0	50
1,3-Dichloropropane	0.0500	0.04517		mg/Kg		90	78 - 126	1	42
Bromoform	0.0500	0.04526		mg/Kg		91	36 - 150	1	50
2,2-Dichloropropane	0.0500	0.04311		mg/Kg		86	68 - 145	2	50
Bromomethane	0.0500	0.04734		mg/Kg		95	43 - 142	3	50
1,1-Dichloropropene	0.0500	0.04493		mg/Kg		90	79 - 127	2	50
Carbon disulfide	0.0500	0.04486		mg/Kg		90	74 - 135	0	50
Carbon tetrachloride	0.0500	0.04383		mg/Kg		88	70 - 141	0	50
Chlorobenzene	0.0500	0.04547		mg/Kg		91	84 - 125	1	50
2-Hexanone	0.250	0.2176		mg/Kg		87	57 - 148	3	50
Chlorodibromomethane	0.0500	0.04700		mg/Kg		94	66 - 134	0	50
Chloroethane	0.0500	0.04825		mg/Kg		96	53 - 144	2	50
Chloroform	0.0500	0.04263		mg/Kg		85	76 - 130	0	49
4-Methyl-2-pentanone (MIBK)	0.250	0.2475		mg/Kg		99	59 - 138	2	50
Chloromethane	0.0500	0.05108		mg/Kg		102	23 - 150	4	50
cis-1,2-Dichloroethene	0.0500	0.04586		mg/Kg		92	75 - 125	2	50
cis-1,3-Dichloropropene	0.0500	0.04910		mg/Kg		98	73 - 148	2	50
Dibromomethane	0.0500	0.04183		mg/Kg		84	71 - 130	0	50
Dichlorodifluoromethane	0.0500	0.05473		mg/Kg		109	12 - 144	2	50
Ethylbenzene	0.0500	0.04958		mg/Kg		99	80 - 134	1	50
Hexachlorobutadiene	0.0500	0.04916		mg/Kg		98	65 - 148	10	50
Isopropylbenzene	0.0500	0.05144		mg/Kg		103	80 - 150	2	50
1,1,1,2-Tetrachloroethane	0.0500	0.04432		mg/Kg		89	80 - 136	1	50
Methyl tert-butyl ether	0.0500	0.04610		mg/Kg		92	70 - 136	2	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-111912/4
Matrix: Solid
Analysis Batch: 111912

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
1,1,2,2-Tetrachloroethane	0.0500	0.04436		mg/Kg		89	66 - 134	2	50
Methylene Chloride	0.0500	0.04168		mg/Kg		83	68 - 144	1	50
Naphthalene	0.0500	0.05375		mg/Kg		108	69 - 150	7	50
n-Butylbenzene	0.0500	0.05444		mg/Kg		109	72 - 152	0	50
N-Propylbenzene	0.0500	0.05275		mg/Kg		106	75 - 137	2	50
p-Isopropyltoluene	0.0500	0.05510		mg/Kg		110	77 - 141	2	50
sec-Butylbenzene	0.0500	0.05327		mg/Kg		107	79 - 141	2	50
1,2,3-Trichlorobenzene	0.0500	0.05197		mg/Kg		104	70 - 150	5	50
Styrene	0.0500	0.05043		mg/Kg		101	82 - 137	3	50
1,2,4-Trichlorobenzene	0.0500	0.05343		mg/Kg		107	62 - 150	1	50
tert-Butylbenzene	0.0500	0.05143		mg/Kg		103	80 - 132	2	50
1,1,1-Trichloroethane	0.0500	0.04380		mg/Kg		88	72 - 140	0	50
Tetrachloroethene	0.0500	0.04467		mg/Kg		89	78 - 140	1	50
1,1,2-Trichloroethane	0.0500	0.04399		mg/Kg		88	78 - 128	1	50
Toluene	0.0500	0.04635		mg/Kg		93	80 - 132	1	50
trans-1,2-Dichloroethene	0.0500	0.04606		mg/Kg		92	76 - 128	1	50
1,2,3-Trichloropropane	0.0500	0.04714		mg/Kg		94	65 - 139	5	50
trans-1,3-Dichloropropene	0.0500	0.04921		mg/Kg		98	62 - 139	3	50
1,2,4-Trimethylbenzene	0.0500	0.05220		mg/Kg		104	77 - 139	4	50
Trichloroethene	0.0500	0.04390		mg/Kg		88	77 - 127	0	50
1,3,5-Trimethylbenzene	0.0500	0.05314		mg/Kg		106	78 - 138	2	50
Trichlorofluoromethane	0.0500	0.04521		mg/Kg		90	50 - 140	1	50
Vinyl chloride	0.0500	0.05359		mg/Kg		107	47 - 136	2	50
Xylenes, Total	0.100	0.09835		mg/Kg		98	80 - 137	2	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

GC/MS VOA

Prep Batch: 110595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-36505-3	SB-3	Total/NA	Solid	5030B	
490-36505-4	SB-4	Total/NA	Solid	5030B	
490-36505-5	SB-5	Total/NA	Solid	5030B	
490-36505-6	SB-6	Total/NA	Solid	5030B	

Prep Batch: 110600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-36505-1	SB-2	Total/NA	Solid	5030B	
490-36505-2	SB-1	Total/NA	Solid	5030B	
490-36505-4	SB-4	Total/NA	Solid	5030B	
490-36505-6	SB-6	Total/NA	Solid	5030B	

Analysis Batch: 110732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-36505-1	SB-2	Total/NA	Solid	8260B	110600
490-36505-2	SB-1	Total/NA	Solid	8260B	110600
490-36505-4	SB-4	Total/NA	Solid	8260B	110600
490-36505-6	SB-6	Total/NA	Solid	8260B	110600
LCS 490-110732/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-110732/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-110732/7	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 110959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-36505-3	SB-3	Total/NA	Solid	8260B	110595
490-36505-4	SB-4	Total/NA	Solid	8260B	110595
490-36505-5	SB-5	Total/NA	Solid	8260B	110595
490-36505-6	SB-6	Total/NA	Solid	8260B	110595
LCS 490-110959/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-110959/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-110959/6	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 111503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-36505-7	SB-1-GW	Total/NA	Water	8260B	
490-36505-8	Trip Blank	Total/NA	Water	8260B	
LCS 490-111503/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-111503/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-111503/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 111840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-29650-B-55 MS	Matrix Spike	Total/NA	Water	8260B	
240-29650-C-55 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-36505-7	SB-1-GW	Total/NA	Water	8260B	
LCS 490-111840/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-111840/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-111840/7	Method Blank	Total/NA	Water	8260B	

GC/MS VOA (Continued)

Analysis Batch: 111912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-36505-4	SB-4	Total/NA	Solid	8260B	110595
LCS 490-111912/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-111912/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-111912/7	Method Blank	Total/NA	Solid	8260B	

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-2 — Lab Sample ID: 490-36505-1

Date Collected: 09/27/13 09:30 — **Matrix: Solid**
Date Received: 09/28/13 08:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			110600	09/28/13 13:55	JLP	TAL NSH
Total/NA	Analysis	8260B		1	110732	09/30/13 15:22	KKK	TAL NSH

Client Sample ID: SB-1 — Lab Sample ID: 490-36505-2

Date Collected: 09/27/13 10:15 — **Matrix: Solid**
Date Received: 09/28/13 08:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			110600	09/28/13 13:55	JLP	TAL NSH
Total/NA	Analysis	8260B		1	110732	09/30/13 15:52	KKK	TAL NSH

Client Sample ID: SB-3 — Lab Sample ID: 490-36505-3

Date Collected: 09/27/13 10:45 — **Matrix: Solid**
Date Received: 09/28/13 08:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			110595	09/28/13 13:54	JLP	TAL NSH
Total/NA	Analysis	8260B		1000	110959	10/01/13 14:51	KKK	TAL NSH

Client Sample ID: SB-4 — Lab Sample ID: 490-36505-4

Date Collected: 09/27/13 11:20 — **Matrix: Solid**
Date Received: 09/28/13 08:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			110600	09/28/13 13:55	JLP	TAL NSH
Total/NA	Analysis	8260B		1	110732	09/30/13 16:53	KKK	TAL NSH
Total/NA	Prep	5030B			110595	09/28/13 13:54	JLP	TAL NSH
Total/NA	Analysis	8260B		20	110959	10/01/13 13:51	KKK	TAL NSH
Total/NA	Analysis	8260B		1000	111912	10/04/13 12:40	KKK	TAL NSH

Client Sample ID: SB-5 — Lab Sample ID: 490-36505-5

Date Collected: 09/27/13 11:45 — **Matrix: Solid**
Date Received: 09/28/13 08:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			110595	09/28/13 13:54	JLP	TAL NSH
Total/NA	Analysis	8260B		1000	110959	10/01/13 14:21	KKK	TAL NSH

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Client Sample ID: SB-6

Lab Sample ID: 490-36505-6
Date Collected: 09/27/13 12:30
Matrix: Solid
Date Received: 09/28/13 08:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			110600	09/28/13 13:55	JLP	TAL NSH
Total/NA	Analysis	8260B		1	110732	09/30/13 17:53	KKK	TAL NSH
Total/NA	Prep	5030B			110595	09/28/13 13:54	JLP	TAL NSH
Total/NA	Analysis	8260B		1	110959	10/01/13 13:22	KKK	TAL NSH

Client Sample ID: SB-1-GW

Lab Sample ID: 490-36505-7
Date Collected: 09/27/13 10:25
Matrix: Water
Date Received: 09/28/13 08:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	111503	10/03/13 08:15	EML	TAL NSH
Total/NA	Analysis	8260B		5	111840	10/04/13 06:40	EML	TAL NSH

Client Sample ID: Trip Blank

Lab Sample ID: 490-36505-8
Date Collected: 09/27/13 00:01
Matrix: Water
Date Received: 09/28/13 08:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	111503	10/03/13 02:24	EML	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Tetra Tech EM Inc.
Project/Site: Long Brother's Clnr

TestAmerica Job ID: 490-36505-1
SDG: 10352930.02

Laboratory: TestAmerica Nashville

All certifica ions held by this laboratory are listed. Not all cer ifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-13
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-14
Ilinois	NELAP	5	200010	12-09-13
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-13 *
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	11-02-13
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-13

* Expired certification is currently pending renewal and is considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Nashville, TN

COOLER RECEIPT FORM

490-36505 Chain of Custody

Cooler Received/Opened On: 9/28/2013 @0825

1. Tracking # 7620 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 1.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: 2 Front/Back

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) AH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDM

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDM

I certify that I attached a label with the unique LIMS number to each container (intial) MDM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

.erica Nashville
960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRO

Loc: 490
36505

10/7/2013

Client Information			Carrier Tracking No(s):	COC No: 490-15554-6600.1
Client Contact: Mr. Jeremy Travis	(b)(4) [redacted] Phone: 610.574.1624	(b)(4) [redacted]		Page: Page 1 of 1
Company: Tetra Tech EM Inc.				Job #:
Address: 1881 Campus Commons Drive, Suite 200	Due Date Requested:			
City: Reston	TAT Requested (days): Standard Fee			
State, Zip: VA, 20191				
Phone: 703.390.0654	PO #: Purchase Order not required			
Email: jeremy.travis@tetratech.com	WO #: 103S2930.02			
Project Name: Long Brother's Clnr	Project #: 49002430			
Site: 655 Lebaum St, SE Wash, DC 20032	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Standard 8260 List	8260B - Standard 8260 List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	A		
SB-2	9/27/13	0930	G	Solid			X		1	Level 3 Deliverable
SB-1	9/27/13	1015	G	Solid			X		1	Required.
SB-3	9/27/13	1045	G	Solid			X		1	
SB-4	9/27/13	1120	G	Solid			X		1	
SB-5	9/27/13	1145	G	Solid			X		1	
SB-6	9/27/13	12:30	G	Solid			X		1	
				Solid						
				Solid						
SB-1-GW	9/27/13	10:25	G	Water				X	3	
				Water						
				Water						

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
(b)(4) [redacted]	Date/Time: 9/27/13 1800	Company: Tetra Tech	(b)(4) [redacted]	Date/Time: 9-28-13 @ 0825	Company: TAN
(b)(4) [redacted]	Date/Time:	Company:	Received by:	Date/Time:	Company:
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: 1.9c

Login Sample Receipt Checklist

Client: Tetra Tech EM Inc.

Job Number: 490-36505-1
SDG Number: 10352930.02

Login Number: 36505
List Number: 1
Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	1.9
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 containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have leg ble 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.	N/A	
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	

ATTACHMENT 4

ANALYTICAL SUMMARY TABLES FOR SOIL VAPOR, INDOOR AIR, AND AMBIENT AIR SAMPLES

TABLE 3: SOIL VAPOR ANALYTICAL RESULTS
LONG BROTHERS CLEANERS
655 LEBAUM STREET, SE
WASHINGTON, DC 20032

Sampling Point	Sample Depth	Boring Location	VOCs by EPA Method TO-15 ($\mu g/m^3$)							
			Benzene	cis-1,2-Dichloroethene	Methylene Chloride	m- and p-Xylene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride
VP-1	18" to 24" below grade	Adjacent to the exterior of the north side of the building	ND	ND	17	15	**45**	27	ND	ND
VP-2	18" to 24" below grade	Beneath the slab of the building along the interior of the eastern wall of the Subject Property	**25**	**2,000**	ND	40	**4,900**	74	**1,500**	**70**
VP-3	18" to 24" below grade	Adjacent to the exterior of the southwest corner of building	ND	**7,400**	ND	ND	**20,000**	ND	**3,400**	**320**
VP-4	18" to 24" below grade	Adjacent to the exterior of the south side of the building	ND	**2,700**	ND	ND	**22,000**	ND	**7,400**	ND
VP-5	18" to 24" below grade	Adjacent to the exterior of the southeast corner of the building	**7.6**	210	24	24	**380**	44	**83**	**83**
EPA Target Shallow Soil Gas Concentration, 10^{-4} Risk Level*			**310**	**350**	**5,200**	**70,000**	**810**	**4,000**	**22**	**280**
EPA Target Shallow Soil Gas Concentration, 10^{-5} Risk Level*			**31**	**350**	**520**	**70,000**	**81**	**4,000**	**2.2**	**28**
EPA Target Shallow Soil Gas Concentration, 10^{-6} Risk Level*			**3**	**350**	**52**	**70,000**	**8.1**	**4,000**	**0.22**	**2.8**
DDOE RBSLs for a Resident Child*			**2,940**	**NS**	**NS**	**205,000**	**NS**	**11,000,000**	**NS**	**NS**
DDOE RBSLs for a Commercial Worker*			**4,480**	**NS**	**NS**	**1,420,000**	**NS**	**75,700,000**	**NS**	**NS**

Only detected analytes are presented

Notes:

Bold results indicated the sample was above regulatory limits

DDOE - District Department of the Environment

EPA - United States Environmental Protection Agency

ND - Not Detected at or above the Laboratory Detection Limit

NS - No Standard for detected analyte

OSWER - EPA Office of Solid Waste and Emergency Response

RBSLs - Risk-Based Screening Levels

* Regulatory values obtained from EPA OSWER *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils* (Subsurface Vapor Intrusion Guidance) using Generic Screening Levels for Target Indoor Air Concentration to Satisfy Both the Prescribed Risk Level and the Target Hazard Index ($R=10^{-4}$, HI=1) Risk = $1x10^{-4}$ which represents an industrial facility; ($R=10^{-5}$, HI=1) Risk = $1x10^{-5}$ which represents a commercial facility; and ($R=10^{-6}$, HI=1) Risk = $1x10^{-6}$ which represents a residential property and includes day care facilities Regulatory Values also obtained from the DDOE Toxic Substances Division Underground Storage Tank Branch, *District of Columbia Risk-Based Corrective Action Technical Guidance (Risk-Based Decision Making) Table 5-8, RBSLs for a Residential Child and Table 5-10, RBSLs for a Commercial Worker*, dated June 2011

$\mu g/m^3$ - Micrograms per cubic meter

VOC - Volatile Organic Compound

TABLE 4: INDOOR AIR ANALYTICAL RESULTS
LONG BROTHERS CLEANERS
655 LEBAUM STREET, SE
WASHINGTON, DC 20032

Sampling Point	Sample Depth	Boring Location	VOCs by EPA Method TO-15 ($\mu g/m^3$)											
			Chloromethane	Benzene	Dichlorodifluoromethane	Ethylbenzene	Methylene Chloride	m- and p-Xylene	o-Xylene	Tetrachloroethene	Toluene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene
IA-1	5 feet above grade	North portion of the occupied space	1 2	ND	2 4	ND	3 0	ND	ND	**170**	3 2	ND	1 4	ND
IA-2	5 feet above grade	South portion of the occupied space adjacent to dry cleaning machines	1 1	**4.4**	2 3	**7.9**	3 7	31	4 1	**4,400 D**	46	**1.3**	1 3	3 6
EPA Target Indoor Air Concentration, 10^{-4} Risk Level*			**90**	**31**	**200**	**220**	**520**	**7,000**	**7,000**	**81**	**400**	**2.2**	**700**	**6**
EPA Target Indoor Air Concentration, 10^{-5} Risk Level*			**24**	**3.1**	**200**	**22**	**52**	**7,000**	**7,000**	**8.1**	**400**	**0.22**	**700**	**6**
EPA Target Indoor Air Concentration, 10^{-6} Risk Level*			**2.4**	**0.31**	**200**	**2.2**	**5.2**	**7,000**	**7,000**	**0.81**	**400**	**0.022**	**700**	**6**
DDOE RBSLs for a Resident Child*			**NS**	**2.43**	**NS**	**7.30**	**NS**	**156**	**156**	**NS**	**7,820**	**NS**	**NS**	**NS**
DDOE RBSLs for a Commercial Worker*			**NS**	**1.57**	**NS**	**4.91**	**NS**	**438**	**438**	**NS**	**21,900**	**NS**	**NS**	**NS**

Only detected analytes are presented

Notes

Bold results indicated the sample was above regulatory limits.
D - Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples
DDOE - District Department of the Environment
EPA - United States Environmental Protection Agency
NS - No Standard for detected analyte
ND - Not Detected at or above the Laboratory Detection Limit
OSWER - EPA Office of Solid Waste and Emergency Response
RBSL - Risk-Based Screening Level

* Regulatory values obtained from EPA OSWER *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils* (Subsurface Vapor Intrusion Guidance) using Generic Screening Levels for Target Indoor Air Concentration to Satisfy Both the Prescribed Risk Level and the Target Hazard Index (R=10^{-} , HI=1) Risk = 1x10^{-} which represents an industrial facility; (R=10^{-5}, HI=1) Risk = 1x10^{-5} which represents a commercial facility; and (R=10^{-6}, HI=1) Risk = 1x10^{-6} which represents a residential property and includes day care facilities. Regulatory Values also obtained from the DDOE Toxic Substances Division Underground Storage Tank Branch, *District of Columbia Risk-Based Corrective Action Technical Guidance (Risk-Based Decision Making) Table 5-8 RBSLs for a Residential Child and Table 5-10 RBSLs for a Commercial Worker* , dated June 2011.

