# Remedial Action Report

Former Cashmere Mill Site (Phase 2)
Cashmere, Washington

*for*
**Washington State Department of Ecology**

April 24, 2015

GeoEngineers
Earth Science + Technology

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**April 24, 2015**

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## ACRONYMS AND ABBREVIATIONS

ARI – Analytical Resources, Inc.

bgs – below ground surface

BTEX – benzene, toluene, ethylbenzene and xylene

COC – contaminants of concern

COPC – contaminants of potential concern

cPAH – carcinogenic polycyclic aromatic hydrocarbon

DO – dissolved oxygen

DOT – Department of Transportation

DRPH – diesel-range petroleum hydrocarbons

Ecology – Washington State Department of Ecology

EPA – Environmental Protection Agency

ev – electron volt

Filion – George Filion Landfill in Cashmere, Washington

GeoEngineers – GeoEngineers, Inc.

GPS – global positioning system

GRPH – gasoline-range petroleum hydrocarbons

GWRL – Greater Wenatchee Regional Landfill

HCID – hydrocarbon identification

LCS – laboratory control sample

LCSD – laboratory control sample duplicate

MFA – Maul Foster & Alongi, Inc.

mg/kg – milligrams per kilogram

µg/L – micrograms per liter

mg/L – milligrams per liter

## ACRONYMS AND ABBREVIATIONS (CONTINUED)

MS – matrix spike

MSD – matrix spike duplicate

MTCA – Model Toxics Control Act

NTU – nephelometric turbidity units

ORP – oxygen-reduction potential

ORPH – oil-range petroleum hydrocarbons

PAHs – polycyclic aromatic hydrocarbons

PCS – petroleum-contaminated soil

PID – photoionization detector

Port – Port of Chelan County

ppm – parts per million

QA/QC – quality assurance/quality control

RH2 – RH2 Engineering

RPD – relative percent difference

SDGs – sample delivery groups

SVOCs – semivolatile organic compounds

TCLP – Toxicity Characteristic Leachate Procedure

TESC – temporary erosion and sediment controls

TestAmerica – TestAmerica Laboratories, Inc.

Tommer – Tommer Construction Company, Inc.

TPH – total petroleum hydrocarbons

VOCs – volatile organic compounds

## EXECUTIVE SUMMARY

This report summarizes Phase 2 remedial excavation activities at the former Cashmere Mill property (site) in Cashmere, Washington. The goals for Phase 2 included: (1) removing petroleum- and mercury-contaminated soil from the site; and (2) removing non-contaminated wood waste from portions of the site to enhance the suitability of the site for future development. Multiple assessments at the Cashmere site identified areas of widespread and scattered soil and groundwater contamination. Contaminants of concern (COCs) identified in previous assessments included petroleum compounds, volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs) and mercury. Additionally, past use of the site as a mill resulted in placement of wood waste in most of the site, making the site generally unsuitable for development.

Phase 1 remedial excavation activities were conducted in 2013. The primary focus of Phase 1 was the removal of wood waste from select parcels located north of Mill Road. As part of those activities, some petroleum-contaminated soils (PCS) were excavated and stockpiled on-site in anticipation of future removal. A follow-up site assessment by GeoEngineers, Inc. (GeoEngineers) in 2013 and 2014 identified nine areas of contamination in addition to the Phase 1 stockpiles.

Phase 2 activities at the site were performed between July 16, 2014 and October 13, 2014 and included:

- Installation of dewatering wells to support excavation activities;
- Excavation and off-site disposal of contaminated soil;
- Collection and analysis of confirmation samples from the sidewalls and/or base of the remedial excavations;
- Excavation of general wood waste within a portion of the Phase 2 area; and
- Backfilling the excavations with both on-site and imported fill material after confirmation samples indicated concentration of COCs were less than established site cleanup levels, or the limits of the excavation reached property boundaries or site utilities.

Approximately 6,702 tons of contaminated soil were excavated from the site. The stockpiles generated from Phase 1 activities (approximately 9,113 tons) also were excavated and hauled from the site. Contaminated soil was taken to the Waste Management Greater Wenatchee Regional Landfill (GWRL) near Wenatchee, Washington for disposal.

Approximately 76,302 tons of general wood waste material were excavated from the site and processed (screened) for on-site reuse as backfill, storage at GWRL for future use, or off-site disposal. Of the approximately 76,302 tons, approximately 48,052 tons of 2-inch-minus wood waste material were transported to GWRL and stockpiled for future use as final cover for the landfill; approximately 27,711 tons of processed coarse gravel, cobbles and boulders were reused on-site as backfill. (Screened 6-inch plus material was crushed on-site before being reused as backfill.) Approximately 42 tons of wood debris and 233 tons of garbage were disposed at the GWRL. Approximately 211 tons of concrete debris were disposed offsite at the Filion Inert Landfill (5600 Nahahum Canyon Road). Approximately 53 tons of metal debris were taken offsite by the contractor for recycling.

Approximately 74,243 tons of imported backfill were placed in excavated areas. The northern area (Phase 1) of the site was graded to promote drainage away from Sunset Highway and the Wenatchee River.

GeoEngineers conducted field-screening of contaminated soil excavations, and collected soil confirmation samples. Results of field screening and confirmation sample analytical results indicated soil left at the limits of remedial excavations contained COCs at concentrations less than applicable cleanup levels, with the following exceptions. Two confirmation samples, collected along the eastern property boundary of Parcel 200 referred to as the "Water Line Excavation," contained total petroleum hydrocarbons (TPH) at concentrations exceeding the site-specific Model Toxics Control Act (MTCA) Method B cleanup level. However, that excavation was terminated because of the proximity of the excavation to the property boundary. One Phase 1 confirmation sample (A2-W38-S-4) collected within the South PCS Area also was left in place following Phase 1 and Phase 2 activities. This sample was located at the property boundary between Parcel 550 and Mill Road.

GeoEngineers conducted groundwater sampling in December 2014, after Phase 2 activities were completed. Arsenic was detected in groundwater samples from 6 of the 11 wells sampled at concentrations exceeding the MTCA Method A cleanup level for arsenic. Other site COCs were either not detected or detected at concentrations less than cleanup levels in the groundwater samples.

Remaining soil contamination along the eastern property boundary of Parcel 200 and near previous confirmation sample A2-W38-S-4, will require a restrictive covenant until the contaminated soil can be excavated and properly disposed offsite. Additionally, the presence of groundwater exceeding cleanup levels for arsenic also will require a restrictive covenant.

## 1.0 INTRODUCTION

GeoEngineers has prepared this report for the Washington State Department of Ecology (Ecology) in support of their Toxics Cleanup Program, describing remedial activities associated with Phase 2 remediation at the former Cashmere Mill site (site) located in Cashmere, Washington. The site is located approximately as shown on the Vicinity Map, Figure 1. Phase 1 activities were conducted at the site in 2013. Principal Phase 1 activities included:

- Removing approximately 300 truckloads of previously stockpiled debris and excavating approximately 428 truckloads of wood waste material and disposing the material off-site.
- Excavating approximately 3,670 cubic yards of PCS and stockpiling the material south of Mill Road.
- Excavating approximately 336 cubic yards of refuse and debris and disposing the material off-site.

Phase 2 remediation activities occurred from July 2014 to October 2014 and generally included:

- Removal and disposal of soil contaminated with mercury, polycyclic aromatic hydrocarbons (PAHs), and petroleum hydrocarbons identified as part of a data gap assessment conducted in 2013 and 2014;
- Removal of PCS stockpiles constructed as part of Phase 1 activities;
- Installation of dewatering wells and operation of a dewatering system to facilitate wood waste removal;
- Removal of wood waste material from designated portions of the site south of Mill Road;
- Placement of imported backfill into the excavations; and
- Regrading the Phase 1 area to promote drainage away from Sunset Highway and the Wenatchee River and encourage infiltration on-site.

Funding for the project was provided by Ecology and administered through the Port of Chelan County (Port). Construction work was conducted under a Public Works contract managed by the Port. RH2 Engineering (RH2) (under contract with the Port) provided design and construction management services for the duration of the project. Tommer Construction Company, Inc. (Tommer) of Ephrata, Washington was selected as the general contractor for the project and was contracted directly by the Port. GeoEngineers (under contract with Ecology) provided observation, documentation and sampling services during excavation of contaminated soils.

## 2.0 SCOPE OF SERVICES

Our services were conducted in general accordance with our Work Plan dated September 4, 2013, and Work Assignment No. C11145ZZ between GeoEngineers and the Ecology. GeoEngineers observed and documented the remedial excavation activities, and collected confirmation samples from the excavations. Our specific scope of services during the remedial action included:

- Observing and documenting remedial excavation activities.
- Field screening representative soil excavated from identified contaminated areas during the remedial action, and based on field screening results, working with the Engineer (RH2) and Contractor (Tommer)

to identify appropriate disposal for wastes removed from the site. Selected samples were field-screened using visual observations, water sheen methods, and headspace vapor measurements with a photoionization detector (PID) to assess possible presence of petroleum-related contaminants.

- Collecting soil confirmation samples from the limits of the contaminated soil remedial excavations and submitting the samples to TestAmerica Laboratories, Inc. (TestAmerica) located in Spokane Valley, Washington. Samples were analyzed for COCs based on identified or suspected contaminants from the data gap assessment.
- Collecting groundwater samples from existing groundwater monitoring wells after Phase 2 activities had been conducted and submitting chemicals for chemical analysis.
- Entering analytical data into Ecology's Environmental Information Management database upon project completion.

A summary of our field procedures during soil and groundwater sampling is presented in Appendix A. Copies of the analytical laboratory test reports are presented in Appendix B. Copies of truck scale tickets are presented in Appendix C.

Observation and documentation of the general wood waste excavation located throughout the Phase 2 area or documentation of backfilling activities was not part of the scope.

## 3.0 SITE CONDITIONS

### 3.1. Location

The site is located in the Wenatchee River valley in the town of Cashmere, Washington. The site occupies approximately 32.5 acres adjacent to Sunset Highway. The site is generally divided into two areas, bisected by Mill Road. Phase 1 is identified as the portion of the site on the north side of Mill Road and Phase 2 is located on the south side of Mill Road. Phase 2 is bounded on south, west and east Brender Creek. The Wenatchee River is located approximately 100 feet to the north on the opposite side of Sunset Highway, as shown on the Site Plan, Figure 2.

### 3.2. Background and History

The site operated as a lumber mill from the 1940s to the late 1970s and for a variety of commercial and light industrial uses thereafter. Activities during mill operations reportedly included manufacturing lumber for fruit boxes. Wood treating activities are not known to have occurred at the site. An accidental fire in 1990 damaged some mill buildings and a second fire in 2000 destroyed many of the remaining ones. The site is currently owned by Port of Chelan County.

During mill operations, a pond was located in the southeast portion of Phase 1, but was filled in the 1950s. Most of the Phase 2 area was used to store logs during mill operation. Low lying areas of both Phase 1 and Phase 2 were reportedly filled over several decades of mill operation with imported fill from various sources, which included wood waste from mill operations. (Note: the term "wood waste" as described in this report generally refers to wood material, mixed with varying amounts of silt, sand, gravel, cobble and boulders, generated during mill operations that was not commercially valuable and was utilized as fill material at the site; it does not indicate the wood designates as "waste" under Washington State regulations).

### 3.3. Geologic Setting

The site is situated within a former meander of the Wenatchee River. The meander was cut off by a railroad embankment when a railroad was constructed through the town of Cashmere around 1900. Brender Creek now borders the southern extents of the site and meander channel. Surficial geology consists of alluvial deposits of silt, sand, gravel, cobbles and boulders deposited by the Wenatchee River. Based on results of site explorations, alluvial deposits extend to depths of at least 40 feet below the site.

### 3.4. Hydrogeologic Setting

A detailed description of the hydrogeologic setting for the site is presented in the Dewatering Assessment report by GeoEngineers, dated July 31, 2013 (GeoEngineers, 2013a). The groundwater table within the shallow unconfined aquifer beneath the site is at a similar elevation to the nearby Wenatchee River, and the shallow aquifer likely is hydraulically connected with the river. In such systems, where an aquifer is hydraulically connected to a river, groundwater typically flows down-valley, roughly parallel to, but slightly toward, the river, but at a much slower velocity. Based on groundwater elevation measurements during the winter of 2013-2014, shallow groundwater at the site generally flows northeast, at depths less than 3 to 7 feet below site grade.

The Wenatchee River flows east-southeast through Cashmere and is located north of the site. Brender Creek travels along the east, south, and west portions of the site and discharges into Mission Creek north of Sunset Highway; Mission Creek then discharges into the Wenatchee River. No Name Creek flows east within a culvert along the south side of Mill Road through the Phase 2 area and in an exposed ditch bordering Mill Road directly east of the site, then re-enters a culvert and flows north-northeast beneath Mill Road and through Parcel 650.

### 3.5. Previous Investigations

Previous investigations and interim action activities have been conducted at the site to identify COCs. Activities conducted before 2013 are summarized in a report titled "Site Investigation Report, Former Cashmere Mill Site, Cashmere, Washington" by Maul Foster & Alongi, Inc. (MFA), dated March 20, 2013 (MFA, 2013). Phase 1 remedial activities were conducted in the spring and summer of 2013, and included removing and stockpiling wood waste and PCS from the Phase 1 area. Stockpiles developed from Phase 1 activities were constructed on the Phase 2 portion of the site. Stockpiles A through G are shown on Figure 2. The results of Phase 1 remedial activities are described in a report by MFA titled "Phase 1 Interim Action Report, Former Cashmere Mill Site," dated May 6, 2014 (MFA, 2014).

Between September and December 2013, data gap assessment activities were conducted by GeoEngineers to further evaluate subsurface soil and groundwater conditions at the site. The results of the data gap assessment are provided in GeoEngineers' report titled "Data Gap Assessment Report, Former Cashmere Mill Site, Cashmere, Washington," dated May 7, 2014 (GeoEngineers, 2014). Approximate locations of previous explorations conducted by both GeoEngineers and others are shown on Phase 2 Final Remedial Excavation Extents, Figures 3 through 6.

### 3.6. Contaminants of Concern and Cleanup Levels

Based on previous site assessments, COCs were generally associated with historic storage and distribution of petroleum products and mercury contamination. COCs established for the site included the following constituents:

#### 3.6.1. Soil

- TPH, including gasoline-range petroleum hydrocarbons (GRPH), diesel-range petroleum hydrocarbons (DRPH) and oil-range petroleum hydrocarbons (ORPH);
- VOCs including benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds and naphthalenes;
- SVOCs, including PAHs; and
- Mercury.

#### 3.6.2. Groundwater

- GRPH, DRPH and ORPH
- BTEX
- Arsenic
- Mercury

#### 3.6.3. Cleanup Levels

The following cleanup levels were established for the site:

##### *3.6.3.1. Soil*

- TPH – 3,400 milligrams per kilogram (mg/kg) (MTCA Method B cleanup level)
- BTEX – Applicable MTCA Method A cleanup levels for unrestricted land use
- SVOCs\PAHs – Applicable MTCA Method A cleanup levels for unrestricted land use, specifically 0.1 mg/kg for carcinogenic PAHs (cPAHs) based on toxic equivalency factors presented in Table 708-2 in Washington Administrative Code 173-340-9001
- Mercury – 2 mg/kg
- Naphthalene – 5 mg/kg

##### *3.6.3.2. Groundwater*

- Groundwater cleanup levels for the site were established in accordance with MTCA Method A.

## 4.0 CORRECTIVE ACTION OBJECTIVES AND METHODS

The remedial action was implemented to reduce the potential risk to human health and the environment as a result of exposure to identified COCs within the vadose-zone soil. The following activities were conducted at the site to reduce human health and ecological risks from exposure to site COCs:

- Excavating contaminated soil to approximately 1 to 3 feet below the groundwater surface and laterally until confirmation sample results indicated COC concentrations were less than established cleanup levels ("Section 3.6, Contaminants of Concern and Cleanup Levels"), or the excavation was limited by the property boundary or other site features;
- Removing and offsite disposal of existing stockpiles from the Phase 1 area located south of Mill Road;
- Disposing of excavated soils at regional landfills in accordance with Washington State Regulations;

- Excavating of general wood waste throughout the Phase 2 area; and
- Backfilling remedial excavations with imported soil and grade the surface to promote stormwater drainage away from Sunset Highway and the Wenatchee River and encourage infiltration on-site.

## 5.0 CORRECTIVE ACTION IMPLEMENTATION

### 5.1. General

RH2 provided on-site engineering oversight throughout the duration of the project. GeoEngineers personnel made periodic site visits, upon request from RH2, to observe excavation of contaminated soil and collect soil confirmation samples. RH2 documented quantities throughout the project, and provided GeoEngineers with a summary of Phase 2 earthwork quantities, which is presented in the table titled Phase 2 Earthwork Summary.

**PHASE 2 EARTHWORK SUMMARY**

| Description | Quantity[1] (Tons) | Disposition |
|---|---|---|
| **Excavation Quantities** | | |
| 1. Contaminated Soil | | |
| Contaminated Soil Excavation | 6,702 | GWRL |
| PCS Stockpiles from Phase 1 | 9,113 | GWRL |
| Total Contaminated Soil Excavation and Disposal | 15,815 | GWRL |
| 2. Non-contaminated Soil/General Wood Waste Excavation | | |
| Class 1 Material (Garbage) | 233 | GWRL |
| Class 2 Material (<2 inch minus) | 48,052 | GWRL (stockpiled for future use as final cover) |
| Class 3 Material (wood) | 42 | GWRL |
| Class 4 Material (concrete debris) | 211 | Filion Inert Landfill |
| Class 4 Material (>6-inch rocks) | 9,760 | Crushed and reused as on-site backfill |
| Class 5 Material (2- to 6-inch rocks) | 17,951 | Reused as on-site backfill |
| Metal Disposal | 53 | Recycled by contractor |
| Total Non-contaminated Material Excavation | 76,302 | Varies |
| **Import Quantities** | | |
| 1. Common Borrow from GWRL | 39,691 | On-site Backfill |
| 2. Common Borrow from Contractor-Supplied Source | 34,552 | On-site Backfill |
| Total Imported Common Borrow | 72,243 | On-site Backfill |

Notes: [1]Quantities were provided by RH2 Engineering.

Tommer mobilized to the site on July 14, 2014 and began site preparation activities. Remedial excavation activities began on July 16, 2014 and continued intermittently until October 13, 2014. GeoEngineers made periodic site visits to observe and document excavation of contaminated soil, confirm compliance with project specifications, and collect remedial excavation confirmation samples. GeoEngineers was not on site to observe wood waste excavation and backfilling activities. Remedial excavation and confirmation sample locations are provided in Figures 3 through 6. The following sections provide details of remedial excavation activities.

### 5.2. Site Preparation and TESC

Tommer mobilized to the site on July 14, 2014, and set up temporary site facilities and temporary erosion and sediment controls (TESC). TESC consisted of silt fences along the property boundaries and between Phase 1 and Phase 2 areas of the site. Planned excavation boundaries as identified in the project drawings, were staked and marked with paint before initiating the excavation. Groundwater monitoring and dewatering wells were staked and flagged to minimize the potential for damage from construction equipment. Tommer conducted utility locates as part of site mobilization activities, which included a one-call utility locate request for the site and a meeting with John Payne of the City of Cashmere for water and sewer locates.

### 5.3. Dewatering

To accommodate wood waste excavation activities, Tommer's hydrogeologic consultant designed a dewatering system for the Phase 2 area. Tommer's subcontractor, Glacier Drilling and Dewatering of Olympia, Washington, mobilized to the site on July 21, 2014 to install 13 dewatering wells. Approximate locations of the wells are provided in Figure 2. Initial attempts to install the dewatering wells with a bucket auger rig were unsuccessful because of the presence of gravels and cobbles in the subsurface soil. The dewatering system installation was delayed until different drilling equipment could be mobilized to the site. On August 20, 2014, Tommer's subcontractor, O'Keefe Drilling of Butte, Montana, arrived on-site and began installing the dewatering wells using a DR-24 air rotary drill rig. Dewatering well installation was finished on September 4, 2014.

After the dewatering wells were installed, Tommer began pumping from four dewatering wells in the northeast corner of Phase 2 at a rate of about 150 gallons per minute each (based on information provided by Tommer). Water was discharged to a dewatering infiltration "pond" in the northwest corner of Phase 1 (Figure 2). At the conclusion of Phase 2 activities, Glacier Drilling decommissioned the dewatering wells. Tommer backfilled the infiltration "pond" with imported fill.

### 5.4. Removal of Phase 1 PCS Stockpiles

The Phase 1 contractor created stockpiles A through G during the Phase 1 remediation activities in the summer of 2013; locations of these stockpiles are shown in Figure 2. Tommer removed stockpiles A through G concurrently during Phase 2 remedial excavation activities. Stockpile G was designated as unsuitable material to be processed as waste material, but the material was disposed with Stockpiles A through F as PCS at the GWRL. Analytical data from pre-remedial excavation work is included in GeoEngineers' Data Gap Assessment Report dated May 7, 2014 (GeoEngineers, 2014).

## 5.5. Excavation of Contaminated Soil

Between July 16 and October 13, 2014, Tommer excavated contaminated soil from 13 areas (EX1 through EX13) at the site. Nine excavation areas were identified from the data gap assessment; however, during the relocation of a water line in the eastern portion on the site near Mill Road, additional hydrocarbon petroleum contamination was identified and four additional excavation areas were identified. Those four areas were identified as EX1, EX2, EX11 and EX13. As a result of contamination extents, excavations EX1, EX2 and EX11 located south of Mill Road were combined into a single excavation and are referenced as the "Water Line Excavation." Excavation EX13 was referenced as the "South PCS Area (Phase 1) Excavation."

Soil was excavated to depths approximately 1 to 3 feet below groundwater. Excavation depths ranged from approximately 5 to 10 feet below ground surface (bgs). Approximate depths of each remedial excavation are provided on Figures 3 through 6. Soil from the excavations ranged from brown and grey fine to medium sand with gravel, cobbles and boulders, to silt and silty fine sand. Wood and concrete debris also were present in the material in varying amounts. Concrete debris was segregated from excavated soil and hauled offsite for disposal at the Filion Inert Landfill located in Cashmere, Washington. Large wood debris was disposed at GWRL.

Contaminated soil excavated from the site was loaded directly into trucks and hauled offsite for disposal, except for some material removed from EX7, EX10 and EX13. Material removed from extensions of the EX7 excavation was temporarily stockpiled on plastic sheeting, sampled and tested for Toxicity Characteristic Leachate Procedure (TCLP)-mercury to further characterize the material, following initial elevated mercury concentrations in contaminated samples collected from sidewall samples. Materials excavated from the EX13 excavation were stockpiled on plastic sheeting pending analytical results at the request of RH2 to potentially reduce disposal costs. After analytical results were received, the material from these three excavations was disposed at GWRL.

Excavations were expanded until: (1) field screening and visual observation by GeoEngineers did not indicate the likely presence of COCs; or (2) the excavation was proximate to subsurface utilities or the site property boundaries.

After excavations were terminated, GeoEngineers collected confirmation samples from excavation sidewalls. One confirmation sample was collected from each sidewall on excavations with sidewalls smaller than 50 linear feet and approximately every 50 linear feet of excavation sidewall on larger excavations. Several confirmation samples also were collected from excavation bottoms, where excavations did not extend down to groundwater, or where excavations had been dewatered. Eighty-five confirmation samples were analyzed for one or more of the following analytes: hydrocarbon identification (HCID), GRPH, DRPH, ORPH, VOCs, SVOCs, PAHs, Metals, and/or TCLP-mercury. Seven stockpile samples also were analyzed.

TestAmerica conducted confirmation sample analysis using the following methods for soil:

- HCID using NWTPH-HCID;
- GRPH using Northwest Method NWTPH-Gx;
- DRPH and ORPH using Northwest Method NWTPH-Dx;
- VOCs using EPA Method 8260C;

- SVOCs using EPA Method 8270D;
- PAHs using EPA Method 8270D;
- Mercury using EPA 6010C/7000 Series Methods; and
- TCLP analyses for Mercury using EPA Method 200.8.

The weight of materials excavated was quantified using truck scales at GWRL. The weight of debris disposed at the local Filion Inert Landfill was quantified using truck scales at the Tree Top produce processing facility. Material excavated and reused on site was quantified using on-site scales provided by Tommer. Each truck was weighed before and after loading to calculate the weight removed from the site. The weights were totaled to obtain the total tonnage of contaminated soil removed from the site. Weight tickets were provided by RH2 as haulage documentation, and are provided in Appendix C, Disposal Documentation.

Approximate horizontal limits of each remedial excavation are shown in Figures 3 through 6. The excavation limits were mapped using a handheld global positioning system (GPS) device and field measurements. The GPS unit has an approximate horizontal accuracy of about 1 to 4 meters, depending on available satellites for relative positioning. The approximate locations of confirmation samples also are shown in Figures 3 through 6. Confirmation sample results are summarized in Summary of Chemical Analytical Results – Confirmation Soil Samples, Table 1. The following sections provide additional detail for each excavation.

#### 5.5.1. Water Line Excavation (EX1, EX2 and EX11)

Tommer encountered unanticipated petroleum contaminated soil on July 15, 2014 while excavating a trench to relocate a water line near the northeast portion of the Phase 2 area. During excavation of the trench, Tommer personnel reportedly detected a strong petroleum odor and observed oil globules on water in the trench. On July 16, 2014, GeoEngineers sampled soil from the water line trench excavation (identified as EX1 and EX2). Samples collected and analyzed from areas near the petroleum odors (EX1-2-3 and EX2-1-3) and oil globules (EX1-3-3) contained petroleum hydrocarbon concentrations exceeding the TPH cleanup level for the site. Groundwater was encountered approximately 2 to 3 feet bgs in excavation EX1 and EX2; therefore, additional excavation was postponed until dewatering could occur.

On July 21, 2014, Tommer used an excavator in the location of the Water Line Excavation to facilitate temporary dewatering well installation. A test pit was excavated to approximately 15 feet bgs, and petroleum odors were present during excavation. Tommer backfilled the test pit with the excavated soil and further excavation at the Water Line Excavation was suspended until dewatering wells could be installed near the excavation but distant from contaminated soil and groundwater.

Dewatering wells were installed by O'Keefe Drilling on August 28, 2014, and excavation activities resumed after Tommer activated the dewatering system. Excavation activities (identified as EX11) resumed to the west and north, and continued until results of field screening and subsequent laboratory analysis did not indicate the presence of petroleum hydrocarbons greater than site cleanup levels. Excavation to the east and south was limited by the property boundary, and therefore the excavation was not expanded beyond the locations of confirmation samples EX1-2-3 and EX1-3-3, which contained TPH exceeding the site-specific Method B cleanup level. The total depth of the Water Line Excavation (EX1, EX2 and EX11) was approximately 8 feet to 10 feet bgs.

#### 5.5.2. Area 3 Excavation (EX3)

The EX3 excavation was identified during the data gap assessment, with TPH as the COC. Tommer started excavating Area 3 on July 17, 2014 and extended the excavation to the north on July 22, 2014 as a result of positive field screening results for petroleum contamination. EX3 was excavated to approximately 6 to 7 feet bgs. Along a portion of the western sidewall, the excavation extended down about 3 feet until the existing cistern (identified during Phase 1 activities) was encountered. The excavation then extended deeper along the perimeter of the cistern and continued until field screening did not indicate the presence of petroleum contamination. The eastern section of the excavation bordered Parcel 650; however, field screening did not indicate petroleum contamination in this area. The excavation of EX3 also included removal of concrete pads with large wood foundation piles. Concrete removed from EX3 was disposed in the Filion landfill, and wood piles were disposed at the GWRL. Confirmation samples collected from EX3 after the July 22, 2014 excavation extension indicated remaining soil did not contain COCs at concentrations greater than site cleanup levels.

#### 5.5.3. Storm Line (Phase 1) Excavation (EX4)

Soil represented by one sidewall confirmation sample exceeding site cleanup criteria for TPH was left in place at the conclusion of Phase 1 activities. Based on this, GeoEngineers identified this area in the data gap assessment with TPH as the COC. Tommer began excavating PCS at EX4 on July 21, 2014 to an approximate depth of about 7 feet bgs. Confirmation samples collected by GeoEngineers on July 21, 2014 from the excavation indicated remaining soil did not contain COCs at concentrations greater than applicable site cleanup levels.

#### 5.5.4. North Hg Area (Phase 1) Excavation (EX5)

The North Hg Area was identified during the data gap assessment and was planned for excavation. COCs for this excavation included mercury and cPAHs. Tommer started excavating soil from EX5 on July 22, 2014 to an approximate depth of about 9 feet bgs. Field screening indicated possible petroleum contamination in the northwest sidewall of the excavation at the location of EX5-4-8; however, the excavation could not extend to the north because of the proximity to the sidewalk along Sunset Highway. Confirmation samples collected from the EX5 excavation (including EX5-4-8) indicated the soil did not contain COCs at concentrations greater than applicable site cleanup levels.

#### 5.5.5. South PCS Area (Phase 2) Excavation (EX6)

The South PCS Area (Phase 2) was identified during the data gap assessment and was planned for excavation, with TPH as the COC. Tommer began excavating the area on July 23, 2014 to an approximate depth of about 8 feet bgs. Confirmation samples were collected and one sample (EX6-6-3) collected from the west side of the northern sidewall contained COCs at concentrations greater than cleanup levels. On July 31, 2014, the excavation was extended north until field screening did not indicate signs of contamination. Confirmation soil samples collected from the extended northern section did not contain COCs at concentrations greater than applicable cleanup levels.

#### 5.5.6. North Hg Area (Phase 2) Excavation (EX7)

The North Hg Area (Phase 2) was identified during the data gap assessment with mercury as the COC. The EX7 excavation was extended several times because analytical results indicated mercury concentrations in sidewall samples were greater than cleanup levels. Excavation sidewalls were extended 5 feet laterally

after each set of sidewall samples contained COCs at concentrations exceeding site cleanup levels. The northwest sidewall was extended twice and the northeast sidewall was extended three times, as shown in Figure 4. The excavation contained building and wood debris, but material contaminated with mercury could not be identified through field screening.

Tommer began excavating EX7 on July 24, 2014 to an approximate depth of about 5 to 6 feet bgs. One confirmation sample (EX7-1-2) from the northeastern sidewall contained mercury concentrations greater than the cleanup level. On July 31, 2014, Tommer extended the excavation laterally approximately 5 feet to the northwest and the northeast. Confirmation sidewall samples EX7-9-3 and EX7-7-3, collected from the northwest and northeast sidewalls, respectively, contained mercury at concentrations greater than site cleanup levels.

On August 7, 2014, Tommer extended the excavation laterally approximately 5 feet to the northwest and the northeast. Confirmation samples from the northeast sidewall contained mercury at concentrations greater than the site cleanup level, but the confirmation samples collected from the northwest sidewall contained mercury at concentrations less than the site cleanup level.

On August 27, 2014, Tommer extended the excavation laterally approximately 5 feet to the northeast. Confirmation samples collected from the northeast sidewall after the August 27, 2014 excavation extension contained mercury at concentrations less than the site cleanup level.

Tommer stockpiled material excavated from EX7 on August 27, 2014 on plastic sheeting next to the excavation. Three samples were collected and analyzed for total mercury and TCLP-mercury. Analytical results indicated TCLP-mercury results were less than EPA D-list requirements (0.2 milligrams per liter [mg/L]); therefore, the stockpiled soil did not designate as dangerous waste and was disposed at the GWRL.

#### 5.5.7. Middle Hg Area Excavation (EX8)

The Middle Hg Area was identified during the data gap assessment with mercury as the COC. Tommer began excavating EX8 on July 24, 2014 to an approximate depth of about 7 feet bgs. Confirmation sample EX8-4-5 from the north sidewall indicated concentrations of mercury greater than site cleanup levels. On July 31, 2014, Tommer extended the excavation laterally approximately 5 feet to the north. Confirmation samples from the north sidewall collected after the excavation extension contained mercury at concentrations less than site cleanup levels.

#### 5.5.8. West Hg Area Excavation (EX9)

The West Hg Area was identified during the data gap assessment with mercury and TPH as the COCs. Tommer began excavating EX9 on July 24, 2014 to an approximate depth of about 5 feet bgs. Confirmation samples from the excavation did not contain COCs at concentrations exceeding site cleanup levels.

#### 5.5.9. South Hg Area Excavation (EX10)

The South Hg Area was identified during the data gap assessment with mercury as the COC. Tommer began excavating EX10 on July 24, 2014 to a depth of about 6 feet bgs. Some of the material excavated from the EX10 excavation was saturated because of shallow groundwater. Tommer stockpiled the material on plastic sheeting next to the excavation until it was suitable for transport to GWRL. Confirmation samples from the excavation did not contain COCs at concentrations exceeding site cleanup levels.

#### 5.5.10. Area 4 Excavation (EX12)

Area 4 was identified during the data gap assessment with TPH as the COC. Tommer began excavating EX12 on September 3, 2014 to an approximate depth of about 6 to 8 feet bgs. Because of a mechanical breakdown, Tommer completed initial excavation on September 4, 2014. GeoEngineers collected confirmation samples on September 4, 2014. Confirmation samples EX12-2-3 and EX12-1-2.5 from the west sidewall contained COCs at concentrations exceeding site cleanup levels. On September 12, 2014, Tommer extended the excavation laterally approximately 10 feet to the west. Confirmation samples from the extended west sidewall did not contain COCs at concentrations greater than site cleanup levels. Active dewatering occurred while excavating the EX12 excavation.

#### 5.5.11. South PCS Area (Phase 1) Excavation (EX13)

In early October 2014, Tommer encountered soil believed to contain PCS during excavation for the water line replacement on the north side of Mill Road. Tommer began remedial excavation EX13 on October 13, 2014, and the excavation was completed to an approximate depth of 5 to 6 feet bgs. Confirmation samples from the excavation sidewalls did not contain COCs at concentrations exceeding site cleanup levels.

At the request of RH2, material excavated from the EX13 excavation was stockpiled on plastic sheeting next to the excavation and three samples were collected and analyzed for TPH. Field screening during excavation indicated that a layer of excavated soil approximately 2 inches to 4 inches thick was contaminated with petroleum hydrocarbons. Tommer mixed the stockpiled soil and GeoEngineers personnel collected stockpile samples. Analytical results of the stockpile samples indicated that TPH concentrations were less than the established site cleanup level. However, because of the variability of contaminant concentrations within the stockpile, the soil was disposed as PCS at GWRL.

### 5.6. Wood Waste Excavation

The Port and Waste Management negotiated terms for Waste Management to accept wood waste from the site for future use as final cover for GWRL. To accommodate this, Waste Management dedicated a portion of their GWRL facility as a stockpile location to store wood waste material delivered from the site until needed during closure of GWRL. To meet Waste Management's grain-size requirements for final cover material (soil and wood less than 2 inches in diameter), and to reduce the amount of material disposed, the project specifications included requirements for the contractor to process (screen and segregate) excavated wood waste material.

RH2, with assistance from GeoEngineers, established five classes of excavated wood waste mixed with soil. Class 1 material (garbage) was hauled directly to, and disposed at, GWRL. Class 2 material (excavated wood waste and soil, screened finer than 2 inches in diameter) was hauled to GWRL and stockpiled for future use. Class 3 material (excavated large pieces of wood) was disposed at GWRL. Class 4 material (rocks larger than 6 inches in diameter) was crushed and reused on-site as backfill. Class 4 material (large concrete debris) was disposed at the Filion Inert Landfill. Class 5 material (rocks between 2 inches and 6 inches in diameter) were reused on-site as backfill.

Tommer began general wood waste excavation activities after removing stockpiles A through G, starting removal of known areas of contaminated soil and activating the dewatering system. (Portions of the mercury-contaminated areas located outside of the planned wood waste excavation were conducted

simultaneously with the wood waste excavation). The Phase 2 wood waste excavation activities generally were located within the northeast portion of the Phase 2 area, and progressed from east to west until the project budget was reached. The approximate limits of the Phase 2 wood waste excavation is shown on Figure 2.

Approximately 76,302 tons of material was excavated from the Phase 2 wood waste excavation area. Of this, approximately 233 tons of Class 1 (garbage) material was disposed at GWRL. Approximately 76,016 tons of other wood waste material (Class 2 through Class 5) was excavated from the site and processed. Of this, approximately 48,052 tons of Class 2 material was transported and stockpiled at GWRL for use as a final cover; approximately 42 tons of Class 3 material was disposed at GWRL; approximately 27,711 tons of Class 4 and Class 5 rocks were reused as on-site backfill; and approximately 211 tons of Class 4 concrete debris was disposed at the Filion Inert Landfill. In addition, Tommer removed approximately 53 tons of metal debris for recycling. The Phase 2 Earthwork Summary table in "Section 5.1" presents a summary of wood waste excavation quantities.

## 5.7. Backfill and Site Grading

Site excavations were backfilled with imported borrow and excavated Class 4 and 5 rock material. Backfill was generally placed into the excavations as soon as the results of the confirmation samples were available. Remedial excavation conducted in the wood waste removal area of Phase 2 (EX6, EX7, EX8, EX9 and EX10) were generally left open until after the general wood waste excavation was conducted or backfilled as necessary to promote excavation stability or protect site utilities and fences. In addition to backfilling excavations with imported borrow, the northern portion of the site (Phase 1) was graded to direct surface water runoff away from Sunset Highway and the Wenatchee River and promote stormwater infiltration on-site.

Imported borrow consisted of sand from two sources: (1) the GWRL facility; and (2) a borrow source owned by Tommer. Seven samples of proposed borrow material were collected from the GWRL facility by representatives of RH2, and submitted to Analytical Resources, Inc. (ARI) for analytical testing in accordance with the project specifications. Tommer submitted six soil samples from their proposed borrow source to TestAmerica for analytical testing in accordance with the project specifications. Each soil sample submitted for use as backfill was analyzed for the following contaminants of potential concern (COPCs):

- VOCs using EPA Method 8260C.
- SVOCs using EPA Method 8270D.
- Pesticides using EPA Method 8081B.
- Metals (As, Cr, Cu and Pb) using EPA 6010/7000 Series Methods.

The borrow source samples did not contain metals at concentrations exceeding MTCA Method A cleanup levels. Pesticides and cPAHs also were not detected in the samples. Several samples contained acetone and methylene chloride; methylene chloride was detected in two of the samples from the GWRL source at concentrations exceeding the MTCA Method A cleanup level for unrestricted land use. The laboratory indicated in its narrative that acetone and methylene chloride are common laboratory solvents and contaminants. Based on consultation with the laboratory and Ecology, it was concluded that detections of these analytes were most likely the result laboratory contamination. On this basis, results of analytical testing indicated the borrow sources met the project specifications and the borrow sources were approved

for use. A summary of analytical test results on proposed borrow material is presented in Summary of Chemical Analytical Results – Imported Fill, Table 3.

Approximately 72,243 tons of borrow (approximately 39,691 tons from GWRL and 34,552 tons from Tommer) were delivered to the site and used to backfill excavations and regrade portions of the site. The table titled Phase 2 Earthwork Summary in "Section 5.1" presents a summary of imported material quantities.

## 6.0 SUMMARY OF CONFIRMATION SAMPLE CHEMICAL ANALYTICAL RESULTS

Confirmation soil samples from contaminated soil excavation areas were analyzed for one or more of the following: HCID, GRPH, DRPH, ORPH, VOCs, SVOCs, PAHs, mercury and TCLIP-mercury. The following table summarizes the number of samples analyzed from each excavation.

**CONFIRMATION SOIL SAMPLE SUMMARY**

| Excavation | Excavation Label | Number of Confirmation Samples Analyzed |
|---|---|---|
| Water Line (Trench and Excavation) | EX1, EX2, EX11 | 11 |
| Area 3 | EX3 | 6 |
| Storm Line | EX4 | 4 |
| North Hg Area (Phase 1) | EX5 | 6 |
| South PCS Area (Phase 2) | EX6 | 8 |
| North Hg Area (Phase 2) | EX7 | 19; 3 additional stockpile samples |
| Middle Hg Area | EX8 | 5 |
| West Hg Area | EX9 | 5 |
| South Hg Area | EX10 | 6 |
| Area 4 | EX12 | 11 |
| South PCS Area (Phase 1) | EX13 | 4; 3 additional stockpile samples |

Chemical analytical results for confirmation samples are summarized in Table 1. Electronic copies of laboratory reports are provided in Appendix B.

Analytical laboratory results of confirmation samples collected from the final limits of remedial excavations EX3 through EX10, and EX12 and EX13 indicated remaining site soil contained COCs at concentrations less than applicable cleanup levels. However, confirmation samples EX1-2-3 and EX1-3-3, located near the property line within the Water Line Extension (EX1, EX2 and EX11), contained TPH at concentrations exceeding the site-specific MTCA Method B cleanup level for TPH. Sample EX1-3-3 also exceeded the MTCA Method A cleanup level for naphthalenes. The remedial excavation was not extended further because of the proximity of the excavation to the property line.

Remaining Confirmation Samples Exceeding Cleanup Levels, Figure 7 presents a site plan showing the locations of confirmation samples EX-1-2-3, EX1-3-3, as well as previous confirmation sample A2-W38-S-4 (collected during Phase 1 activities), which contained analytes at concentrations exceeding applicable cleanup levels, which were not further excavated because of proximity to property lines.