$\mu g/m^3$ - Micrograms per cubic meter
VOC - Volatile Organic Compound

TABLE 5: AMBIENT AIR ANALYTICAL RESULTS
LONG BROTHERS CLEANERS
655 LEBAUM STREET, SE
WASHINGTON, DC 20032

Sampling Point	Sample Depth	Boring Location	VOCs by EPA Method TO-15 (µg/m^3)							
			Benzene	Chloromethane	Dichlorodifluoromethane	Methylene Chloride	m- and p-Xylene	Tetrachloroethene	Toluene	Trichlorofluoromethane
AM-1	2-3 feet above grade	Alley adjacent to the west of the Subject Property building	**0.72**	1 0	2 3	2 5	1 3	8 0	2 1	1 3
EPA Region 3 Residential Air RSL*			**0.31**	**94**	**100**	**96**	**100**	**9.4**	**5,200**	**730**
EPA Region 3 Industrial Air RSL*			**1.6**	**390**	**440**	**1,200**	**440**	**47**	**22,000**	**3,100**
DDOE RBSLs for a Resident Child*			**4.68**	**NS**	**NS**	**NS**	**313**	**NS**	**15,600**	**NS**
DDOE RBSLs for a Commercial Worker*			**1.57**	**NS**	**NS**	**NS**	**438**	**NS**	**21,900**	**NS**

Only detected analytes are presented

Notes:

DDOE - District Department of the Environment
EPA - United States Environmental Protection Agency
ND - Not Detected at or above the Laboratory Detection Limit
NS - No Standard
RBSL - Risk-Based Screening Level
* Regulatory values obtained from the EPA Region 3 RSL for Residential Air and Industrial Air, May 2013 and from the DDOE Toxic Substances Division Underground Storage Tank Branch, District of Columbia Risk-Based Corrective Action Technical Guidance (Risk-Based Decision Making) Table 5-8, RBSLs for a Residential Child and Table 5-10, RBSLs for a Commercial Worker, dated June 2011
RSL - Regional Screening Level
µg/m^3 - Micrograms per cubic meter
VOC - Volatile Organic Compound

ATTACHMENT 5

LABORATORY ANALYTICAL RESULTS FOR SOIL VAPOR, INDOOR AIR, AND AMBIENT AIR

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Tel: (865)291-3000

TestAmerica Job ID: 140-217-1
Client Project/Site: Long Brothers Cleaners TO-15

For:
Tetra Tech EM Inc.
1881 Campus Commons Drive Suite 200
Reston, Virginia 20109

(b) (4)
[redacted]

Authorized for release by:
10/11/2013 1:27:45 PM

(b) (4)
[redacted]

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: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
E	Result exceeded calibration range.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.

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
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 ra io
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: 140-217-1

Laboratory: TestAmerica Knoxville

Narrative

Job Narrative
140-217-1

Comments
No additional comments.

Receipt
The samples were received on 10/1/2013 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA
Method(s) TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified “zero air” as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of “zero air” by TestAmerica Knoxville.

A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for two analytes to recover outside criteria for this method when a full list spike is utilized. The LCS associated with batch 258 had 1,4-dichlorobenzene outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) TO-14A, TO-15: The continuing calibration verification (CCV) associated with batch 258 exhibited % difference of > 30% for the following analytes 1,2,4-trichlorobenzene and hexachlorobutadiene, however the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

No other analytical or quality issues were noted.

Detection Summary

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: AM-1 — Lab Sample ID: 140-217-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.23		0.20		ppb v/v	1		TO-15	Total/NA
Chloromethane	0.50		0.50		ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.46		0.20		ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.73		0.50		ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	0.29		0.20		ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	1.2		0.20		ppb v/v	1		TO-15	Total/NA
Toluene	0.56		0.20		ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.23		0.20		ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.72		0.64		ug/m3	1		TO-15	Total/NA
Chloromethane	1.0		1.0		ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.3		0.99		ug/m3	1		TO-15	Total/NA
Methylene Chloride	2.5		1.7		ug/m3	1		TO-15	Total/NA
m-Xylene & p-Xylene	1.3		0.87		ug/m3	1		TO-15	Total/NA
Tetrachloroethene	8.0		1.4		ug/m3	1		TO-15	Total/NA
Toluene	2.1		0.75		ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.3		1.1		ug/m3	1		TO-15	Total/NA

Client Sample ID: VP-4 — Lab Sample ID: 140-217-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	690		43		ppb v/v	10.87		TO-15	Total/NA
Tetrachloroethene	3200		43		ppb v/v	10.87		TO-15	Total/NA
Trichloroethene	1400		43		ppb v/v	10.87		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2700		170		ug/m3	10.87		TO-15	Total/NA
Tetrachloroethene	22000		290		ug/m3	10.87		TO-15	Total/NA
Trichloroethene	7400		230		ug/m3	10.87		TO-15	Total/NA

Client Sample ID: IA-1 — Lab Sample ID: 140-217-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.56		0.50		ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.49		0.20		ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.86		0.50		ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	25		0.20		ppb v/v	1		TO-15	Total/NA
Toluene	0.85		0.20		ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.25		0.20		ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	1.2		1.0		ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.4		0.99		ug/m3	1		TO-15	Total/NA
Methylene Chloride	3.0		1.7		ug/m3	1		TO-15	Total/NA
Tetrachloroethene	170		1.4		ug/m3	1		TO-15	Total/NA
Toluene	3.2		0.75		ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.4		1.1		ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-2 — Lab Sample ID: 140-217-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.4		0.20		ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: IA-2 (Continued) — Lab Sample ID: 140-217-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.51		0.50		ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.47		0.20		ppb v/v	1		TO-15	Total/NA
Ethylbenzene	1.8		0.20		ppb v/v	1		TO-15	Total/NA
Methylene Chloride	1.1		0.50		ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	7.3		0.20		ppb v/v	1		TO-15	Total/NA
o-Xylene	0.94		0.20		ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	440	E	0.20		ppb v/v	1		TO-15	Total/NA
Toluene	12		0.20		ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.25		0.20		ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.24		0.20		ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.73		0.20		ppb v/v	1		TO-15	Total/NA
Tetrachloroethene - DL	650	D	7.6		ppb v/v	3.82		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	4.4		0.64		ug/m3	1		TO-15	Total/NA
Chloromethane	1.1		1.0		ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.3		0.99		ug/m3	1		TO-15	Total/NA
Ethylbenzene	7.9		0.87		ug/m3	1		TO-15	Total/NA
Methylene Chloride	3.7		1.7		ug/m3	1		TO-15	Total/NA
m-Xylene & p-Xylene	31		0.87		ug/m3	1		TO-15	Total/NA
o-Xylene	4.1		0.87		ug/m3	1		TO-15	Total/NA
Tetrachloroethene	3000	E	1.4		ug/m3	1		TO-15	Total/NA
Toluene	46		0.75		ug/m3	1		TO-15	Total/NA
Trichloroethene	1.3		1.1		ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.3		1.1		ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	3.6		0.98		ug/m3	1		TO-15	Total/NA
Tetrachloroethene - DL	4400	D	52		ug/m3	3.82		TO-15	Total/NA

Client Sample ID: VP-2 — Lab Sample ID: 140-217-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.7		7.0		ppb v/v	3.5		TO-15	Total/NA
cis-1,2-Dichloroethene	510		7.0		ppb v/v	3.5		TO-15	Total/NA
m-Xylene & p-Xylene	9.2		7.0		ppb v/v	3.5		TO-15	Total/NA
Tetrachloroethene	730		7.0		ppb v/v	3.5		TO-15	Total/NA
Toluene	20		7.0		ppb v/v	3.5		TO-15	Total/NA
Trichloroethene	290		7.0		ppb v/v	3.5		TO-15	Total/NA
Vinyl chloride	27		7.0		ppb v/v	3.5		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	25		22		ug/m3	3.5		TO-15	Total/NA
cis-1,2-Dichloroethene	2000		28		ug/m3	3.5		TO-15	Total/NA
m-Xylene & p-Xylene	40		30		ug/m3	3.5		TO-15	Total/NA
Tetrachloroethene	4900		47		ug/m3	3.5		TO-15	Total/NA
Toluene	74		26		ug/m3	3.5		TO-15	Total/NA
Trichloroethene	1500		38		ug/m3	3.5		TO-15	Total/NA
Vinyl chloride	70		18		ug/m3	3.5		TO-15	Total/NA

Client Sample ID: VP-3 — Lab Sample ID: 140-217-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1900		44		ppb v/v	11.05		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: VP-3 (Continued) — Lab Sample ID: 140-217-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	2900		44		ppb v/v	11.05		TO-15	Total/NA
Trichloroethene	640		44		ppb v/v	11.05		TO-15	Total/NA
Vinyl chloride	120		44		ppb v/v	11.05		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	7400		180		ug/m3	11.05		TO-15	Total/NA
Tetrachloroethene	20000		300		ug/m3	11.05		TO-15	Total/NA
Trichloroethene	3400		240		ug/m3	11.05		TO-15	Total/NA
Vinyl chloride	320		110		ug/m3	11.05		TO-15	Total/NA

Client Sample ID: VP-1 — Lab Sample ID: 140-217-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	5.0		5.0		ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	3.5		2.0		ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	6.7		2.0		ppb v/v	1		TO-15	Total/NA
Toluene	7.1		2.0		ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	17		17		ug/m3	1		TO-15	Total/NA
m-Xylene & p-Xylene	15		8.7		ug/m3	1		TO-15	Total/NA
Tetrachloroethene	45		14		ug/m3	1		TO-15	Total/NA
Toluene	27		7.5		ug/m3	1		TO-15	Total/NA

Client Sample ID: VP-5 — Lab Sample ID: 140-217-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.4		2.0		ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	54		2.0		ppb v/v	1		TO-15	Total/NA
Methylene Chloride	7.0		5.0		ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	5.5		2.0		ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	57		2.0		ppb v/v	1		TO-15	Total/NA
Toluene	12		2.0		ppb v/v	1		TO-15	Total/NA
Trichloroethene	15		2.0		ppb v/v	1		TO-15	Total/NA
Vinyl chloride	33		2.0		ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.6		6.4		ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	210		7.9		ug/m3	1		TO-15	Total/NA
Methylene Chloride	24		17		ug/m3	1		TO-15	Total/NA
m-Xylene & p-Xylene	24		8.7		ug/m3	1		TO-15	Total/NA
Tetrachloroethene	380		14		ug/m3	1		TO-15	Total/NA
Toluene	44		7.5		ug/m3	1		TO-15	Total/NA
Trichloroethene	83		11		ug/m3	1		TO-15	Total/NA
Vinyl chloride	83		5.1		ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: AM-1

Date Collected: 09/27/13 15:57
Date Received: 10/01/13 10:00

Lab Sample ID: 140-217-1

Matrix: Ambient Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.23**		0.20		ppb v/v			10/03/13 19:13	1
Benzyl chloride	ND		0.40		ppb v/v			10/03/13 19:13	1
Bromomethane	ND		0.20		ppb v/v			10/03/13 19:13	1
Carbon tetrachloride	ND		0.20		ppb v/v			10/03/13 19:13	1
Chlorobenzene	ND		0.20		ppb v/v			10/03/13 19:13	1
Chloroethane	ND		0.20		ppb v/v			10/03/13 19:13	1
Chloroform	ND		0.20		ppb v/v			10/03/13 19:13	1
Chloromethane	**0.50**		0.50		ppb v/v			10/03/13 19:13	1
cis-1,2-Dichloroethene	ND		0.20		ppb v/v			10/03/13 19:13	1
cis-1,3-Dichloropropene	ND		0.20		ppb v/v			10/03/13 19:13	1
1,2-Dibromoethane (EDB)	ND		0.20		ppb v/v			10/03/13 19:13	1
1,2-Dichlorobenzene	ND		0.20		ppb v/v			10/03/13 19:13	1
1,3-Dichlorobenzene	ND		0.20		ppb v/v			10/03/13 19:13	1
1,4-Dichlorobenzene	ND	*	0.20		ppb v/v			10/03/13 19:13	1
Dichlorodifluoromethane	**0.46**		0.20		ppb v/v			10/03/13 19:13	1
1,1-Dichloroethane	ND		0.20		ppb v/v			10/03/13 19:13	1
1,2-Dichloroethane	ND		0.20		ppb v/v			10/03/13 19:13	1
1,1-Dichloroethene	ND		0.20		ppb v/v			10/03/13 19:13	1
1,2-Dichloropropane	ND		0.20		ppb v/v			10/03/13 19:13	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.20		ppb v/v			10/03/13 19:13	1
Ethylbenzene	ND		0.20		ppb v/v			10/03/13 19:13	1
Hexachlorobutadiene	ND		1.0		ppb v/v			10/03/13 19:13	1
Methylene Chloride	**0.73**		0.50		ppb v/v			10/03/13 19:13	1
m-Xylene & p-Xylene	**0.29**		0.20		ppb v/v			10/03/13 19:13	1
o-Xylene	ND		0.20		ppb v/v			10/03/13 19:13	1
Styrene	ND		0.20		ppb v/v			10/03/13 19:13	1
1,1,2,2-Tetrachloroethane	ND		0.20		ppb v/v			10/03/13 19:13	1
Tetrachloroethene	**1.2**		0.20		ppb v/v			10/03/13 19:13	1
Toluene	**0.56**		0.20		ppb v/v			10/03/13 19:13	1
trans-1,3-Dichloropropene	ND		0.20		ppb v/v			10/03/13 19:13	1
1,2,4-Trichlorobenzene	ND		1.0		ppb v/v			10/03/13 19:13	1
1,1,1-Trichloroethane	ND		0.20		ppb v/v			10/03/13 19:13	1
1,1,2-Trichloroethane	ND		0.20		ppb v/v			10/03/13 19:13	1
Trichloroethene	ND		0.20		ppb v/v			10/03/13 19:13	1
Trichlorofluoromethane	**0.23**		0.20		ppb v/v			10/03/13 19:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ppb v/v			10/03/13 19:13	1
1,2,4-Trimethylbenzene	ND		0.20		ppb v/v			10/03/13 19:13	1
1,3,5-Trimethylbenzene	ND		0.20		ppb v/v			10/03/13 19:13	1
Vinyl chloride	ND		0.20		ppb v/v			10/03/13 19:13	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.72**		0.64		ug/m3			10/03/13 19:13	1
Benzyl chloride	ND		2.1		ug/m3			10/03/13 19:13	1
Bromomethane	ND		0.78		ug/m3			10/03/13 19:13	1
Carbon tetrachloride	ND		1.3		ug/m3			10/03/13 19:13	1
Chlorobenzene	ND		0.92		ug/m3			10/03/13 19:13	1
Chloroethane	ND		0.53		ug/m3			10/03/13 19:13	1
Chloroform	ND		0.98		ug/m3			10/03/13 19:13	1
Chloromethane	**1.0**		1.0		ug/m3			10/03/13 19:13	1
cis-1,2-Dichloroethene	ND		0.79		ug/m3			10/03/13 19:13	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: AM-1

Date Collected: 09/27/13 15:57
Date Received: 10/01/13 10:00

Lab Sample ID: 140-217-1

Matrix: Ambient Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.91		ug/m3			10/03/13 19:13	1
1,2-Dibromoethane (EDB)	ND		1.5		ug/m3			10/03/13 19:13	1
1,2-Dichlorobenzene	ND		1.2		ug/m3			10/03/13 19:13	1
1,3-Dichlorobenzene	ND		1.2		ug/m3			10/03/13 19:13	1
1,4-Dichlorobenzene	ND	*	1.2		ug/m3			10/03/13 19:13	1
Dichlorodifluoromethane	**2.3**		0.99		ug/m3			10/03/13 19:13	1
1,1-Dichloroethane	ND		0.81		ug/m3			10/03/13 19:13	1
1,2-Dichloroethane	ND		0.81		ug/m3			10/03/13 19:13	1
1,1-Dichloroethene	ND		0.79		ug/m3			10/03/13 19:13	1
1,2-Dichloropropane	ND		0.92		ug/m3			10/03/13 19:13	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4		ug/m3			10/03/13 19:13	1
Ethylbenzene	ND		0.87		ug/m3			10/03/13 19:13	1
Hexachlorobutadiene	ND		11		ug/m3			10/03/13 19:13	1
Methylene Chloride	**2.5**		1.7		ug/m3			10/03/13 19:13	1
m-Xylene & p-Xylene	**1.3**		0.87		ug/m3			10/03/13 19:13	1
o-Xylene	ND		0.87		ug/m3			10/03/13 19:13	1
Styrene	ND		0.85		ug/m3			10/03/13 19:13	1
1,1,2,2-Tetrachloroethane	ND		1.4		ug/m3			10/03/13 19:13	1
Tetrachloroethene	**8.0**		1.4		ug/m3			10/03/13 19:13	1
Toluene	**2.1**		0.75		ug/m3			10/03/13 19:13	1
trans-1,3-Dichloropropene	ND		0.91		ug/m3			10/03/13 19:13	1
1,2,4-Trichlorobenzene	ND		7.4		ug/m3			10/03/13 19:13	1
1,1,1-Trichloroethane	ND		1.1		ug/m3			10/03/13 19:13	1
1,1,2-Trichloroethane	ND		1.1		ug/m3			10/03/13 19:13	1
Trichloroethene	ND		1.1		ug/m3			10/03/13 19:13	1
Trichlorofluoromethane	**1.3**		1.1		ug/m3			10/03/13 19:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.5		ug/m3			10/03/13 19:13	1
1,2,4-Trimethylbenzene	ND		0.98		ug/m3			10/03/13 19:13	1
1,3,5-Trimethylbenzene	ND		0.98		ug/m3			10/03/13 19:13	1
Vinyl chloride	ND		0.51		ug/m3			10/03/13 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*60 - 140*		*10/03/13 19:13*	*1*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: VP-4

Date Collected: 09/27/13 17:00
Date Received: 10/01/13 10:00

Lab Sample ID: 140-217-2

Matrix: Soil Gas

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		43		ppb v/v			10/03/13 20:06	10.87
Benzyl chloride	ND		87		ppb v/v			10/03/13 20:06	10.87
Bromomethane	ND		43		ppb v/v			10/03/13 20:06	10.87
Carbon tetrachloride	ND		43		ppb v/v			10/03/13 20:06	10.87
Chlorobenzene	ND		43		ppb v/v			10/03/13 20:06	10.87
Chloroethane	ND		43		ppb v/v			10/03/13 20:06	10.87
Chloroform	ND		43		ppb v/v			10/03/13 20:06	10.87
Chloromethane	ND		110		ppb v/v			10/03/13 20:06	10.87
cis-1,2-Dichloroethene	**690**		43		ppb v/v			10/03/13 20:06	10.87
cis-1,3-Dichloropropene	ND		43		ppb v/v			10/03/13 20:06	10.87
1,2-Dibromoethane (EDB)	ND		43		ppb v/v			10/03/13 20:06	10.87
1,2-Dichlorobenzene	ND		43		ppb v/v			10/03/13 20:06	10.87
1,3-Dichlorobenzene	ND		43		ppb v/v			10/03/13 20:06	10.87
1,4-Dichlorobenzene	ND	*	43		ppb v/v			10/03/13 20:06	10.87
Dichlorodifluoromethane	ND		43		ppb v/v			10/03/13 20:06	10.87
1,1-Dichloroethane	ND		43		ppb v/v			10/03/13 20:06	10.87
1,2-Dichloroethane	ND		43		ppb v/v			10/03/13 20:06	10.87
1,1-Dichloroethene	ND		43		ppb v/v			10/03/13 20:06	10.87
1,2-Dichloropropane	ND		43		ppb v/v			10/03/13 20:06	10.87
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		43		ppb v/v			10/03/13 20:06	10.87
Ethylbenzene	ND		43		ppb v/v			10/03/13 20:06	10.87
Hexachlorobutadiene	ND		220		ppb v/v			10/03/13 20:06	10.87
Methylene Chloride	ND		110		ppb v/v			10/03/13 20:06	10.87
m-Xylene & p-Xylene	ND		43		ppb v/v			10/03/13 20:06	10.87
o-Xylene	ND		43		ppb v/v			10/03/13 20:06	10.87
Styrene	ND		43		ppb v/v			10/03/13 20:06	10.87
1,1,2,2-Tetrachloroethane	ND		43		ppb v/v			10/03/13 20:06	10.87
Tetrachloroethene	**3200**		43		ppb v/v			10/03/13 20:06	10.87
Toluene	ND		43		ppb v/v			10/03/13 20:06	10.87
trans-1,3-Dichloropropene	ND		43		ppb v/v			10/03/13 20:06	10.87
1,2,4-Trichlorobenzene	ND		220		ppb v/v			10/03/13 20:06	10.87
1,1,1-Trichloroethane	ND		43		ppb v/v			10/03/13 20:06	10.87
1,1,2-Trichloroethane	ND		43		ppb v/v			10/03/13 20:06	10.87
Trichloroethene	**1400**		43		ppb v/v			10/03/13 20:06	10.87
Trichlorofluoromethane	ND		43		ppb v/v			10/03/13 20:06	10.87
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		43		ppb v/v			10/03/13 20:06	10.87
1,2,4-Trimethylbenzene	ND		43		ppb v/v			10/03/13 20:06	10.87
1,3,5-Trimethylbenzene	ND		43		ppb v/v			10/03/13 20:06	10.87
Vinyl chloride	ND		43		ppb v/v			10/03/13 20:06	10.87

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		140		ug/m3			10/03/13 20:06	10.87
Benzyl chloride	ND		450		ug/m3			10/03/13 20:06	10.87
Bromomethane	ND		170		ug/m3			10/03/13 20:06	10.87
Carbon tetrachloride	ND		270		ug/m3			10/03/13 20:06	10.87
Chlorobenzene	ND		200		ug/m3			10/03/13 20:06	10.87
Chloroethane	ND		110		ug/m3			10/03/13 20:06	10.87
Chloroform	ND		210		ug/m3			10/03/13 20:06	10.87
Chloromethane	ND		220		ug/m3			10/03/13 20:06	10.87
cis-1,2-Dichloroethene	**2700**		170		ug/m3			10/03/13 20:06	10.87

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: VP-4

Date Collected: 09/27/13 17:00
Date Received: 10/01/13 10:00

Lab Sample ID: 140-217-2

Matrix: Soil Gas

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		200		ug/m3			10/03/13 20:06	10.87
1,2-Dibromoethane (EDB)	ND		330		ug/m3			10/03/13 20:06	10.87
1,2-Dichlorobenzene	ND		260		ug/m3			10/03/13 20:06	10.87
1,3-Dichlorobenzene	ND		260		ug/m3			10/03/13 20:06	10.87
1,4-Dichlorobenzene	ND	*	260		ug/m3			10/03/13 20:06	10.87
Dichlorodifluoromethane	ND		220		ug/m3			10/03/13 20:06	10.87
1,1-Dichloroethane	ND		180		ug/m3			10/03/13 20:06	10.87
1,2-Dichloroethane	ND		180		ug/m3			10/03/13 20:06	10.87
1,1-Dichloroethene	ND		170		ug/m3			10/03/13 20:06	10.87
1,2-Dichloropropane	ND		200		ug/m3			10/03/13 20:06	10.87
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		300		ug/m3			10/03/13 20:06	10.87
Ethylbenzene	ND		190		ug/m3			10/03/13 20:06	10.87
Hexachlorobutadiene	ND		2300		ug/m3			10/03/13 20:06	10.87
Methylene Chloride	ND		380		ug/m3			10/03/13 20:06	10.87
m-Xylene & p-Xylene	ND		190		ug/m3			10/03/13 20:06	10.87
o-Xylene	ND		190		ug/m3			10/03/13 20:06	10.87
Styrene	ND		190		ug/m3			10/03/13 20:06	10.87
1,1,2,2-Tetrachloroethane	ND		300		ug/m3			10/03/13 20:06	10.87
Tetrachloroethene	**22000**		290		ug/m3			10/03/13 20:06	10.87
Toluene	ND		160		ug/m3			10/03/13 20:06	10.87
trans-1,3-Dichloropropene	ND		200		ug/m3			10/03/13 20:06	10.87
1,2,4-Trichlorobenzene	ND		1600		ug/m3			10/03/13 20:06	10.87
1,1,1-Trichloroethane	ND		240		ug/m3			10/03/13 20:06	10.87
1,1,2-Trichloroethane	ND		240		ug/m3			10/03/13 20:06	10.87
Trichloroethene	**7400**		230		ug/m3			10/03/13 20:06	10.87
Trichlorofluoromethane	ND		240		ug/m3			10/03/13 20:06	10.87
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		330		ug/m3			10/03/13 20:06	10.87
1,2,4-Trimethylbenzene	ND		210		ug/m3			10/03/13 20:06	10.87
1,3,5-Trimethylbenzene	ND		210		ug/m3			10/03/13 20:06	10.87
Vinyl chloride	ND		110		ug/m3			10/03/13 20:06	10.87

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*		*10/03/13 20:06*	*10.87*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: IA-1

Lab Sample ID: 140-217-3

Date Collected: 09/27/13 16:29
Matrix: Air
Date Received: 10/01/13 10:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.20		ppb v/v			10/03/13 20:59	1
Benzyl chloride	ND		0.40		ppb v/v			10/03/13 20:59	1
Bromomethane	ND		0.20		ppb v/v			10/03/13 20:59	1
Carbon tetrachloride	ND		0.20		ppb v/v			10/03/13 20:59	1
Chlorobenzene	ND		0.20		ppb v/v			10/03/13 20:59	1
Chloroethane	ND		0.20		ppb v/v			10/03/13 20:59	1
Chloroform	ND		0.20		ppb v/v			10/03/13 20:59	1
Chloromethane	**0.56**		0.50		ppb v/v			10/03/13 20:59	1
cis-1,2-Dichloroethene	ND		0.20		ppb v/v			10/03/13 20:59	1
cis-1,3-Dichloropropene	ND		0.20		ppb v/v			10/03/13 20:59	1
1,2-Dibromoethane (EDB)	ND		0.20		ppb v/v			10/03/13 20:59	1
1,2-Dichlorobenzene	ND		0.20		ppb v/v			10/03/13 20:59	1
1,3-Dichlorobenzene	ND		0.20		ppb v/v			10/03/13 20:59	1
1,4-Dichlorobenzene	ND	*	0.20		ppb v/v			10/03/13 20:59	1
Dichlorodifluoromethane	**0.49**		0.20		ppb v/v			10/03/13 20:59	1
1,1-Dichloroethane	ND		0.20		ppb v/v			10/03/13 20:59	1
1,2-Dichloroethane	ND		0.20		ppb v/v			10/03/13 20:59	1
1,1-Dichloroethene	ND		0.20		ppb v/v			10/03/13 20:59	1
1,2-Dichloropropane	ND		0.20		ppb v/v			10/03/13 20:59	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.20		ppb v/v			10/03/13 20:59	1
Ethylbenzene	ND		0.20		ppb v/v			10/03/13 20:59	1
Hexachlorobutadiene	ND		1.0		ppb v/v			10/03/13 20:59	1
Methylene Chloride	**0.86**		0.50		ppb v/v			10/03/13 20:59	1
m-Xylene & p-Xylene	ND		0.20		ppb v/v			10/03/13 20:59	1
o-Xylene	ND		0.20		ppb v/v			10/03/13 20:59	1
Styrene	ND		0.20		ppb v/v			10/03/13 20:59	1
1,1,2,2-Tetrachloroethane	ND		0.20		ppb v/v			10/03/13 20:59	1
Tetrachloroethene	**25**		0.20		ppb v/v			10/03/13 20:59	1
Toluene	**0.85**		0.20		ppb v/v			10/03/13 20:59	1
trans-1,3-Dichloropropene	ND		0.20		ppb v/v			10/03/13 20:59	1
1,2,4-Trichlorobenzene	ND		1.0		ppb v/v			10/03/13 20:59	1
1,1,1-Trichloroethane	ND		0.20		ppb v/v			10/03/13 20:59	1
1,1,2-Trichloroethane	ND		0.20		ppb v/v			10/03/13 20:59	1
Trichloroethene	ND		0.20		ppb v/v			10/03/13 20:59	1
Trichlorofluoromethane	**0.25**		0.20		ppb v/v			10/03/13 20:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ppb v/v			10/03/13 20:59	1
1,2,4-Trimethylbenzene	ND		0.20		ppb v/v			10/03/13 20:59	1
1,3,5-Trimethylbenzene	ND		0.20		ppb v/v			10/03/13 20:59	1
Vinyl chloride	ND		0.20		ppb v/v			10/03/13 20:59	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.64		ug/m3			10/03/13 20:59	1
Benzyl chloride	ND		2.1		ug/m3			10/03/13 20:59	1
Bromomethane	ND		0.78		ug/m3			10/03/13 20:59	1
Carbon tetrachloride	ND		1.3		ug/m3			10/03/13 20:59	1
Chlorobenzene	ND		0.92		ug/m3			10/03/13 20:59	1
Chloroethane	ND		0.53		ug/m3			10/03/13 20:59	1
Chloroform	ND		0.98		ug/m3			10/03/13 20:59	1
Chloromethane	**1.2**		1.0		ug/m3			10/03/13 20:59	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: IA-1

Lab Sample ID: 140-217-3

Date Collected: 09/27/13 16:29
Matrix: Air
Date Received: 10/01/13 10:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.79		ug/m3			10/03/13 20:59	1
cis-1,3-Dichloropropene	ND		0.91		ug/m3			10/03/13 20:59	1
1,2-Dibromoethane (EDB)	ND		1.5		ug/m3			10/03/13 20:59	1
1,2-Dichlorobenzene	ND		1.2		ug/m3			10/03/13 20:59	1
1,3-Dichlorobenzene	ND		1.2		ug/m3			10/03/13 20:59	1
1,4-Dichlorobenzene	ND	*	1.2		ug/m3			10/03/13 20:59	1
Dichlorodifluoromethane	**2.4**		0.99		ug/m3			10/03/13 20:59	1
1,1-Dichloroethane	ND		0.81		ug/m3			10/03/13 20:59	1
1,2-Dichloroethane	ND		0.81		ug/m3			10/03/13 20:59	1
1,1-Dichloroethene	ND		0.79		ug/m3			10/03/13 20:59	1
1,2-Dichloropropane	ND		0.92		ug/m3			10/03/13 20:59	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4		ug/m3			10/03/13 20:59	1
Ethylbenzene	ND		0.87		ug/m3			10/03/13 20:59	1
Hexachlorobutadiene	ND		11		ug/m3			10/03/13 20:59	1
Methylene Chloride	**3.0**		1.7		ug/m3			10/03/13 20:59	1
m-Xylene & p-Xylene	ND		0.87		ug/m3			10/03/13 20:59	1
o-Xylene	ND		0.87		ug/m3			10/03/13 20:59	1
Styrene	ND		0.85		ug/m3			10/03/13 20:59	1
1,1,2,2-Tetrachloroethane	ND		1.4		ug/m3			10/03/13 20:59	1
Tetrachloroethene	**170**		1.4		ug/m3			10/03/13 20:59	1
Toluene	**3.2**		0.75		ug/m3			10/03/13 20:59	1
trans-1,3-Dichloropropene	ND		0.91		ug/m3			10/03/13 20:59	1
1,2,4-Trichlorobenzene	ND		7.4		ug/m3			10/03/13 20:59	1
1,1,1-Trichloroethane	ND		1.1		ug/m3			10/03/13 20:59	1
1,1,2-Trichloroethane	ND		1.1		ug/m3			10/03/13 20:59	1
Trichloroethene	ND		1.1		ug/m3			10/03/13 20:59	1
Trichlorofluoromethane	**1.4**		1.1		ug/m3			10/03/13 20:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.5		ug/m3			10/03/13 20:59	1
1,2,4-Trimethylbenzene	ND		0.98		ug/m3			10/03/13 20:59	1
1,3,5-Trimethylbenzene	ND		0.98		ug/m3			10/03/13 20:59	1
Vinyl chloride	ND		0.51		ug/m3			10/03/13 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*60 - 140*		*10/03/13 20:59*	*1*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: IA-2