## 7.0 GROUNDWATER MONITORING

### 7.1. Infiltration Area Water Sample

At the request of RH2, GeoEngineers collected one grab water sample from the dewatering system at the outfall to the infiltration area on August 28, 2014 and submitted it to TestAmerica for analysis of total arsenic and total mercury using EPA 200.8 Series Methods. Arsenic was detected in the sample (Infiltration Pond 8/28/14) at a concentration of 0.0057 mg/L. This concentration is greater than the MTCA Method A groundwater cleanup level (0.005 mg/L). Mercury was not detected. Analytical results for water sampled from the infiltration area are provided in Summary of Chemical Analytical Results – Infiltration Pond Water Sample, Table 2.

### 7.2. Post-Construction Groundwater Monitoring

GeoEngineers conducted groundwater sampling on December 2 and December 3, 2014 from site monitoring wells (MW-1 through MW-9, B-1, and OW-1) after Phase 2 activities had been concluded. Approximate locations of site monitoring wells are shown in Arsenic Detection, December 2, 2014, Figure 8. Depth to groundwater was measured in each well and water quality parameters were recorded while purging the wells using low-flow sampling techniques. Measured water quality parameters included: pH, specific conductivity, turbidity, dissolved oxygen (DO), temperature, and oxidation-reduction potential (ORP). Soluble ferrous iron also was measured in the field using a Hach IR-18C color disc kit and the 1,10-phenanthroline testing method. Headspace vapors measured within the well and water quality parameters were recorded during purging activities and are presented in Summary of Field Quality Parameters - Groundwater, Table 4. Purge water was drummed and stored on-site pending chemical analytical results.

### 7.3. Groundwater Elevation Monitoring

Groundwater depths were measured from the top of the well casing on December 2, 2014 at site monitoring wells MW-1 through MW-9, B-1 and OW-1. Groundwater depths ranged from about 2.75 feet (MW-9) to 6.30 feet (MW-2) less than the top of well casing. Groundwater depths are included in Table 4. Groundwater elevations calculated from depth to water measurements were inconsistent with previous monitoring events and calculated elevations did not provide a clear picture of groundwater flow direction and gradient. Construction activities might have disturbed the local groundwater regime or altered the groundwater monitoring wells. Therefore, groundwater flow and gradient at the site were not estimated for the December 2014 groundwater monitoring event.

### 7.4. Groundwater Sampling

GeoEngineers purged and sampled monitoring wells in general compliance with standard low-flow sampling methodology. A portable bladder pump equipped with a disposable bladder and disposable tubing was used to purge and sample monitoring wells. Groundwater water quality parameters generally were measured at 3-minute intervals during well purging. Groundwater samples were collected when each water quality parameter had stabilized in conformance with the criteria presented in Appendix A or the maximum purge time had been achieved.

# 8.0 GROUNDWATER CHEMICAL ANALYTICAL RESULTS

## 8.1. Groundwater Chemical Analytical Results

### 8.1.1. General

Groundwater samples from monitoring wells MW-1 through MW-9, B-1, and OW-1 were submitted to TestAmerica for analysis of GRPH, DRPH, ORPH, BTEX, arsenic and mercury. A duplicate sample was collected from well MW-3. Analytical results for these samples are tabulated and compared to regulatory levels in Summary of Chemical Analytical Test Results – Groundwater, Table 5. TestAmerica's laboratory reports are provided in Appendix B.

### 8.1.2. Water Quality Parameters

Well headspace readings were obtained from monitoring wells using a PID immediately after removing the well caps during groundwater sampling. A headspace reading of less than 1 part per million (ppm) was measured in the site monitoring wells.

Temperature, pH, turbidity, DO, specific conductivity, and ORP were measured in the field during groundwater sampling. Temperatures increased about 4.37 degrees Celsius between upgradient well MW-8 and a downgradient well MW-4 (upgradient and downgradient wells were based on groundwater elevations from prior monitoring events). pH levels ranged from 6.08 in well B-1 to 7.17 at well MW-2. DO concentrations ranged from 0.0 mg/L at MW-3, MW-6, MW-7, MW-8, MW-9, and B-1 to 0.81 mg/L at OW-1. ORP values ranged from 101 millivolts at MW-8, to 352 millivolts at OW-1.

### 8.1.3. Chemical Analytical Results

Groundwater analytical results for the December 2014 event are summarized by the following:

- GRPH, BTEX and mercury were not detected in groundwater samples collected from site monitoring wells during this event.
- DRPH was detected at a concentration of 0.447 mg/L in the groundwater sample from monitoring well B-1. This concentration is less than the MTCA Method A Cleanup Level of 0.500 mg/L. DRPH was not detected in groundwater samples collected from the other site monitoring wells sampled during this monitoring event.
- ORPH was detected at a concentration of 0.387 mg/L in the groundwater sample from monitoring well MW-4. This concentration is less than the MTCA Method A Cleanup Level of 0.500 mg/L. ORPH was not detected in groundwater samples collected from the other site monitoring wells.
- Arsenic was detected in groundwater samples collected from the following monitoring wells at concentrations exceeding the MTCA Method A cleanup level of 5 micrograms per liter (µg/L):
    - MW-2 (7.1 µg/L);
    - MW-5 (5.2 µg/L);
    - MW-6 (5.4 µg/L);
    - MW-7 (9.3 µg/L);
    - MW-8 (6.5 µg/L); and
    - MW-9 (5.4 µg/L).

Arsenic also was detected in groundwater samples from wells MW-1, MW-3 and MW-4, and the duplicate sample, at concentrations less than the MTCA Method A cleanup level. Arsenic was not detected in groundwater samples collected from wells B-1 and OW-1.

Compared to the December 3, 2013 groundwater monitoring event, arsenic concentrations in groundwater samples decreased for samples collected from wells MW-1, MW-3, MW-7 and MW-8; and increased in samples collected from wells MW-2, MW-4, MW-5, MW-6 and MW-7. Graphs of arsenic concentrations versus groundwater elevation for wells MW-1 through MW-9 are presented in Arsenic versus Groundwater Elevation, Figures 9 through 17. Note that because of possible adjustments to the top of the well casing for monitoring wells MW-5, MW-6 and MW-9 during construction, depth to groundwater is presented instead of groundwater elevations for these wells. DRPH and ORPH concentrations decreased in groundwater samples collected from wells B-1 and MW-3 and increased for MW-4, relative to the December 2013 monitoring event. While field-measured DO measurements were not significantly different from previous sampling events, field-measured ORP values increased in each sampled well relative to previous sampling events.

## 9.0 CONCLUSIONS AND SUMMARY

During Phase 2 activities, approximately 6,702 tons of material containing COCs was excavated from the site and disposed offsite at the GWRL. Approximately 9,113 tons of stockpiled material from Phase 1 containing COCs also were disposed offsite at the GWRL.

Approximately 76,302 tons of material was excavated from the Phase 2 wood waste excavation area. Of this, approximately 48,052 tons of processed wood waste was delivered to the GWRL and stockpiled for future use as a final cover for the GWRL facility. Approximately 27,711 tons of gravel, cobbles and boulders screened from the wood waste were reused as on-site backfill. Approximately 42 tons of wood debris and 233 tons of garbage were disposed at the GWRL.

Approximately 211 tons of concrete debris was disposed off-site at the Filion Inert Landfill located in Cashmere, Washington, and approximately 53 tons of metal debris was removed for recycling.

Approximately 74,243 tons of common borrow was imported to backfill and regrade the site.

Field screening and confirmation soil sample results indicate soil with COC concentrations less than established site cleanup levels was reached for each remedial excavation with one exception. Two confirmation samples (EX1-2-3 and EX1-3-3) collected from the southeast side of the Water Line Excavation (EX1, EX2 and EX11) exceeded site cleanup levels for TPH. Sample EX1-3-3 also exceeded site cleanup levels for total naphthalenes. The extent of the Water Line Excavation in this area was limited by the property boundary to the south and east.

One confirmation soil sample collected during Phase 1 activities (A2-W38-S-4) contained TPH at a concentration (4,770 mg/kg) exceeding the site-specific MTCA Method B cleanup level. This previous confirmation sample was collected at the Mill Road right-of-way west of EX3, which prevented further remedial excavation at that location.

Groundwater sampling was conducted on December 2 and December 3, 2014 from site monitoring wells after Phase 2 remedial activities were concluded. Petroleum-based COCs were either not detected or detected at concentrations less than MTCA Method A cleanup levels for the December 2014 groundwater monitoring event. In comparison, during October and December 2013 groundwater sampling events, both DRPH and ORPH was detected at concentrations exceeding MTCA Method A cleanup levels in wells B-1 and MW-3. Comparison between the December 2013 and December 2014 groundwater sampling events indicate that Phase 2 remedial activities might have been successful in reducing TPH concentrations at the site.

Samples collected during the December 2014 groundwater monitoring event indicate groundwater exceeds MTCA Method A cleanup level for arsenic near monitoring wells MW-2, MW-5, MW-6, MW-7, MW-8, and MW-9. Groundwater well locations and cleanup level exceedances are presented in Figure 8. The highest detected arsenic concentration was 9.3 µg/L (MW-7). In comparison, groundwater sampling conducted in December 2013 detected arsenic concentrations greater than MTCA Method A cleanup level in monitoring wells MW-2, MW-3, MW-7 and MW-8 with a highest detected concentration level of 17 µg/L (MW-7).

The presence of remaining PCS along the eastern property boundary within the Water Line Excavation in Parcel 200, and remaining PCS near Phase 1 confirmation sample A2-W38-S-4 in Parcel 550, will require a restrictive covenant for those affected parcels until such time remedial excavations can be extended into adjacent properties and remaining contaminated soil can be excavated and properly disposed of offsite. Additionally, site-wide arsenic-contaminated groundwater will require a restrictive covenant.

## 10.0 REFERENCES


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TABLES

GeoEngineers

# Table 1

## Summary of Chemical Analytical Results - Confirmation Soil Samples[1]

Former Cashmere Mill Site

Cashmere, Washington

| | | | Area | Water Line (EX1, EX2, EX11) | | | | | | | | | | | Area 3 (EX3) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EX1-1-2 | EX1-2-3 | EX1-3-3 | EX1-4-3 | EX1-5-3 | EX2-1-3 | EX11-1-6 | EX11-2-10 | EX11-3-4 | EX11-4-3 | EX11-5-3.25 | EX3-1-4 | EX3-2-4 | EX3-3-4 | EX3-4-4 | EX3-5-5 | EX3-6-4 |
| | | | Sample Date | 7/16/2014 | 7/16/2014 | 7/16/2014 | 7/16/2014 | 7/16/2014 | 7/16/2014 | 8/28/2014 | 8/28/2014 | 8/28/2014 | 8/28/2014 | 8/28/2014 | 7/17/2014 | 7/17/2014 | 7/17/2014 | 7/17/2014 | 7/17/2014 | 7/21/2014 |
| | | | Type | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Bottom | Bottom | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall |
| | | | Status | In-Place | In-Place | In-Place | In-Place | In-Place | Removed | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place |
| **Method** | **Analyte** | **MTCA Soil CUL[2] (mg/kg)** | **Units** | | | | | | | | | | | | | | | | | |
| NWTPH-HCID[3] | Gasoline-range hydrocarbons | | mg/kg | - | **130** | - | - | - | 300 U | - | - | - | - | - | - | - | - | - | - | - |
| | Diesel-range hydrocarbons | | mg/kg | - | **7,300** | - | - | - | **6,200** | - | - | - | - | - | - | - | - | - | - | - |
| | Heavy oil-range hydrocarbons | | mg/kg | - | **20,000** | - | - | - | **23,000** | - | - | - | - | - | - | - | - | - | - | - |
| NWTPH-GX[4] | Gasoline-range hydrocarbons | | mg/kg | 5.63 U | **201 J** | **665 J** | 9.62 U | 6.70 U | **17.7** | **13.7** | **40.7** | 10.4 U | 7.77 U | 7.49 U | 5.27 U | **32.8** | **20.4** | **7.11** | 11.7 U | 5.72 U |
| NWTPH-DX[5] | Diesel-range hydrocarbons | | mg/kg | **59.0** | **15,100** | **5,950** | **41.1** | **38.5** | **8,740** | **10.9** | **458** | **22.0 J** | 13.1 U | **132 J** | **26.7** | **124** | **10.1** | **20.0** | **101** | 10.1 U |
| | Heavy oil-range hydrocarbons | | mg/kg | **265** | **41,200** | **11,800** | **142** | **168** | **33,900** | **34.8** | **1,860** | **84.0 J** | 32.8 U | **589** | **174** | **782** | **37.9** | **62.2** | **209** | 25.2 U |
| Calculated Total Petroleum Hydrocarbons[6] | | 3,400 | mg/kg | <330 | **56,501** | **18,415** | <193 | <213 | **42,658** | **59** | **2,359** | <116 | <54 U | <729 | <206 | **939** | **68.4** | **89.3** | <322 | <42 U |
| Metals[7] | Mercury | 2 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Mercury (TCLP)[8] | 0.2 | mg/L | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| VOCs[9] | 1,2,4-Trimethylbenzene | | mg/kg | - | - | **8.44** | - | - | **0.205 J** | 0.118 U | **0.830** | **0.0321 J** | 0.155 U | **0.0764 J** | - | - | - | - | 0.234 U | - |
| | 1,3,5-Trimethylbenzene | | mg/kg | - | - | **3.19** | - | - | **0.129 J** | 0.118 U | **0.259** | 0.207 U | 0.155 U | 0.150 U | - | - | - | - | 0.234 U | - |
| | 4-Methyl-2-Pentanone | | mg/kg | - | - | **0.805 J** | - | - | 3.04 U | 1.18 U | 1.57 U | 2.07 U | 1.55 U | 1.50 U | - | - | - | - | 2.34 U | - |
| | Acetone | | mg/kg | - | - | **0.359 J** | - | - | 9.12 U | **1.06 J** | **0.888 J** | **0.961 J** | **0.414 J** | **0.502 J** | - | - | - | - | **1.84 J** | - |
| | Benzene | 0.03 | mg/kg | - | - | 0.0278 U | - | - | 0.0295 U[13] | 0.0177 U | 0.0236 U | 0.0201 U[13] | 0.0233 U | 0.0225 U | - | - | - | - | 0.0227 U[13] | - |
| | Bromoform (Tribromomethane) | | mg/kg | - | - | 0.185 U | - | - | 0.304 U | 0.118 U | 0.157 U | 0.207 U | 0.155 U | 0.150 U | - | - | - | - | 0.234 U | - |
| | Chlorobenzene | | mg/kg | - | - | **0.469** | - | - | 0.304 U | 0.118 U | 0.157 U | 0.207 U | 0.155 U | 0.150 U | - | - | - | - | 0.234 U | - |
| | Dibromochloromethane | | mg/kg | - | - | 0.185 U | - | - | 0.304 U | 0.118 U | 0.157 U | 0.207 U | 0.155 U | 0.150 U | - | - | - | - | 0.234 U | - |
| | Ethylbenzene | 6 | mg/kg | - | - | **0.0612 J** | - | - | 0.304 U | 0.118 U | 0.157 U | 0.207 U | 0.155 U | 0.150 U | - | - | - | - | 0.234 U | - |
| | Isopropylbenzene (Cumene) | | mg/kg | - | - | **0.359** | - | - | 0.304 U | **0.0349 J** | **0.0630 J** | 0.207 U | 0.155 U | 0.150 U | - | - | - | - | 0.234 U | - |
| | Methylene Chloride[10] | 0.02 | mg/kg | - | - | 0.00964 U | - | - | 0.0158 U | 0.00615 U | 0.00818 U | 0.0108 U | 0.00808 U | 0.00779 U | - | - | - | - | 0.0121 U | - |
| | Methyl t-butyl ether | 0.1 | mg/kg | - | - | 0.0927 U | - | - | 0.00973 U[11] | 0.0591 U | 0.0787 U | 0.00663 U[11] | 0.0777 U | 0.0749 U | - | - | - | - | 0.00748 U[11] | - |
| | Naphthalene | 5 | mg/kg | - | - | **2.64** | - | - | **0.125 J** | 0.236 U | **0.331** | 0.415 U | 0.311 U | 0.300 U | - | - | - | - | **0.159 J** | - |
| | n-Butylbenzene | | mg/kg | - | - | **1.51** | - | - | 0.304 U | 0.118 U | **0.153 J** | 0.207 U | 0.155 U | 0.150 U | - | - | - | - | 0.234 U | - |
| | n-Propylbenzene | | mg/kg | - | - | 0.185 U | - | - | 0.304 U | 0.118 U | **0.0992 J** | 0.207 U | 0.155 U | 0.150 U | - | - | - | - | 0.234 U | - |
| | p-Isopropyltoluene | | mg/kg | - | - | **3.29** | - | - | 0.304 U | 0.118 U | **0.172** | 0.207 U | 0.155 U | 0.150 U | - | - | - | - | 0.234 U | - |
| | Sec-Butylbenzene | | mg/kg | - | - | **1.37** | - | - | 0.304 U | 0.118 U | **0.0944 J** | 0.207 U | 0.155 U | 0.150 U | - | - | - | - | 0.234 U | - |
| | Toluene | 7 | mg/kg | - | - | **0.130 J** | - | - | 0.304 U | 0.118 U | 0.157 U | 0.207 U | 0.155 U | 0.150 U | - | - | - | - | 0.234 U | - |
| | Xylene, m-,p- | 9 | mg/kg | - | - | **0.711 J** | - | - | 1.22 U | 0.473 U | **0.124 J** | **0.0591 J** | 0.621 U | **0.0315 J** | - | - | - | - | 0.935 U | - |
| | Xylene, o- | 9 | mg/kg | - | - | **0.182 J** | - | - | 0.608 U | 0.236 U | 0.315 U | 0.415 U | 0.311 U | 0.300 U | - | - | - | - | 0.467 U | - |
| | Total Xylenes | 9 | mg/kg | - | - | 0.893 J | - | - | 1.828 U | 0.709 U | 0.439 U | 0.4741 U | 0.932 U | 0.3315 U | - | - | - | - | 1.402 U | - |

| | | | Area | Water Line (EX1, EX2, EX11) | | | | | | | | | | | Area 3 (EX3) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EX1-1-2 | EX1-2-3 | EX1-3-3 | EX1-4-3 | EX1-5-3 | EX2-1-3 | EX11-1-6 | EX11-2-10 | EX11-3-4 | EX11-4-3 | EX11-5-3.25 | EX3-1-4 | EX3-2-4 | EX3-3-4 | EX3-4-4 | EX3-5-5 | EX3-6-4 |
| | | | Sample Date | 7/16/2014 | 7/16/2014 | 7/16/2014 | 7/16/2014 | 7/16/2014 | 7/16/2014 | 8/28/2014 | 8/28/2014 | 8/28/2014 | 8/28/2014 | 8/28/2014 | 7/17/2014 | 7/17/2014 | 7/17/2014 | 7/17/2014 | 7/17/2014 | 7/21/2014 |
| | | | Type | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Bottom | Bottom | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall |
| | | | Status | In-Place | In-Place | In-Place | In-Place | In-Place | Removed | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place |
| **Method** | **Analyte** | **MTCA Soil CUL[2] (mg/kg)** | **Units** | | | | | | | | | | | | | | | | | |
| SVOCs[12] | 1-Methylnaphthalene | | mg/kg | - | - | **6.6 J** | - | - | 1.9 U | - | - | - | - | **0.047** | - | - | - | - | 0.46 U | - |
| | 2-Methylnaphthalene | | mg/kg | - | - | **8.5 J** | - | - | 1.9 U | - | - | - | - | **0.065** | - | - | - | - | 0.46 U | - |
| | Anthracene | | mg/kg | - | - | 1.5 U | - | - | 1.9 U | - | - | - | - | 0.027 U | - | - | - | - | 0.46 U | - |
| | Benzo(a)anthracene | | mg/kg | - | - | 1.5 U | - | - | 1.9 U | - | - | - | - | 0.027 U | - | - | - | - | 0.46 U | - |
| | Benzo(a)pyrene | | mg/kg | - | - | 1.5 U | - | - | 1.9 U | - | - | - | - | 0.04 U | - | - | - | - | 0.46 U | - |
| | Benzo(b)fluoranthene | | mg/kg | - | - | 1.5 U | - | - | 1.9 U | - | - | - | - | 0.027 U | - | - | - | - | 0.46 U | - |
| | Benzo(ghi)perylene | | mg/kg | - | - | 1.5 U | - | - | 1.9 U | - | - | - | - | 0.033 UJ | - | - | - | - | 0.46 U | - |
| | Chrysene | | mg/kg | - | - | 1.5 U | - | - | 1.9 U | - | - | - | - | 0.033 U | - | - | - | - | 0.46 U | - |
| | Fluorene | | mg/kg | - | - | 1.5 U | - | - | 1.9 U | - | - | - | - | 0.027 U | - | - | - | - | 0.46 U | - |
| | Indeno(1,2,3-cd)pyrene | | mg/kg | - | - | 1.5 U | - | - | 1.9 U | - | - | - | - | 0.053 UJ | - | - | - | - | 0.46 U | - |
| | Bis(2-Ethylhexyl) Phthalate | | mg/kg | - | - | 1.5 U | - | - | 1.9 U | - | - | - | - | 0.800 U | - | - | - | - | 0.46 U | - |
| | Fluoranthene | | mg/kg | - | - | 1.5 U | - | - | 1.9 U | - | - | - | - | **0.054** | - | - | - | - | 0.46 U | - |
| | Naphthalene | 5 | mg/kg | - | - | **3.0 J** | - | - | 1.9 U | - | - | - | - | **0.043** | - | - | - | - | 0.46 U | - |
| | Phenanthrene | | mg/kg | - | - | 1.5 U | - | - | 1.9 U | - | - | - | - | **0.047** | - | - | - | - | 0.46 U | - |
| | Pyrene | | mg/kg | - | - | 1.5 U | - | - | 1.9 U | - | - | - | - | **0.058** | - | - | - | - | 0.46 U | - |
| Total Napthalenes[13] | | 5 | mg/kg | | | **18.1 J** | | | **5.7 U[15]** | | | | | **0.155** | | | | | 1.38 U | |
| cPAH | cPAH TEQ[14] | 0.1 | mg/kg | - | - | 0 | - | - | 0 | - | - | - | - | 0 | - | - | - | - | 0 | - |

| | | | Area | Storm Line (EX4) | | | | North Hg Area (Phase I) (EX5) | | | | | | South PCS Area (Phase 2) (EX6) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EX4-1-6 | EX4-2-6 | EX4-3-6 | EX4-4-6 | EX5-1-8 | EX5-2-8 | EX5-3-8 | EX5-4-8 | EX5-7-8 | EX5-8-8 | EX6-1-3 | EX6-2-3 | EX6-3-3 | EX6-4-3 | EX6-5-3 | EX6-6-3 |
| | | | Sample Date | 7/21/2014 | 7/21/2014 | 7/21/2014 | 7/21/2014 | 7/22/2014 | 7/22/2014 | 7/22/2014 | 7/22/2014 | 7/22/2014 | 7/22/2014 | 7/23/2014 | 7/23/2014 | 7/23/2014 | 7/23/2014 | 7/23/2014 | 7/23/2014 |
| | | | Type | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall |
| | | | Status | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | Removed | In-Place | In-Place | In-Place | In-Place | Removed |
| **Method** | **Analyte** | **MTCA Soil CUL[2] (mg/kg)** | **Units** | | | | | | | | | | | | | | | | |
| NWTPH-HCID[3] | Gasoline-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Diesel-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Heavy oil-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| NWTPH-GX[4] | Gasoline-range hydrocarbons | | mg/kg | **13.5** | **4.98** | **10.0** | 8.59 U | - | - | - | **164 J** | **5.43** | **6.29** | **6.21** | 7.56 U | 5.70 U | **11.0** | 4.96 U | 7.21 U |
| NWTPH-DX[5] | Diesel-range hydrocarbons | | mg/kg | 12.0 U | 9.94 U | 10.3 U | 11.3 U | - | - | - | **289** | 10.5 U | 7.63 U | **31.6** | **419 J** | **65.7** | **68.0** | 10.9 U | **796** |
| | Heavy oil-range hydrocarbons | | mg/kg | 29.9 U | 24.9 U | 25.7 U | **36.7** | - | - | - | **203** | 26.3 U | 19.1 U | **55.7** | **1,480 J** | **207** | **131** | 27.1 U | **3,250** |
| Calculated Total Petroleum Hydrocarbons[6] | | 3,400 | mg/kg | <56 | <40 | <46 | <57 | - | - | - | **656** | <43 | <34 | **93.5** | <1907 | <279 | **210** | <43 U | **<4054** |
| Metals[7] | Mercury | 2 | mg/kg | - | - | - | - | 0.0472 U | 0.0446 U | 0.0446 U | 0.0431 U | - | - | - | - | - | - | - | - |
| | Mercury (TCLP)[8] | 0.2 | mg/L | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| VOCs[9] | 1,2,4-Trimethylbenzene | | mg/kg | - | - | - | 0.172 U | - | - | - | - | - | - | - | - | - | - | - | 0.144 U |
| | 1,3,5-Trimethylbenzene | | mg/kg | - | - | - | 0.172 U | - | - | - | - | - | - | - | - | - | - | - | 0.144 U |
| | 4-Methyl-2-Pentanone | | mg/kg | - | - | - | 1.72 U | - | - | - | - | - | - | - | - | - | - | - | 1.44 U |
| | Acetone | | mg/kg | - | - | - | **0.423 J** | - | - | - | - | - | - | - | - | - | - | - | **2.32 J** |
| | Benzene | 0.03 | mg/kg | - | - | - | 0.0258 U | - | - | - | 0.0158 U | - | - | - | - | - | - | - | 0.0216 U |
| | Bromoform (Tribromomethane) | | mg/kg | - | - | - | 0.172 U | - | - | - | - | - | - | - | - | - | - | - | 0.144 U |
| | Chlorobenzene | | mg/kg | - | - | - | 0.172 U | - | - | - | - | - | - | - | - | - | - | - | 0.144 U |
| | Dibromochloromethane | | mg/kg | - | - | - | 0.172 U | - | - | - | - | - | - | - | - | - | - | - | 0.144 U |
| | Ethylbenzene | 6 | mg/kg | - | - | - | 0.172 U | - | - | - | 0.105 U | - | - | - | - | - | - | - | 0.144 U |
| | Isopropylbenzene (Cumene) | | mg/kg | - | - | - | 0.172 U | - | - | - | - | - | - | - | - | - | - | - | 0.144 U |
| | Methylene Chloride[10] | 0.02 | mg/kg | - | - | - | 0.00894 U | - | - | - | - | - | - | - | - | - | - | - | **0.0563 J** |
| | Methyl t-butyl ether | 0.1 | mg/kg | - | - | - | 0.0859 U | - | - | - | - | - | - | - | - | - | - | - | 0.0721 U |
| | Naphthalene | 5 | mg/kg | - | - | - | 0.344 U | - | - | - | - | - | - | - | - | - | - | - | 0.289 U |
| | n-Butylbenzene | | mg/kg | - | - | - | 0.172 U | - | - | - | - | - | - | - | - | - | - | - | 0.144 U |
| | n-Propylbenzene | | mg/kg | - | - | - | 0.172 U | - | - | - | - | - | - | - | - | - | - | - | 0.144 U |
| | p-Isopropyltoluene | | mg/kg | - | - | - | 0.172 U | - | - | - | - | - | - | - | - | - | - | - | 0.144 U |
| | Sec-Butylbenzene | | mg/kg | - | - | - | 0.172 U | - | - | - | - | - | - | - | - | - | - | - | 0.144 U |
| | Toluene | 7 | mg/kg | - | - | - | 0.172 U | - | - | - | 0.105 U | - | - | - | - | - | - | - | **0.0606 J** |
| | Xylene, m-,p- | 9 | mg/kg | - | - | - | 0.687 U | - | - | - | 0.421 U | - | - | - | - | - | - | - | 0.577 U |
| | Xylene, o- | 9 | mg/kg | - | - | - | 0.344 U | - | - | - | 0.211 U | - | - | - | - | - | - | - | 0.289 U |
| | Total Xylenes | 9 | mg/kg | - | - | - | 1.031 U | - | - | - | 0.632 U | - | - | - | - | - | - | - | 0.866 U |

| | | | Area | Storm Line (EX4) | | | | North Hg Area (Phase I) (EX5) | | | | | | South PCS Area (Phase 2) (EX6) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EX4-1-6 | EX4-2-6 | EX4-3-6 | EX4-4-6 | EX5-1-8 | EX5-2-8 | EX5-3-8 | EX5-4-8 | EX5-7-8 | EX5-8-8 | EX6-1-3 | EX6-2-3 | EX6-3-3 | EX6-4-3 | EX6-5-3 | EX6-6-3 |
| | | | Sample Date | 7/21/2014 | 7/21/2014 | 7/21/2014 | 7/21/2014 | 7/22/2014 | 7/22/2014 | 7/22/2014 | 7/22/2014 | 7/22/2014 | 7/22/2014 | 7/23/2014 | 7/23/2014 | 7/23/2014 | 7/23/2014 | 7/23/2014 | 7/23/2014 |
| | | | Type | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall |
| | | | Status | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | Removed | In-Place | In-Place | In-Place | In-Place | Removed |
| **Method** | **Analyte** | **MTCA Soil CUL[2] (mg/kg)** | **Units** | | | | | | | | | | | | | | | | |
| SVOCs[12] | 1-Methylnaphthalene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.422** | - | - | - | - | - | - | - | 0.41 U |
| | 2-Methylnaphthalene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.178** | - | - | - | - | - | - | - | 0.41 U |
| | Anthracene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.0225** | - | - | - | - | - | - | - | 0.41 U |
| | Benzo(a)anthracene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.0116** | - | - | - | - | - | - | - | 0.41 U |
| | Benzo(a)pyrene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.0194** | - | - | - | - | - | - | - | 0.41 U |
| | Benzo(b)fluoranthene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.0255** | - | - | - | - | - | - | - | 0.41 U |
| | Benzo(ghi)perylene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.0194** | - | - | - | - | - | - | - | 0.41 U |
| | Chrysene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.0194** | - | - | - | - | - | - | - | 0.41 U |
| | Fluorene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.0341** | - | - | - | - | - | - | - | 0.41 U |
| | Indeno(1,2,3-cd)pyrene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.0147** | - | - | - | - | - | - | - | 0.41 U |
| | Bis(2-Ethylhexyl) Phthalate | | mg/kg | - | - | - | 0.41 U | - | - | - | - | - | - | - | - | - | - | - | 0.41 U |
| | Fluoranthene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.0317** | - | - | - | - | - | - | - | 0.41 U |
| | Naphthalene | 5 | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.201** | - | - | - | - | - | - | - | 0.41 U |
| | Phenanthrene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.0728** | - | - | - | - | - | - | - | 0.41 U |
| | Pyrene | | mg/kg | - | - | - | 0.41 U | 0.0106 U | 0.0105 U | 0.0108 U | **0.0286** | - | - | - | - | - | - | - | 0.41 U |
| Total Napthalenes[13] | | 5 | mg/kg | | | | 1.23 U | 0.0318U | 0.0315 U | 0.0324 U | **0.801** | | | | | | | | 1.23 U |
| cPAH | cPAH TEQ[14] | 0.1 | mg/kg | - | - | - | 0 | 0 | 0 | 0 | **0.0258** | - | - | - | - | - | - | - | 0 |

| | | | Area | South PCS Area (Phase 2) | | North Hg Area (Phase II) (EX7) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EX6-9-3 | EX6-10-3 | EX7-1-2 | EX7-2-2 | EX7-3-2 | EX7-4-2 | EX7-6-2 | EX7-7-3 | EX7-8-2 | EX7-9-3 | EX7-10-2 | EX7-11-3 | EX7-12-2 | EX7-13-3 | EX7-14-2 | EX7-15-3 |
| | | | Sample Date | 7/31/2014 | 7/31/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 8/7/2014 | 8/7/2014 |
| | | | Type | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall |
| | | | Status | In-Place | In-Place | Removed | Removed | Removed | Removed | Removed | Removed | Removed | Removed | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place |
| **Method** | **Analyte** | **MTCA Soil CUL[2] (mg/kg)** | **Units** | | | | | | | | | | | | | | | | |
| NWTPH-HCID[3] | Gasoline-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Diesel-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Heavy oil-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| NWTPH-GX[4] | Gasoline-range hydrocarbons | | mg/kg | 6.61 U | 5.61 U | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| NWTPH-DX[5] | Diesel-range hydrocarbons | | mg/kg | **33.8** | **269** | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Heavy oil-range hydrocarbons | | mg/kg | **108** | **1,720** | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Calculated Total Petroleum Hydrocarbons[6] | | 3,400 | mg/kg | <149 | <1,995 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Metals[7] | Mercury | 2 | mg/kg | - | - | **6.500** | **1.610** | **1.890** | **1.220** | **0.91** | **29** | **0.87** | **3.7** | **1.2** | 0.086 U | **0.60** | **1.3** | **0.567** | **1.500** |
| | Mercury (TCLP)[8] | 0.2 | mg/L | - | - | - | - | - | . | - | - | - | - | - | - | - | - | - | - |
| VOCs[9] | 1,2,4-Trimethylbenzene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 1,3,5-Trimethylbenzene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4-Methyl-2-Pentanone | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Acetone | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Benzene | 0.03 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Bromoform (Tribromomethane) | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Chlorobenzene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Dibromochloromethane | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Ethylbenzene | 6 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Isopropylbenzene (Cumene) | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Methylene Chloride[10] | 0.02 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Methyl t-butyl ether | 0.1 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Naphthalene | 5 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | n-Butylbenzene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | n-Propylbenzene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | p-Isopropyltoluene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Sec-Butylbenzene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Toluene | 7 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Xylene, m-,p- | 9 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Xylene, o- | 9 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Total Xylenes | 9 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| | | | Area | South PCS Area (Phase 2) | | North Hg Area (Phase II) (EX7) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EX6-9-3 | EX6-10-3 | EX7-1-2 | EX7-2-2 | EX7-3-2 | EX7-4-2 | EX7-6-2 | EX7-7-3 | EX7-8-2 | EX7-9-3 | EX7-10-2 | EX7-11-3 | EX7-12-2 | EX7-13-3 | EX7-14-2 | EX7-15-3 |
| | | | Sample Date | 7/31/2014 | 7/31/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 8/7/2014 | 8/7/2014 |
| | | | Type | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall |
| | | | Status | In-Place | In-Place | Removed | Removed | Removed | Removed | Removed | Removed | Removed | Removed | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place |
| **Method** | **Analyte** | **MTCA Soil CUL[2] (mg/kg)** | **Units** | | | | | | | | | | | | | | | | |
| SVOCs[12] | 1-Methylnaphthalene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2-Methylnaphthalene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Anthracene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Benzo(a)anthracene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Benzo(a)pyrene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Benzo(b)fluoranthene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Benzo(ghi)perylene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Chrysene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Fluorene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Indeno(1,2,3-cd)pyrene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Bis(2-Ethylhexyl) Phthalate | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Fluoranthene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Naphthalene | 5 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Phenanthrene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Pyrene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total Napthalenes[13] | | 5 | mg/kg | | | | | | | | | | | | | | | | |
| cPAH | cPAH TEQ[14] | 0.1 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| | | | Area | North Hg Area (Phase II) (EX7) | | | | | | | | Middle Hg Area (EX8) | | | | | West Hg Area (EX9) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EX7-16-2 | EX7-17-3 | EX7-18-3.5 | EX7-19-3 | EX7-20-2 | EX7-SP-1 | EX7-SP-2 | EX7-SP-3 | EX8-1-5 | EX8-2-5 | EX8-3-5 | EX8-4-5 | EX8-6-4 | EX9-1-4 | EX9-2-4 | EX9-3-4 | EX9-4-4 | EX9-5-4 |
| | | | Sample Date | 8/7/2014 | 8/7/2014 | 8/27/2014 | 8/27/2014 | 8/27/2014 | 8/27/2014 | 8/27/2014 | 8/27/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/31/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 |
| | | | Type | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Stockpile | Stockpile | Stockpile | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Bottom |
| | | | Status | Removed | Removed | In-Place | In-Place | In-Place | Removed | Removed | Removed | In-Place | In-Place | In-Place | Removed | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place |
| **Method** | **Analyte** | **MTCA Soil CUL[2] (mg/kg)** | **Units** | | | | | | | | | | | | | | | | | | |
| NWTPH-HCID[3] | Gasoline-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Diesel-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Heavy oil-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| NWTPH-GX[4] | Gasoline-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | 5.17 U | 6.16 U | **10.8** | 4.53 U | 10.0 U |
| NWTPH-DX[5] | Diesel-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | 10.7 U | 11.5 U | 10.9 U | 10.8 U | **42.5** |
| | Heavy oil-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | 26.8 U | 28.7 U | 27.2 U | 27.0 U | **121** |
| Calculated Total Petroleum Hydrocarbons[6] | | 3,400 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | <43 | <47 | <49 | <43 | <174 |
| Metals[7] | Mercury | 2 | mg/kg | **3.380** | **29.300** | **0.804 J** | **1.520** | **0.351** | **1.930** | **1.170** | **0.779** | 0.0431 U | 0.0481 U | 0.0417 U | **2.510** | **0.55** | 0.0472 U | 0.0455 U | 0.0417 U | 0.0403 U | **0.120** |
| | Mercury (TCLP)[8] | 0.2 | mg/L | - | 0.000500 U | | | | 0.000500 U | 0.000500 U | 0.000500 U | - | - | - | - | - | - | - | - | - | - |
| VOCs[9] | 1,2,4-Trimethylbenzene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 1,3,5-Trimethylbenzene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4-Methyl-2-Pentanone | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Acetone | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Benzene | 0.03 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Bromoform (Tribromomethane) | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Chlorobenzene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Dibromochloromethane | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Ethylbenzene | 6 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Isopropylbenzene (Cumene) | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Methylene Chloride[10] | 0.02 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Methyl t-butyl ether | 0.1 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Naphthalene | 5 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | n-Butylbenzene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | n-Propylbenzene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | p-Isopropyltoluene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Sec-Butylbenzene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Toluene | 7 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Xylene, m-,p- | 9 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Xylene, o- | 9 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Total Xylenes | 9 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| | | | Area | North Hg Area (Phase II) (EX7) | | | | | | | | Middle Hg Area (EX8) | | | | | West Hg Area (EX9) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EX7-16-2 | EX7-17-3 | EX7-18-3.5 | EX7-19-3 | EX7-20-2 | EX7-SP-1 | EX7-SP-2 | EX7-SP-3 | EX8-1-5 | EX8-2-5 | EX8-3-5 | EX8-4-5 | EX8-6-4 | EX9-1-4 | EX9-2-4 | EX9-3-4 | EX9-4-4 | EX9-5-4 |
| | | | Sample Date | 8/7/2014 | 8/7/2014 | 8/27/2014 | 8/27/2014 | 8/27/2014 | 8/27/2014 | 8/27/2014 | 8/27/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/31/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 |
| | | | Type | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Stockpile | Stockpile | Stockpile | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Bottom |
| | | | Status | Removed | Removed | In-Place | In-Place | In-Place | Removed | Removed | Removed | In-Place | In-Place | In-Place | Removed | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place |
| **Method** | **Analyte** | **MTCA Soil CUL[2] (mg/kg)** | **Units** | | | | | | | | | | | | | | | | | | |
| SVOCs[12] | 1-Methylnaphthalene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2-Methylnaphthalene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Anthracene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Benzo(a)anthracene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Benzo(a)pyrene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Benzo(b)fluoranthene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Benzo(ghi)perylene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Chrysene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Fluorene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Indeno(1,2,3-cd)pyrene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Bis(2-Ethylhexyl) Phthalate | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Fluoranthene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Naphthalene | 5 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Phenanthrene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Pyrene | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total Napthalenes[13] | | 5 | mg/kg | | | | | | | | | | | | | | | | | | |
| cPAH | cPAH TEQ[14] | 0.1 | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| | | | Area | South Hg Area (EX10) | | | | | | Area 4 (EX12) | | | | | | Area 4 (EX12) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EX10-1-2 | EX10-2-6 | EX10-3-6 | EX10-4-6 | EX10-5-6 | EX10-6-6 | EX12-1-2.5 | EX12-2-3 | EX12-3-2 | EX12-4-3 | EX12-5-3 | EX12-6-8 | EX12-7-6 | EX12-8-3 | EX12-9-3 | EX12-10-7 | EX12-11-3 |
| | | | Sample Date | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 9/4/2014 | 9/4/2014 | 9/4/2014 | 9/4/2014 | 9/4/2014 | 9/4/2014 | 9/4/2014 | 9/12/2014 | 9/12/2014 | 9/12/2014 | 9/12/2014 |
| | | | Type | Bottom | Sidewall | Sidewall | Sidewall | Sidewall | Bottom | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Bottom | Bottom | Sidewall | Sidewall | Sidewall | Sidewall |
| | | | Status | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | Removed | Removed | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place |
| **Method** | **Analyte** | **MTCA Soil CUL[2] (mg/kg)** | **Units** | | | | | | | | | | | | | | | | | |
| NWTPH-HCID[3] | Gasoline-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Diesel-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Heavy oil-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| NWTPH-GX[4] | Gasoline-range hydrocarbons | | mg/kg | - | - | - | - | - | - | **76.2** | 9.71 U | **7.45** | 6.24 U | 9.73 U | **11.6** | 5.36 U | 5.58 U | 5.17 U | 6.56 U | 6.37 U |
| NWTPH-DX[5] | Diesel-range hydrocarbons | | mg/kg | - | - | - | - | - | - | **914** | **718 J** | **363 J** | **12.3** | **215 J** | **178 J** | **61.7** | 10.3 U | 9.73 U | **109 J** | **112 J** |
| | Heavy oil-range hydrocarbons | | mg/kg | - | - | - | - | - | - | **2,800** | **3,430** | **1,420** | **38.1** | **1,390** | **984** | **213** | 25.8 U | 24.3 U | **657** | **923** |
| Calculated Total Petroleum Hydrocarbons[6] | | 3,400 | mg/kg | - | - | - | - | - | - | **3,790** | **<4,158** | **1,790** | <57 | **<1,615** | **1,174** | <281 | <42 U | <40 U | <773 | <1,042 |
| Metals[7] | Mercury | 2 | mg/kg | 0.0397 U | 0.0385 U | 0.0472 U | 0.0446 U | 0.0338 U | 0.0463 U | - | - | - | - | - | - | - | - | - | - | - |
| | Mercury (TCLP)[8] | 0.2 | mg/L | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| VOCs[9] | 1,2,4-Trimethylbenzene | | mg/kg | - | - | - | - | - | - | **0.0592 J** | 0.194 U | **0.0334 J** | 0.125 U | **0.0856 J** | **0.125** | 0.107 U | - | - | - | - |
| | 1,3,5-Trimethylbenzene | | mg/kg | - | - | - | - | - | - | **0.0367 J** | 0.194 U | 0.0982 U | 0.125 U | **0.0447 J** | **0.0433 J** | 0.107 U | - | - | - | - |
| | 4-Methyl-2-Pentanone | | mg/kg | - | - | - | - | - | - | 1.29 U | 1.94 U | 0.982 U | 1.25 U | 1.95 U | 1.12 U | 1.07 U | - | - | - | - |
| | Acetone | | mg/kg | - | - | - | - | - | - | 3.86 U | 5.83 U | 2.95 U | 3.74 U | 5.84 U | 3.37 U | 3.21 U | - | - | - | - |
| | Benzene | 0.03 | mg/kg | - | - | - | - | - | - | 0.0193 U | 0.0291 U | 0.0147 U | 0.0187 U | 0.0292 U | 0.0169 U | 0.0161 U | - | - | - | - |
| | Bromoform (Tribromomethane) | | mg/kg | - | - | - | - | - | - | 0.129 U | 0.194 U | 0.0982 U | 0.125 U | 0.195 U | 0.112 U | 0.107 U | - | - | - | - |
| | Chlorobenzene | | mg/kg | - | - | - | - | - | - | 0.129 U | 0.194 U | 0.0982 U | 0.125 U | 0.195 U | 0.112 U | 0.107 U | - | - | - | - |
| | Dibromochloromethane | | mg/kg | - | - | - | - | - | - | 0.129 U | 0.194 U | **0.0137 J** | **0.0274 J** | **0.0243 J** | **0.0157 J** | **0.0129 J** | - | - | - | - |
| | Ethylbenzene | 6 | mg/kg | - | - | - | - | - | - | 0.129 U | 0.194 U | 0.0982 U | 0.125 U | 0.195 U | 0.112 U | 0.107 U | - | - | - | - |
| | Isopropylbenzene (Cumene) | | mg/kg | - | - | - | - | - | - | 0.129 U | 0.194 U | 0.0982 U | 0.125 U | 0.195 U | 0.112 U | 0.107 U | - | - | - | - |
| | Methylene Chloride[10] | 0.02 | mg/kg | - | - | - | - | - | - | 0.00669 U | 0.0101 U | 0.00511 U | 0.00649 U | 0.0101 U | 0.00585 U | 0.00557 U | - | - | - | - |
| | Methyl t-butyl ether | 0.1 | mg/kg | - | - | - | - | - | - | 0.0644 U | 0.0971 U | 0.0491 U | 0.0624 U | 0.0973 U | 0.0562 U | 0.0536 U | - | - | - | - |
| | Naphthalene | 5 | mg/kg | - | - | - | - | - | - | 0.257 U | 0.388 U | **0.0373 J** | 0.250 U | 0.389 U | **0.0292 J** | 0.214 U | - | - | - | - |
| | n-Butylbenzene | | mg/kg | - | - | - | - | - | - | 0.129 U | 0.194 U | 0.0982 U | 0.125 U | 0.195 U | 0.112 U | 0.107 U | - | - | - | - |
| | n-Propylbenzene | | mg/kg | - | - | - | - | - | - | 0.129 U | 0.194 U | 0.0982 U | 0.125 U | 0.195 U | 0.112 U | 0.107 U | - | - | - | - |
| | p-Isopropyltoluene | | mg/kg | - | - | - | - | - | - | 0.129 U | 0.194 U | 0.0982 U | 0.125 U | 0.195 U | 0.112 U | 0.107 U | - | - | - | - |
| | Sec-Butylbenzene | | mg/kg | - | - | - | - | - | - | 0.129 U | 0.194 U | 0.0982 U | 0.125 U | 0.195 U | 0.112 U | 0.107 U | - | - | - | - |
| | Toluene | 7 | mg/kg | - | - | - | - | - | - | 0.129 U | 0.194 U | 0.0982 U | 0.125 U | 0.195 U | 0.112 U | 0.107 U | - | - | - | - |
| | Xylene, m-,p- | 9 | mg/kg | - | - | - | - | - | - | 0.515 U | 0.777 U | 0.393 U | 0.499 U | 0.778 U | **0.0410 J** | 0.429 U | - | - | - | - |
| | Xylene, o- | 9 | mg/kg | - | - | - | - | - | - | 0.257 U | 0.388 U | 0.196 U | 0.250 U | 0.389 U | 0.225 U | 0.214 U | - | - | - | - |
| | Total Xylenes | 9 | mg/kg | - | - | - | - | - | - | 0.772 U | 1.165 U | 0.589 U | 0.749 U | 1.167 U | 0.266 U | 0.643 U | - | - | - | - |

| | | | Area | South Hg Area (EX10) | | | | | | Area 4 (EX12) | | | | | | Area 4 (EX12) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EX10-1-2 | EX10-2-6 | EX10-3-6 | EX10-4-6 | EX10-5-6 | EX10-6-6 | EX12-1-2.5 | EX12-2-3 | EX12-3-2 | EX12-4-3 | EX12-5-3 | EX12-6-8 | EX12-7-6 | EX12-8-3 | EX12-9-3 | EX12-10-7 | EX12-11-3 |
| | | | Sample Date | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 7/24/2014 | 9/4/2014 | 9/4/2014 | 9/4/2014 | 9/4/2014 | 9/4/2014 | 9/4/2014 | 9/4/2014 | 9/12/2014 | 9/12/2014 | 9/12/2014 | 9/12/2014 |
| | | | Type | Bottom | Sidewall | Sidewall | Sidewall | Sidewall | Bottom | Sidewall | Sidewall | Sidewall | Sidewall | Sidewall | Bottom | Bottom | Sidewall | Sidewall | Sidewall | Sidewall |
| | | | Status | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | Removed | Removed | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place | In-Place |
| **Method** | **Analyte** | **MTCA Soil CUL[2] (mg/kg)** | **Units** | | | | | | | | | | | | | | | | | |
| SVOCs[12] | 1-Methylnaphthalene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.037 U | - | - | - | - | - | - | - |
| | 2-Methylnaphthalene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.024 U | - | - | - | - | - | - | - |
| | Anthracene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.024 U | - | - | - | - | - | - | - |
| | Benzo(a)anthracene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.024 U | - | - | - | - | - | - | - |
| | Benzo(a)pyrene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.037 U | - | - | - | - | - | - | - |
| | Benzo(b)fluoranthene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.024 U | - | - | - | - | - | - | - |
| | Benzo(ghi)perylene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.031 U | - | - | - | - | - | - | - |
| | Chrysene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.031 U | - | - | - | - | - | - | - |
| | Fluorene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.024 U | - | - | - | - | - | - | - |
| | Indeno(1,2,3-cd)pyrene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.049 U | - | - | - | - | - | - | - |
| | Bis(2-Ethylhexyl) Phthalate | | mg/kg | - | - | - | - | - | - | - | - | - | 0.730 U | - | - | - | - | - | - | - |
| | Fluoranthene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.024 U | - | - | - | - | - | - | - |
| | Naphthalene | 5 | mg/kg | - | - | - | - | - | - | - | - | - | 0.024 U | - | - | - | - | - | - | - |
| | Phenanthrene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.024 U | - | - | - | - | - | - | - |
| | Pyrene | | mg/kg | - | - | - | - | - | - | - | - | - | 0.024 U | - | - | - | - | - | - | - |
| Total Napthalenes[13] | | 5 | mg/kg | | | | | | | | | | 0.085 U | | | | | | | |
| cPAH | cPAH TEQ[14] | 0.1 | mg/kg | - | - | - | - | - | - | - | - | - | 0 | - | - | - | - | - | - | - |

| | | | Area | South PCS Area (Phase 1) (EX13) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EX13-1-3 | EX13-2-3 | EX13-3-3 | EX13-4-3 | EX13-SP1 | EX13-SP2 | EX13-SP3 |
| | | | Sample Date | 10/13/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 |
| | | | Type | Sidewall | Sidewall | Sidewall | Sidewall | Stockpile | Stockpile | Stockpile |
| | | | Status | In-Place | In-Place | In-Place | In-Place | Removed | Removed | Removed |
| **Method** | **Analyte** | **MTCA Soil CUL[2] (mg/kg)** | **Units** | | | | | | | |
| NWTPH-HCID[3] | Gasoline-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - |
| | Diesel-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - |
| | Heavy oil-range hydrocarbons | | mg/kg | - | - | - | - | - | - | - |
| NWTPH-GX[4] | Gasoline-range hydrocarbons | | mg/kg | 5.35 U | 4.61 U | 4.82 U | 5.85 U | 5.43 U | **7.38** | **17.2** |
| NWTPH-DX[5] | Diesel-range hydrocarbons | | mg/kg | **158 J** | **85.3 J** | **12.0** | **267 J** | **140 J** | **659** | **623** |
| | Heavy oil-range hydrocarbons | | mg/kg | **631** | **296** | 26.1 U | **626** | **565** | **751** | **636** |
| Calculated Total Petroleum Hydrocarbons[6] | | 3,400 | mg/kg | <795 | <386 | <43 | <899 | <711 | **1417** | **1276** |
| Metals[7] | Mercury | 2 | mg/kg | - | - | - | - | - | - | - |
| | Mercury (TCLP)[8] | 0.2 | mg/L | - | - | - | - | - | - | - |
| VOCs[9] | 1,2,4-Trimethylbenzene | | mg/kg | - | 0.0922 U | - | - | - | - | - |
| | 1,3,5-Trimethylbenzene | | mg/kg | - | 0.0922 U | - | - | - | - | - |
| | 4-Methyl-2-Pentanone | | mg/kg | - | 0.922 U | - | - | - | - | - |
| | Acetone | | mg/kg | - | 2.76 U | - | - | - | - | - |
| | Benzene | 0.03 | mg/kg | - | 0.0138 U | - | - | - | - | - |
| | Bromoform (Tribromomethane) | | mg/kg | - | **0.0184 J** | - | - | - | - | - |
| | Chlorobenzene | | mg/kg | - | 0.0922 U | - | - | - | - | - |
| | Dibromochloromethane | | mg/kg | - | 0.0922 U | - | - | - | - | - |
| | Ethylbenzene | 6 | mg/kg | - | 0.0922 U | - | - | - | - | - |
| | Isopropylbenzene (Cumene) | | mg/kg | - | 0.0922 U | - | - | - | - | - |
| | Methylene Chloride[10] | 0.02 | mg/kg | - | 0.00479 U | - | - | - | - | - |
| | Methyl t-butyl ether | 0.1 | mg/kg | - | 0.0461 U | - | - | - | - | - |
| | Naphthalene | 5 | mg/kg | - | 0.184 U | - | - | - | - | - |
| | n-Butylbenzene | | mg/kg | - | 0.0922 U | - | - | - | - | - |
| | n-Propylbenzene | | mg/kg | - | 0.0922 U | - | - | - | - | - |
| | p-Isopropyltoluene | | mg/kg | - | 0.0922 U | - | - | - | - | - |
| | Sec-Butylbenzene | | mg/kg | - | 0.0922 U | - | - | - | - | - |
| | Toluene | 7 | mg/kg | - | 0.0922 U | - | - | - | - | - |
| | Xylene, m-,p- | 9 | mg/kg | - | 0.369 U | - | - | - | - | - |
| | Xylene, o- | 9 | mg/kg | - | 0.184 U | - | - | - | - | - |
| | Total Xylenes | 9 | mg/kg | - | 0.553 U | - | - | - | - | - |

| | | | Area | South PCS Area (Phase 1) (EX13) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EX13-1-3 | EX13-2-3 | EX13-3-3 | EX13-4-3 | EX13-SP1 | EX13-SP2 | EX13-SP3 |
| | | | Sample Date | 10/13/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 |
| | | | Type | Sidewall | Sidewall | Sidewall | Sidewall | Stockpile | Stockpile | Stockpile |
| | | | Status | In-Place | In-Place | In-Place | In-Place | Removed | Removed | Removed |
| **Method** | **Analyte** | **MTCA Soil CUL[2] (mg/kg)** | **Units** | | | | | | | |
| SVOCs[12] | 1-Methylnaphthalene | | mg/kg | - | 0.032 U | - | - | - | - | - |
| | 2-Methylnaphthalene | | mg/kg | - | 0.021 U | - | - | - | - | - |
| | Anthracene | | mg/kg | - | 0.021 U | - | - | - | - | - |
| | Benzo(a)anthracene | | mg/kg | - | 0.021 U | - | - | - | - | - |
| | Benzo(a)pyrene | | mg/kg | - | 0.032 U | - | - | - | - | - |
| | Benzo(b)fluoranthene | | mg/kg | - | 0.021 U | - | - | - | - | - |
| | Benzo(ghi)perylene | | mg/kg | - | 0.027 U | - | - | - | - | - |
| | Chrysene | | mg/kg | - | 0.027 U | - | - | - | - | - |
| | Fluorene | | mg/kg | - | 0.043 U | - | - | - | - | - |
| | Indeno(1,2,3-cd)pyrene | | mg/kg | - | - | - | - | - | - | - |
| | Bis(2-Ethylhexyl) Phthalate | | mg/kg | - | **0.740** | - | - | - | - | - |
| | Fluoranthene | | mg/kg | - | 0.021 U | - | - | - | - | - |
| | Naphthalene | 5 | mg/kg | - | 0.021 U | - | - | - | - | - |
| | Phenanthrene | | mg/kg | - | 0.021 U | - | - | - | - | - |
| | Pyrene | | mg/kg | - | **0.039** | - | - | - | - | - |
| Total Napthalenes[13] | | 5 | mg/kg | | 0.074 U | | | | | |
| cPAH | cPAH TEQ[14] | 0.1 | mg/kg | - | 0 | - | - | - | - | - |

Notes:

[1]Chemical analyses conducted by TestAmerica Laboratories, Inc. located in Spokane Valley, Washington.

[2]Washington State, Model Toxics Control Act (MTCA) Method A cleanup levels. Method B is used for total petroleum hydrocarbons (TPH).

[3]Hydrocarbon Identification using Method NWTPH-HCID

[4]Gasoline-range hydrocarbons were analyzed using Method NWTPH-Gx.

[5]Diesel-range hydrocarbons and heavy oil-range hydrocarbons were analyzed using Method NWTPH-Dx.

[6]MTCA Method B cleanup levels were used for Calculated Total Petroleum Hydrocarbons (TPH). The Calculated TPH equals the sum of detection(s) plus reporting limits for non-detected analytes.

[7]Metals were analyzed using EPA 6010/7000 Series Methods.

[8]Toxicity Characteristic Leaching Procedure (TCLP) were analyzed by Method EPA7471. Maximum allowable concentration of contaminant for toxicity characteristic (EPA D-List).

[9]Volatile organic compounds (VOCs) were analyzed using EPA 8260C Method. Only VOCs that were detected in one or more samples are listed in table. Refer to analytical report for the full list of VOCs.

[10]The methylene chloride results detected at concentrations less than the reporting limit are reported at the method detection limit.

[11]Non-detect value reported at the Method Detection Limit for benzene and MTBE.

[12]Semi-volatile organic compounds (SVOCs) were analyzed using 8270D Method. Only SVOCs that were detected in one or more samples are listed in table. Refer to analytical report for the full list or SVOCs.

[13]Naphthalenes are a total value for naphthalene, 1-methylnaphthalene and 2 methylnaphthalene. Total naphthalenes equals the sum of detection(s) plus reporting limits for non-detected analytes.

[14]Carcinogenic PAH (cPAH) toxic equivalency (TEQ) calculated using toxicity equivalency factors (TEF) from MTCA Table 708-2, based on methodology described in MTCA Cleanup Regulation WAC 173-340-708.

[15]Method detection limit for analyte(s) is greater than the applicable MTCA Method A cleanup level.

U indicates analyte not detectd at a concentration greater than listed reporting limit, or method detection limit where indicated.

J indicates result is qualified as estimated. Refer to applicable Data Validation Report in Appendix B for details.

UJ indicates analyte was not detected at a concentration greater than the sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation.

**Bolding** indicates the detected concentration of an analyte was greater than the method reporting limit, or method detection limit where indicated.

**Red bolding** and outline indicates the detected concentration of an analyte was greater than the cleanup level.

mg/kg = milligrams per kilogram; mg/L = milligrams per liter; TPH = total petroleum hydrocarbons; "-" = not tested

# Table 2

## Summary of Chemical Analytical Results - Infiltration Pond Water Sample[1]

**Former Cashmere Mill Site**

**Cashmere, Washington**

| | | | **Sample ID** | **INFILTRATION POND 8/28/14** |
|---|---|---|---|---|
| | | | **Sample Date** | **8/28/2014** |
| | | | **Matrix** | **Water** |
| Method | Analyte | MTCA Method A GW CUL[2] (mg/L) | Units | |
| Metals[3] | Arsenic | 0.005 | mg/L | **0.0057** |
| | Mercury | 0.002 | mg/L | 0.0002 U |

**Notes:**

[1]Chemical analyses conducted by TestAmerica Laboratories, Inc. located in Spokane Valley, Washington.

[2]Washington State, Model Toxics Control Act (MTCA) Method A cleanup levels for groundwater.

[3]Metals analyzed using EPA 200 Series Methods.

**Red bolding** and outline indicates the detected concentration of an analyte was greater than the cleanup level.

U indicates analyte not detected at a concentration greater than listed reporting limit.

mg/L = milligrams per liter

# Table 3

## Summary of Chemical Analytical Results - Cashmere Imported Fill[1]

Former Cashmere Mill Site

Cashmere, Washington

| | | | Location | Eastside[2] | | Westside[2] | | Northside[2] | Southside[2] | WM-1 | WM-2 | WM-3 | WM-4 | WM-5 | WM-6 | WM-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EASTSIDE | EASTSIDE | WESTSIDE | WESTSIDE | NORTHSIDE | SOUTHSIDE | WM-1 | WM-2 | WM-3 | WM-4 | WM-5 | WM-6 | WM-7 |
| | | | Sample Date | 7/11/2014 | 7/31/2014 | 7/11/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 4/22/2014 | 4/22/2014 | 4/22/2014 | 4/22/2014 | 4/22/2014 | 4/22/2014 | 4/22/2014 |
| **Method** | **Analyte** | **MTCA Soil CUL[3]** | **Units** | | | | | | | | | | | | | |
| Metals[4] | Arsenic | 20 | mg/kg | **3.76** | **3.36** | **3.58** | **3.92** | **4.19** | **3.22** | **3.2** | **1.7** | **2.5** | **2.1** | **3.0** | **5.3** | **2.2** |
| | Chromium | 2,000 | mg/kg | **12.4** | **13.4** | **12.3** | **14.8** | **15.1** | **14.1** | **8.4** | **8.8** | **14.4** | **11.6** | **16.8** | **12.6** | **9.5** |
| | Copper | NE | mg/kg | **16.1** | **17.9** | **24.2** | **19.1** | **19.1** | **18.2** | **9.0** | **10.1** | **13.0** | **12.0** | **15.8** | **11.9** | **10.4** |
| | Lead | 250 | mg/kg | **4.17** | **3.07** | **4.04** | **3.06** | **3.15** | **3.98** | **4.3** | **3.5** | **5.7** | **4.0** | **5.9** | **6.4** | **3.7** |
| Pesticides[5] | 4,4'-DDD | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0010 U | 0.00094 U | 0.00095 U | 0.00095 U | 0.00096 U | 0.00099 U | 0.00094 U |
| | 4,4'-DDE | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0010 U | 0.00094 U | 0.00095 U | 0.00095 U | 0.00096 U | 0.00099 U | 0.00094 U |
| | 4,4'-DDT | 3 | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0010 U | 0.00094 U | 0.00095 U | 0.00095 U | 0.00096 U | 0.00099 U | 0.00094 U |
| | Aldrin | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.00050 U | 0.00047 U | 0.00048 U | 0.00048 U | 0.00048 U | 0.00049 U | 0.00047 U |
| | Alpha-BHC | NE | mg/kg | 0.0021 U | 0.0021 U | 0.0021 U | 0.0021 U | 0.0021 U | 0.0021 U | 0.00050 U | 0.00047 U | 0.00048 U | 0.00048 U | 0.00048 U | 0.00049 U | 0.00047 U |
| | alpha-Chlordane (cis) | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.00050 U | 0.00047 U | 0.00048 U | 0.00048 U | 0.00048 U | 0.00049 U | 0.00047 U |
| | beta or gamma-Chlordane (trans) | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.00050 U | 0.00047 U | 0.00048 U | 0.00048 U | 0.00048 U | 0.00049 U | 0.00047 U |
| | Beta-BHC | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.00050 U | 0.00047 U | 0.00048 U | 0.00048 U | 0.00048 U | 0.00049 U | 0.00047 U |
| | Chlordane (Total) | NE | mg/kg | 0.018 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U | -- | -- | -- | -- | -- | -- | -- |
| | Delta-BHC | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.00050 U | 0.00047 U | 0.00048 U | 0.00048 U | 0.00048 U | 0.00049 U | 0.00047 U |
| | Dieldrin | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0010 U | 0.00094 U | 0.00095 U | 0.00095 U | 0.00096 U | 0.00099 U | 0.00094 U |
| | Endosulfan I | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.00050 U | 0.00047 U | 0.00048 U | 0.00048 U | 0.00048 U | 0.00049 U | 0.00047 U |
| | Endosulfan II | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0010 U | 0.00094 U | 0.00095 U | 0.00095 U | 0.00096 U | 0.00099 U | 0.00094 U |
| | Endosulfan Sulfate | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0010 U | 0.00094 U | 0.00095 U | 0.00095 U | 0.00096 U | 0.00099 U | 0.00094 U |
| | Endrin | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0010 U | 0.00094 U | 0.00095 U | 0.00095 U | 0.00096 U | 0.00099 U | 0.00094 U |
| | Endrin Aldehyde | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0010 U | 0.00094 U | 0.00095 U | 0.00095 U | 0.00096 U | 0.00099 U | 0.00094 U |
| | Endrin Ketone | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0010 U | 0.00094 U | 0.00095 U | 0.00095 U | 0.00096 U | 0.00099 U | 0.00094 U |
| | Heptachlor | NE | mg/kg | 0.0021 U | 0.0021 U | 0.0021 U | 0.0021 U | 0.0021 U | 0.0021 U | 0.00050 U | 0.00047 U | 0.00048 U | 0.00048 U | 0.00048 U | 0.00049 U | 0.00047 U |
| | Heptachlor Epoxide | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0010 U | 0.00094 U | 0.00095 U | 0.00095 U | 0.00096 U | 0.00099 U | 0.00094 U |
| | Lindane (Gamma-BHC) | NE | mg/kg | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.00050 U | 0.00047 U | 0.00048 U | 0.00048 U | 0.00048 U | 0.00049 U | 0.00047 U |
| | Methoxychlor | NE | mg/kg | 0.0035 U | 0.0035 U | 0.0035 U | 0.0035 U | 0.0035 U | 0.0035 U | 0.0050 U | 0.0047 U | 0.0048 U | 0.0048 U | 0.0048 U | 0.0049 U | 0.0047 U |
| | Toxaphene | NE | mg/kg | 0.070 U | 0.071 U | 0.070 U | 0.070 U | 0.071 U | 0.071 U | 0.025 U | 0.023 U | 0.024 U | 0.024 U | 0.024 U | 0.025 U | 0.023 U |
| VOCs[6] | Methylene Chloride | 0.02 | mg/kg | **0.0206** | 0.00582[8] U | **0.0203** | 0.00569[8] U | 0.00577[8] U | **0.0155 J** | 0.0020 U | **0.0023** | **0.0030** | **0.0026** | 0.0021 U | **0.0021** | **0.0029** |
| | Acetone | NE | mg/kg | 3.09 U | **0.589 J** | 3.05 U | **0.833 J** | **0.769 J** | **1.33 J** | 0.710 U | 0.710 U | 0.670 U | 0.670 U | 0.760 U | 0.640 U | 0.590 U |
| | Dibromochloromethane | NE | mg/kg | 0.103 U | 0.112 U | 0.102 U | **0.0131 J** | **0.0139 J** | 0.115 U | 0.0010 U | 0.0010 U | 0.0010 U | 0.0010 U | 0.0010 U | 0.0009 U | 0.0010 U |
| | Isopropylbenzene (Cumene) | NE | mg/kg | 0.103 U | 0.112 U | 0.102 U | **0.0219 J** | 0.111 U | 0.115 U | 0.0010 U | 0.0010 U | 0.0010 U | 0.0010 U | 0.0010 U | 0.0009 U | 0.0010 U |

| | | | Location | Eastside[2] | | Westside[2] | | Northside[2] | Southside[2] | WM-1 | WM-2 | WM-3 | WM-4 | WM-5 | WM-6 | WM-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample ID | EASTSIDE | EASTSIDE | WESTSIDE | WESTSIDE | NORTHSIDE | SOUTHSIDE | WM-1 | WM-2 | WM-3 | WM-4 | WM-5 | WM-6 | WM-7 |
| | | | Sample Date | 7/11/2014 | 7/31/2014 | 7/11/2014 | 7/31/2014 | 7/31/2014 | 7/31/2014 | 4/22/2014 | 4/22/2014 | 4/22/2014 | 4/22/2014 | 4/22/2014 | 4/22/2014 | 4/22/2014 |
| **Method** | **Analyte** | **MTCA Soil CUL[3]** | **Units** | | | | | | | | | | | | | |
| SVOCs[7] | Naphthalene | 5 | mg/kg | 0.31 U | 0.35 U | 0.30 U | 0.35 U | 0.35 U | 0.35 U | 0.019 U | 0.019 U | 0.020 U | 0.019 U | 0.020 U | **0.015 J** | 0.019 U |
| | Phenanthrene | NE | mg/kg | 0.31 U | 0.35 U | 0.30 U | 0.35 U | 0.35 U | 0.35 U | 0.019 U | 0.019 U | 0.020 U | 0.019 U | 0.020 U | **0.027** | 0.019 U |

**Notes:**

[1]Chemical analyses (Eastside, Westside, Northside, and Southside samples) conducted by TestAmerica Laboratories, Inc. located in Spokane Valley, Washington.

[2]Chemical analyses (WM Samples) conducted by Analytical Resources, Inc. located in Tukwila, Washington.

[3]Washington State, Model Toxics Control Act (MTCA) Method A cleanup levels for soil

[4]Metals were analyzed using EPA 6010/7000 Series Methods.

[5]Pesticides were analyzed using EPA 8081B Method.

[6]Volatile organic compounds (VOCs) were analyzed using EPA 8260C Method. Only VOCs with detections are listed in table. Refer to analytical report for the full list of VOCs.

[7]Semi-volatile organic compounds (SVOCs) were analyzed using 8270D Method. Only SVOCs with detections are listed in table. Refer to analytical report for the full list or SVOCs.

[8]Analyte was not detected at concentration greater than listed detection limit.

U indicates analyte not detected at a concentration greater than listed reporting limit.

J indicates result is qualified as estimated. Refer to applicable Data Validation Report in Appendix B for details.

**Bolding** indicates the detected concentration is greater than the reporting limit.

Red bolding and outline indicates the detected concentration of an analyte was greater than the cleanup level.

mg/kg = milligrams per kilogram; NE = not established

"-" = not tested

# Table 4

## Summary of Field Quality Parameters - Groundwater

### Former Cashmere Mill Site
### Cashmere, Washington

| Sample Number | Date Sampled | Depth to Water[1] (feet) | pH | Specific Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature (°C) | ORP (mV) | Soluble Ferrous Iron[2] (mg/L) | Well Headspace PID Readings[3] (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 10/28/13 | 6.83 | 7.00 | 0.5453 | 3.780 | 0.02 | 16.53 | -47 | 0.0 | 10.2 |
| | 12/03/13 | 6.41 | 6.71 | 0.4773 | 4.726 | 0.03 | 12.69 | -43 | 0.8 | 0.0 |
| | 12/02/14 | 5.05 | 6.88 | 0.4629 | 4.570 | 0.01 | 11.24 | 221 | NA | 0.0 |
| MW-2 | 10/28/13 | 5.90 | 7.12 | 0.6500 | 9.270 | 0.02 | 17.95 | -81 | 0.0 | 0.0 |
| | 12/03/13 | 5.70 | 6.94 | 0.5757 | 14.78 | 0.05 | 13.70 | -88 | 1.0 | 0.0 |
| | 12/03/14 | 6.30 | 7.17 | 0.8595 | 57.85 | 0.07 | 14.18 | 167 | NT | 0.0 |
| MW-3 | 10/28/13 | 7.36 | 6.13 | 0.9500 | 5.580 | 0.01 | 16.47 | -86 | 0.0 | 0.0 |
| | 12/03/13 | 7.23 | 5.88 | 0.8568 | 3.874 | 0.01 | 14.00 | -65 | 1.5 | 0.0 |
| | 12/03/14 | 6.09 | 6.57 | 0.5091 | 21.02 | 0.00 | 14.00 | 87 | NA | 0.0 |
| MW-4 | 10/28/13 | 4.83 | 7.08 | 0.5580 | 2.480 | 0.02 | 16.61 | -107 | 0.0 | 0.0 |
| | 12/03/13 | 4.72 | 6.90 | 0.5016 | 1.694 | 0.03 | 11.81 | -85 | 1.0 | 0.0 |
| | 12/02/14 | 4.50 | 7.05 | 0.4885 | 2.136 | 0.01 | 15.11 | 169 | NT | 0.1 |
| MW-5 | 10/28/13 | 2.67 | 7.04 | 0.5700 | 0.6800 | 0.03 | 15.73 | -83 | 0.0 | 0.0 |
| | 12/03/13 | 2.57 | 6.85 | 0.5323 | 0.9694 | 0.04 | 10.81 | -70 | 0.7 | 0.0 |
| | 12/02/14 | 5.15 | 7.10 | 0.5063 | 9.670 | 0.01 | 13.68 | 184 | NA | 0.0 |
| MW-6 | 10/28/13 | 2.55 | 7.12 | 0.5700 | 8.770 | 0.00 | 16.75 | -125 | 0.0 | 0.0 |
| | 12/03/13 | 2.47 | 6.88 | 0.5142 | 5.203 | 0.03 | 13.37 | -54 | 1.0 | 115 |
| | 12/02/14 | 5.08 | 7.16 | 0.5286 | 20.63 | 0.00 | 12.30 | 200 | NA | 0.0 |
| MW-7 | 10/28/13 | 3.10 | 6.95 | 0.4800 | 3.910 | 0.98 | 14.67 | -16 | 0.0 | 0.0 |
| | 12/03/13 | 3.03 | 6.76 | 0.4434 | 0.1150 | 0.00 | 10.13 | -44 | 1.2 | 0.0 |
| | 12/03/14 | 4.05 | 6.95 | 0.4647 | 28.52 | 0.00 | 11.66 | 161 | NA | 0.0 |
| MW-8 | 10/28/13 | 3.87 | 6.73 | 0.3360 | 4.220 | 0.00 | 12.35 | -123 | 0.0 | 0.0 |
| | 12/03/13 | 3.87 | 6.44 | 0.3847 | 5.165 | 0.02 | 10.80 | -110 | 1.7 | 0.0 |
| | 12/03/14 | 4.00 | 6.91 | 0.3380 | 2.184 | 0.00 | 10.74 | 101 | NA | 0.0 |
| MW-9 | 12/20/13 | -- | 7.12 | 0.5500 | 0.00 | 0.20 | 11.69 | 114 | NA | NA |
| | 12/03/14 | 2.75 | 7.15 | 0.3318 | 1.875 | 0.00 | 12.37 | 301 | NA | 0.0 |

| Sample Number | Date Sampled | Depth to Water[1] (feet) | pH | Specific Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature (°C) | ORP (mV) | Soluble Ferrous Iron[2] (mg/L) | Well Headspace PID Readings[3] (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|
| B-1 | 10/28/13[4] | 6.26 | 6.10 | 0.7000 | 1884 | 0.03 | 18.13 | -75 | 0.0 | 0.0 |
| | 12/03/13 | 6.34 | 5.92 | 0.8623 | 40.81 | 0.07 | 15.62 | -52 | 0.8 | 17.6 |
| | 12/03/14 | 4.49 | 6.08 | 0.4495 | 43.93 | 0.00 | 15.66 | 129 | NA | 0.0 |
| OW-1 | 12/04/13 | 4.45 | 6.84 | 0.4884 | 7.057 | 0.06 | 13.43 | 5 | 0.0 | 0.0 |
| | 12/03/14 | 4.49 | 7.14 | 0.4650 | 1.503 | 0.81 | 14.12 | 352 | NA | 0.0 |

**Notes:**

[1]Depth to water measurements referenced to the top of the PVC casing.

[2]Soluble ferrous iron was measured in the field using a Hach IR-18C color disc test kit and the 1,10 phenanthroline testing method.

[3]Well headspace reading measured using a MiniRae2000 Photo-ionization detector (PID).

[4]Water level within B-1 did not stabilize, well pumped dry during initial purging. Well allowed to recharge before collecting groundwater sample.

mS/cm = millisiemens per centimeter; NTU = nephelometric turbidity units; mg/L = milligrams per liter; mV = millivolts; ppm = parts per million; NA = Not Analyzed; "-" = Not Measured

# Table 5

## Summary of Chemical Analytical Test Results[1] – Groundwater

### Former Cashmere Mill Site
### Cashmere, Washington

| Sample Location ID | Date Sampled | GRPH[2] (µg/L) | DRPH[3] (mg/L) | ORPH[4] (mg/L) | Benzene[5] (µg/L) | Toluene[5] (µg/L) | Ethyl-benzene[5] (µg/L) | o-Xylene[5] (µg/L) | m,p-Xylenes[5] (µg/L) | Xylenes (total)[5] (µg/L) | Arsenic[6] (mg/L) | Mercury[7] (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 12/02/14 | <100 | <0.234 | <0.390 | <0.200 | <0.500 | <0.500 | <0.500 | <0.500 | <1.50 | 0.0024 | <0.200 |
| MW-2 | 12/03/14 | <100 | <0.232 | <0.386 | <0.200 | <0.500 | <0.500 | <0.500 | <0.500 | <1.50 | **0.0071** | <0.200 |
| MW-3 | 12/03/14 | <100 | <0.229 | <0.382 | <0.200 | <0.500 | <0.500 | <0.500 | <0.500 | <1.50 | 0.0022 | <0.200 |
| MW-4 | 12/02/14 | <100 | <0.232 | 0.387 | <0.200 | <0.500 | <0.500 | <0.500 | <0.500 | <1.50 | 0.0044 | <0.200 |
| MW-5 | 12/02/14 | <100 | <0.238 | <0.397 | <0.200 | <0.500 | <0.500 | <0.500 | <0.500 | <1.50 | **0.0052** | <0.200 |
| MW-6 | 12/02/14 | <100 | <0.237 | <0.396 | <0.200 | <0.500 | <0.500 | <0.500 | <0.500 | <1.50 | **0.0054** | <0.200 |
| MW-7 | 12/03/14 | <100 | <0.231 | <0.385 | <0.200 | <0.500 | <0.500 | <0.500 | <0.500 | <1.50 | **0.0093** | <0.200 |
| MW-8 | 12/03/14 | <100 | <0.238 | <0.397 | <0.200 | <0.500 | <0.500 | <0.500 | <0.500 | <1.50 | **0.0065** | <0.200 |
| MW-9 | 12/03/14 | <100 | <0.223 | <0.388 | <0.200 | <0.500 | <0.500 | <0.500 | <0.500 | <1.50 | **0.0054** | <0.200 |
| B-1 | 12/03/14 | <100 | 0.447 | <0.386 | <0.200 | <0.500 | <0.500 | <0.500 | <0.500 | <1.50 | <0.010 | <0.200 |
| OW-1 | 12/03/14 | <100 | <0.231 | <0.385 | <0.200 | <0.500 | <0.500 | <0.500 | <0.500 | <1.50 | <0.0010 | <0.200 |
| MW-Dup | 12/03/14 | <100 | <0.231 | <0.385 | <0.200 | <0.500 | <0.500 | <0.500 | <0.500 | <1.50 | 0.0020 | <0.200 |
| MTCA Method A Cleanup Levels | | 1,000/800[8] | 0.500 | 0.500 | 5 | 1,000 | 700 | 1,000[9] | | | 0.005 | 2 |

**Notes:**

[1]Chemical analyses completed by TestAmerica Laboratories, Inc. located in Spokane Valley, Washington.

[2]GRPH = Gasoline-range petroleum hydrocarbons analyzed by Northwest Method NWTPH-Gx.

[3]DRPH = Diesel-range petroleum hydrocarbons analyzed by Northwest Method NWTPH-Dx.

[4]ORPH = Oil-range petroleum hydrocarbons analyzed by Northwest Method NWTPH-Dx.

[5]Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA 8260C.

[6]Arsenic analyzed by EPA 200.8

[7]Mercury analyzed by EPA 200 Series Methods

[8]Cleanup level is 1,000 µg/L; 800 µg/L when benzene is detected.

[9]Cleanup level for total xylenes (o-xylene and m,p-xylene) is 1,000 µg/L.