Lab Sample ID: 140-217-4

Date Collected: 09/27/13 16:40
Matrix: Air
Date Received: 10/01/13 10:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.4**		0.20		ppb v/v			10/03/13 21:52	1
Benzyl chloride	ND		0.40		ppb v/v			10/03/13 21:52	1
Bromomethane	ND		0.20		ppb v/v			10/03/13 21:52	1
Carbon tetrachloride	ND		0.20		ppb v/v			10/03/13 21:52	1
Chlorobenzene	ND		0.20		ppb v/v			10/03/13 21:52	1
Chloroethane	ND		0.20		ppb v/v			10/03/13 21:52	1
Chloroform	ND		0.20		ppb v/v			10/03/13 21:52	1
Chloromethane	**0.51**		0.50		ppb v/v			10/03/13 21:52	1
cis-1,2-Dichloroethene	ND		0.20		ppb v/v			10/03/13 21:52	1
cis-1,3-Dichloropropene	ND		0.20		ppb v/v			10/03/13 21:52	1
1,2-Dibromoethane (EDB)	ND		0.20		ppb v/v			10/03/13 21:52	1
1,2-Dichlorobenzene	ND		0.20		ppb v/v			10/03/13 21:52	1
1,3-Dichlorobenzene	ND		0.20		ppb v/v			10/03/13 21:52	1
1,4-Dichlorobenzene	ND	*	0.20		ppb v/v			10/03/13 21:52	1
Dichlorodifluoromethane	**0.47**		0.20		ppb v/v			10/03/13 21:52	1
1,1-Dichloroethane	ND		0.20		ppb v/v			10/03/13 21:52	1
1,2-Dichloroethane	ND		0.20		ppb v/v			10/03/13 21:52	1
1,1-Dichloroethene	ND		0.20		ppb v/v			10/03/13 21:52	1
1,2-Dichloropropane	ND		0.20		ppb v/v			10/03/13 21:52	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.20		ppb v/v			10/03/13 21:52	1
Ethylbenzene	**1.8**		0.20		ppb v/v			10/03/13 21:52	1
Hexachlorobutadiene	ND		1.0		ppb v/v			10/03/13 21:52	1
Methylene Chloride	**1.1**		0.50		ppb v/v			10/03/13 21:52	1
m-Xylene & p-Xylene	**7.3**		0.20		ppb v/v			10/03/13 21:52	1
o-Xylene	**0.94**		0.20		ppb v/v			10/03/13 21:52	1
Styrene	ND		0.20		ppb v/v			10/03/13 21:52	1
1,1,2,2-Tetrachloroethane	ND		0.20		ppb v/v			10/03/13 21:52	1
Tetrachloroethene	**440**	**E**	0.20		ppb v/v			10/03/13 21:52	1
Toluene	**12**		0.20		ppb v/v			10/03/13 21:52	1
trans-1,3-Dichloropropene	ND		0.20		ppb v/v			10/03/13 21:52	1
1,2,4-Trichlorobenzene	ND		1.0		ppb v/v			10/03/13 21:52	1
1,1,1-Trichloroethane	ND		0.20		ppb v/v			10/03/13 21:52	1
1,1,2-Trichloroethane	ND		0.20		ppb v/v			10/03/13 21:52	1
Trichloroethene	**0.25**		0.20		ppb v/v			10/03/13 21:52	1
Trichlorofluoromethane	**0.24**		0.20		ppb v/v			10/03/13 21:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ppb v/v			10/03/13 21:52	1
1,2,4-Trimethylbenzene	**0.73**		0.20		ppb v/v			10/03/13 21:52	1
1,3,5-Trimethylbenzene	ND		0.20		ppb v/v			10/03/13 21:52	1
Vinyl chloride	ND		0.20		ppb v/v			10/03/13 21:52	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4.4**		0.64		ug/m3			10/03/13 21:52	1
Benzyl chloride	ND		2.1		ug/m3			10/03/13 21:52	1
Bromomethane	ND		0.78		ug/m3			10/03/13 21:52	1
Carbon tetrachloride	ND		1.3		ug/m3			10/03/13 21:52	1
Chlorobenzene	ND		0.92		ug/m3			10/03/13 21:52	1
Chloroethane	ND		0.53		ug/m3			10/03/13 21:52	1
Chloroform	ND		0.98		ug/m3			10/03/13 21:52	1
Chloromethane	**1.1**		1.0		ug/m3			10/03/13 21:52	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: IA-2

Lab Sample ID: 140-217-4

Date Collected: 09/27/13 16:40
Matrix: Air
Date Received: 10/01/13 10:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.79		ug/m3			10/03/13 21:52	1
cis-1,3-Dichloropropene	ND		0.91		ug/m3			10/03/13 21:52	1
1,2-Dibromoethane (EDB)	ND		1.5		ug/m3			10/03/13 21:52	1
1,2-Dichlorobenzene	ND		1.2		ug/m3			10/03/13 21:52	1
1,3-Dichlorobenzene	ND		1.2		ug/m3			10/03/13 21:52	1
1,4-Dichlorobenzene	ND	*	1.2		ug/m3			10/03/13 21:52	1
Dichlorodifluoromethane	**2.3**		0.99		ug/m3			10/03/13 21:52	1
1,1-Dichloroethane	ND		0.81		ug/m3			10/03/13 21:52	1
1,2-Dichloroethane	ND		0.81		ug/m3			10/03/13 21:52	1
1,1-Dichloroethene	ND		0.79		ug/m3			10/03/13 21:52	1
1,2-Dichloropropane	ND		0.92		ug/m3			10/03/13 21:52	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4		ug/m3			10/03/13 21:52	1
Ethylbenzene	**7.9**		0.87		ug/m3			10/03/13 21:52	1
Hexachlorobutadiene	ND		11		ug/m3			10/03/13 21:52	1
Methylene Chloride	**3.7**		1.7		ug/m3			10/03/13 21:52	1
m-Xylene & p-Xylene	**31**		0.87		ug/m3			10/03/13 21:52	1
o-Xylene	**4.1**		0.87		ug/m3			10/03/13 21:52	1
Styrene	ND		0.85		ug/m3			10/03/13 21:52	1
1,1,2,2-Tetrachloroethane	ND		1.4		ug/m3			10/03/13 21:52	1
Tetrachloroethene	**3000**	**E**	1.4		ug/m3			10/03/13 21:52	1
Toluene	**46**		0.75		ug/m3			10/03/13 21:52	1
trans-1,3-Dichloropropene	ND		0.91		ug/m3			10/03/13 21:52	1
1,2,4-Trichlorobenzene	ND		7.4		ug/m3			10/03/13 21:52	1
1,1,1-Trichloroethane	ND		1.1		ug/m3			10/03/13 21:52	1
1,1,2-Trichloroethane	ND		1.1		ug/m3			10/03/13 21:52	1
Trichloroethene	**1.3**		1.1		ug/m3			10/03/13 21:52	1
Trichlorofluoromethane	**1.3**		1.1		ug/m3			10/03/13 21:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.5		ug/m3			10/03/13 21:52	1
1,2,4-Trimethylbenzene	**3.6**		0.98		ug/m3			10/03/13 21:52	1
1,3,5-Trimethylbenzene	ND		0.98		ug/m3			10/03/13 21:52	1
Vinyl chloride	ND		0.51		ug/m3			10/03/13 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*60 - 140*		*10/03/13 21:52*	*1*

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**650**	**D**	7.6		ppb v/v			10/08/13 17:59	3 82

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**4400**	**D**	52		ug/m3			10/08/13 17:59	3 82

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*60 - 140*		*10/08/13 17:59*	*3.82*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: VP-2

Date Collected: 09/27/13 16:44
Date Received: 10/01/13 10:00

Lab Sample ID: 140-217-5

Matrix: Soil Gas

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**7.7**		7.0		ppb v/v			10/05/13 00:21	3.5
Benzyl chloride	ND		14		ppb v/v			10/05/13 00:21	3.5
Bromomethane	ND		7.0		ppb v/v			10/05/13 00:21	3.5
Carbon tetrachloride	ND		7.0		ppb v/v			10/05/13 00:21	3.5
Chlorobenzene	ND		7.0		ppb v/v			10/05/13 00:21	3.5
Chloroethane	ND		7.0		ppb v/v			10/05/13 00:21	3.5
Chloroform	ND		7.0		ppb v/v			10/05/13 00:21	3.5
Chloromethane	ND		18		ppb v/v			10/05/13 00:21	3.5
cis-1,2-Dichloroethene	**510**		7.0		ppb v/v			10/05/13 00:21	3.5
cis-1,3-Dichloropropene	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,2-Dibromoethane (EDB)	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,2-Dichlorobenzene	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,3-Dichlorobenzene	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,4-Dichlorobenzene	ND		7.0		ppb v/v			10/05/13 00:21	3.5
Dichlorodifluoromethane	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,1-Dichloroethane	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,2-Dichloroethane	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,1-Dichloroethene	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,2-Dichloropropane	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		7.0		ppb v/v			10/05/13 00:21	3.5
Ethylbenzene	ND		7.0		ppb v/v			10/05/13 00:21	3.5
Hexachlorobutadiene	ND		35		ppb v/v			10/05/13 00:21	3.5
Methylene Chloride	ND		18		ppb v/v			10/05/13 00:21	3.5
m-Xylene & p-Xylene	**9.2**		7.0		ppb v/v			10/05/13 00:21	3.5
o-Xylene	ND		7.0		ppb v/v			10/05/13 00:21	3.5
Styrene	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,1,2,2-Tetrachloroethane	ND		7.0		ppb v/v			10/05/13 00:21	3.5
Tetrachloroethene	**730**		7.0		ppb v/v			10/05/13 00:21	3.5
Toluene	**20**		7.0		ppb v/v			10/05/13 00:21	3.5
trans-1,3-Dichloropropene	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,2,4-Trichlorobenzene	ND		35		ppb v/v			10/05/13 00:21	3.5
1,1,1-Trichloroethane	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,1,2-Trichloroethane	ND		7.0		ppb v/v			10/05/13 00:21	3.5
Trichloroethene	**290**		7.0		ppb v/v			10/05/13 00:21	3.5
Trichlorofluoromethane	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,2,4-Trimethylbenzene	ND		7.0		ppb v/v			10/05/13 00:21	3.5
1,3,5-Trimethylbenzene	ND		7.0		ppb v/v			10/05/13 00:21	3.5
Vinyl chloride	**27**		7.0		ppb v/v			10/05/13 00:21	3.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**25**		22		ug/m3			10/05/13 00:21	3.5
Benzyl chloride	ND		72		ug/m3			10/05/13 00:21	3.5
Bromomethane	ND		27		ug/m3			10/05/13 00:21	3.5
Carbon tetrachloride	ND		44		ug/m3			10/05/13 00:21	3.5
Chlorobenzene	ND		32		ug/m3			10/05/13 00:21	3.5
Chloroethane	ND		18		ug/m3			10/05/13 00:21	3.5
Chloroform	ND		34		ug/m3			10/05/13 00:21	3.5
Chloromethane	ND		36		ug/m3			10/05/13 00:21	3.5
cis-1,2-Dichloroethene	**2000**		28		ug/m3			10/05/13 00:21	3.5

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: VP-2

Date Collected: 09/27/13 16:44
Date Received: 10/01/13 10:00

Lab Sample ID: 140-217-5

Matrix: Soil Gas

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		32		ug/m3			10/05/13 00:21	3.5
1,2-Dibromoethane (EDB)	ND		54		ug/m3			10/05/13 00:21	3.5
1,2-Dichlorobenzene	ND		42		ug/m3			10/05/13 00:21	3.5
1,3-Dichlorobenzene	ND		42		ug/m3			10/05/13 00:21	3.5
1,4-Dichlorobenzene	ND		42		ug/m3			10/05/13 00:21	3.5
Dichlorodifluoromethane	ND		35		ug/m3			10/05/13 00:21	3.5
1,1-Dichloroethane	ND		28		ug/m3			10/05/13 00:21	3.5
1,2-Dichloroethane	ND		28		ug/m3			10/05/13 00:21	3.5
1,1-Dichloroethene	ND		28		ug/m3			10/05/13 00:21	3.5
1,2-Dichloropropane	ND		32		ug/m3			10/05/13 00:21	3.5
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		49		ug/m3			10/05/13 00:21	3.5
Ethylbenzene	ND		30		ug/m3			10/05/13 00:21	3.5
Hexachlorobutadiene	ND		370		ug/m3			10/05/13 00:21	3.5
Methylene Chloride	ND		61		ug/m3			10/05/13 00:21	3.5
m-Xylene & p-Xylene	**40**		30		ug/m3			10/05/13 00:21	3.5
o-Xylene	ND		30		ug/m3			10/05/13 00:21	3.5
Styrene	ND		30		ug/m3			10/05/13 00:21	3.5
1,1,2,2-Tetrachloroethane	ND		48		ug/m3			10/05/13 00:21	3.5
Tetrachloroethene	**4900**		47		ug/m3			10/05/13 00:21	3.5
Toluene	**74**		26		ug/m3			10/05/13 00:21	3.5
trans-1,3-Dichloropropene	ND		32		ug/m3			10/05/13 00:21	3.5
1,2,4-Trichlorobenzene	ND		260		ug/m3			10/05/13 00:21	3.5
1,1,1-Trichloroethane	ND		38		ug/m3			10/05/13 00:21	3.5
1,1,2-Trichloroethane	ND		38		ug/m3			10/05/13 00:21	3.5
Trichloroethene	**1500**		38		ug/m3			10/05/13 00:21	3.5
Trichlorofluoromethane	ND		39		ug/m3			10/05/13 00:21	3.5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		54		ug/m3			10/05/13 00:21	3.5
1,2,4-Trimethylbenzene	ND		34		ug/m3			10/05/13 00:21	3.5
1,3,5-Trimethylbenzene	ND		34		ug/m3			10/05/13 00:21	3.5
Vinyl chloride	**70**		18		ug/m3			10/05/13 00:21	3.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*60 - 140*		*10/05/13 00:21*	*3.5*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: VP-3

Date Collected: 09/27/13 17:11
Date Received: 10/01/13 10:00

Lab Sample ID: 140-217-6

Matrix: Soil Gas

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		44		ppb v/v			10/03/13 23:40	11.05
Benzyl chloride	ND		88		ppb v/v			10/03/13 23:40	11.05
Bromomethane	ND		44		ppb v/v			10/03/13 23:40	11.05
Carbon tetrachloride	ND		44		ppb v/v			10/03/13 23:40	11.05
Chlorobenzene	ND		44		ppb v/v			10/03/13 23:40	11.05
Chloroethane	ND		44		ppb v/v			10/03/13 23:40	11.05
Chloroform	ND		44		ppb v/v			10/03/13 23:40	11.05
Chloromethane	ND		110		ppb v/v			10/03/13 23:40	11.05
cis-1,2-Dichloroethene	**1900**		44		ppb v/v			10/03/13 23:40	11.05
cis-1,3-Dichloropropene	ND		44		ppb v/v			10/03/13 23:40	11.05
1,2-Dibromoethane (EDB)	ND		44		ppb v/v			10/03/13 23:40	11.05
1,2-Dichlorobenzene	ND		44		ppb v/v			10/03/13 23:40	11.05
1,3-Dichlorobenzene	ND		44		ppb v/v			10/03/13 23:40	11.05
1,4-Dichlorobenzene	ND	*	44		ppb v/v			10/03/13 23:40	11.05
Dichlorodifluoromethane	ND		44		ppb v/v			10/03/13 23:40	11.05
1,1-Dichloroethane	ND		44		ppb v/v			10/03/13 23:40	11.05
1,2-Dichloroethane	ND		44		ppb v/v			10/03/13 23:40	11.05
1,1-Dichloroethene	ND		44		ppb v/v			10/03/13 23:40	11.05
1,2-Dichloropropane	ND		44		ppb v/v			10/03/13 23:40	11.05
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		44		ppb v/v			10/03/13 23:40	11.05
Ethylbenzene	ND		44		ppb v/v			10/03/13 23:40	11.05
Hexachlorobutadiene	ND		220		ppb v/v			10/03/13 23:40	11.05
Methylene Chloride	ND		110		ppb v/v			10/03/13 23:40	11.05
m-Xylene & p-Xylene	ND		44		ppb v/v			10/03/13 23:40	11.05
o-Xylene	ND		44		ppb v/v			10/03/13 23:40	11.05
Styrene	ND		44		ppb v/v			10/03/13 23:40	11.05
1,1,2,2-Tetrachloroethane	ND		44		ppb v/v			10/03/13 23:40	11.05
Tetrachloroethene	**2900**		44		ppb v/v			10/03/13 23:40	11.05
Toluene	ND		44		ppb v/v			10/03/13 23:40	11.05
trans-1,3-Dichloropropene	ND		44		ppb v/v			10/03/13 23:40	11.05
1,2,4-Trichlorobenzene	ND		220		ppb v/v			10/03/13 23:40	11.05
1,1,1-Trichloroethane	ND		44		ppb v/v			10/03/13 23:40	11.05
1,1,2-Trichloroethane	ND		44		ppb v/v			10/03/13 23:40	11.05
Trichloroethene	**640**		44		ppb v/v			10/03/13 23:40	11.05
Trichlorofluoromethane	ND		44		ppb v/v			10/03/13 23:40	11.05
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		44		ppb v/v			10/03/13 23:40	11.05
1,2,4-Trimethylbenzene	ND		44		ppb v/v			10/03/13 23:40	11.05
1,3,5-Trimethylbenzene	ND		44		ppb v/v			10/03/13 23:40	11.05
Vinyl chloride	**120**		44		ppb v/v			10/03/13 23:40	11.05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		140		ug/m3			10/03/13 23:40	11.05
Benzyl chloride	ND		460		ug/m3			10/03/13 23:40	11.05
Bromomethane	ND		170		ug/m3			10/03/13 23:40	11.05
Carbon tetrachloride	ND		280		ug/m3			10/03/13 23:40	11.05
Chlorobenzene	ND		200		ug/m3			10/03/13 23:40	11.05
Chloroethane	ND		120		ug/m3			10/03/13 23:40	11.05
Chloroform	ND		220		ug/m3			10/03/13 23:40	11.05
Chloromethane	ND		230		ug/m3			10/03/13 23:40	11.05
cis-1,2-Dichloroethene	**7400**		180		ug/m3			10/03/13 23:40	11.05