**Red bolding** and outline indicates the detected concentration of an analyte was greater than the cleanup level.

mg/L = milligrams per liter; µg/L = micrograms per liter; MTCA = Model Toxics Control Act

FIGURES

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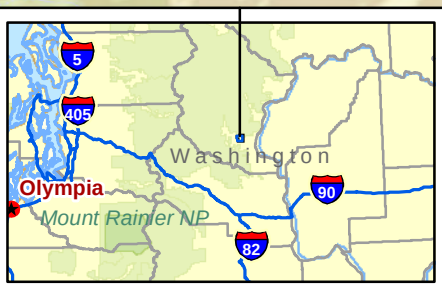


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Data Sources: ESRI Data & Maps, Street Maps 2005

Transverse Mercator, State Plane South, North American Datum 1983
North arrow oriented to grid north

**Vicinity Map**

Former Cashmere Mill Site
Cashmere, Washington

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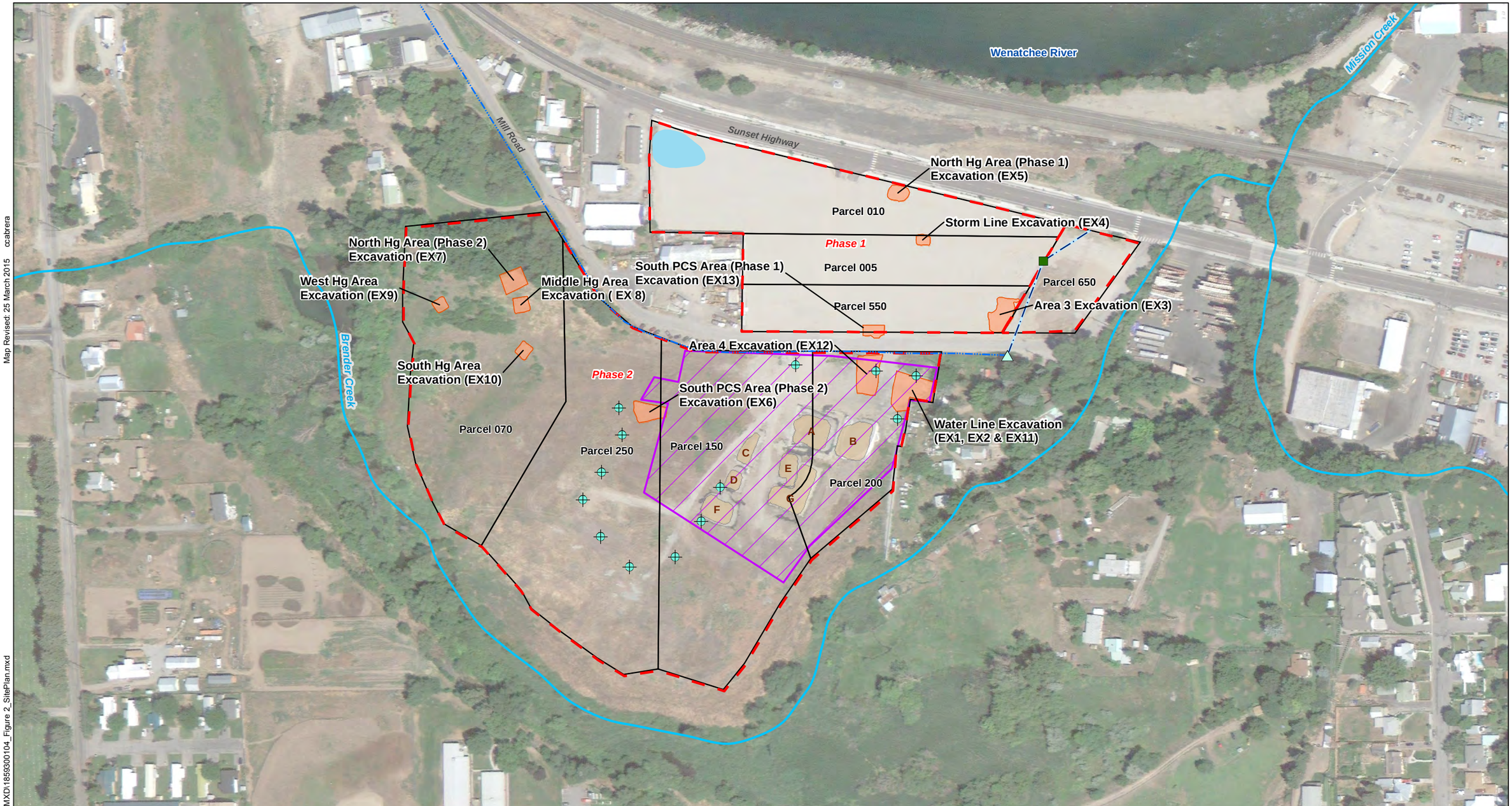
**Figure 1**

Office: SPOK Path: P:\18\18593001\GIS\MXD\1859300104_F1.mxd Map Revised: 02 October 2014 ccabrera




Map Revised: 25 March 2015 ccabrera

Path: P:\18\18593001\GIS\MXD\1859300104_Figure 2_SitePlan.mxd

Office: SPO

Data References
Existing site boundary, parcel, previous explorations, remedial site boundaries, and PCS Soil stockpiles based on data provided by Maul, Foster & Alongi, Inc. and RH2 Engineering Inc., 2013.
Imagery from Google Earth Pro, 2013

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

Notes:
1. Parcel labels in drawing refer to the last three digits in the parcel numbers below. Parcels in map include:
231905924005, 231905925010, 231905110650, 231905110550, 231905110500, 231905110600, 231905141200, 231905110150, 231905141250, 231905924070.
2. The locations of all features shown are approximate.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
4. Dewatering well locations estimate from the "Groundwater Control Plan", Middour Consulting LLC, June 20, 2014.
5. Phase 2 wood waste excavation limits based on post-construction survey provided by RH2 Engineering.

Approximate Project Site Boundary

Approximate Final Extent of Phase I and II Excavation Areas

A — Former PCS Stockpile Identification and Locations from Phase 1

Approximate Phase 2 Wood Waste Excavation Limits

Approximate Location of Dewatering Wells

Approximate Location of Dewatering Infiltration Pond

Inlet at No Name Creek Bypass

No Name Creek Bypass Vault

No Name Creek Culvert Approximate Alignment

Streams Approximate Location

Ditch Approximate Location

Parcels

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Feet

**Site Plan**

Former Cashmere Mill Site
Cashmere, Washington

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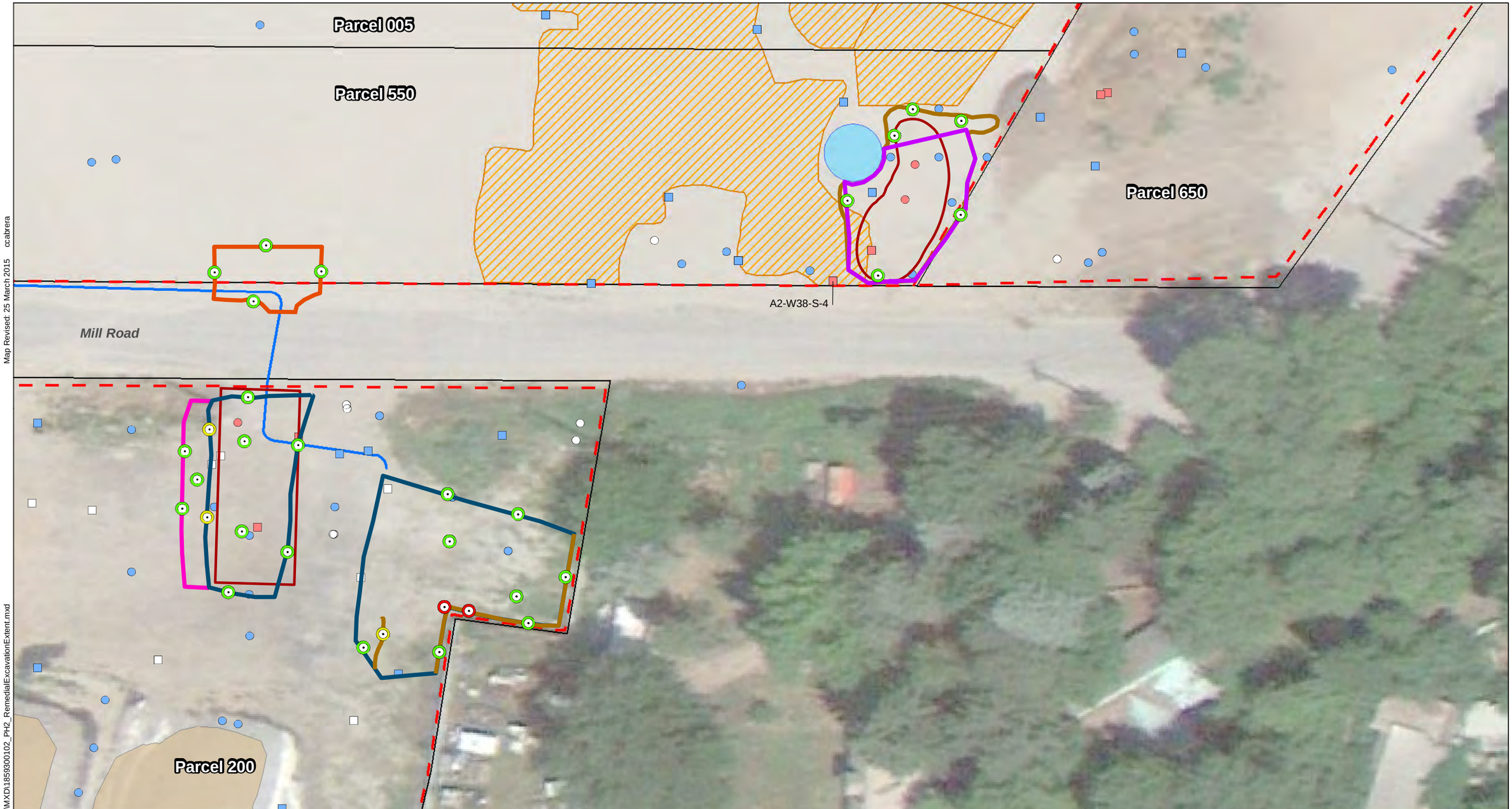
**Figure 2**




Data References
Existing site boundary, parcel, previous explorations, remedial site boundaries, and PCS Soil stockpiles based on data provided by Maul, Foster & Alongi, Inc. and RH2 Engineering Inc., 2013.
Imagery from Google Earth Pro, 2013

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

Notes:
1. Parcel labels in drawing refer to the last three digits in the parcel numbers below. Parcels in map include:
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Excavation Confirmation Sample Number and Approximate Location Tested Less Than Cleanup Level

Excavation Confirmation Sample Number and Approximate Location Tested Greater Than Cleanup Level (Later Removed)

Excavation Confirmation Sample Number and Approximate Location Tested Greater Than Cleanup Level (Remains Inplace)

Excavation Sample Not Tested

Approximate Limits of Remedial Excavation Based on GPS Data and/or Field Measurements

- July 18, 2014
- July 21, 2014
- September 5, 2014
- September 12, 2014
- October 13, 2014

GeoEngineers Explorations Not Tested

GeoEngineers Explorations < MTCA Applicable Method A or B Cleanup Levels

GeoEngineers Explorations > MTCA Applicable Method A or B Cleanup Levels

Previous Remedial Excavation Confirmation Sample Explorations by Others Not Tested

Previous Remedial Excavation Confirmation Sample Explorations by Others < MTCA Method A Cleanup Levels

Previous Remedial Excavation Confirmation Sample Explorations by Others > MTCA Method A Cleanup Levels

Estimated Extent of Contaminated Soil Requiring Removal

Former PCS Stockpiles from Phase 1

Approximate Location of Previous Phase 1 Remedial Excavation Areas

Approximate Project Site Boundary

Waterline

Water Structure

Parcels

N
W E
S

0 40
Feet

**Phase 2 Final Remedial Excavation Extents**

Former Cashmere Mill Site
Cashmere, Washington

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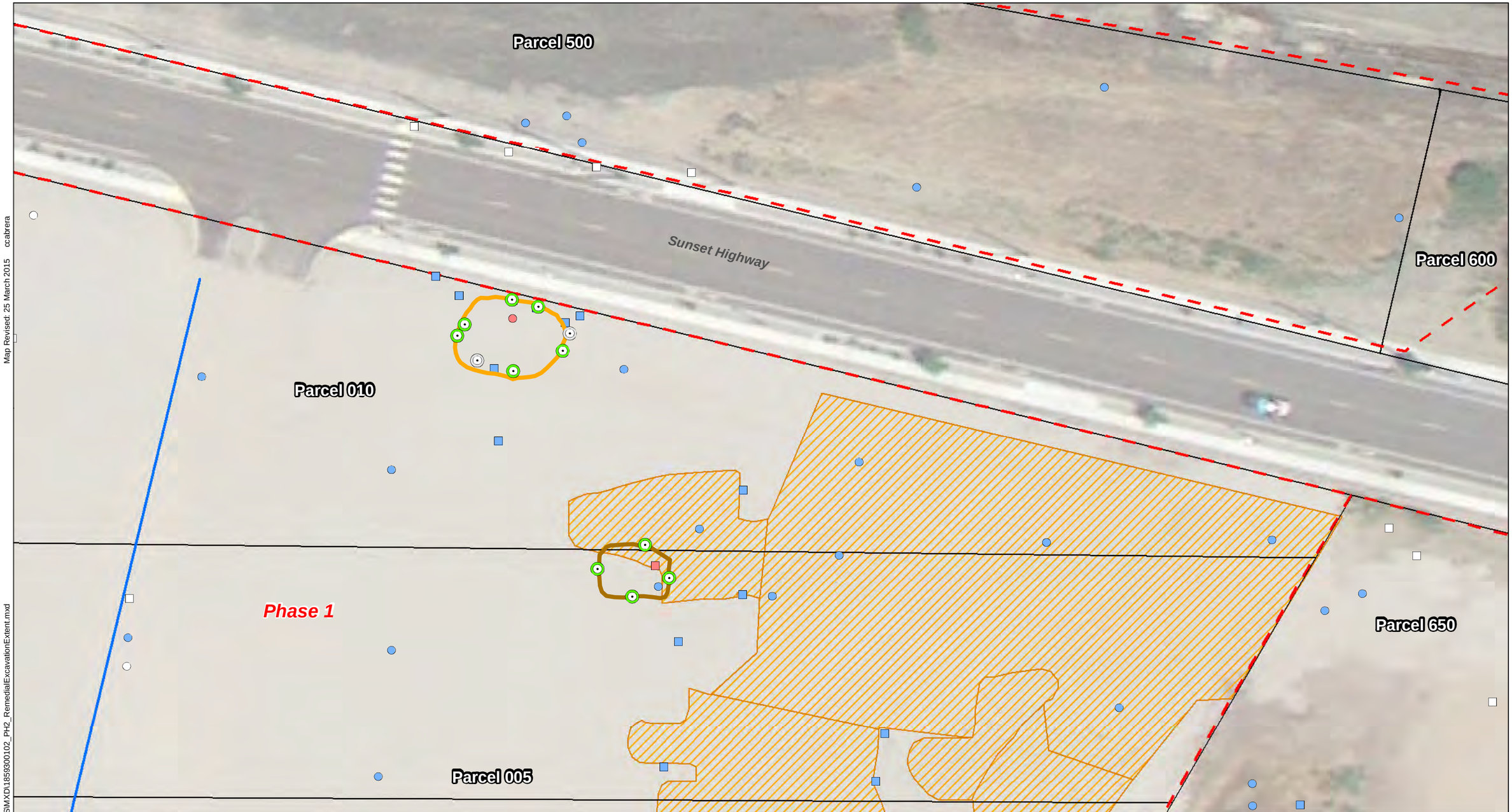
**Figure 3**

Office: SPO Path: P:\18\18593001\GIS\MXD\18593001 02_PH2_RemedialExcavationExtent.mxd Map Revised: 25 March 2015 ccabrera




Data References
Existing site boundary, parcel, previous explorations, remedial site boundaries, and PCS Soil stockpiles based on data provided by Maul, Foster & Alongi, Inc. and RH2 Engineering Inc., 2013.
Imagery from Google Earth Pro, 2013

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

Notes:
1. Parcel labels in drawing refer to the last three digits in the parcel numbers below.
Parcels in map include:
231905924005, 231905925010, 231905110650, 231905110550, 231905110500, 231905110600, 231905141200, 231905110150, 231905141250, 231905924070.
2. The locations of all features shown are approximate.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Excavation Confirmation Sample Number and Approximate Location Tested Less Than Cleanup Level

Excavation Confirmation Sample Number and Approximate Location Tested Greater Than Cleanup Level (Later Removed)

Excavation Confirmation Sample Number and Approximate Location Tested Greater Than Cleanup Level (Remains Inplace)

Excavation Sample Not Tested

Approximate Limits of Remedial Excavation Based on GPS Data and/or Field Measurements

July 21, 2014

July 22, 2014

GeoEngineers Explorations Not Tested

GeoEngineers Explorations < MTCA Applicable Method A or B Cleanup Levels

GeoEngineers Explorations > MTCA Applicable Method A or B Cleanup Levels

Previous Remedial Excavation Confirmation Sample Explorations by Others Not Tested

Previous Remedial Excavation Confirmation Sample Explorations by Others < MTCA Method A Cleanup Levels

Previous Remedial Excavation Confirmation Sample Explorations by Others > MTCA Method A Cleanup Levels

Estimated Extent of Contaminated Soil Requiring Removal

Former PCS Stockpiles from Phase 1

Approximate Location of Previous Phase 1 Remedial Excavation Areas

Approximate Project Site Boundary

Waterline

Parcels

N
W E
S

0 40
Feet

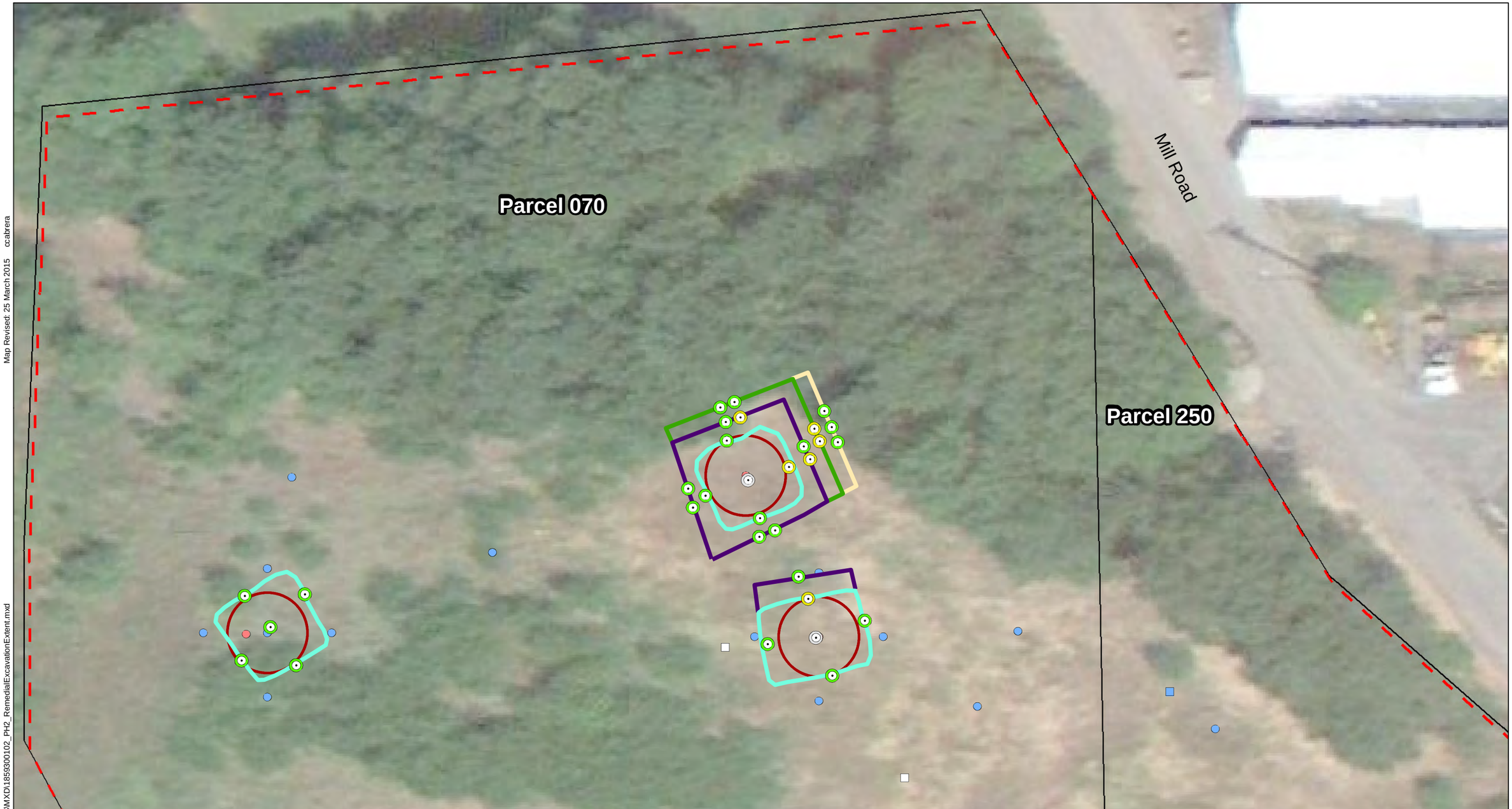
**Phase 2 Final Remedial Excavation Extents**

Former Cashmere Mill Site
Cashmere, Washington

GEOENGINEERS

**Figure 4**

Office: SPO Path: P:\18\18593001\GIS\MXD\1859300102_PH2_RemedialExcavationExtent.mxd Map Revised: 25 March 2015 ccabrera




Map Revised: 25 March 2015 ccabrera

Path: P:\18\18593001\GIS\MXD\18593001 02_PH2_RemedialExcavationExtent.mxd

Office: SPO

Data References
Existing site boundary, parcel, previous explorations, remedial site boundaries, and PCS Soil stockpiles based on data provided by Maul, Foster & Alongi, Inc. and RH2 Engineering Inc., 2013.
Imagery from Google Earth Pro, 2013

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

Notes:
1. Parcel labels in drawing refer to the last three digits in the parcel numbers below. Parcels in map include:
231905924005, 231905925010, 231905110650, 231905110550, 231905110500, 231905110600, 231905141200, 231905110150, 231905141250, 231905924070.
2. The locations of all features shown are approximate.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Excavation Confirmation Sample Number and Approximate Location Tested Less Than Cleanup Level

Excavation Confirmation Sample Number and Approximate Location Tested Greater Than Cleanup Level (Later Removed)

Excavation Confirmation Sample Number and Approximate Location Tested Greater Than Cleanup Level (Remains Inplace)

Excavation Sample Not Tested

Approximate Limits of Remedial Excavation Based on GPS Data and/or Field Measurements

July 24, 2014

July 31, 2014

August 7, 2014

August 27, 2014

GeoEngineers Explorations Not Tested

GeoEngineers Explorations < MTCA Applicable Method A or B Cleanup Levels

GeoEngineers Explorations > MTCA Applicable Method A or B Cleanup Levels

Previous Remedial Excavation Confirmation Sample Explorations by Others Not Tested

Previous Remedial Excavation Confirmation Sample Explorations by Others < MTCA Method A Cleanup Levels

Previous Remedial Excavation Confirmation Sample Explorations by Others > MTCA Method A Cleanup Levels

Estimated Extent of Contaminated Soil Requiring Removal

Former PCS Stockpiles from Phase 1

Approximate Location of Previous Phase 1 Remedial Excavation Areas

Approximate Project Site Boundary

Waterline

Parcels

N
W E
S

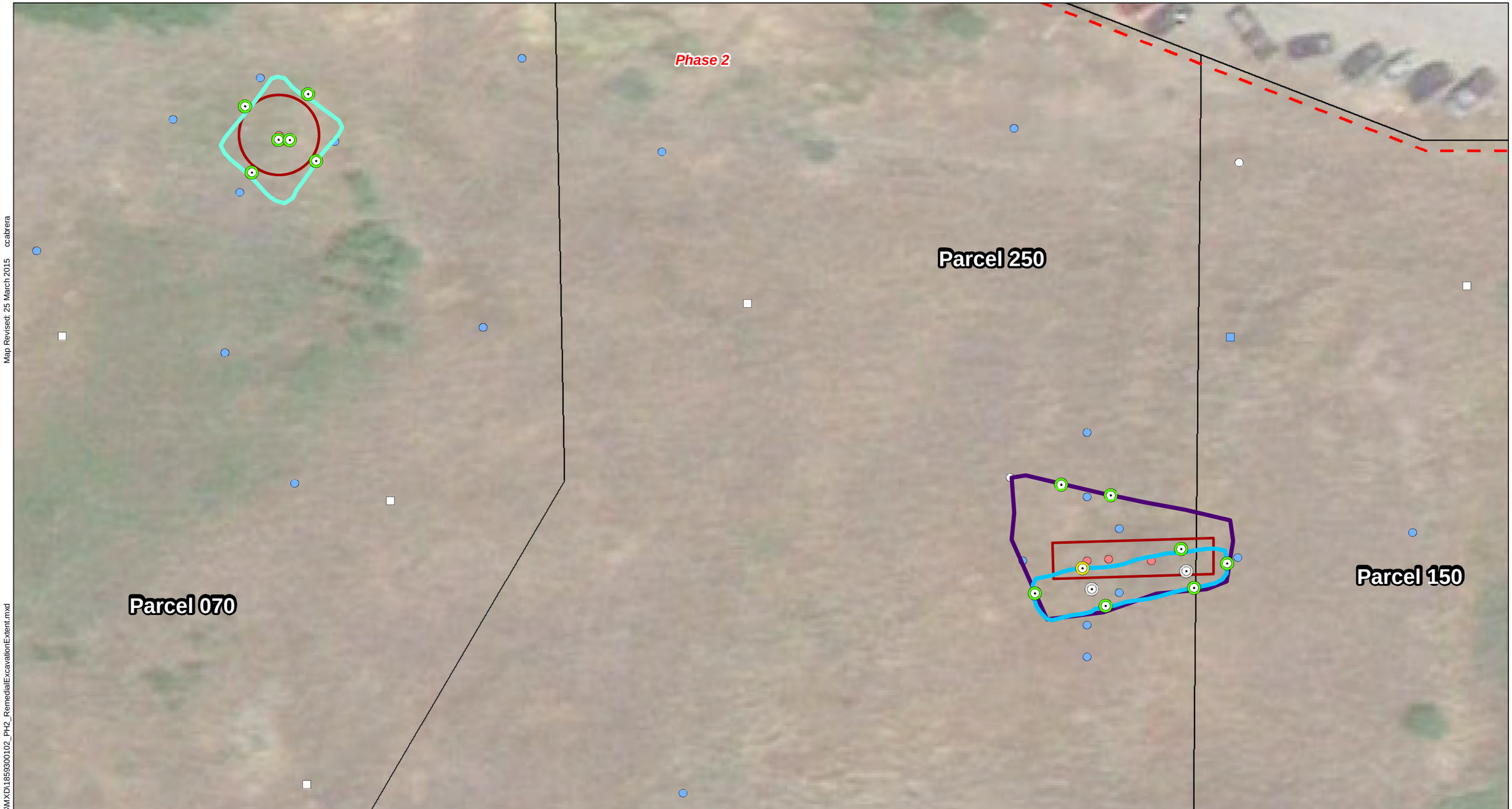
0 30
Feet

**Phase 2 Final Remedial Excavation Extents**

Former Cashmere Mill Site
Cashmere, Washington

GEOENGINEERS

**Figure 5**




Map Revised: 25 March 2015 ccabrera

Path: P:\181\18593001\GIS\MXD\18593001 02_PH2_RemedialExcavationExtent.mxd

Office: SPO

Data References
Existing site boundary, parcel, previous explorations, remedial site boundaries, and PCS Soil stockpiles based on data provided by Maul, Foster & Alongi, Inc. and RH2 Engineering Inc., 2013.
Imagery from Google Earth Pro, 2013

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

Notes:
1. Parcel labels in drawing refer to the last three digits in the parcel numbers below. Parcels in map include:
231905924005, 231905925010, 231905110650, 231905110550, 231905110500, 231905110600, 231905141200, 231905110150, 231905141250, 231905924070.
2. The locations of all features shown are approximate.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Excavation Confirmation Sample Number and Approximate Location Tested Less Than Cleanup Level

Excavation Confirmation Sample Number and Approximate Location Tested Greater Than Cleanup Level (Later Removed)

Excavation Confirmation Sample Number and Approximate Location Tested Greater Than Cleanup Level (Remains Inplace)

Excavation Sample Not Tested

Approximate Limits of Remedial Excavation Based on GPS Data and/or Field Measurements

July 23, 2014

July 24, 2014

July 31, 2014

GeoEngineers Explorations Not Tested

GeoEngineers Explorations < MTCA Applicable Method A or B Cleanup Levels

GeoEngineers Explorations > MTCA Applicable Method A or B Cleanup Levels

Previous Remedial Excavation Confirmation Sample Explorations by Others Not Tested

Previous Remedial Excavation Confirmation Sample Explorations by Others < MTCA Method A Cleanup Levels

Previous Remedial Excavation Confirmation Sample Explorations by Others > MTCA Method A Cleanup Levels

Estimated Extent of Contaminated Soil Requiring Removal

Former PCS Stockpiles from Phase 1

Approximate Location of Previous Phase 1 Remedial Excavation Areas

Approximate Project Site Boundary

Waterline

Parcels

N
W E
S

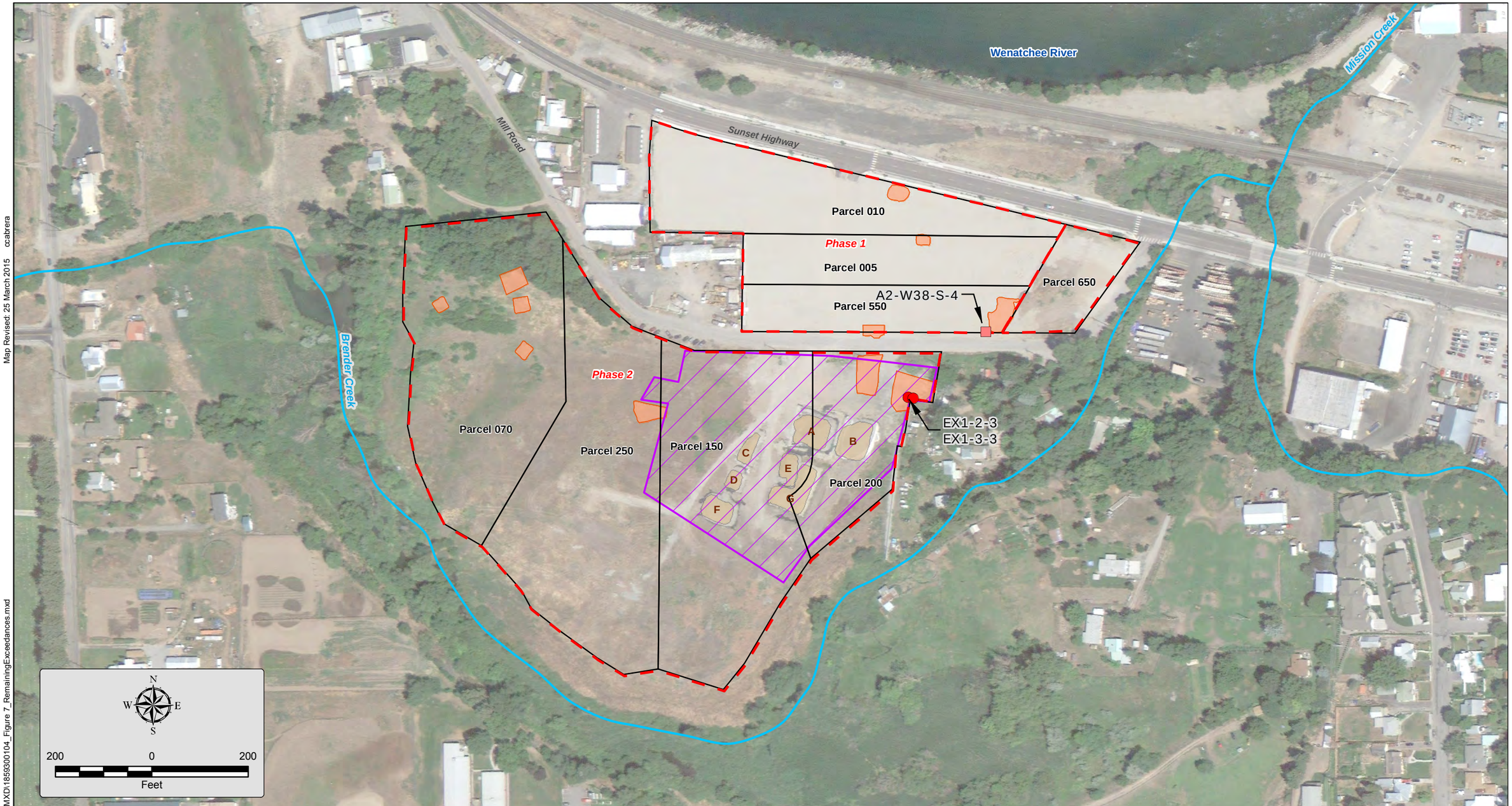
0 30
Feet

**Phase 2 Final Remedial Excavation Extents**

Former Cashmere Mill Site
Cashmere, Washington

GEOENGINEERS

**Figure 6**




Map Revised: 25 March 2015 ccabrera

Path: P:\181859300\GIS\MXD\1859300104_Figure 7_RemainingExceedances.mxd

Office: SPO

Data References
Existing site boundary, parcel, previous explorations, remedial site boundaries, and PCS Soil stockpiles based on data provided by Maul, Foster & Alongi, Inc. and RH2 Engineering Inc., 2013.
Imagery from Google Earth Pro, 2013

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

Notes:
1. Parcel labels in drawing refer to the last three digits in the parcel numbers below. Parcels in map include:
231905924005, 231905925010, 231905110650, 231905110550, 231905110500, 231905110600, 231905141200, 231905110150, 231905141250, 231905924070.
2. The locations of all features shown are approximate.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
4. Dewatering well locations estimate from the "Groundwater Control Plan", Middour Consulting LLC, June 20, 2014.
5. Phase 2 wood waste excavation limits based on post-construction survey provided by RH2 Engineering.

Approximate Project Site Boundary

Confirmation Sample Tested Greater Than Cleanup Level (Remains In Place)

Previous Remedial Excavation Confirmation Sample Explorations by Others > MTCA Method A Cleanup Levels (Remains In Place)

Approximate Final Extent of Phase I and II Excavation Areas

A — Former PCS Stockpile Identification and Locations from Phase 1

Approximate Phase 2 Wood Waste Excavation Limits

Streams Approximate Location

Parcels

*Refer to Figure 3 for detailed site location of remaining confirmation samples exceeding cleanup levels.

**Remaining Confirmation Samples Exceeding Cleanup Levels**

Former Cashmere Mill Site
Cashmere, Washington

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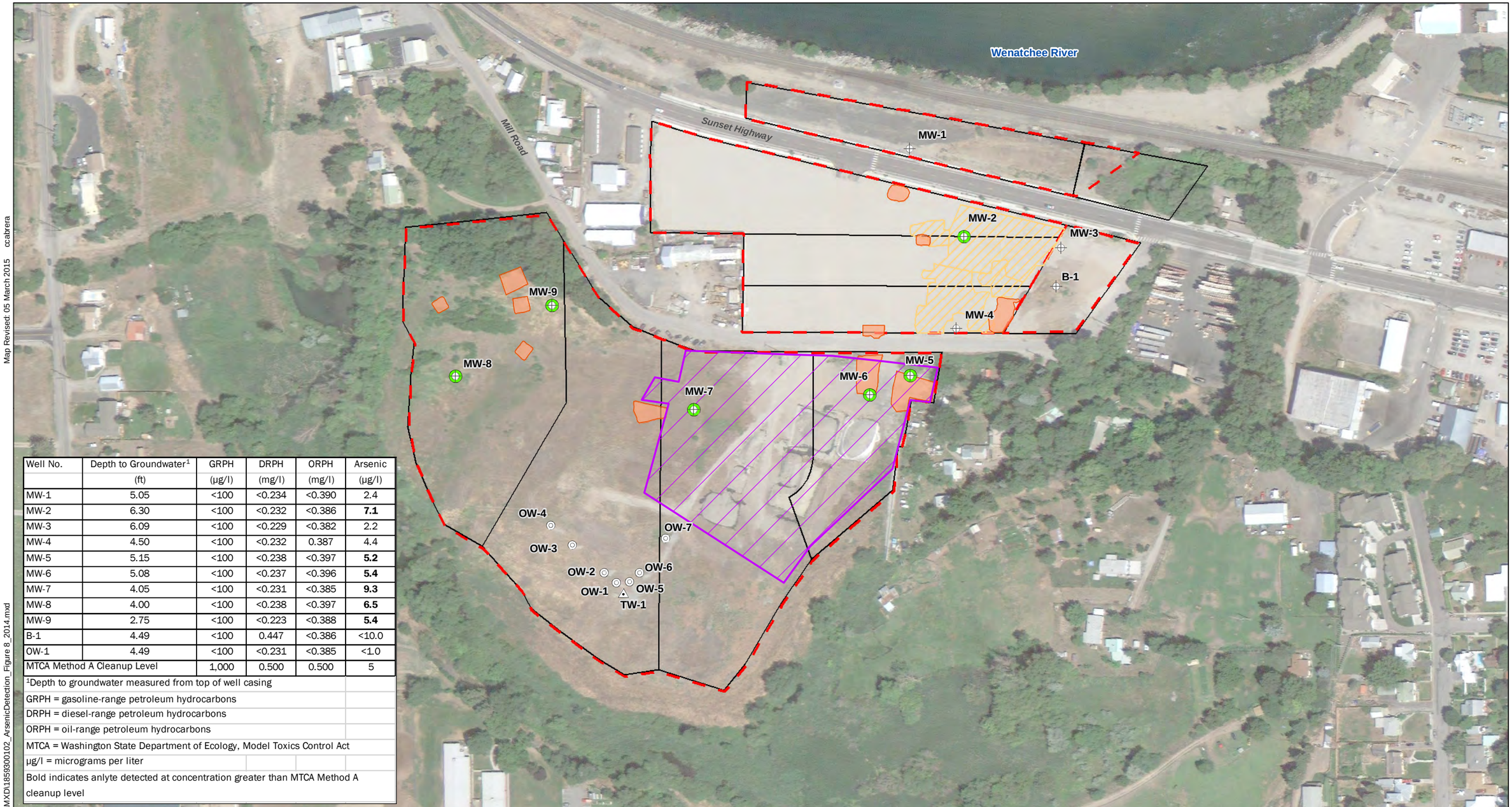
**Figure 7**




| Well No. | Depth to Groundwater[1] (ft) | GRPH (µg/l) | DRPH (mg/l) | ORPH (mg/l) | Arsenic (µg/l) |
|---|---|---|---|---|---|
| MW-1 | 5.05 | <100 | <0.234 | <0.390 | 2.4 |
| MW-2 | 6.30 | <100 | <0.232 | <0.386 | **7.1** |
| MW-3 | 6.09 | <100 | <0.229 | <0.382 | 2.2 |
| MW-4 | 4.50 | <100 | <0.232 | 0.387 | 4.4 |
| MW-5 | 5.15 | <100 | <0.238 | <0.397 | **5.2** |
| MW-6 | 5.08 | <100 | <0.237 | <0.396 | **5.4** |
| MW-7 | 4.05 | <100 | <0.231 | <0.385 | **9.3** |
| MW-8 | 4.00 | <100 | <0.238 | <0.397 | **6.5** |
| MW-9 | 2.75 | <100 | <0.223 | <0.388 | **5.4** |
| B-1 | 4.49 | <100 | 0.447 | <0.386 | <10.0 |
| OW-1 | 4.49 | <100 | <0.231 | <0.385 | <1.0 |
| MTCA Method A Cleanup Level | | 1,000 | 0.500 | 0.500 | 5 |

[1]Depth to groundwater measured from top of well casing

GRPH = gasoline-range petroleum hydrocarbons

DRPH = diesel-range petroleum hydrocarbons

ORPH = oil-range petroleum hydrocarbons

MTCA = Washington State Department of Ecology, Model Toxics Control Act

µg/l = micrograms per liter

Bold indicates anlyte detected at concentration greater than MTCA Method A cleanup level

Data References: Contours generated using Surfer software. Existing site boundary, parcel, previous explorations, remedial site boundaries, and PCS Soil stockpiles based on data provided by Maul, Foster & Alongi, Inc. and RH2 Engineering Inc., 2013. Imagery from Google Earth Pro, 2013

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

Notes:
1. Parcel labels in drawing refer to the last three digits in the parcel numbers below. Parcels in map include:
231905924005, 231905925010, 231905110650, 231905110550, 231905110500, 231905110600, 231905141200, 231905110150, 231905141250, 231905924070.
2. The locations of all features shown are approximate.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
4. Phase 2 wood waste excavation limits based on post-construction survey provided by RH2 Engineering.

Monitoring Well Number and Approximate Location

Observation Well Number and Approximate Location

Test Well Number and Approximate Location

Arsenic detected at concentration greater than MTCA Method A cleanup level

Approximate Location of Phase 1 Remedial Excavation Areas

Approximate Project Site Boundary

Final Extent of Contaminated Soil Remedial Excavation Areas

Approximate Final Extent of Phase I and II Excavation Areas

Parcels

N W E S

200 0 200
Feet

**Arsenic Detection, December 2, 2014**

Former Cashmere Mill Site
Cashmere, Washington

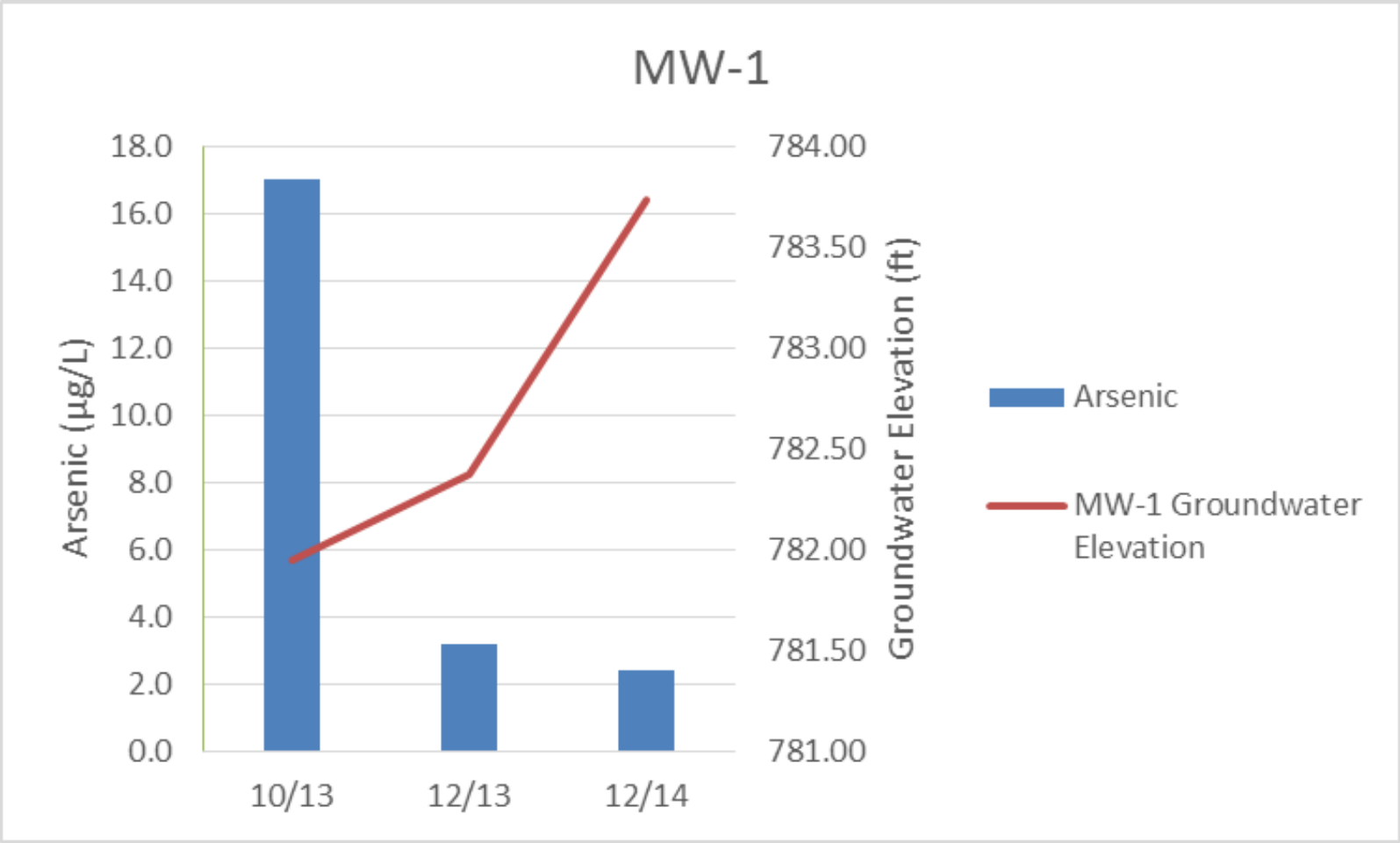
GEOENGINEERS

**Figure 8**

Map Revised: 05 March 2015 ccabrera

Path: P:\18\18593001\GIS\MXD\18593000102_ArsenicDetection_Figure 8_2014.mxd

Office: SPO




Notes:

1. ft = feet; µg/L = µicrograms per liter

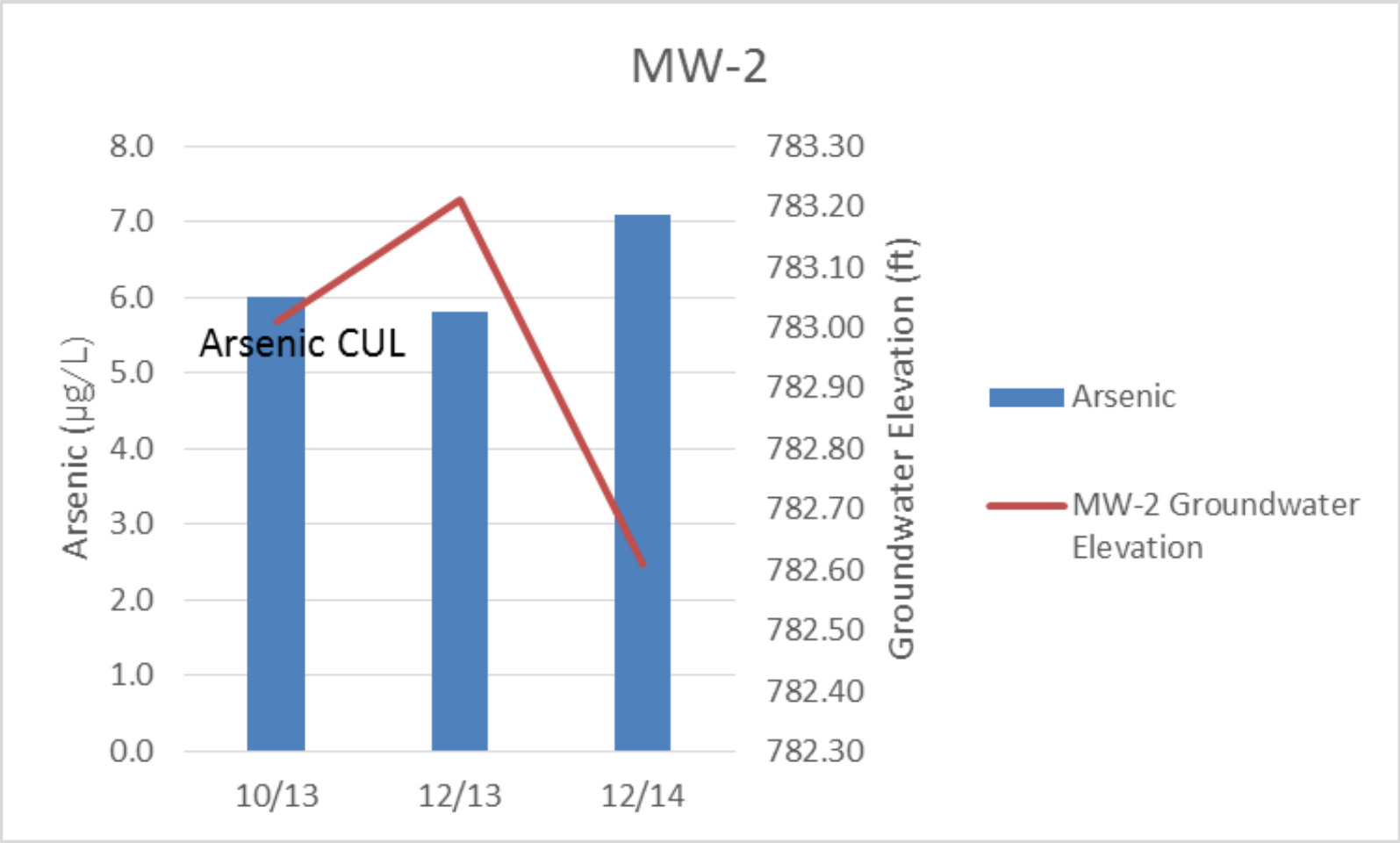
**Arsenic versus Groundwater Elevation**

Former Cashmere Mill Site
Cashmere, Washington

GeoEngineers

**Figure 9**

File No. 18593-001-04 4/24/2015




Notes:

1. ft = feet; µg/L = µicrograms per liter
2. CUL = cleanup level

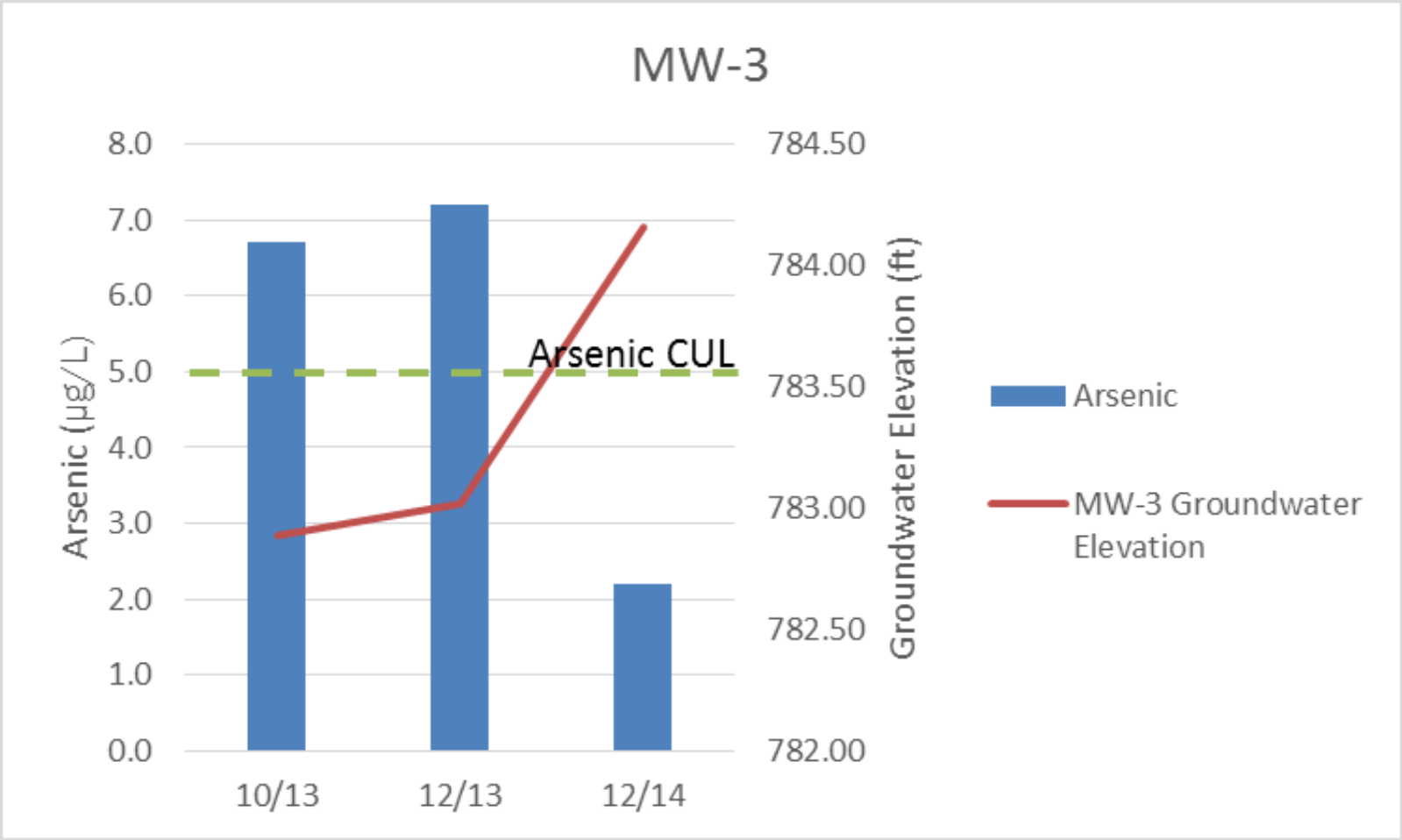
**Arsenic versus Groundwater Elevation**

Former Cashmere Mill Site
Cashmere, Washington

GeoEngineers

**Figure 10**

File No. 18593-001-04 4/24/2015




Notes:

1. ft = feet; µg/L = µicrograms per liter
2. CUL = cleanup level

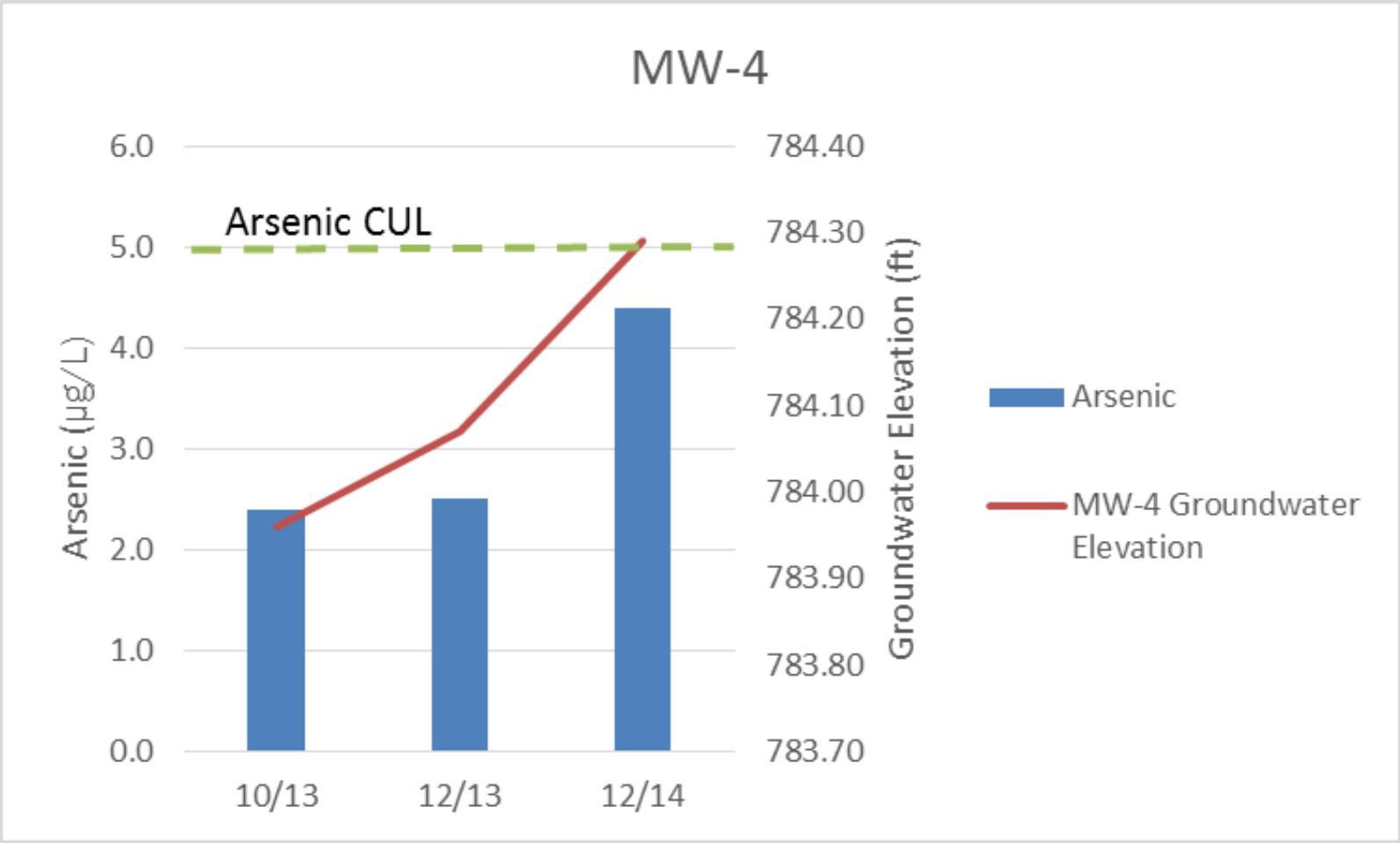
File No. 18593-001-04 4/24/2015

**Arsenic versus Groundwater Elevation**

Former Cashmere Mill Site
Cashmere, Washington

GeoEngineers

**Figure 11**




Notes:

1. ft = feet; µg/L = µicrograms per liter
2. CUL = cleanup level

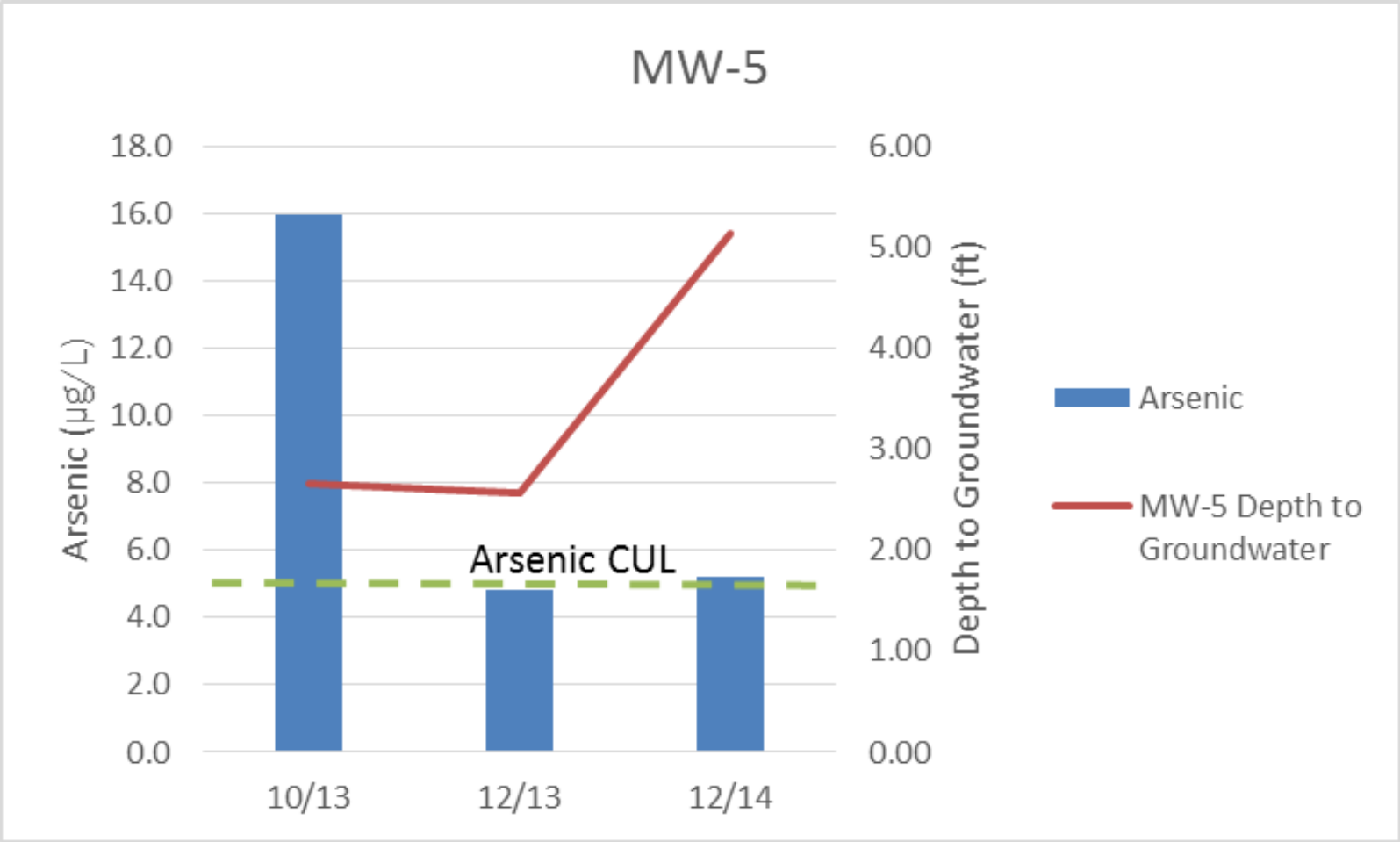
**Arsenic versus Groundwater Elevation**

Former Cashmere Mill Site
Cashmere, Washington

GeoEngineers

**Figure 12**

File No. 18593-001-04 4/24/2015




Notes:

1. ft = feet; µg/L = µicrograms per liter
2. CUL = cleanup level

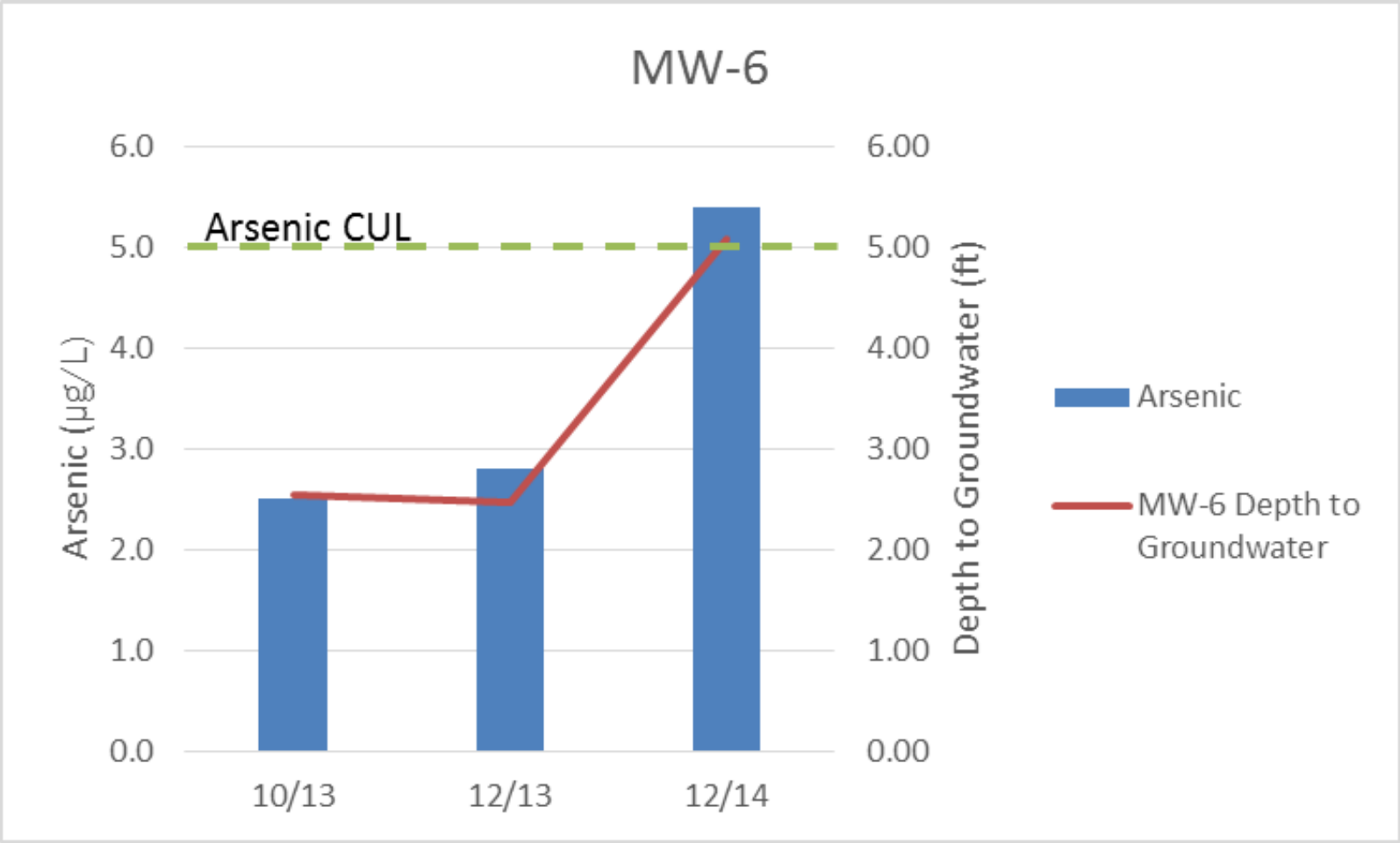
**Arsenic versus Groundwater Elevation**

Former Cashmere Mill Site
Cashmere, Washington

GeoEngineers

**Figure 13**

File No. 18593-001-04 4/24/2015




Notes:

1. ft = feet; µg/L = µicrograms per liter
2. CUL = cleanup level

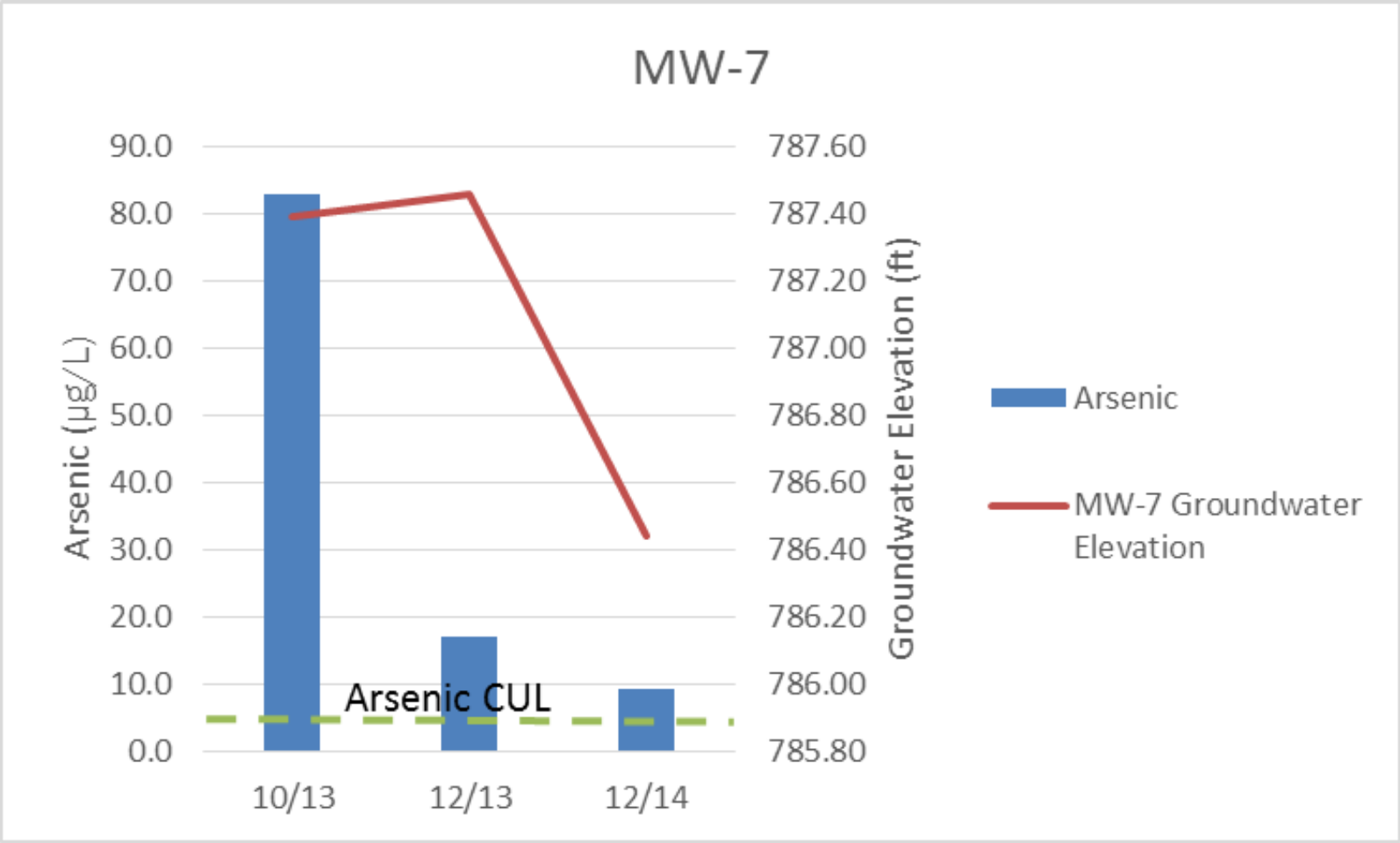
**Arsenic versus Groundwater Elevation**

Former Cashmere Mill Site
Cashmere, Washington

GeoEngineers

**Figure 14**

File No. 18593-001-04 4/24/2015




Notes:

1. ft = feet; µg/L = µicrograms per liter
2. CUL = cleanup level

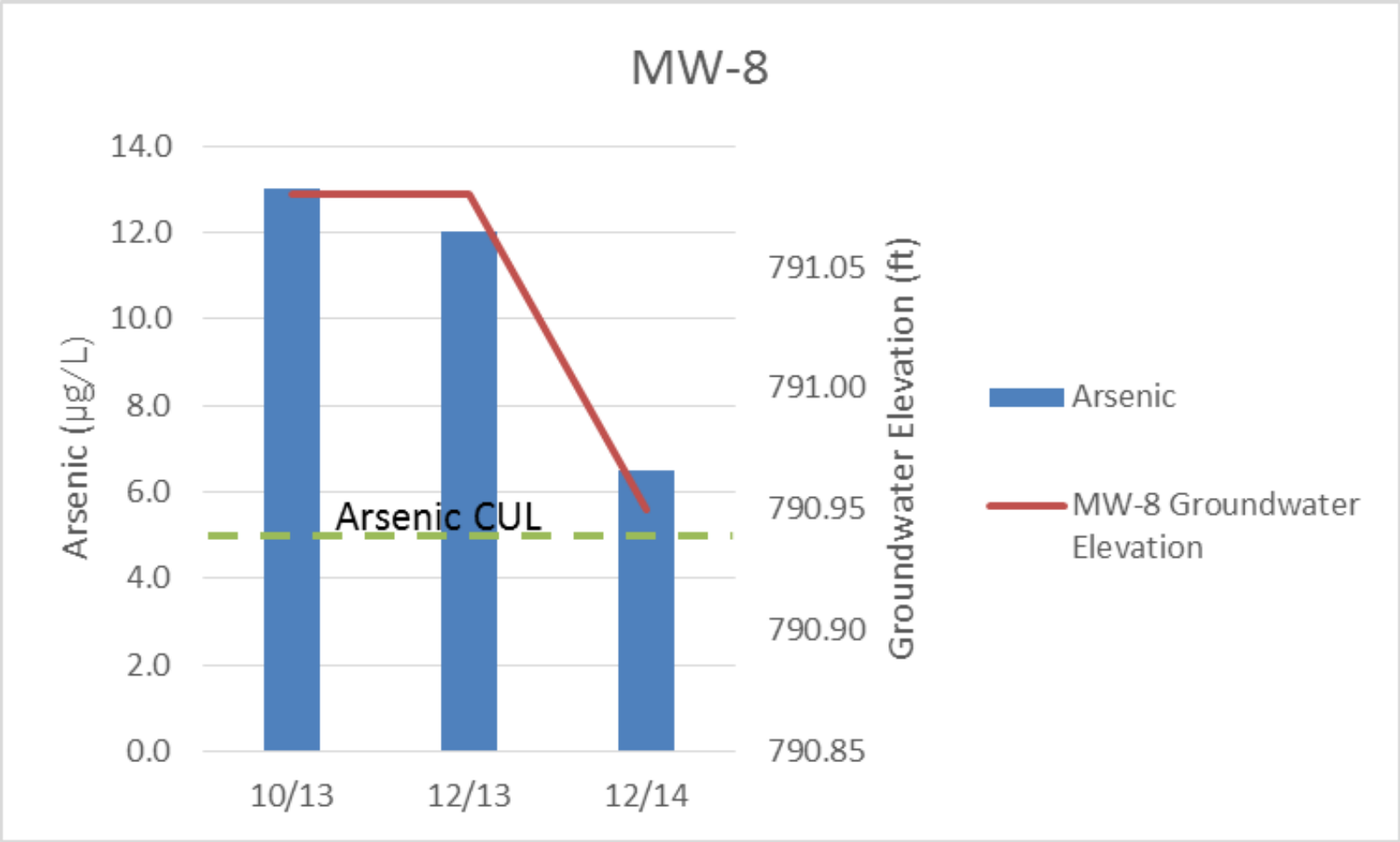
**Arsenic versus Groundwater Elevation**

Former Cashmere Mill Site
Cashmere, Washington

GeoEngineers

**Figure 15**

File No. 18593-001-04 4/24/2015




Notes:

1. ft = feet; µg/L = µicrograms per liter
2. CUL = cleanup level

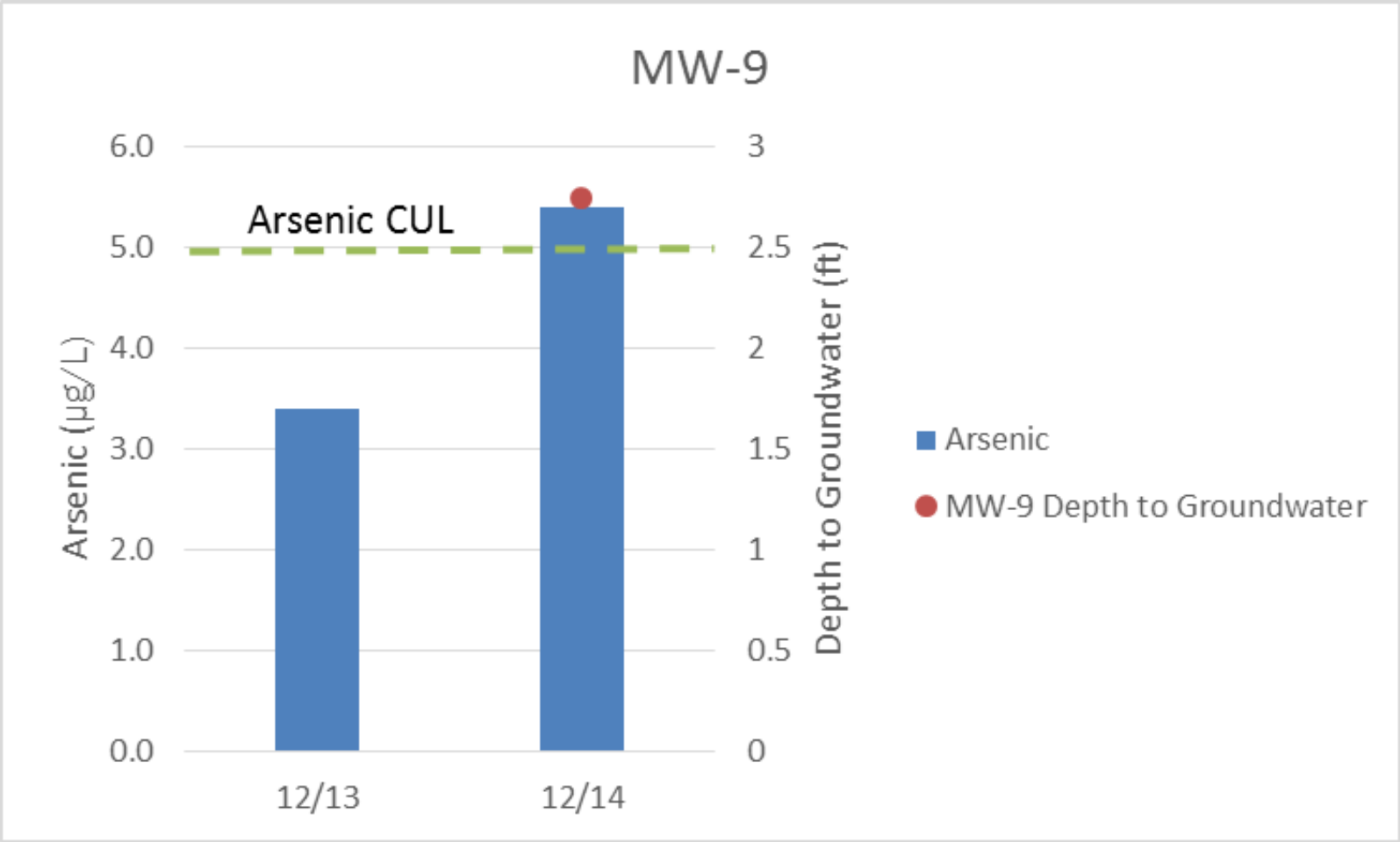
**Arsenic versus Groundwater Elevation**

Former Cashmere Mill Site
Cashmere, Washington

GeoEngineers

**Figure 16**

File No. 18593-001-04 4/24/2015




Notes:

1. ft = feet; µg/L = µicrograms per liter
2. CUL = cleanup level

**Arsenic versus Groundwater Elevation**

Former Cashmere Mill Site
Cashmere, Washington

GeoEngineers

**Figure 17**

File No. 18593-001-04 4/24/2015

APPENDICES

GeoEngineers

# APPENDIX A
## Field Procedures

# APPENDIX A
# FIELD PROCEDURES

## General Soil Sampling Procedures

Samples were obtained using disposable nitrile gloves which were discarded after each use. Samples were placed in 4-ounce, laboratory-supplied sample containers. Sample containers were filled to minimize headspace and labeled with a unique identification. Confirmation samples analyzed for VOCs were obtained using EPA Method 5035 sampling procedures. Samples were temporarily stored in a cool environment (refrigerator or iced cooler) prior to transfer to TestAmerica's Spokane Valley, Washington laboratory for analysis. Chain-of-custody protocols were followed.

## Confirmation Sampling

Discrete confirmation grab samples were obtained from remedial excavations at a rate of one sample per about 50 linear feet of excavation sidewall. Smaller remedial excavations were sampled on sidewalls. Where applicable, samples were collected from the bucket of the excavator. When entering the excavations was safe, samples were obtained by removing about 6 inches of soil from the sample locations and collecting the sample from the underlying, undisturbed soil. Confirmation samples were placed in laboratory-supplied sample containers. Samples obtained for VOC analysis were collected using EPA Method 5035 sampling protocols. Confirmation sample locations were logged using a hand-held GPS unit.

## Field Screening of Soil Samples

A GeoEngineers representative performed field screening of soil samples obtained from areas where petroleum-contaminated soil was observed during excavation activities. Field screening results are used as a general guideline to delineate depths with possible petroleum-related contamination. The screening methods used include: (1) visual screening; (2) water sheen screening; and (3) headspace vapor screening using a MiniRae PID calibrated to isobutylene.

Visual screening consists of inspecting the soil for stains indicative of petroleum-related contamination. Visual screening is generally more effective when contamination is related to heavy petroleum hydrocarbons such as motor oil, or when hydrocarbon concentrations are high. Water sheen screening is a more sensitive method that has been effective in evaluating whether contaminant concentrations are less than regulatory cleanup guidelines.

Water sheen screening involves placing soil in water and observing the water surface for signs of sheen. Sheen screening may detect both volatile and nonvolatile petroleum hydrocarbons. Sheen classifications are as follows:

| | |
|---|---|
| No Sheen | No visible sheen on water surface. |
| Slight Sheen | Light, colorless, dull sheen; spread is irregular, not rapid; sheen dissipates rapidly. Natural organic matter in the soil may produce a slight sheen. |
| Moderate Sheen | Light to heavy sheen; may have some color/iridescence; spread is irregular to flowing, may be rapid; few remaining areas of no sheen on water surface. |
| Heavy Sheen | Heavy sheen with color/iridescence; spread is rapid; entire water surface may be covered with sheen. |

Headspace vapor screening involved placing a soil sample in a plastic sample bag. Air was captured in the bag, and the bag was shaken to expose the soil to the air trapped in the bag. Headspace vapor screening targeted volatile petroleum hydrocarbon compounds. In this application, the PID measured concentration of organic vapors ionizable by a 10.6 electron volt (ev) lamp in the range between 1.0 and 2,000 ppm, with a resolution of +/- 2 ppm.

Field screening results are site-specific. The effectiveness of field screening results will vary with temperature, moisture content, organic content, soil type and type and age of contaminant. The presence or absence of a sheen or headspace vapors does not necessarily indicate the presence or absence of petroleum hydrocarbons.

### Monitoring Headspace Vapor Measurements

Headspace vapor measurement involved placing the tip of the PID into the headspace of the monitoring well and covering the top of the monitoring well to prevent the exchange of ambient air with air in the monitoring well. Headspace vapor measurements targeted volatile petroleum hydrocarbon compounds. In this application, the PID measured concentration of organic vapors ionizable by a 10.6 ev lamp in the range between 1.0 and 2,000 ppm, with a resolution of ±2 ppm.

### Groundwater Elevations Depth to Groundwater

Depths to groundwater were measured using a Solinst Model 101 Water Level Meter (Solinst) in monitoring wells MW-1 through MW-9, B-1 and OW-1 and referenced to the north side of the surveyed top of casing in each well. The Solinst was decontaminated between wells using a LiquiNox® solution wash, followed by a distilled water rinse prior to use in each well.

### Low-Flow/Low-Stress Sampling Procedures

Groundwater sampling was performed consistent with the EPA's low-flow/low-stress groundwater sampling procedure (EPA, 2010a). A bladder pump and disposable polyethylene tubing were used for purging and sampling activities. During purging activities, water quality parameters, including pH, conductivity, temperature, turbidity, ORP and DO, were measured using a Troll 9500 multi-parameter meter equipped with a flow-through cell; measurements were recorded approximately every 3 minutes. The meter calibration was verified at the beginning of each work day consistent with manufacturer recommendations prior to purging and sampling activities.

Groundwater samples were generally collected after (1) water quality parameters had stabilized or (2) a maximum purge time of 60 minutes was achieved. During purging and sampling, drawdown was not allowed to exceed 500 milliliters per minute. Water quality parameter stabilization criteria included the following:

- Turbidity: ±10 percent for values greater than 5 nephelometric turbidity units (NTU);
- DO: ±10 percent for values greater than 0.5 mg/L;
- Conductivity: ±3 percent;
- pH: ±0.1 unit;
- Temperature: ±3 percent; and

- ORP: ±10 millivolts.

After groundwater quality stabilization criteria were reached, the pump's discharge tubing was disconnected from the flow-through cell and groundwater samples were collected for analysis.

Field water quality measurements and depth-to-water measurements were recorded on a Well Purging – Field Water Quality Measurement Form. The groundwater samples were transferred in the field to laboratory-prepared sample containers and kept on ice during transport to the testing laboratory. Chain-of-custody procedures were observed from the time of sample collection to delivery to the testing laboratory.

### Handling of Investigation-Derived Waste

IDW, mainly purge water, was placed in a U.S. Department of Transportation (DOT) approved 55-gallon drum. The drum was labeled with GeoEngineers' contact information, the general contents of the drum, and the date. IDW generated during the December 2014 groundwater monitoring event was placed in a drum on site.

### Laboratory Analytical Plan

Groundwater samples were analyzed using the following methods:

- GRPH using Method NWTPH-Gx;
- DRPH and ORPH using Method NWTPH-Dx;
- BTEX using EPA Method 8260C;
- Arsenic using EPA Method 200.8; and
- Mercury using EPA Method 245.1.

# APPENDIX B
## Laboratory Reports

GeoEngineers
523 East Second Avenue, Spokane, Washington 99202, Telephone: 509.363.3125, Fax: 509.363.3126 www.geoengineers.com

# Data Validation Report

| | |
|---|---|
| **Project:** | Port of Chelan County – Cashmere Mill Construction Phase Services<br>2014 Excavation Soil Samples |
| **GEI File No:** | 18593-001-04 |
| **Date:** | October 26, 2014 |

This report documents the results of a United States EPA-defined Stage 2A data validation (EPA Document 540-R-08-005; EPA, 2009) of analytical data from the analyses of soil samples collected as part of the 2014 Excavation sampling event, and the associated laboratory and field quality control samples. The samples were obtained from the Former Cashmere Mill Site located in the general vicinity of Mill Road and Sunset Highway, about 100 feet south of the Wenatchee River and along the north bank of Brender Creek in Cashmere, Washington.