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: VP-3

Lab Sample ID: 140-217-6

Date Collected: 09/27/13 17:11

Matrix: Soil Gas

Date Received: 10/01/13 10:00

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		200		ug/m3			10/03/13 23:40	11.05
1,2-Dibromoethane (EDB)	ND		340		ug/m3			10/03/13 23:40	11.05
1,2-Dichlorobenzene	ND		270		ug/m3			10/03/13 23:40	11.05
1,3-Dichlorobenzene	ND		270		ug/m3			10/03/13 23:40	11.05
1,4-Dichlorobenzene	ND	*	270		ug/m3			10/03/13 23:40	11.05
Dichlorodifluoromethane	ND		220		ug/m3			10/03/13 23:40	11.05
1,1-Dichloroethane	ND		180		ug/m3			10/03/13 23:40	11.05
1,2-Dichloroethane	ND		180		ug/m3			10/03/13 23:40	11.05
1,1-Dichloroethene	ND		180		ug/m3			10/03/13 23:40	11.05
1,2-Dichloropropane	ND		200		ug/m3			10/03/13 23:40	11.05
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		310		ug/m3			10/03/13 23:40	11.05
Ethylbenzene	ND		190		ug/m3			10/03/13 23:40	11.05
Hexachlorobutadiene	ND		2400		ug/m3			10/03/13 23:40	11.05
Methylene Chloride	ND		380		ug/m3			10/03/13 23:40	11.05
m-Xylene & p-Xylene	ND		190		ug/m3			10/03/13 23:40	11.05
o-Xylene	ND		190		ug/m3			10/03/13 23:40	11.05
Styrene	ND		190		ug/m3			10/03/13 23:40	11.05
1,1,2,2-Tetrachloroethane	ND		300		ug/m3			10/03/13 23:40	11.05
Tetrachloroethene	**20000**		300		ug/m3			10/03/13 23:40	11.05
Toluene	ND		170		ug/m3			10/03/13 23:40	11.05
trans-1,3-Dichloropropene	ND		200		ug/m3			10/03/13 23:40	11.05
1,2,4-Trichlorobenzene	ND		1600		ug/m3			10/03/13 23:40	11.05
1,1,1-Trichloroethane	ND		240		ug/m3			10/03/13 23:40	11.05
1,1,2-Trichloroethane	ND		240		ug/m3			10/03/13 23:40	11.05
Trichloroethene	**3400**		240		ug/m3			10/03/13 23:40	11.05
Trichlorofluoromethane	ND		250		ug/m3			10/03/13 23:40	11.05
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		340		ug/m3			10/03/13 23:40	11.05
1,2,4-Trimethylbenzene	ND		220		ug/m3			10/03/13 23:40	11.05
1,3,5-Trimethylbenzene	ND		220		ug/m3			10/03/13 23:40	11.05
Vinyl chloride	**320**		110		ug/m3			10/03/13 23:40	11.05

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*		*10/03/13 23:40*	*11.05*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: VP-1

Date Collected: 09/27/13 17:08
Date Received: 10/01/13 10:00

Lab Sample ID: 140-217-7

Matrix: Soil Gas

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ppb v/v			10/04/13 00:34	1
Benzyl chloride	ND		4.0		ppb v/v			10/04/13 00:34	1
Bromomethane	ND		2.0		ppb v/v			10/04/13 00:34	1
Carbon tetrachloride	ND		2.0		ppb v/v			10/04/13 00:34	1
Chlorobenzene	ND		2.0		ppb v/v			10/04/13 00:34	1
Chloroethane	ND		2.0		ppb v/v			10/04/13 00:34	1
Chloroform	ND		2.0		ppb v/v			10/04/13 00:34	1
Chloromethane	ND		5.0		ppb v/v			10/04/13 00:34	1
cis-1,2-Dichloroethene	ND		2.0		ppb v/v			10/04/13 00:34	1
cis-1,3-Dichloropropene	ND		2.0		ppb v/v			10/04/13 00:34	1
1,2-Dibromoethane (EDB)	ND		2.0		ppb v/v			10/04/13 00:34	1
1,2-Dichlorobenzene	ND		2.0		ppb v/v			10/04/13 00:34	1
1,3-Dichlorobenzene	ND		2.0		ppb v/v			10/04/13 00:34	1
1,4-Dichlorobenzene	ND	*	2.0		ppb v/v			10/04/13 00:34	1
Dichlorodifluoromethane	ND		2.0		ppb v/v			10/04/13 00:34	1
1,1-Dichloroethane	ND		2.0		ppb v/v			10/04/13 00:34	1
1,2-Dichloroethane	ND		2.0		ppb v/v			10/04/13 00:34	1
1,1-Dichloroethene	ND		2.0		ppb v/v			10/04/13 00:34	1
1,2-Dichloropropane	ND		2.0		ppb v/v			10/04/13 00:34	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.0		ppb v/v			10/04/13 00:34	1
Ethylbenzene	ND		2.0		ppb v/v			10/04/13 00:34	1
Hexachlorobutadiene	ND		10		ppb v/v			10/04/13 00:34	1
Methylene Chloride	**5.0**		5.0		ppb v/v			10/04/13 00:34	1
m-Xylene & p-Xylene	**3.5**		2.0		ppb v/v			10/04/13 00:34	1
o-Xylene	ND		2.0		ppb v/v			10/04/13 00:34	1
Styrene	ND		2.0		ppb v/v			10/04/13 00:34	1
1,1,2,2-Tetrachloroethane	ND		2.0		ppb v/v			10/04/13 00:34	1
Tetrachloroethene	**6.7**		2.0		ppb v/v			10/04/13 00:34	1
Toluene	**7.1**		2.0		ppb v/v			10/04/13 00:34	1
trans-1,3-Dichloropropene	ND		2.0		ppb v/v			10/04/13 00:34	1
1,2,4-Trichlorobenzene	ND		10		ppb v/v			10/04/13 00:34	1
1,1,1-Trichloroethane	ND		2.0		ppb v/v			10/04/13 00:34	1
1,1,2-Trichloroethane	ND		2.0		ppb v/v			10/04/13 00:34	1
Trichloroethene	ND		2.0		ppb v/v			10/04/13 00:34	1
Trichlorofluoromethane	ND		2.0		ppb v/v			10/04/13 00:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0		ppb v/v			10/04/13 00:34	1
1,2,4-Trimethylbenzene	ND		2.0		ppb v/v			10/04/13 00:34	1
1,3,5-Trimethylbenzene	ND		2.0		ppb v/v			10/04/13 00:34	1
Vinyl chloride	ND		2.0		ppb v/v			10/04/13 00:34	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		6.4		ug/m3			10/04/13 00:34	1
Benzyl chloride	ND		21		ug/m3			10/04/13 00:34	1
Bromomethane	ND		7.8		ug/m3			10/04/13 00:34	1
Carbon tetrachloride	ND		13		ug/m3			10/04/13 00:34	1
Chlorobenzene	ND		9.2		ug/m3			10/04/13 00:34	1
Chloroethane	ND		5.3		ug/m3			10/04/13 00:34	1
Chloroform	ND		9.8		ug/m3			10/04/13 00:34	1
Chloromethane	ND		10		ug/m3			10/04/13 00:34	1
cis-1,2-Dichloroethene	ND		7.9		ug/m3			10/04/13 00:34	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: VP-1

Date Collected: 09/27/13 17:08
Date Received: 10/01/13 10:00

Lab Sample ID: 140-217-7

Matrix: Soil Gas

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		9.1		ug/m3			10/04/13 00:34	1
1,2-Dibromoethane (EDB)	ND		15		ug/m3			10/04/13 00:34	1
1,2-Dichlorobenzene	ND		12		ug/m3			10/04/13 00:34	1
1,3-Dichlorobenzene	ND		12		ug/m3			10/04/13 00:34	1
1,4-Dichlorobenzene	ND	*	12		ug/m3			10/04/13 00:34	1
Dichlorodifluoromethane	ND		9.9		ug/m3			10/04/13 00:34	1
1,1-Dichloroethane	ND		8.1		ug/m3			10/04/13 00:34	1
1,2-Dichloroethane	ND		8.1		ug/m3			10/04/13 00:34	1
1,1-Dichloroethene	ND		7.9		ug/m3			10/04/13 00:34	1
1,2-Dichloropropane	ND		9.2		ug/m3			10/04/13 00:34	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		14		ug/m3			10/04/13 00:34	1
Ethylbenzene	ND		8.7		ug/m3			10/04/13 00:34	1
Hexachlorobutadiene	ND		110		ug/m3			10/04/13 00:34	1
Methylene Chloride	**17**		17		ug/m3			10/04/13 00:34	1
m-Xylene & p-Xylene	**15**		8.7		ug/m3			10/04/13 00:34	1
o-Xylene	ND		8.7		ug/m3			10/04/13 00:34	1
Styrene	ND		8.5		ug/m3			10/04/13 00:34	1
1,1,2,2-Tetrachloroethane	ND		14		ug/m3			10/04/13 00:34	1
Tetrachloroethene	**45**		14		ug/m3			10/04/13 00:34	1
Toluene	**27**		7.5		ug/m3			10/04/13 00:34	1
trans-1,3-Dichloropropene	ND		9.1		ug/m3			10/04/13 00:34	1
1,2,4-Trichlorobenzene	ND		74		ug/m3			10/04/13 00:34	1
1,1,1-Trichloroethane	ND		11		ug/m3			10/04/13 00:34	1
1,1,2-Trichloroethane	ND		11		ug/m3			10/04/13 00:34	1
Trichloroethene	ND		11		ug/m3			10/04/13 00:34	1
Trichlorofluoromethane	ND		11		ug/m3			10/04/13 00:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15		ug/m3			10/04/13 00:34	1
1,2,4-Trimethylbenzene	ND		9.8		ug/m3			10/04/13 00:34	1
1,3,5-Trimethylbenzene	ND		9.8		ug/m3			10/04/13 00:34	1
Vinyl chloride	ND		5.1		ug/m3			10/04/13 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*60 - 140*		*10/04/13 00:34*	*1*

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: VP-5

Date Collected: 09/27/13 17:14
Date Received: 10/01/13 10:00

Lab Sample ID: 140-217-8

Matrix: Soil Gas

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.4**		2.0		ppb v/v			10/04/13 01:28	1
Benzyl chloride	ND		4.0		ppb v/v			10/04/13 01:28	1
Bromomethane	ND		2.0		ppb v/v			10/04/13 01:28	1
Carbon tetrachloride	ND		2.0		ppb v/v			10/04/13 01:28	1
Chlorobenzene	ND		2.0		ppb v/v			10/04/13 01:28	1
Chloroethane	ND		2.0		ppb v/v			10/04/13 01:28	1
Chloroform	ND		2.0		ppb v/v			10/04/13 01:28	1
Chloromethane	ND		5.0		ppb v/v			10/04/13 01:28	1
cis-1,2-Dichloroethene	**54**		2.0		ppb v/v			10/04/13 01:28	1
cis-1,3-Dichloropropene	ND		2.0		ppb v/v			10/04/13 01:28	1
1,2-Dibromoethane (EDB)	ND		2.0		ppb v/v			10/04/13 01:28	1
1,2-Dichlorobenzene	ND		2.0		ppb v/v			10/04/13 01:28	1
1,3-Dichlorobenzene	ND		2.0		ppb v/v			10/04/13 01:28	1
1,4-Dichlorobenzene	ND	*	2.0		ppb v/v			10/04/13 01:28	1
Dichlorodifluoromethane	ND		2.0		ppb v/v			10/04/13 01:28	1
1,1-Dichloroethane	ND		2.0		ppb v/v			10/04/13 01:28	1
1,2-Dichloroethane	ND		2.0		ppb v/v			10/04/13 01:28	1
1,1-Dichloroethene	ND		2.0		ppb v/v			10/04/13 01:28	1
1,2-Dichloropropane	ND		2.0		ppb v/v			10/04/13 01:28	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.0		ppb v/v			10/04/13 01:28	1
Ethylbenzene	ND		2.0		ppb v/v			10/04/13 01:28	1
Hexachlorobutadiene	ND		10		ppb v/v			10/04/13 01:28	1
Methylene Chloride	**7.0**		5.0		ppb v/v			10/04/13 01:28	1
m-Xylene & p-Xylene	**5.5**		2.0		ppb v/v			10/04/13 01:28	1
o-Xylene	ND		2.0		ppb v/v			10/04/13 01:28	1
Styrene	ND		2.0		ppb v/v			10/04/13 01:28	1
1,1,2,2-Tetrachloroethane	ND		2.0		ppb v/v			10/04/13 01:28	1
Tetrachloroethene	**57**		2.0		ppb v/v			10/04/13 01:28	1
Toluene	**12**		2.0		ppb v/v			10/04/13 01:28	1
trans-1,3-Dichloropropene	ND		2.0		ppb v/v			10/04/13 01:28	1
1,2,4-Trichlorobenzene	ND		10		ppb v/v			10/04/13 01:28	1
1,1,1-Trichloroethane	ND		2.0		ppb v/v			10/04/13 01:28	1
1,1,2-Trichloroethane	ND		2.0		ppb v/v			10/04/13 01:28	1
Trichloroethene	**15**		2.0		ppb v/v			10/04/13 01:28	1
Trichlorofluoromethane	ND		2.0		ppb v/v			10/04/13 01:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0		ppb v/v			10/04/13 01:28	1
1,2,4-Trimethylbenzene	ND		2.0		ppb v/v			10/04/13 01:28	1
1,3,5-Trimethylbenzene	ND		2.0		ppb v/v			10/04/13 01:28	1
Vinyl chloride	**33**		2.0		ppb v/v			10/04/13 01:28	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**7.6**		6.4		ug/m3			10/04/13 01:28	1
Benzyl chloride	ND		21		ug/m3			10/04/13 01:28	1
Bromomethane	ND		7.8		ug/m3			10/04/13 01:28	1
Carbon tetrachloride	ND		13		ug/m3			10/04/13 01:28	1
Chlorobenzene	ND		9.2		ug/m3			10/04/13 01:28	1
Chloroethane	ND		5.3		ug/m3			10/04/13 01:28	1
Chloroform	ND		9.8		ug/m3			10/04/13 01:28	1
Chloromethane	ND		10		ug/m3			10/04/13 01:28	1
cis-1,2-Dichloroethene	**210**		7.9		ug/m3			10/04/13 01:28	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: VP-5

Date Collected: 09/27/13 17:14
Date Received: 10/01/13 10:00

Lab Sample ID: 140-217-8

Matrix: Soil Gas

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		9.1		ug/m3			10/04/13 01:28	1
1,2-Dibromoethane (EDB)	ND		15		ug/m3			10/04/13 01:28	1
1,2-Dichlorobenzene	ND		12		ug/m3			10/04/13 01:28	1
1,3-Dichlorobenzene	ND		12		ug/m3			10/04/13 01:28	1
1,4-Dichlorobenzene	ND	*	12		ug/m3			10/04/13 01:28	1
Dichlorodifluoromethane	ND		9.9		ug/m3			10/04/13 01:28	1
1,1-Dichloroethane	ND		8.1		ug/m3			10/04/13 01:28	1
1,2-Dichloroethane	ND		8.1		ug/m3			10/04/13 01:28	1
1,1-Dichloroethene	ND		7.9		ug/m3			10/04/13 01:28	1
1,2-Dichloropropane	ND		9.2		ug/m3			10/04/13 01:28	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		14		ug/m3			10/04/13 01:28	1
Ethylbenzene	ND		8.7		ug/m3			10/04/13 01:28	1
Hexachlorobutadiene	ND		110		ug/m3			10/04/13 01:28	1
Methylene Chloride	**24**		17		ug/m3			10/04/13 01:28	1
m-Xylene & p-Xylene	**24**		8.7		ug/m3			10/04/13 01:28	1
o-Xylene	ND		8.7		ug/m3			10/04/13 01:28	1
Styrene	ND		8.5		ug/m3			10/04/13 01:28	1
1,1,2,2-Tetrachloroethane	ND		14		ug/m3			10/04/13 01:28	1
Tetrachloroethene	**380**		14		ug/m3			10/04/13 01:28	1
Toluene	**44**		7.5		ug/m3			10/04/13 01:28	1
trans-1,3-Dichloropropene	ND		9.1		ug/m3			10/04/13 01:28	1
1,2,4-Trichlorobenzene	ND		74		ug/m3			10/04/13 01:28	1
1,1,1-Trichloroethane	ND		11		ug/m3			10/04/13 01:28	1
1,1,2-Trichloroethane	ND		11		ug/m3			10/04/13 01:28	1
Trichloroethene	**83**		11		ug/m3			10/04/13 01:28	1
Trichlorofluoromethane	ND		11		ug/m3			10/04/13 01:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15		ug/m3			10/04/13 01:28	1
1,2,4-Trimethylbenzene	ND		9.8		ug/m3			10/04/13 01:28	1
1,3,5-Trimethylbenzene	ND		9.8		ug/m3			10/04/13 01:28	1
Vinyl chloride	**83**		5.1		ug/m3			10/04/13 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*60 - 140*		*10/04/13 01:28*	*1*