## OBJECTIVE AND QUALITY CONTROL ELEMENTS

GeoEngineers completed the data validation consistent with the EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (EPA, 2008) and Inorganic Superfund Data Review (EPA, 2010b) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits less than applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

In accordance with Quality Assurance Project Plan (GeoEngineers, 2013b), the data validation included review of the following QC elements:

- Data package completeness
- Chain-of-custody documentation
- Holding times and sample preservation
- Surrogate recoveries
- Method blanks
- Matrix spikes/matrix spike duplicates
- Laboratory control samples/laboratory control sample duplicates
- Laboratory duplicates

- Miscellaneous

## VALIDATED SAMPLE DELIVERY GROUPS

This data validation included review of the sample delivery groups (SDGs) listed below in Table 1.

**TABLE 1: SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS**

| Laboratory SDG | Samples Validated |
|---|---|
| SXG0111 | EX1-1-2, EX1-2-3, EX1-3-3, EX1-4-3, EX1-5-3, EX2-1-3, EX3-1-4 |
| SXG0129 | EX3-2-4, EX3-3-4, EX3-4-4, EX3-5-5 |
| SXG0146 | EX3-6-4, EX4-1-6, EX4-2-6, EX4-3-6, EX4-4-6 |
| SXG0152 | EX5-1-8, EX5-2-8, EX5-3-8, EX5-4-8, EX5-7-8, EX5-8-8 |
| SXG0169 | EX6-1-3, EX6-2-3, EX6-3-3, EX6-4-3, EX6-5-3, EX6-6-3 |
| SXG0172 | EX7-1-2, EX7-2-2, EX7-3-2, EX7-4-2, EX8-1-5, EX8-2-5, EX8-3-5, EX8-4-5, EX9-1-4, EX9-2-4, EX9-3-4, EX9-4-4, EX9-5-4, EX10-1-2, EX10-2-6, EX10-3-6, EX10-4-6, EX10-5-6, EX10-6-6 |
| SXH0001 | EX6-9-3, EX6-10-3, EX7-6-2, EX7-7-3, EX7-8-2, EX7-9-3, EX7-10-2, EX7-11-3, EX7-12-2, EX7-13-3, EX8-6-4 |
| SXH0053 | EX7-14-2, EX7-15-3, EX7-16-2, EX7-17-3 |
| SXH0188 | EX7-18-3.5, EX7-19-3, EX7-20-2, EX7-SP-1, EX7-SP-2, EX7-SP-3 |
| SXH0199 | EX11-1-6, EX11-2-10, EX11-3-4, EX11-4-3, EX11-5-3.25, Infiltration Pond 8/28/14 |
| SXI0031 | EX12-1-2.5, EX12-2-3, EX12-3-2, EX12-4-3, EX12-5-3, EX12-6-8, EX12-7-6 |
| SXI0084 | EX12-8-3, EX12-9-3, EX12-10-7, EX12-11-3 |
| SXJ0095 | EX13-1-3, EX13-2-3, EX13-3-3, EX13-4-3, EX13-SP-1, EX13-SP-2, EX13-SP-3 |

## CHEMICAL ANALYSIS PERFORMED

TestAmerica, located in Spokane, Washington, performed laboratory analysis on the soil samples using one or more of the following methods:

- HCID (NWTPH-HCID) using Method NWTPH-HCID;
- GRPH (NWTPH-Gx) using Method NWTPH-Gx;
- Petroleum Hydrocarbons (NWTPH-Dx) using Method NWTPH-Dx;
- VOCs using Method SW8260C;
- SVOCs using Method SW8270D;
- PAHs using Method SW8270D-SIM;
- Total Mercury using Method EPA7471A, EPA7471B, or EPA245.1;
- Total Arsenic using Method EPA200.8; and
- TCLP using Method EPA7471.

## DATA VALIDATION SUMMARY

The results for each of the QC elements are summarized below.

### Data Package Completeness

TestAmerica provided required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and identified anomalies were discussed in the relevant laboratory case narrative.

### Chain-of-Custody Documentation

Chain-of-custody forms were provided with the laboratory analytical reports. The chain-of-custody forms were accurate and complete when submitted to the laboratory.

### Holding Times and Sample Preservation

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for analyses. The sample coolers arrived at the laboratory within the appropriate temperatures of between 2 and 6 degrees Celsius, with the following exceptions:

SDG SXG0129: The sample cooler temperature recorded at the laboratory was 8.9 degrees Celsius. It was determined through professional judgment that since the samples were received by the laboratory within 24 hours after the samples were collected, this temperature should not affect the sample analytical results.

SDG SXG0172: The sample cooler temperature recorded at the laboratory was 7.3 degrees Celsius. It was determined through professional judgment that since the samples were received by the laboratory within 24 hours after the samples were collected, this temperature should not affect the sample analytical results.

SDG SXH0053: The sample cooler temperature recorded at the laboratory was 14.8 degrees Celsius. It was determined through professional judgment that since the samples were received by the laboratory within 24 hours after the samples were collected, this temperature should not affect the sample analytical results.

SDG SXH0199: The sample cooler temperature recorded at the laboratory was 9.1 degrees Celsius. It was determined through professional judgment that since the samples were received by the laboratory within 24 hours after the samples were collected, this temperature should not affect the sample analytical results.

SDG SXI0031: The sample cooler temperature recorded at the laboratory was 9.8 degrees Celsius. It was determined through professional judgment that since the samples were received by the laboratory the same day they were collected, this temperature should not affect the sample analytical results.

SDG SXI0084: The sample cooler temperature recorded at the laboratory was 19.1 degrees Celsius. It was determined through professional judgment that since the samples were received by the laboratory the same day they were collected, this temperature should not affect the sample analytical results.

## Surrogate Recoveries

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in any environmental sample. Surrogates are used for organic analyses and are added to samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. Surrogate percent recoveries for field samples were within the laboratory control limits, with the following exceptions:

**SDG SXG0111:** (NWTPH-Gx) The percent recovery for surrogate 4-bromofluorobenzene was greater than the control limits in Samples EX1-2-3 and EX1-3-3. The positive results for gasoline-range hydrocarbons were qualified as estimated (J) in these samples.

(NWTPH-Dx) The percent recovery for surrogate o-terphenyl was greater than the control limits in Sample EX1-2-3. The sample required dilution (100X). The surrogates are added to the sample when it is extracted. If the sample is diluted 10X or more, accurate recovery of the surrogates is often not possible because it is also diluted below the linear calibration range of the instrument. No action was required for this outlier.

(VOCs) The percent recovery for surrogate 4-bromofluorobenzene was greater than the control limits in Sample EX1-3-3; however, the sample was spiked with three additional surrogates, all within their respective control limits. No action was required for this outlier.

(SVOCs) The percent recoveries for surrogates nitrobenzene-d5 and terphenyl-d14 were greater than the control limits in Sample EX1-3-3. The positive results for 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene were qualified as estimated (J) in this sample.

Additionally, the percent recovery for surrogate 2-fluorophenol was greater than the control limits in Sample EX1-3-3; however, the sample was spiked with a total of three acidic surrogates. In this case, there were at least two other surrogates that exhibited percent recovery values that were within their respective control limits. No action was required for this outlier.

The percent recoveries for surrogates nitrobenzene-d5 and terphenyl-d14 were greater than the control limits in Sample EX2-1-3. There were no positive results in this sample; therefore, no action was required for this outlier.

**SDG SXG0152:** (NWTPH-Gx) The percent recovery for surrogate 4-bromofluorobenzene was greater than the control limits in Sample EX5-4-8. The positive result for gasoline-range hydrocarbons was qualified as estimated (J) in this sample.

(VOCs) The percent recovery for surrogate 4-bromofluorobenzene was greater than the control limits in Sample EX5-4-8; however, the sample was spiked with three additional surrogates, all within their respective control limits. No action was required for this outlier.

**SDG SXG0169:** (NWTPH-Dx) The percent recovery for surrogate n-triacontane-d62 was greater than the control limits in Sample EX6-2-3. The positive results for diesel- and heavy oil-range hydrocarbons were qualified as estimated (J) in this sample.

Additionally, the percent recovery for surrogate n-triacontane-d62 was not recoverable in Sample EX6-6-3. The sample required dilution (50X). The surrogates are added to the sample when it is extracted. If the sample is diluted 10X or more, recovery of the surrogates is often not possible because it is also diluted below the linear calibration range of the instrument. No action was required for this outlier.

(SVOCs) The percent recovery for surrogate 2-fluorobiphenyl was greater than the control limits in Sample EX6-6-3; however, the sample was spiked with a total of three base-neutral surrogates. In this case, there were at least two other surrogates that exhibited percent recovery values that were within their respective control limits. No action was required for this outlier.

**SDG SXH0199:** (NWTPH-Dx) The percent recoveries for surrogates o-terphenyl and n-triacontane-d52 were less than the control limits in Sample EX11-5-3.25. The sample required dilution (10X). The surrogates are added to the sample when it is extracted. If the sample is diluted 10X or more, accurate recovery of the surrogates is often not possible because it is also diluted below the linear calibration range of the instrument. No action was required for this outlier.

**SDG SXI0031:** (VOCs) The percent recovery for surrogate 4-bromofluorobenzene was greater than the control limits in Sample EX12-1-2.5; however, the sample was spiked with three additional surrogates, all within their respective control limits. No action was required for this outlier.

### Method Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For all sample batches, method blanks for all applicable methods were analyzed at the required frequency. None of the analytes of interest were detected greater than the reporting limits in any of the method blanks.

### Matrix Spikes/Matrix Spike Duplicates

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

For inorganic methods, the matrix spike is followed by a post-digestion spike sample if any element percent recoveries were outside the control limits in the matrix spike. The percent recovery control limits for matrix spikes are 75 to 125 percent.

One MS/MSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for analyses and the percent recovery and RPD values were within the proper control limits, with the following exceptions:

**SDG SXG0169:** (SVOCs) The laboratory performed an MS/MSD sample set on Sample EX6-6-3. The percent recoveries for bis(2-chloroethoxy)methane, bis(2-chloroethyl)ether, 2-chloronaphthalene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, hexachloroethane, naphthalene, 2-nitroaniline, nitrobenzene, 2,4,5-trichlorophenol, and 2,4,6-trichlorophenol were greater than the control limits in the MS/MSD sample set extracted on July 25, 2014. There were no positive results for these target analytes in the associated field sample; therefore, no action was required for these outliers.

Additionally, in the same MS/MSD sample set, the percent recoveries for acenaphthene, benzo(b)fluoranthene, 2-chlorophenol, dimethyl phthalate, hexachlorobutadiene, 2-nitrophenol, bis(2-chloroisopropyl)ether, and 1,2,4-trichlorobenzene were greater than the control limits in the MSD. The percent recoveries for these target analytes were within the control limits in the corresponding MS; therefore, no action was required for these outliers.

**SDG SXG0172:** (Mercury) The laboratory performed an MS/MSD sample set on Sample EX7-1-2. The percent recovery for total mercury was outside the control limits in the MS/MSD sample set extracted on July 29, 2014. The parent sample concentration for this target analyte was greater than 4 times the amount spiked into the sample; therefore, no qualification of the data was required.

**SDG SXH0053:** (Mercury) The laboratory performed an MS/MSD sample set with percent recovery and RPD outliers; however, it was performed on a sample that was associated with another client of the laboratory and not any of the project samples collected by GeoEngineers. For this reason, no action was required for these outliers.

**SDG SXH0188:** (Mercury) The laboratory performed an MS/MSD sample set on Sample EX7-18-3.5. The percent recoveries for total mercury were outside the control limits in the MS/MSD sample set extracted on September 2, 2014. The positive result for this target analyte was qualified as estimated (J) in this sample.

Additionally, the laboratory performed an MS/MSD sample set on Sample EX7-SP-1. The percent recoveries for total mercury were outside the control limits in the MS/MSD sample set extracted on September 2, 2014. The parent sample concentration for this target analyte was greater than 4 times the amount spiked into the sample; therefore, no qualification of the data was required.

**SDG SXH0199:** (SVOCs) The laboratory performed an MS/MSD sample set on Sample EX11-5-3.25. The percent recovery for hexachloroethane was less than the control limits in the MS extracted on September 4, 2014. The percent recovery for this target analyte was within the control limits in the corresponding MSD. No action was required for this outlier.

Also, the percent recoveries for hexachlorocyclopentadiene, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene were less than the control limits in the same MS/MSD sample set. The reporting limits for these target analytes were qualified as estimated (UJ) in Sample EX11-5-3.25.

Additionally, in the same MS/MSD sample set, the percent recoveries for 4-nitroaniline and carbazole were greater than the control limits in both the MS and MSD. There were no positive results for these target analytes in the associated field sample; therefore, no action was required for these outliers.

**SDG SXI0031:** (SVOCs) The laboratory performed an MS/MSD sample set on Sample EX12-4-3. The percent recovery for diethyl phthalate was less than the control limits in the MSD extracted on September 9, 2014. The percent recovery for this target analyte was within the control limits in the corresponding MS. No action was required for this outlier.

### Laboratory Control Samples/Laboratory Control Sample Duplicates

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/laboratory control sample duplicate (LCSD) control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for analyses and the percent recovery and RPD values were within the proper control limits, with the following exceptions:

**SDG SXG0111:** (SVOCs) The percent recoveries for 2-chloronaphthalene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, naphthalene, phenol, and 2,4,5-trichlorophenol were greater than the control limits in the LCS extracted on July 18, 2014. The percent recoveries for these target analytes were within the control limits in the corresponding LCSD. No action was required for these outliers.

Additionally, the percent recovery for 2,4-dinitrophenol was greater than the control limits in the LCSD extracted on July 18, 2014. The percent recovery for this target analyte was within the control limits in the corresponding LCS. The RPD was greater than the control limits in this LCS/LCSD sample set. There were no positive results for this target analyte in the associated field samples; therefore, no action was required for this outlier.

**SDG SXG0129:** (SVOCs) The percent recoveries for 2-chloronaphthalene, 1,2-dichlorobenzene, and 1,3-dichlorobenzene were greater than the control limits in the LCS extracted on July 21, 2014. The percent recoveries for these target analytes were within the control limits in the corresponding LCSD. No action was required for these outliers.

Also, in the same LCS/LCSD sample set, the percent recovery for 3,3'-dichlorobenzidine was greater than the control limits in both the LCS and LCSD. There were no positive results for this target analyte in the associated field samples; therefore, no action was required for this outlier.

**SDG SXG0169:** (SVOCs) The percent recoveries for hexachlorocyclopentadiene, 2,4,5-trichlorophenol, and 2,4,6-trichlorophenol were greater than the control limits in the LCS extracted on July 25, 2014. There were no positive results for these target analytes in the associated field samples; therefore, no action was required for these outliers.

**SDG SXH0199:** (SVOCs) The percent recoveries for 2-nitrophenol were less than the control limits in the LCS/LCSD sample set extracted on September 4, 2014. The reporting limit for this target analyte was qualified as estimated (UJ) in Sample EX11-5-3.25. Also, the percent recoveries for 4-nitroaniline were

greater than the control limits in the same LCS/LCSD sample set. There were no positive results for this target analyte in the associated field sample; therefore, no action was required for this outlier.

Additionally, in the same LCS/LCSD sample set, the RPD values for 2,4-dinitrophenol and pentachlorophenol were greater than the control limit. There were no positive results for these target analytes in the associated field sample; therefore, no action was required for these outliers.

Lastly, the percent recovery for benzo(a)anthracene was less than the control limits in the LCSD extracted on September 4, 2014. The percent recovery for this target analyte was within the control limits in the corresponding LCS. No action was required for this outlier.

**SDG SXI0031:** (SVOCs) The percent recoveries for diethyl phthalate were less than the control limits in the LCS/LCSD sample set extracted on September 9, 2014. The reporting limit for this target analyte was qualified as estimated (UJ) in Sample EX12-4-3.

#### LABORATORY DUPLICATES

Internal laboratory duplicate analyses are performed to monitor the precision of the analyses. Two separate aliquots of a sample are analyzed as distinct samples in the laboratory and the RPD between the two results is calculated. Duplicate analyses should be performed once per analytical batch. If one or more of the samples used has a concentration less than five times the reporting limit for that sample, the absolute difference is used instead of the RPD. For organic analyses, the RPD control limits are specified in the laboratory documents. For inorganic analyses, the RPD control limit for soil samples is 35 percent. Laboratory duplicates were analyzed at the proper frequency and the specified acceptance criteria were met, with the following exceptions:

**SDG SXH0188:** (Mercury) A laboratory duplicate analysis was performed on Sample EX7-18-3.5. The RPD for total mercury was greater than the control limit. The positive result for this target analyte was qualified as estimated (J) in this sample.

**SDG SXH0199:** (NWTPH-Dx) A laboratory duplicate analysis was performed with an RPD that exceeded the control limit. This sample was associated with another client of the laboratory and not any of the project samples collected by GeoEngineers. For this reason, no action was required for this outlier.

### Miscellaneous

**SDG SXH0199**: (NWTPH-Dx) For Sample EX11-3-4, the laboratory flagged the diesel- and heavy oil-range hydrocarbons results with "Q9," indicating that the hydrocarbon pattern most closely resembles biogenic interference. For this reason, the positive results for diesel- and heavy oil-range hydrocarbons were qualified as estimated (J) in Sample EX11-3-4, in order to signify a potential high bias.

For Sample EX11-5-3.25, the laboratory flagged the diesel-range hydrocarbons result with "Q6," indicating that the diesel-range hydrocarbons result was being influenced by the relative concentration of heavy oil-range hydrocarbons in the sample. For this reason, the positive result for diesel-range hydrocarbons was qualified as estimated (J) in Sample EX11-5-3.25, in order to signify a potential high bias.

**SDG SXI0031**: (NWTPH-Dx) For Samples EX12-2-3, EX12-3-2, EX12-5-3, and EX12-6-8, the laboratory flagged the diesel-range hydrocarbons results with "Q6," indicating that the diesel-range hydrocarbons

results were being influenced by the relative concentration of heavy oil-range hydrocarbons in the samples. For this reason, the positive results for diesel-range hydrocarbons were qualified as estimated (J) in these samples, in order to signify a potential high bias.

SDG SXI0084: (NWTPH-Dx) For Samples EX12-10-7 and EX12-11-3, the laboratory flagged the diesel-range hydrocarbons results with "Q6," indicating that the diesel-range hydrocarbons results were being influenced by the relative concentration of heavy oil-range hydrocarbons in the samples. For this reason, the positive results for diesel-range hydrocarbons were qualified as estimated (J) in these samples, in order to signify a potential high bias.

SDG SXJ0095: (NWTPH-Dx) For Samples EX13-1-3, EX13-2-3, EX13-4-3, and EX13-SP-1 the laboratory flagged the diesel-range hydrocarbons result with "Q6," indicating that the diesel-range hydrocarbons result was being influenced by the relative concentration of heavy oil-range hydrocarbons in the sample. For this reason, the positive results for diesel-range hydrocarbons were qualified as estimated (J) in Samples EX13-1-3, EX13-2-3, EX13-4-3, and EX13-SP-1, in order to signify a potential high bias.

## OVERALL ASSESSMENT

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate, LCS/LCSD, and MS/MSD percent recovery values. Precision was acceptable, as demonstrated by the LCS/LCSD, MS/MSD, and laboratory duplicate RPD values.

All data are acceptable for the intended use, with the following qualifications listed below in Table 2.

**TABLE 2: SUMMARY OF QUALIFIED SAMPLES**

| Sample ID | Analyte | Qualifier |
|---|---|---|
| EX1-2-3 | Gasoline-range hydrocarbons | J |
| EX1-3-3 | Gasoline-range hydrocarbons<br>1-methylnaphthalene<br>2-methylnaphthalene<br>Naphthalene | J<br>J<br>J<br>J |
| EX5-4-8 | Gasoline-range hydrocarbons | J |
| EX6-2-3 | Diesel-range hydrocarbons<br>Heavy oil-range hydrocarbons | J<br>J |
| EX7-18-3.5 | Mercury | J |
| EX11-3-4 | Diesel-range hydrocarbons<br>Heavy oil-range hydrocarbons | J<br>J |

| Sample ID | Analyte | Qualifier |
|---|---|---|
| EX11-5-3.25 | 2-nitrophenol | UJ |
| | 2,4-dinitrophenol | UJ |
| | 4,6-dinitro-2-methylphenol | UJ |
| | Indeno(1,2,3-cd)pyrene | UJ |
| | Dibenzo(a,h)anthracene | UJ |
| | Benzo(g,h,i)perylene | UJ |
| | Hexachlorocyclopentadiene | UJ |
| | Diesel-range hydrocarbons | J |
| EX12-2-3 | Diesel-range hydrocarbons | J |
| EX12-3-2 | Diesel-range hydrocarbons | J |
| EX12-4-3 | Diethyl phthalate | UJ |
| EX12-5-3 | Diesel-range hydrocarbons | J |
| EX12-6-8 | Diesel-range hydrocarbons | J |
| EX12-10-7 | Diesel-range hydrocarbons | J |
| EX12-11-3 | Diesel-range hydrocarbons | J |
| EX13-1-3 | Diesel-range hydrocarbons | J |
| EX13-2-3 | Diesel-range hydrocarbons | J |
| EX13-4-3 | Diesel-range hydrocarbons | J |
| EX13-SP-1 | Diesel-range hydrocarbons | J |

| | |
|---|---|
| **Project:** | Port of Chelan County – Cashmere Mill Construction Phase Services<br>2014 Imported Fill Material |
| **GEI File No:** | 18593-001-04 |
| **Date:** | September 29, 2014 |

This report documents the results of a United States EPA-defined Stage 2A data validation (EPA Document 540-R-08-005; EPA, 2009) of analytical data from the analyses of soil samples collected as part of the 2014 Imported Fill Material sampling event, and the associated laboratory and field QC samples. The samples were obtained from the Former Cashmere Mill Site located in the general vicinity of Mill Road and Sunset Highway, about 100 feet south of the Wenatchee River and along the north bank of Brender Creek in Cashmere, Washington.

## OBJECTIVE AND QUALITY CONTROL ELEMENTS

GeoEngineers completed the data validation consistent with the EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (EPA, 2008) and Inorganic Superfund Data Review (EPA, 2010b) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits less than applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The QA/QC procedures utilized by the laboratory meet acceptable industry practices and standards.

In accordance with Quality Assurance Project Plan (GeoEngineers, 2013b), the data validation included review of the following QC elements:

- Data package completeness
- Chain-of-custody documentation
- Holding times and sample preservation
- Surrogate recoveries
- Method and trip blanks
- Matrix spikes/matrix spike duplicates
- Laboratory control samples/laboratory control sample duplicates
- Laboratory duplicates
- Miscellaneous

## VALIDATED SAMPLE DELIVERY GROUPS

This data validation included review of the SDGs listed below in Table 1.

**TABLE 1: SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS**

| Laboratory SDG | Samples Validated |
|---|---|
| SXG0084 | Westside, Eastside (collected on 7/11/2014) |
| SXH0010 | Northside, Southside, Eastside, Westside (collected on 7/31/2014) |
| YH76 | WM-1, WM-2, WM-3, WM-4, WM-5, WM-6, WM-7, TRIP BLANK |

## CHEMICAL ANALYSIS PERFORMED

TestAmerica, located in Spokane, Washington, performed laboratory analysis on the soil samples (SDGs SXG0084 and SXH0010) using the following methods*:*

- VOCs using Method SW8260C;
- SVOCs using Method SW8270D;
- Organochlorine Pesticides using Method SW8081B; and
- Total Metals by Method EPA6010C

ARI, located in Tukwila, Washington, performed laboratory analysis on the soil samples (SDG YH76) using the following methods*:*

- VOCs using Method SW8260C;
- SVOCs using Method SW8270D;
- Organochlorine Pesticides using Method SW8081; and
- Total Metals using Method EPA200.8

## DATA VALIDATION SUMMARY

The results for each of the QC elements are summarized below.

### Data Package Completeness

TestAmerica and ARI provided required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and identified anomalies were discussed in the relevant laboratory case narrative.

### Chain-of-Custody Documentation

Chain-of-custody forms were provided with the laboratory analytical reports. The chain-of-custody forms were accurate and complete when submitted to the laboratory.

### Holding Times and Sample Preservation

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for analyses. The sample coolers arrived at the laboratory within the appropriate temperatures of between 2 and 6 degrees Celsius.

### Surrogate Recoveries

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in any environmental sample. Surrogates are used for organic analyses and are added to samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. Surrogate percent recoveries for field samples were within the laboratory control limits, with the following exceptions:

SDG SXH0010: (SVOCs) The percent recovery for surrogate 2-fluorophenol was greater than the control limits in Sample Southside; however, the sample was spiked with a total of three acidic surrogates. In this case, there were at least two other surrogates that exhibited percent recovery values that were within their respective control limits. No action was required for this outlier.

Additionally, the percent recoveries for surrogates nitrobenzene-d5 and 2-fluorobiphenyl were greater than the control limits in Sample Southside. There were no positive results in this sample; therefore, no action was required for these outliers.

The percent recovery for surrogate 2-fluorobiphenyl was greater than the control limits in Sample Eastside; however, the sample was spiked with a total of three base-neutral surrogates. In this case, there were at least two other surrogates that exhibited percent recovery values that were within their respective control limits. No action was required for this outlier.

### Method and Trip Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For all sample batches, method blanks for applicable methods were analyzed at the required frequency. None of the analytes of interest were detected greater than the reporting limits in any of the method blanks.

Trip blanks are analyzed to provide an indication as to whether volatile compounds have cross-contaminated other like samples within the transportation process to the laboratory. None of the analytes of interest were detected greater than the reporting limits in the trip blank.

### Matrix Spikes/Matrix Spike Duplicates

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a MS analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From

these analyses, a percent recovery is calculated. MSD analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the RPD is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

For inorganic methods, the matrix spike is followed by a post-digestion spike sample if any element percent recoveries were outside the control limits in the matrix spike. The percent recovery control limits for matrix spikes are 75 to 125 percent.

One MS/MSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for analyses and the percent recovery and RPD values were within the proper control limits, with the following exceptions:

**SDG SXG0084:** (Pesticides) The laboratory performed an MS/MSD sample set with percent recoveries for alpha-BHC greater than the control limits in both the MS and MSD, extracted on July 25, 2014. This MS/MSD sample set was performed on a sample that was associated with another client of the laboratory and not any of the project samples. For this reason, no action was required for this outlier.

**SDG YH76:** (SVOCs) The laboratory performed an MS/MSD sample set on Sample WM-2. The RPD value for benzyl alcohol was greater than the control limit in the MS/MSD sample set extracted on April 25, 2014. There were no positive results for this target analyte in the associated field sample; therefore, no action was required for this outlier.

### Laboratory Control Samples/Laboratory Control Sample Duplicates

A LCS is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for analyses and the percent recovery and RPD values were within the proper control limits, with the following exceptions:

**SDG SXH0010:** (SVOCs) The percent recoveries for 4-chloro-3-methylphenol, 4-chlorophenyl phenyl ether, dibenzofuran, diethyl phthalate, 2,6-dinitrotoluene, phenanthrene, phenol, and pyrene were greater than the control limits in the LCS extracted on August 13, 2014. The percent recoveries for these target analytes were within the control limits in the corresponding LCSD. No action was required for these outliers.

Additionally, in the same LCS/LCSD sample set, the percent recoveries for acenaphthene, acenaphthylene, bis(2-chloroethoxy)methane, bis(2-chloroethyl)ether, 2-chloronaphthalene, 2-chlorophenol, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 2,4-dichlorophenol, fluorene, hexachlorobutadiene, hexachloroethane, 2-methylnaphthalene, naphthalene, nitrobenzene, 2-nitrophenol, 1,24-trichlorobenzene, 2,4,5-trichlorophenol, and 2,4,6-trichlorophenol were greater than

the control limits in both the LCS and LCSD. There were no positive results for these target analytes in the associated field samples; therefore, no action was required for these outliers.

### Laboratory Duplicates

Internal laboratory duplicate analyses are performed to monitor the precision of the analyses. Two separate aliquots of a sample are analyzed as distinct samples in the laboratory and the RPD between the two results is calculated. Duplicate analyses should be performed once per analytical batch. If one or more of the samples used has a concentration less than five times the reporting limit for that sample, the absolute difference is used instead of the RPD. For organic analyses, the RPD control limits are specified in the laboratory documents. For inorganic analyses, the RPD control limit for soil samples is 35 percent. Laboratory duplicates were analyzed at the proper frequency and the specified acceptance criteria were met.

### Miscellaneous

SDG YH76: (VOCs) The laboratory reported two sets of results for Sample WM-6, an initial analysis and a re-analysis, because of internal standard recovery. The re-analysis results were labeled as do-not-report and should not be used for any purpose.

## OVERALL ASSESSMENT

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate, LCS/LCSD, and MS/MSD percent recovery values. Precision was acceptable, as demonstrated by the LCS/LCSD, MS/MSD, and laboratory duplicate RPD values.

No analytical results were qualified. All data are acceptable for the intended use.

| | |
|---|---|
| **Project:** | Port of Chelan County – Cashmere Mill Construction Phase Services<br>December 2014 Groundwater Samples |
| **GEI File No:** | 18593-001-04 |
| **Date:** | January 6, 2015 |

This report documents the results of a United States EPA-defined Stage 2A data validation (EPA Document 540-R-08-005; EPA, 2009) of analytical data from the analyses of groundwater samples collected as part of the December 2014 sampling event, and the associated laboratory and field QC samples. The samples were obtained from the Former Cashmere Mill Site located in the general vicinity of Mill Road and Sunset Highway, about 100 feet south of the Wenatchee River and along the north bank of Brender Creek in Cashmere, Washington.

## OBJECTIVE AND QUALITY CONTROL ELEMENTS

GeoEngineers completed the data validation consistent with the EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (EPA, 2008) and Inorganic Superfund Data Review (EPA, 2010b) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits less than applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The QA/QC procedures utilized by the laboratory meet acceptable industry practices and standards.

In accordance with Quality Assurance Project Plan (GeoEngineers, 2013b), the data validation included review of the following QC elements:

- Data package completeness
- Chain-of-custody documentation
- Holding times and sample preservation
- Surrogate recoveries
- Method blanks
- Matrix spikes/matrix spike duplicates
- Laboratory control samples
- Laboratory and field duplicates

## VALIDATED SAMPLE DELIVERY GROUPS

This data validation included review of the SDG listed below in Table 1.

**TABLE 1: SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS**

| Laboratory SDG | Samples Validated |
|---|---|
| SXL0021 | B-1-12314, MW-1-12214, MW-2-12314, MW-3-12314, MW-Dup-12314, MW-4-12214, MW-5-12214, MW-6-12214, MW-7-12314, MW-8-12314, MW-9-12314, OW-1-12314 |

## CHEMICAL ANALYSIS PERFORMED

TestAmerica, located in Spokane, Washington, performed laboratory analysis on the groundwater samples using the following methods:

- GRPH (NWTPH-Gx) using Method NWTPH-Gx;
- Petroleum Hydrocarbons (NWTPH-Dx) using Method NWTPH-Dx;
- BTEX using Method SW8260C;
- Total Arsenic using Method EPA200.8; and
- Total Mercury using Method EPA245.1

## DATA VALIDATION SUMMARY

The results for each of the QC elements are summarized below.

### Data Package Completeness

TestAmerica provided required deliverables for the data validation according to the National Functional Guidelines. The laboratory appears to have followed adequate corrective action processes; however, the laboratory analytical report does not contain a case narrative.

### Chain-of-Custody Documentation

Chain-of-custody forms were provided with the laboratory analytical reports. The chain-of-custody forms were accurate and complete when submitted to the laboratory.

### Holding Times and Sample Preservation

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for analyses. The sample cooler arrived at the laboratory within the appropriate temperatures of between 2 and 6 degrees Celsius.

### Surrogate Recoveries

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in any environmental sample. Surrogates are used for organic analyses and are added to samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. Surrogate percent recoveries for field samples were within the laboratory control limits.

### Method Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For sample batches, method blanks for applicable methods were analyzed at the required frequency. None of the analytes of interest were detected greater than the reporting limits in any of the method blanks.

### Matrix Spikes/Matrix Spike Duplicates

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a MS analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. MSD analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the RPD is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

For inorganic methods, the matrix spike is followed by a post-digestion spike sample if any element percent recoveries were outside the control limits in the matrix spike. The percent recovery control limits for matrix spikes are 75 to 125 percent.

One MS/MSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for analyses and the percent recovery and RPD values were within the proper control limits.

### Laboratory Control Samples

A LCS is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS control limits for accuracy are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS analyses are specified in the laboratory documents.

One LCS analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for all analyses and the percent recovery values were within the proper control limits.

### Laboratory Duplicates

Internal laboratory duplicate analyses are performed to monitor the precision of the analyses. Two separate aliquots of a sample are analyzed as distinct samples in the laboratory and the RPD between the two results is calculated. Duplicate analyses should be performed once per analytical batch. If one or more of the samples used has a concentration less than five times the reporting limit for that sample, the absolute difference is used instead of the RPD. For organic analyses, the RPD control limits are specified in the laboratory documents. For inorganic analyses, the RPD control limit is 20 percent. Laboratory duplicates were analyzed at the proper frequency and the specified acceptance criteria were met.

### Field Duplicates

In order to assess precision, field duplicate samples are collected and analyzed along with the reviewed sample batches. The duplicate samples are analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of the sample analytes has a concentration less than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control limit for water samples is 20 percent.

SDG SXH0069: One field duplicate sample pair, MW-3-12314 and MW-Dup-12314, was submitted with this SDG. The precision criteria for target analytes were met for this sample pair.

## OVERALL ASSESSMENT

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate, LCS, and MS/MSD percent recovery values. Precision was acceptable, as demonstrated by the MS/MSD and laboratory/field duplicate RPD values.

No analytical results were qualified. Data are acceptable for the intended use.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXG0111
Client Project/Site: 18593-001-04
Client Project Description: Cashmere Mill

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*7/30/2014 11:46:23 AM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*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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## Job ID: SXG0111

### Laboratory: TestAmerica St. Louis

**Narrative**

**Job Narrative**
**160-7525-1**

**Receipt**
The samples were received on 7/18/2014 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8º C.

**GC/MS Semi VOA**
Method(s) 8270D:

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 132657 recovered outside control limits for 2,4-Dinitrophenol. (LCS 160-132459/2-A), (LCSD 160-132459/3-A). The spike recoveries for this analyte are within QC limits, therefore the data was not affected.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for prep batch 132459 recovered outside upper control limits. These analytes were biased high in the LCS and were not detected in the associated samples >RL except for Naphthalene in 160-7525-1. Due to the level of matrix in the client samples, they will not be re-extracted for this analyte; therefore, the data have been reported. (LCS 160-132459/2-A), (LCSD 160-132459/3-A), SXG0111-03 (EX1-3-3 - Soil) (160-7525-1), SXG0111-06 (EX2-1-3 - Soil) (160-7525-2)

Internal standard responses were outside of acceptance limits for the following samples: SXG0111-03 (EX1-3-3 - Soil) (160-7525-1), SXG0111-06 (EX2-1-3 - Soil) (160-7525-2). The samples show evidence of matrix interference.