Surrogate Summary

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	BFB (60-140)							
140-217-3	IA-1	108							
140-217-4	IA-2	108							
140-217-4 - DL	IA-2	104							
LCS 140-258/1002	Lab Control Sample	109							
LCS 140-261/1002	Lab Control Sample	104							
LCS 140-264/1002	Lab Control Sample	104							
MB 140-258/4	Method Blank	104							
MB 140-261/23	Method Blank	103							
MB 140-264/8	Method Blank	102							

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Ambient Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	BFB (60-140)							
140-217-1	AM-1	105							

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Soil Gas **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	BFB (60-140)							
140-217-2	VP-4	100							
140-217-5	VP-2	108							
140-217-6	VP-3	100							
140-217-7	VP-1	104							
140-217-8	VP-5	102							

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 140-258/4
Matrix: Air
Analysis Batch: 258

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.20		ppb v/v			10/03/13 16:31	1
Benzyl chloride	ND		0.40		ppb v/v			10/03/13 16:31	1
Bromomethane	ND		0.20		ppb v/v			10/03/13 16:31	1
Carbon tetrachloride	ND		0.20		ppb v/v			10/03/13 16:31	1
Chlorobenzene	ND		0.20		ppb v/v			10/03/13 16:31	1
Chloroethane	ND		0.20		ppb v/v			10/03/13 16:31	1
Chloroform	ND		0.20		ppb v/v			10/03/13 16:31	1
Chloromethane	ND		0.50		ppb v/v			10/03/13 16:31	1
cis-1,2-Dichloroethene	ND		0.20		ppb v/v			10/03/13 16:31	1
cis-1,3-Dichloropropene	ND		0.20		ppb v/v			10/03/13 16:31	1
1,2-Dibromoethane (EDB)	ND		0.20		ppb v/v			10/03/13 16:31	1
1,2-Dichlorobenzene	ND		0.20		ppb v/v			10/03/13 16:31	1
1,3-Dichlorobenzene	ND		0.20		ppb v/v			10/03/13 16:31	1
1,4-Dichlorobenzene	ND		0.20		ppb v/v			10/03/13 16:31	1
Dichlorodifluoromethane	ND		0.20		ppb v/v			10/03/13 16:31	1
1,1-Dichloroethane	ND		0.20		ppb v/v			10/03/13 16:31	1
1,2-Dichloroethane	ND		0.20		ppb v/v			10/03/13 16:31	1
1,1-Dichloroethene	ND		0.20		ppb v/v			10/03/13 16:31	1
1,2-Dichloropropane	ND		0.20		ppb v/v			10/03/13 16:31	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.20		ppb v/v			10/03/13 16:31	1
Ethylbenzene	ND		0.20		ppb v/v			10/03/13 16:31	1
Hexachlorobutadiene	ND		1.0		ppb v/v			10/03/13 16:31	1
Methylene Chloride	ND		0.50		ppb v/v			10/03/13 16:31	1
m-Xylene & p-Xylene	ND		0.20		ppb v/v			10/03/13 16:31	1
o-Xylene	ND		0.20		ppb v/v			10/03/13 16:31	1
Styrene	ND		0.20		ppb v/v			10/03/13 16:31	1
1,1,2,2-Tetrachloroethane	ND		0.20		ppb v/v			10/03/13 16:31	1
Tetrachloroethene	ND		0.20		ppb v/v			10/03/13 16:31	1
Toluene	ND		0.20		ppb v/v			10/03/13 16:31	1
trans-1,3-Dichloropropene	ND		0.20		ppb v/v			10/03/13 16:31	1
1,2,4-Trichlorobenzene	ND		1.0		ppb v/v			10/03/13 16:31	1
1,1,1-Trichloroethane	ND		0.20		ppb v/v			10/03/13 16:31	1
1,1,2-Trichloroethane	ND		0.20		ppb v/v			10/03/13 16:31	1
Trichloroethene	ND		0.20		ppb v/v			10/03/13 16:31	1
Trichlorofluoromethane	ND		0.20		ppb v/v			10/03/13 16:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ppb v/v			10/03/13 16:31	1
1,2,4-Trimethylbenzene	ND		0.20		ppb v/v			10/03/13 16:31	1
1,3,5-Trimethylbenzene	ND		0.20		ppb v/v			10/03/13 16:31	1
Vinyl chloride	ND		0.20		ppb v/v			10/03/13 16:31	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.64		ug/m3			10/03/13 16:31	1
Benzyl chloride	ND		2.1		ug/m3			10/03/13 16:31	1
Bromomethane	ND		0.78		ug/m3			10/03/13 16:31	1
Carbon tetrachloride	ND		1.3		ug/m3			10/03/13 16:31	1
Chlorobenzene	ND		0.92		ug/m3			10/03/13 16:31	1
Chloroethane	ND		0.53		ug/m3			10/03/13 16:31	1
Chloroform	ND		0.98		ug/m3			10/03/13 16:31	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-258/4
Matrix: Air
Analysis Batch: 258

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0		ug/m3			10/03/13 16:31	1
cis-1,2-Dichloroethene	ND		0.79		ug/m3			10/03/13 16:31	1
cis-1,3-Dichloropropene	ND		0.91		ug/m3			10/03/13 16:31	1
1,2-Dibromoethane (EDB)	ND		1.5		ug/m3			10/03/13 16:31	1
1,2-Dichlorobenzene	ND		1.2		ug/m3			10/03/13 16:31	1
1,3-Dichlorobenzene	ND		1.2		ug/m3			10/03/13 16:31	1
1,4-Dichlorobenzene	ND		1.2		ug/m3			10/03/13 16:31	1
Dichlorodifluoromethane	ND		0.99		ug/m3			10/03/13 16:31	1
1,1-Dichloroethane	ND		0.81		ug/m3			10/03/13 16:31	1
1,2-Dichloroethane	ND		0.81		ug/m3			10/03/13 16:31	1
1,1-Dichloroethene	ND		0.79		ug/m3			10/03/13 16:31	1
1,2-Dichloropropane	ND		0.92		ug/m3			10/03/13 16:31	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4		ug/m3			10/03/13 16:31	1
Ethylbenzene	ND		0.87		ug/m3			10/03/13 16:31	1
Hexachlorobutadiene	ND		11		ug/m3			10/03/13 16:31	1
Methylene Chloride	ND		1.7		ug/m3			10/03/13 16:31	1
m-Xylene & p-Xylene	ND		0.87		ug/m3			10/03/13 16:31	1
o-Xylene	ND		0.87		ug/m3			10/03/13 16:31	1
Styrene	ND		0.85		ug/m3			10/03/13 16:31	1
1,1,2,2-Tetrachloroethane	ND		1.4		ug/m3			10/03/13 16:31	1
Tetrachloroethene	ND		1.4		ug/m3			10/03/13 16:31	1
Toluene	ND		0.75		ug/m3			10/03/13 16:31	1
trans-1,3-Dichloropropene	ND		0.91		ug/m3			10/03/13 16:31	1
1,2,4-Trichlorobenzene	ND		7.4		ug/m3			10/03/13 16:31	1
1,1,1-Trichloroethane	ND		1.1		ug/m3			10/03/13 16:31	1
1,1,2-Trichloroethane	ND		1.1		ug/m3			10/03/13 16:31	1
Trichloroethene	ND		1.1		ug/m3			10/03/13 16:31	1
Trichlorofluoromethane	ND		1.1		ug/m3			10/03/13 16:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.5		ug/m3			10/03/13 16:31	1
1,2,4-Trimethylbenzene	ND		0.98		ug/m3			10/03/13 16:31	1
1,3,5-Trimethylbenzene	ND		0.98		ug/m3			10/03/13 16:31	1
Vinyl chloride	ND		0.51		ug/m3			10/03/13 16:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*60 - 140*		*10/03/13 16:31*	*1*

Lab Sample ID: LCS 140-258/1002
Matrix: Air
Analysis Batch: 258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.00	1.94		ppb v/v		97	70 - 130
Benzyl chloride	2.00	1.49		ppb v/v		75	70 - 130
Bromomethane	2.00	2.12		ppb v/v		106	70 - 130
Carbon tetrachloride	2.00	2.21		ppb v/v		110	70 - 130
Chlorobenzene	2.00	1.68		ppb v/v		84	70 - 130
Chloroethane	2.00	2.21		ppb v/v		110	70 - 130
Chloroform	2.00	2.04		ppb v/v		102	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-258/1002
Matrix: Air
Analysis Batch: 258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	2.00	1.88		ppb v/v		94	60 - 140
cis-1,2-Dichloroethene	2.00	2.03		ppb v/v		102	70 - 130
cis-1,3-Dichloropropene	2.00	1.85		ppb v/v		92	70 - 130
1,2-Dibromoethane (EDB)	2.00	1.70		ppb v/v		85	70 - 130
1,2-Dichlorobenzene	2.00	1.41		ppb v/v		70	70 - 130
1,3-Dichlorobenzene	2.00	1.43		ppb v/v		71	70 - 130
1,4-Dichlorobenzene	2.00	1.37	*	ppb v/v		69	70 - 130
Dichlorodifluoromethane	2.00	2.16		ppb v/v		108	60 - 140
1,1-Dichloroethane	2.00	2.16		ppb v/v		108	70 - 130
1,2-Dichloroethane	2.00	2.14		ppb v/v		107	70 - 130
1,1-Dichloroethene	2.00	1.97		ppb v/v		98	70 - 130
1,2-Dichloropropane	2.00	1.87		ppb v/v		94	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.00	2.23		ppb v/v		112	60 - 140
Ethylbenzene	2.00	1.66		ppb v/v		83	70 - 130
Hexachlorobutadiene	2.00	1.21		ppb v/v		60	60 - 140
Methylene Chloride	2.00	1.96		ppb v/v		98	70 - 130
m-Xylene & p-Xylene	4.00	3.31		ppb v/v		83	70 - 130
o-Xylene	2.00	1.62		ppb v/v		81	70 - 130
Styrene	2.00	1.58		ppb v/v		79	70 - 130
1,1,2,2-Tetrachloroethane	2.00	1.57		ppb v/v		79	70 - 130
Tetrachloroethene	2.00	1.76		ppb v/v		88	70 - 130
Toluene	2.00	1.67		ppb v/v		83	70 - 130
trans-1,3-Dichloropropene	2.00	1.83		ppb v/v		92	70 - 130
1,2,4-Trichlorobenzene	2.00	1.28		ppb v/v		64	60 - 140
1,1,1-Trichloroethane	2.00	2.09		ppb v/v		105	70 - 130
1,1,2-Trichloroethane	2.00	1.75		ppb v/v		88	70 - 130
Trichloroethene	2.00	1.93		ppb v/v		97	70 - 130
Trichlorofluoromethane	2.00	2.18		ppb v/v		109	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	2.07		ppb v/v		104	70 - 130
1,2,4-Trimethylbenzene	2.00	1.50		ppb v/v		75	70 - 130
1,3,5-Trimethylbenzene	2.00	1.48		ppb v/v		74	70 - 130
Vinyl chloride	2.00	2.12		ppb v/v		106	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.4	6.20		ug/m3		97	70 - 130
Benzyl chloride	10	7.74		ug/m3		75	70 - 130
Bromomethane	7.8	8.21		ug/m3		106	70 - 130
Carbon tetrachloride	13	13.9		ug/m3		110	70 - 130
Chlorobenzene	9.2	7.75		ug/m3		84	70 - 130
Chloroethane	5.3	5.83		ug/m3		110	70 - 130
Chloroform	9.8	9.94		ug/m3		102	70 - 130
Chloromethane	4.1	3.89		ug/m3		94	60 - 140
cis-1,2-Dichloroethene	7.9	8.05		ug/m3		102	70 - 130
cis-1,3-Dichloropropene	9.1	8.38		ug/m3		92	70 - 130
1,2-Dibromoethane (EDB)	15	13.1		ug/m3		85	70 - 130
1,2-Dichlorobenzene	12	8.48		ug/m3		70	70 - 130
1,3-Dichlorobenzene	12	8.58		ug/m3		71	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-258/1002
Matrix: Air
Analysis Batch: 258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	12	8.27	*	ug/m3		69	70 - 130
Dichlorodifluoromethane	9.9	10.7		ug/m3		108	60 - 140
1,1-Dichloroethane	8.1	8.73		ug/m3		108	70 - 130
1,2-Dichloroethane	8.1	8.65		ug/m3		107	70 - 130
1,1-Dichloroethene	7.9	7.80		ug/m3		98	70 - 130
1,2-Dichloropropane	9.2	8.65		ug/m3		94	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	14	15.6		ug/m3		112	60 - 140
Ethylbenzene	8.7	7.22		ug/m3		83	70 - 130
Hexachlorobutadiene	21	12.9		ug/m3		60	60 - 140
Methylene Chloride	6.9	6.81		ug/m3		98	70 - 130
m-Xylene & p-Xylene	17	14.4		ug/m3		83	70 - 130
o-Xylene	8.7	7.02		ug/m3		81	70 - 130
Styrene	8.5	6.72		ug/m3		79	70 - 130
1,1,2,2-Tetrachloroethane	14	10.8		ug/m3		79	70 - 130
Tetrachloroethene	14	12.0		ug/m3		88	70 - 130
Toluene	7.5	6.29		ug/m3		83	70 - 130
trans-1,3-Dichloropropene	9.1	8.32		ug/m3		92	70 - 130
1,2,4-Trichlorobenzene	15	9.49		ug/m3		64	60 - 140
1,1,1-Trichloroethane	11	11.4		ug/m3		105	70 - 130
1,1,2-Trichloroethane	11	9.57		ug/m3		88	70 - 130
Trichloroethene	11	10.4		ug/m3		97	70 - 130
Trichlorofluoromethane	11	12.3		ug/m3		109	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	15	15.9		ug/m3		104	70 - 130
1,2,4-Trimethylbenzene	9.8	7.36		ug/m3		75	70 - 130
1,3,5-Trimethylbenzene	9.8	7.26		ug/m3		74	70 - 130
Vinyl chloride	5.1	5.42		ug/m3		106	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*60 - 140*

Lab Sample ID: MB 140-261/23
Matrix: Air
Analysis Batch: 261

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.20		ppb v/v			10/04/13 17:08	1
Benzyl chloride	ND		0.40		ppb v/v			10/04/13 17:08	1
Bromomethane	ND		0.20		ppb v/v			10/04/13 17:08	1
Carbon tetrachloride	ND		0.20		ppb v/v			10/04/13 17:08	1
Chlorobenzene	ND		0.20		ppb v/v			10/04/13 17:08	1
Chloroethane	ND		0.20		ppb v/v			10/04/13 17:08	1
Chloroform	ND		0.20		ppb v/v			10/04/13 17:08	1
Chloromethane	ND		0.50		ppb v/v			10/04/13 17:08	1
cis-1,2-Dichloroethene	ND		0.20		ppb v/v			10/04/13 17:08	1
cis-1,3-Dichloropropene	ND		0.20		ppb v/v			10/04/13 17:08	1
1,2-Dibromoethane (EDB)	ND		0.20		ppb v/v			10/04/13 17:08	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-261/23
Matrix: Air
Analysis Batch: 261