Surrogate recoveries for the following samples were outside control limits: SXG0111-03 (EX1-3-3 - Soil) (160-7525-1), SXG0111-06 (EX2-1-3 - Soil) (160-7525-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**
Method(s) 3550C: 3550 8270 132459
Due to sample matrix, and analyst request an MS/MSD was not performed. An LCS/LCSD was performed to demonstrate accuracy and replicate precision. SXG0111-03 (EX1-3-3 - Soil) (160-7525-1), SXG0111-06 (EX2-1-3 - Soil) (160-7525-2)

Due to the dark matrices, which smelled like fuel, the initial volume used for the following samples deviated from the standard procedure: SXG0111-03 (EX1-3-3 - Soil) (160-7525-1), SXG0111-06 (EX2-1-3 - Soil) (160-7525-2). The reporting limits (RLs) have been adjusted proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Sample Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXG0111-01 | EX1-1-2 | Soil | 07/16/14 08:00 | 07/17/14 10:30 |
| SXG0111-02 | EX1-2-3 | Soil | 07/16/14 08:10 | 07/17/14 10:30 |
| SXG0111-03 | EX1-3-3 | Soil | 07/16/14 08:20 | 07/17/14 10:30 |
| SXG0111-04 | EX1-4-3 | Soil | 07/16/14 08:30 | 07/17/14 10:30 |
| SXG0111-05 | EX1-5-3 | Soil | 07/16/14 08:40 | 07/17/14 10:30 |
| SXG0111-06 | EX2-1-3 | Soil | 07/16/14 08:50 | 07/17/14 10:30 |
| SXG0111-07 | EX3-1-4 | Soil | 07/16/14 14:20 | 07/17/14 10:30 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Qualifiers

### GCMS Volatiles

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| ZX | Due to sample matrix effects, the surrogate recovery was outside the acceptance limits. |

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD exceeds the control limits |
| * | RPD of the LCS and LCSD exceeds the control limits |
| X | Surrogate is outside control limits |
| * | ISTD response or retention time outside acceptable limits |

### Fuels

| Qualifier | Qualifier Description |
|---|---|
| Z3 | The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX1-1-2

**Lab Sample ID: SXG0111-01**
**Date Collected: 07/16/14 08:00**
**Matrix: Soil**
**Date Received: 07/17/14 10:30**
**Percent Solids: 80.3**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.63 | | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 13:38 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *103* | | *41.5 - 162* | *07/17/14 07:29* | *07/17/14 13:38* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **59.0** | | 11.1 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 08:00 | 1.00 |
| **Heavy Oil Range Hydrocarbons** | **265** | | 27.8 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 08:00 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *92.1* | | *50 - 150* | *07/17/14 13:47* | *07/19/14 08:00* | *1.00* |
| *n-Triacontane-d62* | *92.8* | | *50 - 150* | *07/17/14 13:47* | *07/19/14 08:00* | *1.00* |

## Client Sample ID: EX1-2-3

**Lab Sample ID: SXG0111-02**
**Date Collected: 07/16/14 08:10**
**Matrix: Soil**
**Date Received: 07/17/14 10:30**
**Percent Solids: 92.3**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **201** | | 4.67 | | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:01 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *360* | *ZX* | *41.5 - 162* | *07/17/14 07:29* | *07/17/14 14:01* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **15100** | | 2730 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 08:23 | 100 |
| **Heavy Oil Range Hydrocarbons** | **41200** | | 6830 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 08:23 | 100 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *200* | *Z3* | *50 - 150* | *07/17/14 13:47* | *07/19/14 08:23* | *100* |
| *n-Triacontane-d62* | *90.5* | | *50 - 150* | *07/17/14 13:47* | *07/19/14 08:23* | *100* |

### Method: NWTPH-HCID - Hydrocarbon Identification by NWTPH-HCID

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **130** | | 120 | | mg/kg dry | ☼ | 07/29/14 15:09 | 07/29/14 17:37 | 1.0 |
| **Diesel Range Hydrocarbons** | **7300** | | 290 | | mg/kg dry | ☼ | 07/29/14 15:09 | 07/29/14 17:37 | 1.0 |
| **Heavy Oil Range Hydrocarbons** | **20000** | | 290 | | mg/kg dry | ☼ | 07/29/14 15:09 | 07/29/14 17:37 | 1.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-BFB (FID)* | *97.1* | | *50 - 150* | *07/29/14 15:09* | *07/29/14 17:37* | *1.0* |
| *2-FBP* | *100* | | *50 - 150* | *07/29/14 15:09* | *07/29/14 17:37* | *1.0* |
| *p-Terphenyl-d14* | *104* | | *50 - 150* | *07/29/14 15:09* | *07/29/14 17:37* | *1.0* |

## Client Sample ID: EX1-3-3

**Lab Sample ID: SXG0111-03**
**Date Collected: 07/16/14 08:20**
**Matrix: Soil**
**Date Received: 07/17/14 10:30**
**Percent Solids: 60**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.185 | 0.0172 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX1-3-3

**Date Collected: 07/16/14 08:20**
**Date Received: 07/17/14 10:30**

## Lab Sample ID: SXG0111-03

**Matrix: Soil**
**Percent Solids: 60**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | ND | | 0.927 | 0.00982 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Vinyl chloride | ND | | 0.111 | 0.0115 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Bromomethane | ND | | 0.927 | 0.0567 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Chloroethane | ND | | 0.185 | 0.0454 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0556 | 0.0146 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.185 | 0.0235 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Carbon disulfide | ND | | 0.185 | 0.0198 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Methylene chloride | ND | | 0.0371 | 0.00964 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **Acetone** | **0.359** | **J** | 5.56 | 0.161 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.185 | 0.0191 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0927 | 0.00593 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.185 | 0.0209 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.185 | 0.0106 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.185 | 0.0315 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Bromochloromethane | ND | | 0.185 | 0.00723 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Chloroform | ND | | 0.185 | 0.0143 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Carbon tetrachloride | ND | | 0.185 | 0.0386 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.185 | 0.0321 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 2-Butanone | ND | | 1.85 | 0.204 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Hexane | ND | | 0.185 | 0.0150 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.185 | 0.0323 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Benzene | ND | | 0.0278 | 0.0180 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.185 | 0.00908 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Trichloroethene | ND | | 0.0463 | 0.0237 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Dibromomethane | ND | | 0.185 | 0.0169 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.185 | 0.0111 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Bromodichloromethane | ND | | 0.185 | 0.0130 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.185 | 0.0115 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **Toluene** | **0.130** | **J** | 0.185 | 0.0247 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **4-Methyl-2-pentanone** | **0.805** | **J** | 1.85 | 0.0378 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.185 | 0.0122 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Tetrachloroethene | ND | | 0.0742 | 0.0326 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.185 | 0.0115 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Dibromochloromethane | ND | | 0.185 | 0.0111 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.185 | 0.0137 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0185 | 0.0108 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 2-Hexanone | ND | | 1.85 | 0.0862 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **Ethylbenzene** | **0.0612** | **J** | 0.185 | 0.0300 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **Chlorobenzene** | **0.469** | | 0.185 | 0.0141 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.185 | 0.0189 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **m,p-Xylene** | **0.711** | **J** | 0.742 | 0.0315 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **o-Xylene** | **0.182** | **J** | 0.371 | 0.0243 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Styrene | ND | | 0.185 | 0.0172 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Bromoform | ND | | 0.185 | 0.0232 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **Isopropylbenzene** | **0.359** | | 0.185 | 0.0352 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| n-Propylbenzene | ND | | 0.185 | 0.0384 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.185 | 0.0139 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Bromobenzene | ND | | 0.185 | 0.0174 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **1,3,5-Trimethylbenzene** | **3.19** | | 0.185 | 0.0345 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX1-3-3

**Date Collected: 07/16/14 08:20**
**Date Received: 07/17/14 10:30**

## Lab Sample ID: SXG0111-03

**Matrix: Soil**
**Percent Solids: 60**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Chlorotoluene | ND | | 0.185 | 0.0302 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.185 | 0.0156 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 4-Chlorotoluene | ND | | 0.185 | 0.0265 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| tert-Butylbenzene | ND | | 0.185 | 0.0400 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **1,2,4-Trimethylbenzene** | **8.44** | | 0.185 | 0.0269 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **sec-Butylbenzene** | **1.37** | | 0.185 | 0.0436 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **p-Isopropyltoluene** | **3.29** | | 0.185 | 0.0443 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.185 | 0.0234 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.185 | 0.0196 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **n-Butylbenzene** | **1.51** | | 0.185 | 0.0510 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.185 | 0.0141 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.927 | 0.0526 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| Hexachlorobutadiene | ND | | 0.185 | 0.106 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.185 | 0.0369 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| **Naphthalene** | **2.64** | | 0.371 | 0.0252 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.185 | 0.0658 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *98.1* | | *42.4 - 163* | *07/17/14 07:29* | *07/17/14 14:23* | *1.00* |
| *1,2-dichloroethane-d4* | *94.7* | | *50 - 150* | *07/17/14 07:29* | *07/17/14 14:23* | *1.00* |
| *Toluene-d8* | *94.6* | | *45.8 - 155* | *07/17/14 07:29* | *07/17/14 14:23* | *1.00* |
| *4-bromofluorobenzene* | *442* | *ZX* | *41.5 - 162* | *07/17/14 07:29* | *07/17/14 14:23* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **665** | | 9.27 | | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 14:23 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *442* | *ZX* | *41.5 - 162* | *07/17/14 07:29* | *07/17/14 14:23* | *1.00* |

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Acenaphthylene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Anthracene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Benzo[a]anthracene | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Benzo[b]fluoranthene | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Benzo[k]fluoranthene | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Benzo[g,h,i]perylene | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Benzo[a]pyrene | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Bis(2-chloroethyl)ether | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Butyl benzyl phthalate | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Carbazole | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 4-Chloroaniline | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 4-Chloro-3-methylphenol | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 2-Chloronaphthalene | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 2-Chlorophenol | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX1-3-3

**Date Collected: 07/16/14 08:20**
**Date Received: 07/17/14 10:30**

## Lab Sample ID: SXG0111-03

**Matrix: Soil**
**Percent Solids: 64.9**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Chlorophenyl phenyl ether | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Chrysene | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Dibenz(a,h)anthracene | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Dibenzofuran | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Di-n-butyl phthalate | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 1,2-Dichlorobenzene | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 1,4-Dichlorobenzene | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 3,3'-Dichlorobenzidine | ND | * | 7.3 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 2,4-Dichlorophenol | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Diethyl phthalate | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 2,4-Dimethylphenol | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Dimethyl phthalate | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 7.3 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 2,4-Dinitrophenol | ND | * | 7.3 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 2,4-Dinitrotoluene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 2,6-Dinitrotoluene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Di-n-octyl phthalate | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Fluoranthene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Fluorene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Hexachlorobenzene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Hexachlorobutadiene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Hexachlorocyclopentadiene | ND | | 7.3 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Hexachloroethane | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Isophorone | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| **2-Methylnaphthalene** | **8.5** | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 2-Methylphenol | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 3 & 4 Methylphenol | ND | | 3.0 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| **Naphthalene** | **3.0** | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 2-Nitroaniline | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 3-Nitroaniline | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 4-Nitroaniline | ND | | 7.3 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Nitrobenzene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 2-Nitrophenol | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 4-Nitrophenol | ND | | 7.3 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| N-Nitrosodiphenylamine | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Pentachlorophenol | ND | | 3.0 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Phenanthrene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Phenol | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Pyrene | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 2,4,5-Trichlorophenol | ND | * | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 2,4,6-Trichlorophenol | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Aniline | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| 1,4-Dioxane | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |
| Benzyl alcohol | ND | | 1.5 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX1-3-3

**Lab Sample ID: SXG0111-03**
**Date Collected: 07/16/14 08:20**
**Matrix: Soil**
**Date Received: 07/17/14 10:30**
**Percent Solids: 64.9**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Pyridine | ND | | 3.0 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 11:55 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *100* | *X* | *53 - 97* | *07/18/14 13:09* | *07/21/14 11:55* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *104* | | *46 - 111* | *07/18/14 13:09* | *07/21/14 11:55* | *1* |
| *Nitrobenzene-d5 (Surr)* | *117* | *X* | *55 - 98* | *07/18/14 13:09* | *07/21/14 11:55* | *1* |
| *Phenol-d5 (Surr)* | *98* | | *54 - 101* | *07/18/14 13:09* | *07/21/14 11:55* | *1* |
| *Terphenyl-d14 (Surr)* | *130* | ** X* | *58 - 123* | *07/18/14 13:09* | *07/21/14 11:55* | *1* |
| *2-Fluorobiphenyl (Surr)* | *94* | | *56 - 97* | *07/18/14 13:09* | *07/21/14 11:55* | *1* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **5950** | | 576 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 08:46 | 25.0 |
| **Heavy Oil Range Hydrocarbons** | **11800** | | 1440 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 08:46 | 25.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *121* | | *50 - 150* | *07/17/14 13:47* | *07/19/14 08:46* | *25.0* |
| *n-Triacontane-d62* | *92.0* | | *50 - 150* | *07/17/14 13:47* | *07/19/14 08:46* | *25.0* |

## Client Sample ID: EX1-4-3

**Lab Sample ID: SXG0111-04**
**Date Collected: 07/16/14 08:30**
**Matrix: Soil**
**Date Received: 07/17/14 10:30**
**Percent Solids: 66.1**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 9.62 | | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 16:39 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *105* | | *41.5 - 162* | *07/17/14 07:29* | *07/17/14 16:39* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **41.1** | | 14.3 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 09:09 | 1.00 |
| **Heavy Oil Range Hydrocarbons** | **142** | | 35.8 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 09:09 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *92.3* | | *50 - 150* | *07/17/14 13:47* | *07/19/14 09:09* | *1.00* |
| *n-Triacontane-d62* | *98.5* | | *50 - 150* | *07/17/14 13:47* | *07/19/14 09:09* | *1.00* |

## Client Sample ID: EX1-5-3

**Lab Sample ID: SXG0111-05**
**Date Collected: 07/16/14 08:40**
**Matrix: Soil**
**Date Received: 07/17/14 10:30**
**Percent Solids: 80.4**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 6.70 | | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 17:47 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *106* | | *41.5 - 162* | *07/17/14 07:29* | *07/17/14 15:08* | *1.00* |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX1-5-3

**Lab Sample ID: SXG0111-05**
**Date Collected: 07/16/14 08:40**
**Matrix: Soil**
**Date Received: 07/17/14 10:30**
**Percent Solids: 80.4**

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 38.5 | | 11.1 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 09:33 | 1.00 |
| Heavy Oil Range Hydrocarbons | 168 | | 27.8 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 09:33 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *94.2* | | *50 - 150* | *07/17/14 13:47* | *07/19/14 09:33* | *1.00* |
| *n-Triacontane-d62* | *95.5* | | *50 - 150* | *07/17/14 13:47* | *07/19/14 09:33* | *1.00* |

## Client Sample ID: EX2-1-3

**Lab Sample ID: SXG0111-06**
**Date Collected: 07/16/14 08:50**
**Matrix: Soil**
**Date Received: 07/17/14 10:30**
**Percent Solids: 43.2**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.304 | 0.0283 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Chloromethane | ND | | 1.52 | 0.0161 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Vinyl chloride | ND | | 0.182 | 0.0188 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Bromomethane | ND | | 1.52 | 0.0930 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Chloroethane | ND | | 0.304 | 0.0745 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0912 | 0.0240 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.304 | 0.0386 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Carbon disulfide | ND | | 0.304 | 0.0325 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Methylene chloride | ND | | 0.0608 | 0.0158 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Acetone | ND | | 9.12 | 0.264 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.304 | 0.0313 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.152 | 0.00973 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.304 | 0.0343 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.304 | 0.0173 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.304 | 0.0517 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Bromochloromethane | ND | | 0.304 | 0.0119 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Chloroform | ND | | 0.304 | 0.0234 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Carbon tetrachloride | ND | | 0.304 | 0.0632 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.304 | 0.0526 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 2-Butanone | ND | | 3.04 | 0.334 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Hexane | ND | | 0.304 | 0.0246 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.304 | 0.0529 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Benzene | ND | | 0.0456 | 0.0295 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.304 | 0.0149 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Trichloroethene | ND | | 0.0760 | 0.0389 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Dibromomethane | ND | | 0.304 | 0.0277 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.304 | 0.0182 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Bromodichloromethane | ND | | 0.304 | 0.0213 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.304 | 0.0188 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Toluene | ND | | 0.304 | 0.0404 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 3.04 | 0.0620 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.304 | 0.0201 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Tetrachloroethene | ND | | 0.122 | 0.0535 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.304 | 0.0188 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Dibromochloromethane | ND | | 0.304 | 0.0182 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.304 | 0.0225 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0304 | 0.0176 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX2-1-3

**Date Collected: 07/16/14 08:50**
**Date Received: 07/17/14 10:30**

## Lab Sample ID: SXG0111-06

**Matrix: Soil**
**Percent Solids: 43.2**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Hexanone | ND | | 3.04 | 0.141 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Ethylbenzene | ND | | 0.304 | 0.0492 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Chlorobenzene | ND | | 0.304 | 0.0231 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.304 | 0.0310 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| m,p-Xylene | ND | | 1.22 | 0.0517 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| o-Xylene | ND | | 0.608 | 0.0398 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Styrene | ND | | 0.304 | 0.0283 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Bromoform | ND | | 0.304 | 0.0380 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Isopropylbenzene | ND | | 0.304 | 0.0578 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| n-Propylbenzene | ND | | 0.304 | 0.0629 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.304 | 0.0228 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Bromobenzene | ND | | 0.304 | 0.0286 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| **1,3,5-Trimethylbenzene** | **0.129** | **J** | 0.304 | 0.0565 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 2-Chlorotoluene | ND | | 0.304 | 0.0495 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.304 | 0.0255 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 4-Chlorotoluene | ND | | 0.304 | 0.0435 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| tert-Butylbenzene | ND | | 0.304 | 0.0657 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| **1,2,4-Trimethylbenzene** | **0.205** | **J** | 0.304 | 0.0441 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| sec-Butylbenzene | ND | | 0.304 | 0.0714 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| p-Isopropyltoluene | ND | | 0.304 | 0.0726 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.304 | 0.0383 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.304 | 0.0322 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| n-Butylbenzene | ND | | 0.304 | 0.0836 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.304 | 0.0231 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 1.52 | 0.0863 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| Hexachlorobutadiene | ND | | 0.304 | 0.173 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.304 | 0.0605 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| **Naphthalene** | **0.125** | **J** | 0.608 | 0.0413 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.304 | 0.108 | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *98.8* | | *42.4 - 163* | *07/17/14 07:29* | *07/17/14 15:31* | *1.00* |
| *1,2-dichloroethane-d4* | *90.5* | | *50 - 150* | *07/17/14 07:29* | *07/17/14 15:31* | *1.00* |
| *Toluene-d8* | *104* | | *45.8 - 155* | *07/17/14 07:29* | *07/17/14 15:31* | *1.00* |
| *4-bromofluorobenzene* | *109* | | *41.5 - 162* | *07/17/14 07:29* | *07/17/14 15:31* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **17.7** | | 15.2 | | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 18:09 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *109* | | *41.5 - 162* | *07/17/14 07:29* | *07/17/14 15:31* | *1.00* |

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Acenaphthylene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Anthracene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Benzo[a]anthracene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Benzo[b]fluoranthene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX2-1-3

**Date Collected: 07/16/14 08:50**
**Date Received: 07/17/14 10:30**

## Lab Sample ID: SXG0111-06

**Matrix: Soil**
**Percent Solids: 51.8**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[k]fluoranthene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Benzo[g,h,i]perylene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Benzo[a]pyrene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Bis(2-chloroethyl)ether | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Butyl benzyl phthalate | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Carbazole | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 4-Chloroaniline | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 4-Chloro-3-methylphenol | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2-Chloronaphthalene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2-Chlorophenol | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Chrysene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Dibenz(a,h)anthracene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Dibenzofuran | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Di-n-butyl phthalate | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 1,2-Dichlorobenzene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 1,4-Dichlorobenzene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 3,3'-Dichlorobenzidine | ND | * | 9.3 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2,4-Dichlorophenol | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Diethyl phthalate | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2,4-Dimethylphenol | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Dimethyl phthalate | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 9.3 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2,4-Dinitrophenol | ND | * | 9.3 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2,4-Dinitrotoluene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2,6-Dinitrotoluene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Di-n-octyl phthalate | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Fluoranthene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Fluorene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Hexachlorobenzene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Hexachlorobutadiene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.3 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Hexachloroethane | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Isophorone | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2-Methylnaphthalene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2-Methylphenol | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 3 & 4 Methylphenol | ND | | 3.8 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Naphthalene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2-Nitroaniline | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 3-Nitroaniline | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 4-Nitroaniline | ND | | 9.3 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Nitrobenzene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2-Nitrophenol | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 4-Nitrophenol | ND | | 9.3 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX2-1-3

**Lab Sample ID: SXG0111-06**

**Date Collected: 07/16/14 08:50**
**Matrix: Soil**
**Date Received: 07/17/14 10:30**
**Percent Solids: 51.8**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| N-Nitrosodiphenylamine | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Pentachlorophenol | ND | | 3.8 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Phenanthrene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Phenol | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Pyrene | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2,4,5-Trichlorophenol | ND | * | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 2,4,6-Trichlorophenol | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Aniline | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| 1,4-Dioxane | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Benzyl alcohol | ND | | 1.9 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |
| Pyridine | ND | | 3.8 | | mg/Kg | ☼ | 07/18/14 13:09 | 07/21/14 12:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *97* | | *53 - 97* | *07/18/14 13:09* | *07/21/14 12:31* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *95* | | *46 - 111* | *07/18/14 13:09* | *07/21/14 12:31* | *1* |
| *Nitrobenzene-d5 (Surr)* | *104* | *X* | *55 - 98* | *07/18/14 13:09* | *07/21/14 12:31* | *1* |
| *Phenol-d5 (Surr)* | *100* | | *54 - 101* | *07/18/14 13:09* | *07/21/14 12:31* | *1* |
| *Terphenyl-d14 (Surr)* | *131* | ** X* | *58 - 123* | *07/18/14 13:09* | *07/21/14 12:31* | *1* |
| *2-Fluorobiphenyl (Surr)* | *93* | | *56 - 97* | *07/18/14 13:09* | *07/21/14 12:31* | *1* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **8740** | | 2410 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 09:56 | 50.0 |
| **Heavy Oil Range Hydrocarbons** | **33900** | | 6030 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 09:56 | 50.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *127* | | *50 - 150* | *07/17/14 13:47* | *07/19/14 09:56* | *50.0* |
| *n-Triacontane-d62* | *140* | | *50 - 150* | *07/17/14 13:47* | *07/19/14 09:56* | *50.0* |

### Method: NWTPH-HCID - Hydrocarbon Identification by NWTPH-HCID

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 300 | | mg/kg dry | ☼ | 07/29/14 15:09 | 07/29/14 18:28 | 1.0 |
| **Diesel Range Hydrocarbons** | **6200** | | 740 | | mg/kg dry | ☼ | 07/29/14 15:09 | 07/29/14 18:28 | 1.0 |
| **Heavy Oil Range Hydrocarbons** | **23000** | | 740 | | mg/kg dry | ☼ | 07/29/14 15:09 | 07/29/14 18:28 | 1.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-BFB (FID)* | *98.7* | | *50 - 150* | *07/29/14 15:09* | *07/29/14 18:28* | *1.0* |
| *2-FBP* | *105* | | *50 - 150* | *07/29/14 15:09* | *07/29/14 18:28* | *1.0* |
| *p-Terphenyl-d14* | *112* | | *50 - 150* | *07/29/14 15:09* | *07/29/14 18:28* | *1.0* |

## Client Sample ID: EX3-1-4

**Lab Sample ID: SXG0111-07**

**Date Collected: 07/16/14 14:20**
**Matrix: Soil**
**Date Received: 07/17/14 10:30**
**Percent Solids: 86**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.27 | | mg/kg dry | ☼ | 07/17/14 07:29 | 07/17/14 15:54 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX3-1-4

**Date Collected: 07/16/14 14:20**
**Date Received: 07/17/14 10:30**

## Lab Sample ID: SXG0111-07

**Matrix: Soil**
**Percent Solids: 86**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 104 | | 41.5 - 162 | 07/17/14 07:29 | 07/17/14 15:54 | 1.00 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 26.7 | | 22.9 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 10:19 | 2.00 |
| Heavy Oil Range Hydrocarbons | 174 | | 57.4 | | mg/kg dry | ☼ | 07/17/14 13:47 | 07/19/14 10:19 | 2.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 98.4 | | 50 - 150 | 07/17/14 13:47 | 07/19/14 10:19 | 2.00 |
| n-Triacontane-d62 | 83.2 | | 50 - 150 | 07/17/14 13:47 | 07/19/14 10:19 | 2.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

**Lab Sample ID: 14G0131-BLK1**
**Matrix: Soil**
**Analysis Batch: 14G0131**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14G0131_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.100 | 0.00930 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Chloromethane | ND | | 0.500 | 0.00530 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Vinyl chloride | ND | | 0.0600 | 0.00620 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Bromomethane | ND | | 0.500 | 0.0306 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Chloroethane | ND | | 0.100 | 0.0245 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0300 | 0.00790 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.100 | 0.0127 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Carbon disulfide | ND | | 0.100 | 0.0107 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Methylene chloride | ND | | 0.0200 | 0.00520 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Acetone | ND | | 3.00 | 0.0870 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.100 | 0.0103 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0500 | 0.00320 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.100 | 0.0113 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.100 | 0.00570 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.100 | 0.0170 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Bromochloromethane | ND | | 0.100 | 0.00390 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Chloroform | ND | | 0.100 | 0.00770 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Carbon tetrachloride | ND | | 0.100 | 0.0208 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.100 | 0.0173 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 2-Butanone | ND | | 1.00 | 0.110 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Hexane | ND | | 0.100 | 0.00810 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.100 | 0.0174 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Benzene | ND | | 0.0150 | 0.00970 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.100 | 0.00490 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Trichloroethene | ND | | 0.0250 | 0.0128 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Dibromomethane | ND | | 0.100 | 0.00910 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.100 | 0.00600 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Bromodichloromethane | ND | | 0.100 | 0.00700 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.100 | 0.00620 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Toluene | ND | | 0.100 | 0.0133 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.00 | 0.0204 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.100 | 0.00660 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Tetrachloroethene | ND | | 0.0400 | 0.0176 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.100 | 0.00620 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Dibromochloromethane | ND | | 0.100 | 0.00600 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.100 | 0.00740 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0100 | 0.00580 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 2-Hexanone | ND | | 1.00 | 0.0465 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Ethylbenzene | ND | | 0.100 | 0.0162 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Chlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.100 | 0.0102 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| m,p-Xylene | ND | | 0.400 | 0.0170 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| o-Xylene | ND | | 0.200 | 0.0131 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Styrene | ND | | 0.100 | 0.00930 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Bromoform | ND | | 0.100 | 0.0125 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Isopropylbenzene | ND | | 0.100 | 0.0190 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| n-Propylbenzene | ND | | 0.100 | 0.0207 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.100 | 0.00750 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0131-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0131** — **Prep Batch: 14G0131_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromobenzene | ND | | 0.100 | 0.00940 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.100 | 0.0186 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 2-Chlorotoluene | ND | | 0.100 | 0.0163 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.100 | 0.00840 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 4-Chlorotoluene | ND | | 0.100 | 0.0143 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| tert-Butylbenzene | ND | | 0.100 | 0.0216 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.100 | 0.0145 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| sec-Butylbenzene | ND | | 0.100 | 0.0235 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| p-Isopropyltoluene | ND | | 0.100 | 0.0239 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.100 | 0.0126 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.100 | 0.0106 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| n-Butylbenzene | ND | | 0.100 | 0.0275 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.500 | 0.0284 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Hexachlorobutadiene | ND | | 0.100 | 0.0570 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.100 | 0.0199 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| Naphthalene | ND | | 0.200 | 0.0136 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.100 | 0.0355 | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *98.7* | | *42.4 - 163* | *07/17/14 07:29* | *07/17/14 09:32* | *1.00* |
| *1,2-dichloroethane-d4* | *97.6* | | *50 - 150* | *07/17/14 07:29* | *07/17/14 09:32* | *1.00* |
| *Toluene-d8* | *103* | | *45.8 - 155* | *07/17/14 07:29* | *07/17/14 09:32* | *1.00* |
| *4-bromofluorobenzene* | *102* | | *41.5 - 162* | *07/17/14 07:29* | *07/17/14 09:32* | *1.00* |

**Lab Sample ID: 14G0131-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0131** — **Prep Batch: 14G0131_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.500 | 0.434 | | mg/kg wet | | 86.8 | 60 - 140 |
| Chloromethane | 0.500 | 0.499 | J | mg/kg wet | | 99.8 | 60 - 140 |
| Vinyl chloride | 0.500 | 0.528 | | mg/kg wet | | 106 | 60 - 140 |
| Bromomethane | 0.500 | 0.620 | | mg/kg wet | | 124 | 60 - 140 |
| Chloroethane | 0.500 | 0.538 | | mg/kg wet | | 108 | 60 - 140 |
| Trichlorofluoromethane | 0.500 | 0.495 | | mg/kg wet | | 99.0 | 60 - 140 |
| 1,1-Dichloroethene | 0.500 | 0.484 | | mg/kg wet | | 96.7 | 76 - 187 |
| Carbon disulfide | 0.500 | 0.532 | | mg/kg wet | | 106 | 60 - 140 |
| Methylene chloride | 0.500 | 0.425 | | mg/kg wet | | 85.0 | 60 - 140 |
| Acetone | 2.50 | 1.78 | J | mg/kg wet | | 71.2 | 60 - 140 |
| trans-1,2-Dichloroethene | 0.500 | 0.518 | | mg/kg wet | | 104 | 60 - 140 |
| Methyl tert-butyl ether | 0.500 | 0.479 | | mg/kg wet | | 95.8 | 79 - 127 |
| 1,1-Dichloroethane | 0.500 | 0.526 | | mg/kg wet | | 105 | 60 - 140 |
| cis-1,2-Dichloroethene | 0.500 | 0.496 | | mg/kg wet | | 99.1 | 60 - 140 |
| 2,2-Dichloropropane | 0.500 | 0.474 | | mg/kg wet | | 94.8 | 60 - 140 |
| Bromochloromethane | 0.500 | 0.495 | | mg/kg wet | | 99.0 | 60 - 140 |
| Chloroform | 0.500 | 0.490 | | mg/kg wet | | 98.1 | 60 - 140 |
| Carbon tetrachloride | 0.500 | 0.490 | | mg/kg wet | | 98.0 | 60 - 140 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0131-BS1**
**Matrix: Soil**
**Analysis Batch: 14G0131**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14G0131_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.500 | 0.498 | | mg/kg wet | | 99.7 | 60 - 140 |
| 2-Butanone | 2.50 | 1.96 | | mg/kg wet | | 78.5 | 60 - 140 |
| Hexane | 0.500 | 0.498 | | mg/kg wet | | 99.6 | 50 - 150 |
| 1,1-Dichloropropene | 0.500 | 0.504 | | mg/kg wet | | 101 | 60 - 140 |
| Benzene | 0.500 | 0.496 | | mg/kg wet | | 99.3 | 75.9 - 123 |
| 1,2-Dichloroethane (EDC) | 0.500 | 0.494 | | mg/kg wet | | 98.9 | 60 - 140 |
| Trichloroethene | 0.500 | 0.478 | | mg/kg wet | | 95.6 | 82.7 - 120 |
| Dibromomethane | 0.500 | 0.486 | | mg/kg wet | | 97.1 | 60 - 140 |
| 1,2-Dichloropropane | 0.500 | 0.379 | | mg/kg wet | | 75.8 | 60 - 140 |
| Bromodichloromethane | 0.500 | 0.464 | | mg/kg wet | | 92.9 | 60 - 140 |
| cis-1,3-Dichloropropene | 0.500 | 0.470 | | mg/kg wet | | 93.9 | 60 - 140 |
| Toluene | 0.500 | 0.516 | | mg/kg wet | | 103 | 77.3 - 126 |
| 4-Methyl-2-pentanone | 2.50 | 2.51 | | mg/kg wet | | 101 | 60 - 140 |
| trans-1,3-Dichloropropene | 0.500 | 0.517 | | mg/kg wet | | 103 | 60 - 140 |
| Tetrachloroethene | 0.500 | 0.524 | | mg/kg wet | | 105 | 75 - 130 |
| 1,1,2-Trichloroethane | 0.500 | 0.531 | | mg/kg wet | | 106 | 60 - 140 |
| Dibromochloromethane | 0.500 | 0.466 | | mg/kg wet | | 93.2 | 60 - 140 |
| 1,3-Dichloropropane | 0.500 | 0.526 | | mg/kg wet | | 105 | 60 - 140 |
| 1,2-Dibromoethane | 0.500 | 0.508 | | mg/kg wet | | 102 | 60 - 140 |
| 2-Hexanone | 2.50 | 2.32 | | mg/kg wet | | 93.0 | 60 - 140 |
| Ethylbenzene | 0.500 | 0.504 | | mg/kg wet | | 101 | 80.7 - 120 |
| Chlorobenzene | 0.500 | 0.546 | | mg/kg wet | | 109 | 80 - 120 |
| 1,1,1,2-Tetrachloroethane | 0.500 | 0.536 | | mg/kg wet | | 107 | 60 - 140 |
| m,p-Xylene | 0.500 | 0.498 | | mg/kg wet | | 99.7 | 86.1 - 120 |
| o-Xylene | 0.500 | 0.524 | | mg/kg wet | | 105 | 85.3 - 120 |
| Styrene | 0.500 | 0.528 | | mg/kg wet | | 106 | 60 - 140 |
| Bromoform | 0.500 | 0.478 | | mg/kg wet | | 95.6 | 60 - 140 |
| Isopropylbenzene | 0.500 | 0.516 | | mg/kg wet | | 103 | 60 - 140 |
| n-Propylbenzene | 0.500 | 0.517 | | mg/kg wet | | 103 | 60 - 140 |
| 1,1,2,2-Tetrachloroethane | 0.500 | 0.494 | | mg/kg wet | | 98.7 | 60 - 140 |
| Bromobenzene | 0.500 | 0.500 | | mg/kg wet | | 99.9 | 60 - 140 |
| 1,3,5-Trimethylbenzene | 0.500 | 0.513 | | mg/kg wet | | 103 | 60 - 140 |
| 2-Chlorotoluene | 0.500 | 0.536 | | mg/kg wet | | 107 | 60 - 140 |
| 1,2,3-Trichloropropane | 0.500 | 0.480 | | mg/kg wet | | 96.0 | 60 - 140 |
| 4-Chlorotoluene | 0.500 | 0.508 | | mg/kg wet | | 102 | 60 - 140 |
| tert-Butylbenzene | 0.500 | 0.516 | | mg/kg wet | | 103 | 60 - 140 |
| 1,2,4-Trimethylbenzene | 0.500 | 0.520 | | mg/kg wet | | 104 | 60 - 140 |
| sec-Butylbenzene | 0.500 | 0.514 | | mg/kg wet | | 103 | 60 - 140 |
| p-Isopropyltoluene | 0.500 | 0.506 | | mg/kg wet | | 101 | 60 - 140 |
| 1,3-Dichlorobenzene | 0.500 | 0.507 | | mg/kg wet | | 101 | 60 - 140 |
| 1,4-Dichlorobenzene | 0.500 | 0.518 | | mg/kg wet | | 104 | 60 - 140 |
| n-Butylbenzene | 0.500 | 0.512 | | mg/kg wet | | 102 | 60 - 140 |
| 1,2-Dichlorobenzene | 0.500 | 0.516 | | mg/kg wet | | 103 | 60 - 140 |
| 1,2-Dibromo-3-chloropropane | 0.500 | 0.424 | J | mg/kg wet | | 84.7 | 60 - 140 |
| Hexachlorobutadiene | 0.500 | 0.500 | | mg/kg wet | | 100 | 60 - 140 |
| 1,2,4-Trichlorobenzene | 0.500 | 0.460 | | mg/kg wet | | 92.1 | 60 - 140 |
| Naphthalene | 0.500 | 0.420 | | mg/kg wet | | 83.9 | 58.8 - 130 |
| 1,2,3-Trichlorobenzene | 0.500 | 0.449 | | mg/kg wet | | 89.8 | 60 - 140 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0131-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0131** — **Prep Batch: 14G0131_P**

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *99.9* | | *42.4 - 163* |
| *1,2-dichloroethane-d4* | *98.9* | | *50 - 150* |
| *Toluene-d8* | *103* | | *45.8 - 155* |
| *4-bromofluorobenzene* | *101* | | *41.5 - 162* |

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

**Lab Sample ID: 14G0131-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0131** — **Prep Batch: 14G0131_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.00 | | mg/kg wet | | 07/17/14 07:29 | 07/17/14 09:32 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *102* | | *41.5 - 162* | *07/17/14 07:29* | *07/17/14 09:32* | *1.00* |

**Lab Sample ID: 14G0131-BS2** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0131** — **Prep Batch: 14G0131_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 50.0 | 48.0 | | mg/kg wet | | 95.9 | 74.4 - 124 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-bromofluorobenzene* | *102* | | *41.5 - 162* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 160-132459/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 132657** — **Prep Batch: 132459**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Acenaphthylene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Anthracene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Benzo[a]anthracene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Benzo[b]fluoranthene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Benzo[k]fluoranthene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Benzo[a]pyrene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Butyl benzyl phthalate | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 160-132459/1-A**
**Matrix: Solid**
**Analysis Batch: 132657**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 132459**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbazole | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 4-Chloroaniline | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 4-Chloro-3-methylphenol | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2-Chloronaphthalene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2-Chlorophenol | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Chrysene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Dibenzofuran | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Di-n-butyl phthalate | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 1.6 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2,4-Dichlorophenol | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Diethyl phthalate | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2,4-Dimethylphenol | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Dimethyl phthalate | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1.6 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2,4-Dinitrophenol | ND | | 1.6 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2,6-Dinitrotoluene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Di-n-octyl phthalate | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Fluoranthene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Fluorene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Hexachlorobenzene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Hexachlorobutadiene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Hexachlorocyclopentadiene | ND | | 1.6 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Hexachloroethane | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Isophorone | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2-Methylnaphthalene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2-Methylphenol | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 3 & 4 Methylphenol | ND | | 0.66 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Naphthalene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2-Nitroaniline | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 3-Nitroaniline | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 4-Nitroaniline | ND | | 1.6 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Nitrobenzene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2-Nitrophenol | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 4-Nitrophenol | ND | | 1.6 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Pentachlorophenol | ND | | 0.66 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Phenanthrene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Phenol | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Pyrene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 160-132459/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 132657** — **Prep Batch: 132459**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2,4,5-Trichlorophenol | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 2,4,6-Trichlorophenol | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Aniline | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| 1,4-Dioxane | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Benzyl alcohol | ND | | 0.33 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |
| Pyridine | ND | | 0.66 | | mg/Kg | | 07/18/14 13:09 | 07/21/14 04:52 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *86* | | *53 - 97* | *07/18/14 13:09* | *07/21/14 04:52* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *82* | | *46 - 111* | *07/18/14 13:09* | *07/21/14 04:52* | *1* |
| *Nitrobenzene-d5 (Surr)* | *85* | | *55 - 98* | *07/18/14 13:09* | *07/21/14 04:52* | *1* |
| *Phenol-d5 (Surr)* | *86* | | *54 - 101* | *07/18/14 13:09* | *07/21/14 04:52* | *1* |
| *Terphenyl-d14 (Surr)* | *84* | | *58 - 123* | *07/18/14 13:09* | *07/21/14 04:52* | *1* |
| *2-Fluorobiphenyl (Surr)* | *90* | | *56 - 97* | *07/18/14 13:09* | *07/21/14 04:52* | *1* |