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.20		ppb v/v			10/04/13 17:08	1
1,3-Dichlorobenzene	ND		0.20		ppb v/v			10/04/13 17:08	1
1,4-Dichlorobenzene	ND		0.20		ppb v/v			10/04/13 17:08	1
Dichlorodifluoromethane	ND		0.20		ppb v/v			10/04/13 17:08	1
1,1-Dichloroethane	ND		0.20		ppb v/v			10/04/13 17:08	1
1,2-Dichloroethane	ND		0.20		ppb v/v			10/04/13 17:08	1
1,1-Dichloroethene	ND		0.20		ppb v/v			10/04/13 17:08	1
1,2-Dichloropropane	ND		0.20		ppb v/v			10/04/13 17:08	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.20		ppb v/v			10/04/13 17:08	1
Ethylbenzene	ND		0.20		ppb v/v			10/04/13 17:08	1
Hexachlorobutadiene	ND		1.0		ppb v/v			10/04/13 17:08	1
Methylene Chloride	ND		0.50		ppb v/v			10/04/13 17:08	1
m-Xylene & p-Xylene	ND		0.20		ppb v/v			10/04/13 17:08	1
o-Xylene	ND		0.20		ppb v/v			10/04/13 17:08	1
Styrene	ND		0.20		ppb v/v			10/04/13 17:08	1
1,1,2,2-Tetrachloroethane	ND		0.20		ppb v/v			10/04/13 17:08	1
Tetrachloroethene	ND		0.20		ppb v/v			10/04/13 17:08	1
Toluene	ND		0.20		ppb v/v			10/04/13 17:08	1
trans-1,3-Dichloropropene	ND		0.20		ppb v/v			10/04/13 17:08	1
1,2,4-Trichlorobenzene	ND		1.0		ppb v/v			10/04/13 17:08	1
1,1,1-Trichloroethane	ND		0.20		ppb v/v			10/04/13 17:08	1
1,1,2-Trichloroethane	ND		0.20		ppb v/v			10/04/13 17:08	1
Trichloroethene	ND		0.20		ppb v/v			10/04/13 17:08	1
Trichlorofluoromethane	ND		0.20		ppb v/v			10/04/13 17:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ppb v/v			10/04/13 17:08	1
1,2,4-Trimethylbenzene	ND		0.20		ppb v/v			10/04/13 17:08	1
1,3,5-Trimethylbenzene	ND		0.20		ppb v/v			10/04/13 17:08	1
Vinyl chloride	ND		0.20		ppb v/v			10/04/13 17:08	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.64		ug/m3			10/04/13 17:08	1
Benzyl chloride	ND		2.1		ug/m3			10/04/13 17:08	1
Bromomethane	ND		0.78		ug/m3			10/04/13 17:08	1
Carbon tetrachloride	ND		1.3		ug/m3			10/04/13 17:08	1
Chlorobenzene	ND		0.92		ug/m3			10/04/13 17:08	1
Chloroethane	ND		0.53		ug/m3			10/04/13 17:08	1
Chloroform	ND		0.98		ug/m3			10/04/13 17:08	1
Chloromethane	ND		1.0		ug/m3			10/04/13 17:08	1
cis-1,2-Dichloroethene	ND		0.79		ug/m3			10/04/13 17:08	1
cis-1,3-Dichloropropene	ND		0.91		ug/m3			10/04/13 17:08	1
1,2-Dibromoethane (EDB)	ND		1.5		ug/m3			10/04/13 17:08	1
1,2-Dichlorobenzene	ND		1.2		ug/m3			10/04/13 17:08	1
1,3-Dichlorobenzene	ND		1.2		ug/m3			10/04/13 17:08	1
1,4-Dichlorobenzene	ND		1.2		ug/m3			10/04/13 17:08	1
Dichlorodifluoromethane	ND		0.99		ug/m3			10/04/13 17:08	1
1,1-Dichloroethane	ND		0.81		ug/m3			10/04/13 17:08	1
1,2-Dichloroethane	ND		0.81		ug/m3			10/04/13 17:08	1
1,1-Dichloroethene	ND		0.79		ug/m3			10/04/13 17:08	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-261/23
Matrix: Air
Analysis Batch: 261

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		0.92		ug/m3			10/04/13 17:08	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4		ug/m3			10/04/13 17:08	1
Ethylbenzene	ND		0.87		ug/m3			10/04/13 17:08	1
Hexachlorobutadiene	ND		11		ug/m3			10/04/13 17:08	1
Methylene Chloride	ND		1.7		ug/m3			10/04/13 17:08	1
m-Xylene & p-Xylene	ND		0.87		ug/m3			10/04/13 17:08	1
o-Xylene	ND		0.87		ug/m3			10/04/13 17:08	1
Styrene	ND		0.85		ug/m3			10/04/13 17:08	1
1,1,2,2-Tetrachloroethane	ND		1.4		ug/m3			10/04/13 17:08	1
Tetrachloroethene	ND		1.4		ug/m3			10/04/13 17:08	1
Toluene	ND		0.75		ug/m3			10/04/13 17:08	1
trans-1,3-Dichloropropene	ND		0.91		ug/m3			10/04/13 17:08	1
1,2,4-Trichlorobenzene	ND		7.4		ug/m3			10/04/13 17:08	1
1,1,1-Trichloroethane	ND		1.1		ug/m3			10/04/13 17:08	1
1,1,2-Trichloroethane	ND		1.1		ug/m3			10/04/13 17:08	1
Trichloroethene	ND		1.1		ug/m3			10/04/13 17:08	1
Trichlorofluoromethane	ND		1.1		ug/m3			10/04/13 17:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.5		ug/m3			10/04/13 17:08	1
1,2,4-Trimethylbenzene	ND		0.98		ug/m3			10/04/13 17:08	1
1,3,5-Trimethylbenzene	ND		0.98		ug/m3			10/04/13 17:08	1
Vinyl chloride	ND		0.51		ug/m3			10/04/13 17:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*		*10/04/13 17:08*	*1*

Lab Sample ID: LCS 140-261/1002
Matrix: Air
Analysis Batch: 261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.00	1.92		ppb v/v		96	70 - 130
Benzyl chloride	2.00	2.12		ppb v/v		106	70 - 130
Bromomethane	2.00	2.25		ppb v/v		112	70 - 130
Carbon tetrachloride	2.00	2.15		ppb v/v		108	70 - 130
Chlorobenzene	2.00	1.86		ppb v/v		93	70 - 130
Chloroethane	2.00	2.31		ppb v/v		115	70 - 130
Chloroform	2.00	2.06		ppb v/v		103	70 - 130
Chloromethane	2.00	2.03		ppb v/v		101	60 - 140
cis-1,2-Dichloroethene	2.00	1.99		ppb v/v		100	70 - 130
cis-1,3-Dichloropropene	2.00	1.96		ppb v/v		98	70 - 130
1,2-Dibromoethane (EDB)	2.00	1.93		ppb v/v		96	70 - 130
1,2-Dichlorobenzene	2.00	1.82		ppb v/v		91	70 - 130
1,3-Dichlorobenzene	2.00	1.84		ppb v/v		92	70 - 130
1,4-Dichlorobenzene	2.00	1.83		ppb v/v		92	70 - 130
Dichlorodifluoromethane	2.00	2.29		ppb v/v		115	60 - 140
1,1-Dichloroethane	2.00	2.16		ppb v/v		108	70 - 130
1,2-Dichloroethane	2.00	2.14		ppb v/v		107	70 - 130
1,1-Dichloroethene	2.00	2.08		ppb v/v		104	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-261/1002
Matrix: Air
Analysis Batch: 261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	2.00	1.97		ppb v/v		99	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.00	2.42		ppb v/v		121	60 - 140
Ethylbenzene	2.00	1.93		ppb v/v		96	70 - 130
Hexachlorobutadiene	2.00	1.70		ppb v/v		85	60 - 140
Methylene Chloride	2.00	2.11		ppb v/v		105	70 - 130
m-Xylene & p-Xylene	4.00	3.92		ppb v/v		98	70 - 130
o-Xylene	2.00	1.91		ppb v/v		95	70 - 130
Styrene	2.00	1.91		ppb v/v		95	70 - 130
1,1,2,2-Tetrachloroethane	2.00	1.97		ppb v/v		98	70 - 130
Tetrachloroethene	2.00	1.93		ppb v/v		97	70 - 130
Toluene	2.00	1.89		ppb v/v		94	70 - 130
trans-1,3-Dichloropropene	2.00	2.11		ppb v/v		106	70 - 130
1,2,4-Trichlorobenzene	2.00	2.05		ppb v/v		103	60 - 140
1,1,1-Trichloroethane	2.00	2.09		ppb v/v		104	70 - 130
1,1,2-Trichloroethane	2.00	1.96		ppb v/v		98	70 - 130
Trichloroethene	2.00	1.93		ppb v/v		97	70 - 130
Trichlorofluoromethane	2.00	2.29		ppb v/v		114	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	2.19		ppb v/v		109	70 - 130
1,2,4-Trimethylbenzene	2.00	1.98		ppb v/v		99	70 - 130
1,3,5-Trimethylbenzene	2.00	1.89		ppb v/v		95	70 - 130
Vinyl chloride	2.00	2.25		ppb v/v		113	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.4	6.14		ug/m3		96	70 - 130
Benzyl chloride	10	11.0		ug/m3		106	70 - 130
Bromomethane	7.8	8.72		ug/m3		112	70 - 130
Carbon tetrachloride	13	13.5		ug/m3		108	70 - 130
Chlorobenzene	9.2	8.57		ug/m3		93	70 - 130
Chloroethane	5.3	6.10		ug/m3		115	70 - 130
Chloroform	9.8	10.1		ug/m3		103	70 - 130
Chloromethane	4.1	4.19		ug/m3		101	60 - 140
cis-1,2-Dichloroethene	7.9	7.89		ug/m3		100	70 - 130
cis-1,3-Dichloropropene	9.1	8.89		ug/m3		98	70 - 130
1,2-Dibromoethane (EDB)	15	14.8		ug/m3		96	70 - 130
1,2-Dichlorobenzene	12	11.0		ug/m3		91	70 - 130
1,3-Dichlorobenzene	12	11.1		ug/m3		92	70 - 130
1,4-Dichlorobenzene	12	11.0		ug/m3		92	70 - 130
Dichlorodifluoromethane	9.9	11.3		ug/m3		115	60 - 140
1,1-Dichloroethane	8.1	8.74		ug/m3		108	70 - 130
1,2-Dichloroethane	8.1	8.68		ug/m3		107	70 - 130
1,1-Dichloroethene	7.9	8.24		ug/m3		104	70 - 130
1,2-Dichloropropane	9.2	9.11		ug/m3		99	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	14	16.9		ug/m3		121	60 - 140
Ethylbenzene	8.7	8.37		ug/m3		96	70 - 130
Hexachlorobutadiene	21	18.1		ug/m3		85	60 - 140
Methylene Chloride	6.9	7.31		ug/m3		105	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-261/1002
Matrix: Air
Analysis Batch: 261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	17	17.0		ug/m3		98	70 - 130
o-Xylene	8.7	8.28		ug/m3		95	70 - 130
Styrene	8.5	8.12		ug/m3		95	70 - 130
1,1,2,2-Tetrachloroethane	14	13.5		ug/m3		98	70 - 130
Tetrachloroethene	14	13.1		ug/m3		97	70 - 130
Toluene	7.5	7.11		ug/m3		94	70 - 130
trans-1,3-Dichloropropene	9.1	9.59		ug/m3		106	70 - 130
1,2,4-Trichlorobenzene	15	15.2		ug/m3		103	60 - 140
1,1,1-Trichloroethane	11	11.4		ug/m3		104	70 - 130
1,1,2-Trichloroethane	11	10.7		ug/m3		98	70 - 130
Trichloroethene	11	10.4		ug/m3		97	70 - 130
Trichlorofluoromethane	11	12.9		ug/m3		114	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	15	16.8		ug/m3		109	70 - 130
1,2,4-Trimethylbenzene	9.8	9.72		ug/m3		99	70 - 130
1,3,5-Trimethylbenzene	9.8	9.30		ug/m3		95	70 - 130
Vinyl chloride	5.1	5.76		ug/m3		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*60 - 140*

Lab Sample ID: MB 140-264/8
Matrix: Air
Analysis Batch: 264

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.20		ppb v/v			10/08/13 17:05	1
Benzyl chloride	ND		0.40		ppb v/v			10/08/13 17:05	1
Bromomethane	ND		0.20		ppb v/v			10/08/13 17:05	1
Carbon tetrachloride	ND		0.20		ppb v/v			10/08/13 17:05	1
Chlorobenzene	ND		0.20		ppb v/v			10/08/13 17:05	1
Chloroethane	ND		0.20		ppb v/v			10/08/13 17:05	1
Chloroform	ND		0.20		ppb v/v			10/08/13 17:05	1
Chloromethane	ND		0.50		ppb v/v			10/08/13 17:05	1
cis-1,2-Dichloroethene	ND		0.20		ppb v/v			10/08/13 17:05	1
cis-1,3-Dichloropropene	ND		0.20		ppb v/v			10/08/13 17:05	1
1,2-Dibromoethane (EDB)	ND		0.20		ppb v/v			10/08/13 17:05	1
1,2-Dichlorobenzene	ND		0.20		ppb v/v			10/08/13 17:05	1
1,3-Dichlorobenzene	ND		0.20		ppb v/v			10/08/13 17:05	1
1,4-Dichlorobenzene	ND		0.20		ppb v/v			10/08/13 17:05	1
Dichlorodifluoromethane	ND		0.20		ppb v/v			10/08/13 17:05	1
1,1-Dichloroethane	ND		0.20		ppb v/v			10/08/13 17:05	1
1,2-Dichloroethane	ND		0.20		ppb v/v			10/08/13 17:05	1
1,1-Dichloroethene	ND		0.20		ppb v/v			10/08/13 17:05	1
1,2-Dichloropropane	ND		0.20		ppb v/v			10/08/13 17:05	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.20		ppb v/v			10/08/13 17:05	1
Ethylbenzene	ND		0.20		ppb v/v			10/08/13 17:05	1
Hexachlorobutadiene	ND		1.0		ppb v/v			10/08/13 17:05	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-264/8
Matrix: Air
Analysis Batch: 264

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		0.50		ppb v/v			10/08/13 17:05	1
m-Xylene & p-Xylene	ND		0.20		ppb v/v			10/08/13 17:05	1
o-Xylene	ND		0.20		ppb v/v			10/08/13 17:05	1
Styrene	ND		0.20		ppb v/v			10/08/13 17:05	1
1,1,2,2-Tetrachloroethane	ND		0.20		ppb v/v			10/08/13 17:05	1
Tetrachloroethene	ND		0.20		ppb v/v			10/08/13 17:05	1
Toluene	ND		0.20		ppb v/v			10/08/13 17:05	1
trans-1,3-Dichloropropene	ND		0.20		ppb v/v			10/08/13 17:05	1
1,2,4-Trichlorobenzene	ND		1.0		ppb v/v			10/08/13 17:05	1
1,1,1-Trichloroethane	ND		0.20		ppb v/v			10/08/13 17:05	1
1,1,2-Trichloroethane	ND		0.20		ppb v/v			10/08/13 17:05	1
Trichloroethene	ND		0.20		ppb v/v			10/08/13 17:05	1
Trichlorofluoromethane	ND		0.20		ppb v/v			10/08/13 17:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ppb v/v			10/08/13 17:05	1
1,2,4-Trimethylbenzene	ND		0.20		ppb v/v			10/08/13 17:05	1
1,3,5-Trimethylbenzene	ND		0.20		ppb v/v			10/08/13 17:05	1
Vinyl chloride	ND		0.20		ppb v/v			10/08/13 17:05	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.64		ug/m3			10/08/13 17:05	1
Benzyl chloride	ND		2.1		ug/m3			10/08/13 17:05	1
Bromomethane	ND		0.78		ug/m3			10/08/13 17:05	1
Carbon tetrachloride	ND		1.3		ug/m3			10/08/13 17:05	1
Chlorobenzene	ND		0.92		ug/m3			10/08/13 17:05	1
Chloroethane	ND		0.53		ug/m3			10/08/13 17:05	1
Chloroform	ND		0.98		ug/m3			10/08/13 17:05	1
Chloromethane	ND		1.0		ug/m3			10/08/13 17:05	1
cis-1,2-Dichloroethene	ND		0.79		ug/m3			10/08/13 17:05	1
cis-1,3-Dichloropropene	ND		0.91		ug/m3			10/08/13 17:05	1
1,2-Dibromoethane (EDB)	ND		1.5		ug/m3			10/08/13 17:05	1
1,2-Dichlorobenzene	ND		1.2		ug/m3			10/08/13 17:05	1
1,3-Dichlorobenzene	ND		1.2		ug/m3			10/08/13 17:05	1
1,4-Dichlorobenzene	ND		1.2		ug/m3			10/08/13 17:05	1
Dichlorodifluoromethane	ND		0.99		ug/m3			10/08/13 17:05	1
1,1-Dichloroethane	ND		0.81		ug/m3			10/08/13 17:05	1
1,2-Dichloroethane	ND		0.81		ug/m3			10/08/13 17:05	1
1,1-Dichloroethene	ND		0.79		ug/m3			10/08/13 17:05	1
1,2-Dichloropropane	ND		0.92		ug/m3			10/08/13 17:05	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4		ug/m3			10/08/13 17:05	1
Ethylbenzene	ND		0.87		ug/m3			10/08/13 17:05	1
Hexachlorobutadiene	ND		11		ug/m3			10/08/13 17:05	1
Methylene Chloride	ND		1.7		ug/m3			10/08/13 17:05	1
m-Xylene & p-Xylene	ND		0.87		ug/m3			10/08/13 17:05	1
o-Xylene	ND		0.87		ug/m3			10/08/13 17:05	1
Styrene	ND		0.85		ug/m3			10/08/13 17:05	1
1,1,2,2-Tetrachloroethane	ND		1.4		ug/m3			10/08/13 17:05	1
Tetrachloroethene	ND		1.4		ug/m3			10/08/13 17:05	1
Toluene	ND		0.75		ug/m3			10/08/13 17:05	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-264/8
Matrix: Air
Analysis Batch: 264

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.91		ug/m3			10/08/13 17:05	1
1,2,4-Trichlorobenzene	ND		7.4		ug/m3			10/08/13 17:05	1
1,1,1-Trichloroethane	ND		1.1		ug/m3			10/08/13 17:05	1
1,1,2-Trichloroethane	ND		1.1		ug/m3			10/08/13 17:05	1
Trichloroethene	ND		1.1		ug/m3			10/08/13 17:05	1
Trichlorofluoromethane	ND		1.1		ug/m3			10/08/13 17:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.5		ug/m3			10/08/13 17:05	1
1,2,4-Trimethylbenzene	ND		0.98		ug/m3			10/08/13 17:05	1
1,3,5-Trimethylbenzene	ND		0.98		ug/m3			10/08/13 17:05	1
Vinyl chloride	ND		0.51		ug/m3			10/08/13 17:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*60 - 140*		*10/08/13 17:05*	*1*

Lab Sample ID: LCS 140-264/1002
Matrix: Air
Analysis Batch: 264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.00	1.55		ppb v/v		78	70 - 130
Benzyl chloride	2.00	1.69		ppb v/v		84	70 - 130
Bromomethane	2.00	2.16		ppb v/v		108	70 - 130
Carbon tetrachloride	2.00	1.83		ppb v/v		91	70 - 130
Chlorobenzene	2.00	1.52		ppb v/v		76	70 - 130
Chloroethane	2.00	2.25		ppb v/v		112	70 - 130
Chloroform	2.00	1.79		ppb v/v		90	70 - 130
Chloromethane	2.00	1.98		ppb v/v		99	60 - 140
cis-1,2-Dichloroethene	2.00	1.80		ppb v/v		90	70 - 130
cis-1,3-Dichloropropene	2.00	1.59		ppb v/v		80	70 - 130
1,2-Dibromoethane (EDB)	2.00	1.53		ppb v/v		77	70 - 130
1,2-Dichlorobenzene	2.00	1.50		ppb v/v		75	70 - 130
1,3-Dichlorobenzene	2.00	1.51		ppb v/v		75	70 - 130
1,4-Dichlorobenzene	2.00	1.49		ppb v/v		75	70 - 130
Dichlorodifluoromethane	2.00	2.21		ppb v/v		110	60 - 140
1,1-Dichloroethane	2.00	1.93		ppb v/v		97	70 - 130
1,2-Dichloroethane	2.00	1.79		ppb v/v		89	70 - 130
1,1-Dichloroethene	2.00	1.98		ppb v/v		99	70 - 130
1,2-Dichloropropane	2.00	1.59		ppb v/v		80	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.00	2.28		ppb v/v		114	60 - 140
Ethylbenzene	2.00	1.52		ppb v/v		76	70 - 130
Hexachlorobutadiene	2.00	1.48		ppb v/v		74	60 - 140
Methylene Chloride	2.00	2.07		ppb v/v		104	70 - 130
m-Xylene & p-Xylene	4.00	3.09		ppb v/v		77	70 - 130
o-Xylene	2.00	1.51		ppb v/v		76	70 - 130
Styrene	2.00	1.48		ppb v/v		74	70 - 130
1,1,2,2-Tetrachloroethane	2.00	1.63		ppb v/v		82	70 - 130
Tetrachloroethene	2.00	1.59		ppb v/v		79	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-264/1002
Matrix: Air
Analysis Batch: 264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	2.00	1.50		ppb v/v		75	70 - 130
trans-1,3-Dichloropropene	2.00	1.68		ppb v/v		84	70 - 130
1,2,4-Trichlorobenzene	2.00	1.66		ppb v/v		83	60 - 140
1,1,1-Trichloroethane	2.00	1.89		ppb v/v		95	70 - 130
1,1,2-Trichloroethane	2.00	1.61		ppb v/v		81	70 - 130
Trichloroethene	2.00	1.61		ppb v/v		80	70 - 130
Trichlorofluoromethane	2.00	2.26		ppb v/v		113	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	2.09		ppb v/v		104	70 - 130
1,2,4-Trimethylbenzene	2.00	1.63		ppb v/v		81	70 - 130
1,3,5-Trimethylbenzene	2.00	1.53		ppb v/v		77	70 - 130
Vinyl chloride	2.00	2.16		ppb v/v		108	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.4	4.96		ug/m3		78	70 - 130
Benzyl chloride	10	8.75		ug/m3		84	70 - 130
Bromomethane	7.8	8.40		ug/m3		108	70 - 130
Carbon tetrachloride	13	11.5		ug/m3		91	70 - 130
Chlorobenzene	9.2	7.00		ug/m3		76	70 - 130
Chloroethane	5.3	5.93		ug/m3		112	70 - 130
Chloroform	9.8	8.75		ug/m3		90	70 - 130
Chloromethane	4.1	4.08		ug/m3		99	60 - 140
cis-1,2-Dichloroethene	7.9	7.14		ug/m3		90	70 - 130
cis-1,3-Dichloropropene	9.1	7.22		ug/m3		80	70 - 130
1,2-Dibromoethane (EDB)	15	11.8		ug/m3		77	70 - 130
1,2-Dichlorobenzene	12	9.01		ug/m3		75	70 - 130
1,3-Dichlorobenzene	12	9.07		ug/m3		75	70 - 130
1,4-Dichlorobenzene	12	8.98		ug/m3		75	70 - 130
Dichlorodifluoromethane	9.9	10.9		ug/m3		110	60 - 140
1,1-Dichloroethane	8.1	7.82		ug/m3		97	70 - 130
1,2-Dichloroethane	8.1	7.24		ug/m3		89	70 - 130
1,1-Dichloroethene	7.9	7.86		ug/m3		99	70 - 130
1,2-Dichloropropane	9.2	7.36		ug/m3		80	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	14	15.9		ug/m3		114	60 - 140
Ethylbenzene	8.7	6.61		ug/m3		76	70 - 130
Hexachlorobutadiene	21	15.8		ug/m3		74	60 - 140
Methylene Chloride	6.9	7.20		ug/m3		104	70 - 130
m-Xylene & p-Xylene	17	13.4		ug/m3		77	70 - 130
o-Xylene	8.7	6.57		ug/m3		76	70 - 130
Styrene	8.5	6.32		ug/m3		74	70 - 130
1,1,2,2-Tetrachloroethane	14	11.2		ug/m3		82	70 - 130
Tetrachloroethene	14	10.8		ug/m3		79	70 - 130
Toluene	7.5	5.64		ug/m3		75	70 - 130
trans-1,3-Dichloropropene	9.1	7.64		ug/m3		84	70 - 130
1,2,4-Trichlorobenzene	15	12.4		ug/m3		83	60 - 140
1,1,1-Trichloroethane	11	10.3		ug/m3		95	70 - 130
1,1,2-Trichloroethane	11	8.80		ug/m3		81	70 - 130
Trichloroethene	11	8.64		ug/m3		80	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-264/1002
Matrix: Air
Analysis Batch: 264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	11	12.7		ug/m3		113	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	15	16.0		ug/m3		104	70 - 130
1,2,4-Trimethylbenzene	9.8	7.99		ug/m3		81	70 - 130
1,3,5-Trimethylbenzene	9.8	7.54		ug/m3		77	70 - 130
Vinyl chloride	5.1	5.51		ug/m3		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*60 - 140*

QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Air - GC/MS VOA

Analysis Batch: 258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-217-1	AM-1	Total/NA	Ambient Air	TO-15	
140-217-2	VP-4	Total/NA	Soil Gas	TO-15	
140-217-3	IA-1	Total/NA	Air	TO-15	
140-217-4	IA-2	Total/NA	Air	TO-15	
140-217-6	VP-3	Total/NA	Soil Gas	TO-15	
140-217-7	VP-1	Total/NA	Soil Gas	TO-15	
140-217-8	VP-5	Total/NA	Soil Gas	TO-15	
LCS 140-258/1002	Lab Control Sample	Total/NA	Air	TO-15	
MB 140-258/4	Method Blank	Total/NA	Air	TO-15	

Analysis Batch: 261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-217-5	VP-2	Total/NA	Soil Gas	TO-15	
LCS 140-261/1002	Lab Control Sample	Total/NA	Air	TO-15	
MB 140-261/23	Method Blank	Total/NA	Air	TO-15	

Analysis Batch: 264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-217-4 - DL	IA-2	Total/NA	Air	TO-15	
LCS 140-264/1002	Lab Control Sample	Total/NA	Air	TO-15	
MB 140-264/8	Method Blank	Total/NA	Air	TO-15	

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: AM-1 — Lab Sample ID: 140-217-1

Date Collected: 09/27/13 15:57 — **Matrix: Ambient Air**
Date Received: 10/01/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	258	10/03/13 19:13	AFB	TAL KNX
	Instrument ID: MJ									

Client Sample ID: VP-4 — Lab Sample ID: 140-217-2

Date Collected: 09/27/13 17:00 — **Matrix: Soil Gas**
Date Received: 10/01/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		10.87	10 mL	500 mL	258	10/03/13 20:06	AFB	TAL KNX
	Instrument ID: MJ									

Client Sample ID: IA-1 — Lab Sample ID: 140-217-3

Date Collected: 09/27/13 16:29 — **Matrix: Air**
Date Received: 10/01/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	258	10/03/13 20:59	AFB	TAL KNX
	Instrument ID: MJ									

Client Sample ID: IA-2 — Lab Sample ID: 140-217-4

Date Collected: 09/27/13 16:40 — **Matrix: Air**
Date Received: 10/01/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	258	10/03/13 21:52	AFB	TAL KNX
	Instrument ID: MJ									
Total/NA	Analysis	TO-15	DL	3.82	20 mL	500 mL	264	10/08/13 17:59	HMT	TAL KNX
	Instrument ID: MJ									

Client Sample ID: VP-2 — Lab Sample ID: 140-217-5

Date Collected: 09/27/13 16:44 — **Matrix: Soil Gas**
Date Received: 10/01/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		3.5	20 mL	500 mL	261	10/05/13 00:21	AFB	TAL KNX
	Instrument ID: MJ									

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Client Sample ID: VP-3

Lab Sample ID: 140-217-6

Date Collected: 09/27/13 17:11
Matrix: Soil Gas
Date Received: 10/01/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		11.05	10 mL	500 mL	258	10/03/13 23:40	AFB	TAL KNX
	Instrument ID: MJ									

Client Sample ID: VP-1

Lab Sample ID: 140-217-7

Date Collected: 09/27/13 17:08
Matrix: Soil Gas
Date Received: 10/01/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	20 mL	500 mL	258	10/04/13 00:34	AFB	TAL KNX
	Instrument ID: MJ									

Client Sample ID: VP-5

Lab Sample ID: 140-217-8

Date Collected: 09/27/13 17:14
Matrix: Soil Gas
Date Received: 10/01/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	20 mL	500 mL	258	10/04/13 01:28	AFB	TAL KNX
	Instrument ID: MJ									

Laboratory References:

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Certification Summary

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Laboratory: TestAmerica Knoxville

All certifica ions held by this laboratory are listed. Not all cer ifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		N/A	
Arkansas DEQ	State Program	6	88-0688	06-17-14
California	State Program	9	2423	06-30-14
Colorado	State Program	8	N/A	02-28-14
Connecticut	State Program	1	PH-0223	09-30-13 *
Florida	NELAP	4	E87177	06-30-14
Georgia	State Program	4	906	06-13-14
Hawaii	State Program	9	N/A	04-13-14
Indiana	State Program	5	C-TN-02	04-13-14
Iowa	State Program	7	375	08-01-14
Kansas	NELAP	7	E-10349	10-31-13
Kentucky	State Program	4	90101	12-31-13
L-A-B	DoD ELAP		L2311	02-13-16
Louisiana	NELAP	6	LA110001	12-31-13
Maryland	State Program	3	277	03-31-14
Michigan	State Program	5	9933	04-13-14
Nevada	State Program	9	TN00009	07-31-14
New Jersey	NELAP	2	TN001	06-30-14
New York	NELAP	2	10781	04-01-14
North Carolina DENR	State Program	4	64	12-31-13
North Carolina DHHS	State Program	4	21705	07-31-14
Ohio VAP	State Program	5	CL0059	03-26-15
Oklahoma	State Program	6	9415	08-31-14
Pennsylvania	NELAP	3	68-00576	12-31-13
South Carolina	State Program	4	84001	06-30-14
Tennessee	State Program	4	2014	04-13-14
Texas	NELAP	6	T104704380-TX	08-31-14
USDA	Federal		P330-13-00260	08-29-16
Utah	NELAP	8	QUAN3	07-31-14
Virginia	NELAP	3	460176	09-14-14
Virginia	State Program	3	165	06-30-14
Washington	State Program	10	C593	01-19-14
West Virginia	State Program	3	9955C	12-31-13
West Virginia DEP	State Program	3	345	04-30-14
Wisconsin	State Program	5	998044300	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech EM Inc.
Project/Site: Long Brothers Cleaners TO-15

TestAmerica Job ID: 140-217-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-217-1	AM-1	Ambient Air	09/27/13 15:57	10/01/13 10:00
140-217-2	VP-4	Soil Gas	09/27/13 17:00	10/01/13 10:00
140-217-3	IA-1	Air	09/27/13 16:29	10/01/13 10:00
140-217-4	IA-2	Air	09/27/13 16:40	10/01/13 10:00
140-217-5	VP-2	Soil Gas	09/27/13 16:44	10/01/13 10:00
140-217-6	VP-3	Soil Gas	09/27/13 17:11	10/01/13 10:00
140-217-7	VP-1	Soil Gas	09/27/13 17:08	10/01/13 10:00
140-217-8	VP-5	Soil Gas	09/27/13 17:14	10/01/13 10:00

TAL Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
phone 865-291-3000 fax 865-584-4315

Canister Samples Chain of Custody Record

TestAmerica assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information	Project Manager: [redacted] (b)(4)	Sampled By: [redacted] (b)(4)	1 of 2 COCs
Company: Tetra Tech	Phone: 703.390.0654		
Address: 1881 Campus Commons Dr. Suite 200	Site Contact:		
City/State/Zip Reston, VA 20191	TAL Contact:		
Phone: 703.390.0656			
FAX: 703.391.5876			
Project Name: Long Brothers Cleaners	Analysis Turnaround Time		
Site/location: 655 Lebanon St SE Wash DC	Standard (Specify) X		
PO # 10352930.02	Rush (Specify)		

140-217 Chain of Custody

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
AM-1	09/27/13	7:57am	15:57	-29.0	-1.0	10657	10716	✓								✓			
~~AM~~ VP-4	09/27/13	9:00am	17:00	-29.0	-5.0	10619	10727	✓									✓		
~~IA-1~~	~~09/27/13~~					~~10687~~													
IA-1	09/27/13	8:29am	16:29	-29.0	-3.0	10663	10487	✓							✓				
IA-2	09/27/13	8:40am	16:40	-29.0	-6.0	10056	10723	✓							✓				
VP-2	09/27/13	8:44am	16:44	-29.0	-5.0	10648	10729	✓									✓		

Sampled by :

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Received @ ambient
Custody seal intact
2 boxes
KW 10/1/13
Fedex Priority
#K#9861 0843 7414
" 9861 0843 7274

Special Instructions/QC Requirements & Comments:
Level 3 Deliverable Required

Canisters Shipped by:	Date/Time:	[redacted] (b)(4) 10/1/13 1000	8 cans
Samples Relinquished by:	Date/Time:	Received by:	8 flows
Relinquished by:	Date/Time:	Received by:	

TAL Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
phone 865-291-3000 fax 865-584-4315

Canister Samples Chain of Custody Record

TestAmerica assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information	Project Manager: [redacted] (b)(4)	Sampled By: [redacted] (b)(4)	2 of 2 COCs
Company: Tetra Tech	Phone: 703-390-0654		
Address: 1881 Campus Commons Dr.	Site Contact:		
City/State/Zip: Reston, VA 20191	TAL Contact:		
Phone: 703-390-0656			
FAX: 703-391-5876			
Project Name: Long Brothers Cleaners	Analysis Turnaround Time		
Site/location: 655 Lebanon St., NE Wash, DC	Standard (Specify)		
PO # 103 52930.02	Rush (Specify)		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
VP-3	09/27/13	9:11 a.m.	1711	-30.0	-4.0	10649	09775	✓									✓		
VP-1	09/27/13	9:08 a.m.	1708	-29.0	-5.0	10652	10724	✓									✓		
VP-5	09/27/13	9:14 a.m.	1714	-28.9	-4.0	10645	10477	✓									✓		

Sampled by :	Temperature (Fahrenheit)			
		Interior	Ambient	
	Start			
	Stop			
	Pressure (inches of Hg)			
		Interior	Ambient	
	Start			
	Stop			

Special Instructions/QC Requirements & Comments:

Level 3 Deliverable Required

Canisters Shipped by:	Date/Time:	[redacted] (b)(4): 10/1/13 1000
Samples Relinquished by:	Date/Time:	Received by:
Relinquished by:	Date/Time:	Received by:

Login Sample Receipt Checklist

Client: Tetra Tech EM Inc.

Job Number: 140-217-1

Login Number: 217

List Source: TestAmerica Knoxville

List Number: 1

Creator: Wilson, Ken

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
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 containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have leg ble labels.	True	
Containers are not broken or leaking.	N/A	checked in lab
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

TestAmerica Knoxville - Air Canister Initial Pressure Check

Analyst	Date	Time	Sample ID	Pressure @ Receipt (-in or +psig)	Comments
NRS	10/2/2013	14:45	140-217-A-1	0.0	
NRS	10/2/2013	14:46	140-217-A-2	-4.6	
NRS	10/2/2013	14:47	140-217-A-3	-3.3	
NRS	10/2/2013	14:48	140-217-A-4	-4.2	
NRS	10/2/2013	14:49	140-217-A-5	-4.0	
NRS	10/2/2013	14:50	140-217-A-6	-4.6	
NRS	10/2/2013	14:51	140-217-A-7	-4.6	
NRS	10/2/2013	14:52	140-217-A-8	-4.7	