**Lab Sample ID: LCS 160-132459/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 132657** — **Prep Batch: 132459**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.67 | 6.09 | | mg/Kg | | 91 | 63 - 95 |
| Acenaphthylene | 6.67 | 6.19 | | mg/Kg | | 93 | 62 - 98 |
| Anthracene | 6.68 | 5.79 | | mg/Kg | | 87 | 63 - 100 |
| Benzo[a]anthracene | 6.67 | 6.23 | | mg/Kg | | 93 | 74 - 114 |
| Benzo[b]fluoranthene | 6.67 | 6.22 | | mg/Kg | | 93 | 68 - 109 |
| Benzo[k]fluoranthene | 6.68 | 6.18 | | mg/Kg | | 93 | 69 - 111 |
| Benzo[g,h,i]perylene | 6.67 | 6.86 | | mg/Kg | | 103 | 67 - 121 |
| Benzo[a]pyrene | 6.67 | 6.20 | | mg/Kg | | 93 | 63 - 103 |
| Bis(2-chloroethoxy)methane | 6.68 | 6.07 | | mg/Kg | | 91 | 62 - 91 |
| Bis(2-chloroethyl)ether | 6.67 | 5.97 | | mg/Kg | | 90 | 58 - 92 |
| Bis(2-ethylhexyl) phthalate | 6.67 | 6.32 | | mg/Kg | | 95 | 63 - 112 |
| 4-Bromophenyl phenyl ether | 6.67 | 5.94 | | mg/Kg | | 89 | 63 - 106 |
| Butyl benzyl phthalate | 6.67 | 6.45 | | mg/Kg | | 97 | 59 - 111 |
| Carbazole | 6.69 | 5.65 | | mg/Kg | | 84 | 64 - 101 |
| 4-Chloroaniline | 6.67 | 4.46 | | mg/Kg | | 67 | 43 - 70 |
| 4-Chloro-3-methylphenol | 6.67 | 5.75 | | mg/Kg | | 86 | 58 - 95 |
| 2-Chloronaphthalene | 6.67 | 6.43 | * | mg/Kg | | 97 | 61 - 94 |
| 2-Chlorophenol | 6.67 | 6.07 | | mg/Kg | | 91 | 60 - 91 |
| 4-Chlorophenyl phenyl ether | 6.68 | 5.92 | | mg/Kg | | 89 | 61 - 96 |
| Chrysene | 6.67 | 6.22 | | mg/Kg | | 93 | 66 - 100 |
| Dibenz(a,h)anthracene | 6.67 | 7.11 | | mg/Kg | | 107 | 67 - 114 |
| Dibenzofuran | 6.67 | 5.92 | | mg/Kg | | 89 | 58 - 95 |
| Di-n-butyl phthalate | 6.67 | 5.69 | | mg/Kg | | 85 | 62 - 104 |
| 1,2-Dichlorobenzene | 6.67 | 6.14 | * | mg/Kg | | 92 | 59 - 90 |
| 1,3-Dichlorobenzene | 6.67 | 5.89 | | mg/Kg | | 88 | 57 - 88 |
| 1,4-Dichlorobenzene | 6.67 | 5.94 | * | mg/Kg | | 89 | 58 - 88 |
| 3,3'-Dichlorobenzidine | 6.67 | 5.98 | | mg/Kg | | 90 | 50 - 90 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 160-132459/2-A**
**Matrix: Solid**
**Analysis Batch: 132657**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 132459**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 2,4-Dichlorophenol | 6.67 | 5.94 | | mg/Kg | | 89 | 59 - 90 |
| Diethyl phthalate | 6.67 | 5.88 | | mg/Kg | | 88 | 62 - 97 |
| 2,4-Dimethylphenol | 6.67 | 6.00 | | mg/Kg | | 90 | 54 - 108 |
| Dimethyl phthalate | 6.67 | 6.05 | | mg/Kg | | 91 | 63 - 98 |
| 4,6-Dinitro-2-methylphenol | 6.67 | 5.22 | | mg/Kg | | 78 | 31 - 112 |
| 2,4-Dinitrophenol | 6.67 | 3.74 | | mg/Kg | | 56 | 20 - 100 |
| 2,4-Dinitrotoluene | 6.68 | 5.96 | | mg/Kg | | 89 | 61 - 103 |
| 2,6-Dinitrotoluene | 6.67 | 6.12 | | mg/Kg | | 92 | 63 - 99 |
| Di-n-octyl phthalate | 6.67 | 6.42 | | mg/Kg | | 96 | 61 - 111 |
| Fluoranthene | 6.67 | 5.61 | | mg/Kg | | 84 | 63 - 101 |
| Fluorene | 6.67 | 6.13 | | mg/Kg | | 92 | 62 - 96 |
| Hexachlorobenzene | 6.67 | 5.87 | | mg/Kg | | 88 | 62 - 106 |
| Hexachlorobutadiene | 6.67 | 6.09 | | mg/Kg | | 91 | 57 - 94 |
| Hexachlorocyclopentadiene | 6.67 | 6.24 | | mg/Kg | | 94 | 40 - 115 |
| Hexachloroethane | 6.67 | 5.90 | | mg/Kg | | 88 | 59 - 93 |
| Indeno[1,2,3-cd]pyrene | 6.67 | 6.92 | | mg/Kg | | 104 | 65 - 120 |
| Isophorone | 6.67 | 5.02 | | mg/Kg | | 75 | 57 - 86 |
| 2-Methylnaphthalene | 6.65 | 5.75 | | mg/Kg | | 86 | 59 - 90 |
| 2-Methylphenol | 6.68 | 5.94 | | mg/Kg | | 89 | 58 - 96 |
| 3 & 4 Methylphenol | 6.67 | 6.62 | | mg/Kg | | 99 | 47 - 113 |
| Naphthalene | 6.67 | 6.06 | * | mg/Kg | | 91 | 60 - 90 |
| 2-Nitroaniline | 6.69 | 6.27 | | mg/Kg | | 94 | 58 - 105 |
| 3-Nitroaniline | 6.67 | 5.72 | | mg/Kg | | 86 | 55 - 91 |
| 4-Nitroaniline | 6.69 | 6.07 | | mg/Kg | | 91 | 57 - 94 |
| Nitrobenzene | 6.67 | 6.23 | | mg/Kg | | 93 | 58 - 95 |
| 2-Nitrophenol | 6.68 | 6.17 | | mg/Kg | | 92 | 60 - 93 |
| 4-Nitrophenol | 6.68 | 5.67 | | mg/Kg | | 85 | 54 - 101 |
| N-Nitrosodiphenylamine | 6.67 | 6.78 | | mg/Kg | | 102 | 78 - 133 |
| N-Nitrosodi-n-propylamine | 6.67 | 5.84 | | mg/Kg | | 88 | 60 - 104 |
| bis (2-chloroisopropyl) ether | 6.67 | 5.96 | | mg/Kg | | 89 | 47 - 105 |
| Pentachlorophenol | 6.67 | 5.66 | | mg/Kg | | 85 | 50 - 100 |
| Phenanthrene | 6.68 | 5.94 | | mg/Kg | | 89 | 63 - 99 |
| Phenol | 6.67 | 5.98 | * | mg/Kg | | 90 | 53 - 89 |
| Pyrene | 6.67 | 6.55 | | mg/Kg | | 98 | 64 - 102 |
| 1,2,4-Trichlorobenzene | 6.71 | 5.97 | | mg/Kg | | 89 | 60 - 91 |
| 2,4,5-Trichlorophenol | 6.67 | 6.40 | * | mg/Kg | | 96 | 59 - 94 |
| 2,4,6-Trichlorophenol | 6.67 | 6.20 | | mg/Kg | | 93 | 59 - 95 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol (Surr)* | *95* | | *53 - 97* |
| *2,4,6-Tribromophenol (Surr)* | *89* | | *46 - 111* |
| *Nitrobenzene-d5 (Surr)* | *94* | | *55 - 98* |
| *Phenol-d5 (Surr)* | *90* | | *54 - 101* |
| *Terphenyl-d14 (Surr)* | *94* | | *58 - 123* |
| *2-Fluorobiphenyl (Surr)* | *100* | *X* | *56 - 97* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 160-132459/3-A**
**Matrix: Solid**
**Analysis Batch: 132657**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 132459**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.67 | 5.90 | | mg/Kg | | 88 | 63 - 95 | 3 | 20 |
| Acenaphthylene | 6.67 | 5.96 | | mg/Kg | | 89 | 62 - 98 | 4 | 20 |
| Anthracene | 6.68 | 5.61 | | mg/Kg | | 84 | 63 - 100 | 3 | 20 |
| Benzo[a]anthracene | 6.67 | 5.99 | | mg/Kg | | 90 | 74 - 114 | 4 | 20 |
| Benzo[b]fluoranthene | 6.67 | 6.04 | | mg/Kg | | 91 | 68 - 109 | 3 | 20 |
| Benzo[k]fluoranthene | 6.68 | 5.93 | | mg/Kg | | 89 | 69 - 111 | 4 | 20 |
| Benzo[g,h,i]perylene | 6.67 | 6.68 | | mg/Kg | | 100 | 67 - 121 | 3 | 20 |
| Benzo[a]pyrene | 6.67 | 5.98 | | mg/Kg | | 90 | 63 - 103 | 4 | 20 |
| Bis(2-chloroethoxy)methane | 6.68 | 5.86 | | mg/Kg | | 88 | 62 - 91 | 3 | 20 |
| Bis(2-chloroethyl)ether | 6.67 | 5.73 | | mg/Kg | | 86 | 58 - 92 | 4 | 20 |
| Bis(2-ethylhexyl) phthalate | 6.67 | 6.11 | | mg/Kg | | 92 | 63 - 112 | 3 | 20 |
| 4-Bromophenyl phenyl ether | 6.67 | 5.76 | | mg/Kg | | 86 | 63 - 106 | 3 | 20 |
| Butyl benzyl phthalate | 6.67 | 6.17 | | mg/Kg | | 92 | 59 - 111 | 4 | 20 |
| Carbazole | 6.69 | 5.54 | | mg/Kg | | 83 | 64 - 101 | 2 | 20 |
| 4-Chloroaniline | 6.67 | 4.28 | | mg/Kg | | 64 | 43 - 70 | 4 | 20 |
| 4-Chloro-3-methylphenol | 6.67 | 5.85 | | mg/Kg | | 88 | 58 - 95 | 2 | 20 |
| 2-Chloronaphthalene | 6.67 | 6.12 | | mg/Kg | | 92 | 61 - 94 | 5 | 20 |
| 2-Chlorophenol | 6.67 | 5.81 | | mg/Kg | | 87 | 60 - 91 | 4 | 20 |
| 4-Chlorophenyl phenyl ether | 6.68 | 5.78 | | mg/Kg | | 86 | 61 - 96 | 2 | 20 |
| Chrysene | 6.67 | 5.97 | | mg/Kg | | 89 | 66 - 100 | 4 | 20 |
| Dibenz(a,h)anthracene | 6.67 | 6.95 | | mg/Kg | | 104 | 67 - 114 | 2 | 20 |
| Dibenzofuran | 6.67 | 5.67 | | mg/Kg | | 85 | 58 - 95 | 4 | 20 |
| Di-n-butyl phthalate | 6.67 | 5.67 | | mg/Kg | | 85 | 62 - 104 | 0 | 20 |
| 1,2-Dichlorobenzene | 6.67 | 5.77 | | mg/Kg | | 87 | 59 - 90 | 6 | 20 |
| 1,3-Dichlorobenzene | 6.67 | 5.62 | | mg/Kg | | 84 | 57 - 88 | 5 | 20 |
| 1,4-Dichlorobenzene | 6.67 | 5.70 | | mg/Kg | | 85 | 58 - 88 | 4 | 20 |
| 3,3'-Dichlorobenzidine | 6.67 | 5.62 | | mg/Kg | | 84 | 50 - 90 | 6 | 20 |
| 2,4-Dichlorophenol | 6.67 | 5.91 | | mg/Kg | | 89 | 59 - 90 | 1 | 20 |
| Diethyl phthalate | 6.67 | 5.73 | | mg/Kg | | 86 | 62 - 97 | 3 | 20 |
| 2,4-Dimethylphenol | 6.67 | 5.87 | | mg/Kg | | 88 | 54 - 108 | 2 | 20 |
| Dimethyl phthalate | 6.67 | 5.92 | | mg/Kg | | 89 | 63 - 98 | 2 | 20 |
| 4,6-Dinitro-2-methylphenol | 6.67 | 5.99 | | mg/Kg | | 90 | 31 - 112 | 14 | 20 |
| 2,4-Dinitrophenol | 6.67 | 5.31 | * | mg/Kg | | 80 | 20 - 100 | 35 | 20 |
| 2,4-Dinitrotoluene | 6.68 | 5.94 | | mg/Kg | | 89 | 61 - 103 | 0 | 20 |
| 2,6-Dinitrotoluene | 6.67 | 5.99 | | mg/Kg | | 90 | 63 - 99 | 2 | 20 |
| Di-n-octyl phthalate | 6.67 | 6.18 | | mg/Kg | | 93 | 61 - 111 | 4 | 20 |
| Fluoranthene | 6.67 | 5.54 | | mg/Kg | | 83 | 63 - 101 | 1 | 20 |
| Fluorene | 6.67 | 5.93 | | mg/Kg | | 89 | 62 - 96 | 3 | 20 |
| Hexachlorobenzene | 6.67 | 5.77 | | mg/Kg | | 86 | 62 - 106 | 2 | 20 |
| Hexachlorobutadiene | 6.67 | 5.63 | | mg/Kg | | 85 | 57 - 94 | 8 | 20 |
| Hexachlorocyclopentadiene | 6.67 | 5.86 | | mg/Kg | | 88 | 40 - 115 | 6 | 20 |
| Hexachloroethane | 6.67 | 5.66 | | mg/Kg | | 85 | 59 - 93 | 4 | 20 |
| Indeno[1,2,3-cd]pyrene | 6.67 | 6.78 | | mg/Kg | | 102 | 65 - 120 | 2 | 20 |
| Isophorone | 6.67 | 4.90 | | mg/Kg | | 73 | 57 - 86 | 3 | 20 |
| 2-Methylnaphthalene | 6.65 | 5.58 | | mg/Kg | | 84 | 59 - 90 | 3 | 20 |
| 2-Methylphenol | 6.68 | 5.77 | | mg/Kg | | 86 | 58 - 96 | 3 | 20 |
| 3 & 4 Methylphenol | 6.67 | 6.47 | | mg/Kg | | 97 | 47 - 113 | 2 | 20 |
| Naphthalene | 6.67 | 5.79 | | mg/Kg | | 87 | 60 - 90 | 5 | 20 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 160-132459/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 132657** — **Prep Batch: 132459**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 2-Nitroaniline | 6.69 | 6.14 | | mg/Kg | | 92 | 58 - 105 | 2 | 20 |
| 3-Nitroaniline | 6.67 | 5.53 | | mg/Kg | | 83 | 55 - 91 | 4 | 20 |
| 4-Nitroaniline | 6.69 | 5.98 | | mg/Kg | | 89 | 57 - 94 | 1 | 20 |
| Nitrobenzene | 6.67 | 5.98 | | mg/Kg | | 90 | 58 - 95 | 4 | 20 |
| 2-Nitrophenol | 6.68 | 5.87 | | mg/Kg | | 88 | 60 - 93 | 5 | 20 |
| 4-Nitrophenol | 6.68 | 5.85 | | mg/Kg | | 88 | 54 - 101 | 3 | 20 |
| N-Nitrosodiphenylamine | 6.67 | 6.55 | | mg/Kg | | 98 | 78 - 133 | 3 | 20 |
| N-Nitrosodi-n-propylamine | 6.67 | 5.79 | | mg/Kg | | 87 | 60 - 104 | 1 | 20 |
| bis (2-chloroisopropyl) ether | 6.67 | 5.84 | | mg/Kg | | 88 | 47 - 105 | 2 | 20 |
| Pentachlorophenol | 6.67 | 5.72 | | mg/Kg | | 86 | 50 - 100 | 1 | 20 |
| Phenanthrene | 6.68 | 5.81 | | mg/Kg | | 87 | 63 - 99 | 2 | 20 |
| Phenol | 6.67 | 5.91 | | mg/Kg | | 88 | 53 - 89 | 1 | 20 |
| Pyrene | 6.67 | 6.22 | | mg/Kg | | 93 | 64 - 102 | 5 | 20 |
| 1,2,4-Trichlorobenzene | 6.71 | 5.65 | | mg/Kg | | 84 | 60 - 91 | 6 | 20 |
| 2,4,5-Trichlorophenol | 6.67 | 6.08 | | mg/Kg | | 91 | 59 - 94 | 5 | 20 |
| 2,4,6-Trichlorophenol | 6.67 | 5.92 | | mg/Kg | | 89 | 59 - 95 | 5 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol (Surr)* | *88* | | *53 - 97* |
| *2,4,6-Tribromophenol (Surr)* | *87* | | *46 - 111* |
| *Nitrobenzene-d5 (Surr)* | *86* | | *55 - 98* |
| *Phenol-d5 (Surr)* | *87* | | *54 - 101* |
| *Terphenyl-d14 (Surr)* | *86* | | *58 - 123* |
| *2-Fluorobiphenyl (Surr)* | *92* | | *56 - 97* |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

**Lab Sample ID: 14G0133-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0133** — **Prep Batch: 14G0133_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.0 | | mg/kg wet | | 07/17/14 13:47 | 07/17/14 17:57 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.0 | | mg/kg wet | | 07/17/14 13:47 | 07/17/14 17:57 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *84.3* | | *50 - 150* | *07/17/14 13:47* | *07/17/14 17:57* | *1.00* |
| *n-Triacontane-d62* | *77.6* | | *50 - 150* | *07/17/14 13:47* | *07/17/14 17:57* | *1.00* |

**Lab Sample ID: 14G0133-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0133** — **Prep Batch: 14G0133_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 66.7 | 56.7 | | mg/kg wet | | 85.0 | 50 - 150 |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx (Continued)

**Lab Sample ID: 14G0133-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0133** — **Prep Batch: 14G0133_P**

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| o-Terphenyl | 92.6 | | 50 - 150 |
| n-Triacontane-d62 | 82.1 | | 50 - 150 |

**Lab Sample ID: 14G0133-DUP1** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0133** — **Prep Batch: 14G0133_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | | ND | | mg/kg dry | ☼ | | | | 40 |
| Heavy Oil Range Hydrocarbons | ND | | | ND | | mg/kg dry | ☼ | | | | 40 |

| Surrogate | Duplicate %Recovery | Duplicate Qualifier | Limits |
|---|---|---|---|
| o-Terphenyl | 86.9 | | 50 - 150 |
| n-Triacontane-d62 | 78.7 | | 50 - 150 |

**Lab Sample ID: 14G0133-DUP2** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0133** — **Prep Batch: 14G0133_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | | ND | | mg/kg dry | ☼ | | | | 40 |
| Heavy Oil Range Hydrocarbons | ND | | | ND | | mg/kg dry | ☼ | | | | 40 |

| Surrogate | Duplicate %Recovery | Duplicate Qualifier | Limits |
|---|---|---|---|
| o-Terphenyl | 86.2 | | 50 - 150 |
| n-Triacontane-d62 | 78.1 | | 50 - 150 |

## Method: NWTPH-HCID - Hydrocarbon Identification by NWTPH-HCID

**Lab Sample ID: 14G0206-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0206** — **Prep Batch: 14G0206_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 40 | | mg/kg wet | | 07/29/14 15:09 | 07/29/14 17:12 | 1.00 |
| Diesel Range Hydrocarbons | ND | | 100 | | mg/kg wet | | 07/29/14 15:09 | 07/29/14 17:12 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 100 | | mg/kg wet | | 07/29/14 15:09 | 07/29/14 17:12 | 1.00 |

| Surrogate | Blank %Recovery | Blank Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-BFB (FID) | 93.7 | | 50 - 150 | 07/29/14 15:09 | 07/29/14 17:12 | 1.00 |
| 2-FBP | 93.2 | | 50 - 150 | 07/29/14 15:09 | 07/29/14 17:12 | 1.00 |
| p-Terphenyl-d14 | 95.8 | | 50 - 150 | 07/29/14 15:09 | 07/29/14 17:12 | 1.00 |

## Method: NWTPH-HCID - Hydrocarbon Identification by NWTPH-HCID (Continued)

**Lab Sample ID: 14G0206-DUP1** | **Client Sample ID: EX1-2-3**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14G0206** | **Prep Batch: 14G0206_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 128 | | | 160 | | mg/kg dry | ☼ | | | 22.5 | 25 |
| Diesel Range Hydrocarbons | 7290 | | | 9240 | | mg/kg dry | ☼ | | | 23.6 | 25 |
| Heavy Oil Range Hydrocarbons | 20000 | | | 24200 | | mg/kg dry | ☼ | | | 18.8 | 25 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *4-BFB (FID)* | *93.9* | | *50 - 150* |
| *2-FBP* | *109* | | *50 - 150* |
| *p-Terphenyl-d14* | *88.0* | | *50 - 150* |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX1-1-2 — Lab Sample ID: SXG0111-01

**Date Collected: 07/16/14 08:00** — **Matrix: Soil**
**Date Received: 07/17/14 10:30** — **Percent Solids: 80.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.707 | 14G0131_P | 07/17/14 07:29 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0131 | 07/17/14 13:38 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.892 | 14G0133_P | 07/17/14 13:47 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0133 | 07/19/14 08:00 | MS | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14G0148_P | 07/18/14 14:25 | MS | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14G0148 | 07/21/14 13:52 | MS | TAL SPK |

## Client Sample ID: EX1-2-3 — Lab Sample ID: SXG0111-02

**Date Collected: 07/16/14 08:10** — **Matrix: Soil**
**Date Received: 07/17/14 10:30** — **Percent Solids: 92.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.785 | 14G0131_P | 07/17/14 07:29 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0131 | 07/17/14 14:01 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 2.52 | 14G0133_P | 07/17/14 13:47 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 100 | 14G0133 | 07/19/14 08:23 | MS | TAL SPK |
| Total | Prep | EPA 3580 | | 2.7 | 14G0206_P | 07/29/14 15:09 | MS | TAL SPK |
| Total | Analysis | NWTPH-HCID | | 1.0 | 14G0206 | 07/29/14 17:37 | MS | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14G0138_P | 07/17/14 17:00 | CBW | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14G0138 | 07/18/14 09:30 | CBW | TAL SPK |

## Client Sample ID: EX1-3-3 — Lab Sample ID: SXG0111-03

**Date Collected: 07/16/14 08:20** — **Matrix: Soil**
**Date Received: 07/17/14 10:30** — **Percent Solids: 60**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.712 | 14G0131_P | 07/17/14 07:29 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14G0131 | 07/17/14 14:23 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.712 | 14G0131_P | 07/17/14 07:29 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0131 | 07/17/14 14:23 | CBW | TAL SPK |
| Total/NA | Prep | 3550C | | | 132459 | 07/18/14 13:09 | KKA | TAL SL |
| Total/NA | Analysis | 8270D | | 1 | 132657 | 07/21/14 11:55 | JSW | TAL SL |
| Total | Prep | EPA 3550B | | 1.38 | 14G0133_P | 07/17/14 13:47 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 25.0 | 14G0133 | 07/19/14 08:46 | MS | TAL SPK |
| Total/NA | Analysis | Moisture | | 1 | 132486 | 07/19/14 07:50 | SDB | TAL SL |

## Client Sample ID: EX1-4-3 — Lab Sample ID: SXG0111-04

**Date Collected: 07/16/14 08:30** — **Matrix: Soil**
**Date Received: 07/17/14 10:30** — **Percent Solids: 66.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.933 | 14G0131_P | 07/17/14 07:29 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0131 | 07/17/14 16:39 | CBW | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX1-4-3 — Lab Sample ID: SXG0111-04

**Date Collected: 07/16/14 08:30** — **Matrix: Soil**
**Date Received: 07/17/14 10:30** — **Percent Solids: 66.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 3550B | | 0.946 | 14G0133_P | 07/17/14 13:47 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0133 | 07/19/14 09:09 | MS | TAL SPK |

## Client Sample ID: EX1-5-3 — Lab Sample ID: SXG0111-05

**Date Collected: 07/16/14 08:40** — **Matrix: Soil**
**Date Received: 07/17/14 10:30** — **Percent Solids: 80.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.882 | 14G0131_P | 07/17/14 07:29 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0131 | 07/17/14 15:08 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.882 | 14G0131_P | 07/17/14 07:29 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0131 | 07/17/14 17:47 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.894 | 14G0133_P | 07/17/14 13:47 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0133 | 07/19/14 09:33 | MS | TAL SPK |

## Client Sample ID: EX2-1-3 — Lab Sample ID: SXG0111-06

**Date Collected: 07/16/14 08:50** — **Matrix: Soil**
**Date Received: 07/17/14 10:30** — **Percent Solids: 43.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.745 | 14G0131_P | 07/17/14 07:29 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14G0131 | 07/17/14 15:31 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.745 | 14G0131_P | 07/17/14 07:29 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14G0131 | 07/17/14 18:09 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.745 | 14G0131_P | 07/17/14 07:29 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0131 | 07/17/14 15:31 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.745 | 14G0131_P | 07/17/14 07:29 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0131 | 07/17/14 18:09 | CBW | TAL SPK |
| Total/NA | Prep | 3550C | | | 132459 | 07/18/14 13:09 | KKA | TAL SL |
| Total/NA | Analysis | 8270D | | 1 | 132657 | 07/21/14 12:31 | JSW | TAL SL |
| Total | Prep | EPA 3550B | | 2.08 | 14G0133_P | 07/17/14 13:47 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 50.0 | 14G0133 | 07/19/14 09:56 | MS | TAL SPK |
| Total | Prep | EPA 3580 | | 3.2 | 14G0206_P | 07/29/14 15:09 | MS | TAL SPK |
| Total | Analysis | NWTPH-HCID | | 1.0 | 14G0206 | 07/29/14 18:28 | MS | TAL SPK |
| Total/NA | Analysis | Moisture | | 1 | 132486 | 07/19/14 07:50 | SDB | TAL SL |

## Client Sample ID: EX3-1-4 — Lab Sample ID: SXG0111-07

**Date Collected: 07/16/14 14:20** — **Matrix: Soil**
**Date Received: 07/17/14 10:30** — **Percent Solids: 86**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.767 | 14G0131_P | 07/17/14 07:29 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0131 | 07/17/14 15:54 | CBW | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Client Sample ID: EX3-1-4

**Date Collected: 07/16/14 14:20**
**Date Received: 07/17/14 10:30**

## Lab Sample ID: SXG0111-07

**Matrix: Soil**
**Percent Solids: 86**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 3550B | | 0.987 | 14G0133_P | 07/17/14 13:47 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 2.00 | 14G0133 | 07/19/14 10:19 | MS | TAL SPK |

**Laboratory References:**

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-071 | 10-31-14 |
| Washington | State Program | 10 | C569 | 01-06-15 |

## Laboratory: TestAmerica St. Louis

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | MO00054 | 06-30-15 |
| California | NELAP | 9 | 09266CA | 03-31-15 |
| Connecticut | State Program | 1 | PH-0241 | 03-31-15 |
| Florida | NELAP | 4 | E87689 | 06-30-14 * |
| Illinois | NELAP | 5 | 200023 | 11-30-14 |
| Iowa | State Program | 7 | 373 | 12-01-14 |
| Kansas | NELAP | 7 | E-10236 | 10-31-14 |
| Kentucky (DW) | State Program | 4 | 90125 | 12-31-14 |
| L-A-B | DoD ELAP | | L2305 | 01-10-16 |
| Louisiana | NELAP | 6 | 04080 | 06-30-15 |
| Maryland | State Program | 3 | 310 | 09-30-14 * |
| Missouri | State Program | 7 | 780 | 06-30-14 * |
| Nevada | State Program | 9 | MO000542013-1 | 07-31-14 * |
| New Jersey | NELAP | 2 | MO002 | 06-30-15 |
| New Mexico | State Program | 6 | | 06-30-10 * |
| New York | NELAP | 2 | 11616 | 03-31-15 |
| North Dakota | State Program | 8 | R207 | 06-30-14 * |
| NRC | NRC | | 24-24817-01 | 12-31-22 |
| Oklahoma | State Program | 6 | 2013-049 | 08-31-14 * |
| Pennsylvania | NELAP | 3 | 68-00540 | 02-28-15 |
| South Carolina | State Program | 4 | 85002001 | 06-30-14 * |
| Texas | NELAP | 6 | T104704193-13-6 | 07-31-14 * |
| USDA | Federal | | P330-07-00122 | 01-09-17 |
| USEPA Reg V SDWA | Federal | 1 | WG-15J | 08-30-14 |
| Utah | NELAP | 8 | MO000542013-5 | 07-31-14 * |
| Virginia | NELAP | 3 | 2236 | 06-14-14 * |
| Washington | State Program | 10 | C592 | 08-30-14 |
| West Virginia DEP | State Program | 3 | 381 | 08-30-14 |

* Certification renewal pending - certification considered valid.

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0111

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 8260C | Volatile Organic Compounds by EPA Methods 5035/8260C | | TAL SPK |
| NWTPH-Gx | Gasoline Hydrocarbons by NWTPH-Gx | | TAL SPK |
| 8270D | Semivolatile Organic Compounds (GC/MS) | SW846 | TAL SL |
| NWTPH-Dx | Semivolatile Petroleum Products by NWTPH-Dx | | TAL SPK |
| NWTPH-HCID | Hydrocarbon Identification by NWTPH-HCID | | TAL SPK |
| Moisture | Percent Moisture | EPA | TAL SL |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 ☒
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #: SXG0111

CLIENT:

REPORT TO: dlowder@geoengineers.com
ADDRESS: 523 E Second Ave
Spokane, WA 99202
PHONE: 509 363-3125 FAX: 509-363-3126

INVOICE TO: Port of Chelan

P.O. NUMBER:

PROJECT NAME: Cashmere, WA
PROJECT NUMBER: 18593-001-04
SAMPLED BY: JML

**TURNAROUND REQUEST**
in Business Days *

Organic & Inorganic Analyses: 10 (STD.) | 7 | 5 | 4 | 3 | ☒ | 1 | <1

Petroleum Hydrocarbon Analyses: 5 (STD.) | 4 | 3 | ☒ | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NWTPH Gx | NWTPH Dx | As | VOCs | SVOCs | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EX1-1-2 | 7/16/2014 0800 | X | X | | | | S | 3 | | |
| 2 | EX1-2-3 | 0810 | X | X | | | | S | 3 | | |
| 3 | EX1-3-3 | 0820 | X | X | | X | X | S | 4 | | |
| 4 | EX1-4-3 | 0830 | X | X | | | | S | 3 | | |
| 5 | EX1-5-3 | 0840 | X | X | | | | S | 3 | | |
| 6 | EX2-1-3 | 0850 | X | X | | X | X | S | 3 | | |
| 7 | EX3-1-4 | 1420 | X | X | | | | S | 3 | | |
| 8 | | | | | | | | | | | |
| 9 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| RELEASED BY: | | DATE: 7/16/2014 | RECEIVED BY: | | DATE: 7-17-14 |
| PRINT NAME: Josh Lee | FIRM: GEO | TIME: 1610 | PRINT NAME: Cal Stapleton | FIRM: TestAmerica | TIME: 10:30 |
| RELEASED BY: | | DATE: | RECEIVED BY: | | DATE: |
| PRINT NAME: | FIRM: | TIME: | PRINT NAME: | FIRM: | TIME: |

ADDITIONAL REMARKS:

TEMP: 53

PAGE OF

TAL-1000 (0612)

**TestAmerica Spokane**
**Sample Receipt Form**

| | | |
|---|---|---|
| **Work Order #:** SXG0111 | **Client:** Geo Engineers | **Project:** Cashmere |
| Date/Time Received: 7-17-14 10:30 | By: CS | |
| Samples Delivered By: ☒ Shipping Service ☐ Courier ☐ Client ☐ Other: | | |
| List Air Bill Number(s) or Attach a photocopy of the Air Bill: | | |

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | Y | | | |
| Custody Seals are present and intact: | | | Y | |
| Are CoC documents present: | Y | | | |
| Necessary signatures: | Y | | | |

Thermal Preservation Type: ☐ Blue Ice ☐ Gel Ice ☒ Real Ice ☐ Dry Ice ☐ None ☐ Other:

Temperature: 5.3 °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐ Not enough ice ☐ Ice melted ☐ w/in 4hrs of collection ☐ NA ☐ Other:

| Log-In Phase Date/Time: 7-17-14 10:37 By: CS | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | Y | | | |
| Samples containers were received intact: | Y | | | |
| Do sample IDs match the CoC | Y | | | |
| Appropriate sample containers were received for tests requested | Y | | | |
| Are sample volumes adequate for tests requested | Y | | | |
| Appropriate preservatives were used for the tests requested | Y | | | |
| pH of inorganic samples checked and is within method specification | Y | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | | | Y | |
| Are dissolved parameters field filtered | | | Y | |
| Do any samples need to be filtered or preserved by the lab | | | Y | |
| Does this project require quick turnaround analysis | Y | | | 2 days |
| Are there any short hold time tests (see chart below) | | Y | | |
| Are any samples within 2 days of or past expiration | | Y | | |
| Was the CoC scanned | Y | | | |
| Were there Non-conformance issues at login | | Y | | |
| If yes, was a CAR generated # | | | Y | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

**Form No. SP-FORM-SPL-002 12 December 2012**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXG0129
Client Project/Site: 18593-001-04
Client Project Description: Cashmere, WA
Revision: 1

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*11/5/2014 3:09:45 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.testamericainc.com

*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.*

# Table of Contents

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# Case Narrative

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0129

## Job ID: SXG0129

### Laboratory: TestAmerica Spokane

**Narrative**

**Revision1:** The 8270 SVOC was initially evaluated and reported down to the MDL. Per the client's request the data has be re-evaluated to the RL (reporting limit) only and the data is reflected in the amended report. This final report replaces the final report generated on 07/22/2014.

### Laboratory: TestAmerica St. Louis

**Narrative**

**Job Narrative**
**160-7538-1**

**Revision 1 and 2-** Client requested data to be reported to RL rather than MDL.

**Receipt**
The sample was received on 7/19/2014 8:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5º C.

**GC/MS Semi VOA**
The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for prep batch 132701 recovered outside upper control limits. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. (LCS 160-132701/2-A), (LCSD 160-132701/3-A)133102

Six surrogates are used for this analysis. Based on CLP methodology, the laboratory' allows 1acid and/or 1base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following LCS contained an allowable number of surrogate compounds outside limits: (LCS 160-132701/2-A). These results have been reported.
133102

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Organic Prep Observations**
Method(s) 3550C: 3550 8270 132701
Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch <<132701>>.
An LCS/LCSD was performed to demonstrate accuracy and replicate precision. SXG0129-04 (160-7538-1)

# Sample Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0129

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXG0129-01 | Ex3-2-4 | Soil | 07/17/14 14:30 | 07/18/14 10:40 |
| SXG0129-02 | Ex3-3-4 | Soil | 07/17/14 14:40 | 07/18/14 10:40 |
| SXG0129-03 | Ex3-4-4 | Soil | 07/17/14 14:50 | 07/18/14 10:40 |
| SXG0129-04 | Ex3-5-5 | Soil | 07/17/14 15:00 | 07/18/14 10:40 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0129

## Qualifiers

### GCMS Volatiles

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD exceeds the control limits |
| 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 |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0129

## Client Sample ID: Ex3-2-4

**Lab Sample ID: SXG0129-01**
**Date Collected: 07/17/14 14:30**
**Matrix: Soil**
**Date Received: 07/18/14 10:40**
**Percent Solids: 87.3**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 32.8 | | 6.49 | | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 13:35 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *105* | | *41.5 - 162* | *07/18/14 10:59* | *07/18/14 13:35* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 124 | | 109 | | mg/kg dry | ☼ | 07/18/14 09:49 | 07/21/14 17:08 | 10.0 |
| Heavy Oil Range Hydrocarbons | 782 | | 273 | | mg/kg dry | ☼ | 07/18/14 09:49 | 07/21/14 17:08 | 10.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *97.9* | | *50 - 150* | *07/18/14 09:49* | *07/21/14 17:08* | *10.0* |
| *n-Triacontane-d62* | *93.5* | | *50 - 150* | *07/18/14 09:49* | *07/21/14 17:08* | *10.0* |

## Client Sample ID: Ex3-3-4

**Lab Sample ID: SXG0129-02**
**Date Collected: 07/17/14 14:40**
**Matrix: Soil**
**Date Received: 07/18/14 10:40**
**Percent Solids: 80.4**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 20.4 | | 8.99 | | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 13:58 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *103* | | *41.5 - 162* | *07/18/14 10:59* | *07/18/14 13:58* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 10.1 | | 9.27 | | mg/kg dry | ☼ | 07/18/14 09:49 | 07/19/14 21:09 | 1.00 |
| Heavy Oil Range Hydrocarbons | 37.9 | | 23.2 | | mg/kg dry | ☼ | 07/18/14 09:49 | 07/19/14 21:09 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *117* | | *50 - 150* | *07/18/14 09:49* | *07/19/14 21:09* | *1.00* |
| *n-Triacontane-d62* | *99.7* | | *50 - 150* | *07/18/14 09:49* | *07/19/14 21:09* | *1.00* |

## Client Sample ID: Ex3-4-4

**Lab Sample ID: SXG0129-03**
**Date Collected: 07/17/14 14:50**
**Matrix: Soil**
**Date Received: 07/18/14 10:40**
**Percent Solids: 85.3**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 7.11 | | 6.52 | | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 14:20 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *102* | | *41.5 - 162* | *07/18/14 10:59* | *07/18/14 14:20* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 20.0 | | 9.99 | | mg/kg dry | ☼ | 07/18/14 09:49 | 07/19/14 21:32 | 1.00 |
| Heavy Oil Range Hydrocarbons | 62.2 | | 25.0 | | mg/kg dry | ☼ | 07/18/14 09:49 | 07/19/14 21:32 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *107* | | *50 - 150* | *07/18/14 09:49* | *07/19/14 21:32* | *1.00* |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0129

## Client Sample ID: Ex3-4-4

**Lab Sample ID: SXG0129-03**
**Date Collected: 07/17/14 14:50**
**Matrix: Soil**
**Date Received: 07/18/14 10:40**
**Percent Solids: 85.3**

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Triacontane-d62* | *92.8* | | *50 - 150* | *07/18/14 09:49* | *07/19/14 21:32* | *1.00* |

## Client Sample ID: Ex3-5-5

**Lab Sample ID: SXG0129-04**
**Date Collected: 07/17/14 15:00**
**Matrix: Soil**
**Date Received: 07/18/14 10:40**
**Percent Solids: 71.6**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.234 | 0.0217 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Chloromethane | ND | | 1.17 | 0.0124 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Vinyl chloride | ND | | 0.140 | 0.0145 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Bromomethane | ND | | 1.17 | 0.0715 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Chloroethane | ND | | 0.234 | 0.0572 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0701 | 0.0185 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.234 | 0.0297 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Carbon disulfide | ND | | 0.234 | 0.0250 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Methylene chloride | ND | | 0.0467 | 0.0121 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| **Acetone** | **1.84** | **J** | 7.01 | 0.203 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.234 | 0.0241 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.117 | 0.00748 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.234 | 0.0264 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.234 | 0.0133 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.234 | 0.0397 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Bromochloromethane | ND | | 0.234 | 0.00911 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Chloroform | ND | | 0.234 | 0.0180 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Carbon tetrachloride | ND | | 0.234 | 0.0486 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.234 | 0.0404 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 2-Butanone | ND | | 2.34 | 0.257 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Hexane | ND | | 0.234 | 0.0189 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.234 | 0.0407 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Benzene | ND | | 0.0350 | 0.0227 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.234 | 0.0114 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Trichloroethene | ND | | 0.0584 | 0.0299 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Dibromomethane | ND | | 0.234 | 0.0213 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.234 | 0.0140 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Bromodichloromethane | ND | | 0.234 | 0.0164 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.234 | 0.0145 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Toluene | ND | | 0.234 | 0.0311 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 2.34 | 0.0477 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.234 | 0.0154 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Tetrachloroethene | ND | | 0.0935 | 0.0411 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.234 | 0.0145 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Dibromochloromethane | ND | | 0.234 | 0.0140 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.234 | 0.0173 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0234 | 0.0136 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 2-Hexanone | ND | | 2.34 | 0.109 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Ethylbenzene | ND | | 0.234 | 0.0379 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Chlorobenzene | ND | | 0.234 | 0.0178 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.234 | 0.0238 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0129

## Client Sample ID: Ex3-5-5

**Date Collected: 07/17/14 15:00**
**Date Received: 07/18/14 10:40**

## Lab Sample ID: SXG0129-04

**Matrix: Soil**
**Percent Solids: 71.6**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| m,p-Xylene | ND | | 0.935 | 0.0397 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| o-Xylene | ND | | 0.467 | 0.0306 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Styrene | ND | | 0.234 | 0.0217 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Bromoform | ND | | 0.234 | 0.0292 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Isopropylbenzene | ND | | 0.234 | 0.0444 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| n-Propylbenzene | ND | | 0.234 | 0.0484 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.234 | 0.0175 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Bromobenzene | ND | | 0.234 | 0.0220 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.234 | 0.0435 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 2-Chlorotoluene | ND | | 0.234 | 0.0381 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.234 | 0.0196 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 4-Chlorotoluene | ND | | 0.234 | 0.0334 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| tert-Butylbenzene | ND | | 0.234 | 0.0505 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.234 | 0.0339 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| sec-Butylbenzene | ND | | 0.234 | 0.0549 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| p-Isopropyltoluene | ND | | 0.234 | 0.0558 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.234 | 0.0294 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.234 | 0.0248 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| n-Butylbenzene | ND | | 0.234 | 0.0643 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.234 | 0.0178 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 1.17 | 0.0664 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| Hexachlorobutadiene | ND | | 0.234 | 0.133 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.234 | 0.0465 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| **Naphthalene** | **0.159** | **J** | 0.467 | 0.0318 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.234 | 0.0829 | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *42.4 - 163* | *07/18/14 10:59* | *07/18/14 15:05* | *1.00* |
| *1,2-dichloroethane-d4* | *100* | | *50 - 150* | *07/18/14 10:59* | *07/18/14 15:05* | *1.00* |
| *Toluene-d8* | *102* | | *45.8 - 155* | *07/18/14 10:59* | *07/18/14 15:05* | *1.00* |
| *4-bromofluorobenzene* | *101* | | *41.5 - 162* | *07/18/14 10:59* | *07/18/14 15:05* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 11.7 | | mg/kg dry | ☼ | 07/18/14 10:59 | 07/18/14 15:05 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *101* | | *41.5 - 162* | *07/18/14 10:59* | *07/18/14 15:05* | *1.00* |

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Acenaphthylene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Anthracene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Benzo[a]anthracene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Benzo[b]fluoranthene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Benzo[k]fluoranthene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Benzo[a]pyrene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0129

## Client Sample ID: Ex3-5-5

**Date Collected: 07/17/14 15:00**
**Date Received: 07/18/14 10:40**

## Lab Sample ID: SXG0129-04

**Matrix: Soil**
**Percent Solids: 71.0**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bis(2-chloroethyl)ether | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Butyl benzyl phthalate | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Carbazole | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 4-Chloroaniline | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 4-Chloro-3-methylphenol | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2-Chloronaphthalene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2-Chlorophenol | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Chrysene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Dibenzofuran | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Di-n-butyl phthalate | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 2.3 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2,4-Dichlorophenol | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Diethyl phthalate | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2,4-Dimethylphenol | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Dimethyl phthalate | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 2.3 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2,4-Dinitrophenol | ND | | 2.3 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2,6-Dinitrotoluene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Di-n-octyl phthalate | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Fluoranthene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Fluorene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Hexachlorobenzene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Hexachlorobutadiene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Hexachlorocyclopentadiene | ND | | 2.3 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Hexachloroethane | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Isophorone | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2-Methylnaphthalene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2-Methylphenol | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 3 & 4 Methylphenol | ND | | 0.93 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Naphthalene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2-Nitroaniline | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 3-Nitroaniline | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 4-Nitroaniline | ND | | 2.3 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Nitrobenzene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2-Nitrophenol | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 4-Nitrophenol | ND | | 2.3 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Pentachlorophenol | ND | | 0.93 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0129

## Client Sample ID: Ex3-5-5

**Date Collected: 07/17/14 15:00**
**Date Received: 07/18/14 10:40**

## Lab Sample ID: SXG0129-04

**Matrix: Soil**
**Percent Solids: 71.0**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenanthrene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Phenol | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Pyrene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2,4,5-Trichlorophenol | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 2,4,6-Trichlorophenol | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Aniline | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| 1,4-Dioxane | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Benzyl alcohol | ND | | 0.46 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |
| Pyridine | ND | | 0.93 | | mg/Kg | ☼ | 07/21/14 15:06 | 07/22/14 03:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *90* | | *53 - 97* | *07/21/14 15:06* | *07/22/14 03:51* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *84* | | *46 - 111* | *07/21/14 15:06* | *07/22/14 03:51* | *1* |
| *Nitrobenzene-d5 (Surr)* | *88* | | *55 - 98* | *07/21/14 15:06* | *07/22/14 03:51* | *1* |
| *Phenol-d5 (Surr)* | *87* | | *54 - 101* | *07/21/14 15:06* | *07/22/14 03:51* | *1* |
| *Terphenyl-d14 (Surr)* | *90* | | *58 - 123* | *07/21/14 15:06* | *07/22/14 03:51* | *1* |
| *2-Fluorobiphenyl (Surr)* | *96* | | *56 - 97* | *07/21/14 15:06* | *07/22/14 03:51* | *1* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **101** | | 12.4 | | mg/kg dry | ☼ | 07/18/14 09:49 | 07/19/14 21:56 | 1.00 |
| **Heavy Oil Range Hydrocarbons** | **209** | | 31.1 | | mg/kg dry | ☼ | 07/18/14 09:49 | 07/19/14 21:56 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *116* | | *50 - 150* | *07/18/14 09:49* | *07/19/14 21:56* | *1.00* |
| *n-Triacontane-d62* | *101* | | *50 - 150* | *07/18/14 09:49* | *07/19/14 21:56* | *1.00* |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

**Lab Sample ID: 14G0141-BLK1**
**Matrix: Soil**
**Analysis Batch: 14G0141**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14G0141_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.100 | 0.00930 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Chloromethane | ND | | 0.500 | 0.00530 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Vinyl chloride | ND | | 0.0600 | 0.00620 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Bromomethane | ND | | 0.500 | 0.0306 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Chloroethane | ND | | 0.100 | 0.0245 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0300 | 0.00790 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.100 | 0.0127 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Carbon disulfide | ND | | 0.100 | 0.0107 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Methylene chloride | ND | | 0.0200 | 0.00520 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Acetone | ND | | 3.00 | 0.0870 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.100 | 0.0103 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0500 | 0.00320 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.100 | 0.0113 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.100 | 0.00570 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.100 | 0.0170 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Bromochloromethane | ND | | 0.100 | 0.00390 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Chloroform | ND | | 0.100 | 0.00770 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Carbon tetrachloride | ND | | 0.100 | 0.0208 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.100 | 0.0173 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 2-Butanone | ND | | 1.00 | 0.110 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Hexane | ND | | 0.100 | 0.00810 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.100 | 0.0174 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Benzene | ND | | 0.0150 | 0.00970 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.100 | 0.00490 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Trichloroethene | ND | | 0.0250 | 0.0128 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Dibromomethane | ND | | 0.100 | 0.00910 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.100 | 0.00600 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Bromodichloromethane | ND | | 0.100 | 0.00700 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.100 | 0.00620 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Toluene | ND | | 0.100 | 0.0133 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.00 | 0.0204 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.100 | 0.00660 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Tetrachloroethene | ND | | 0.0400 | 0.0176 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.100 | 0.00620 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Dibromochloromethane | ND | | 0.100 | 0.00600 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.100 | 0.00740 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0100 | 0.00580 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 2-Hexanone | ND | | 1.00 | 0.0465 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Ethylbenzene | ND | | 0.100 | 0.0162 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Chlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.100 | 0.0102 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| m,p-Xylene | ND | | 0.400 | 0.0170 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| o-Xylene | ND | | 0.200 | 0.0131 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Styrene | ND | | 0.100 | 0.00930 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Bromoform | ND | | 0.100 | 0.0125 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Isopropylbenzene | ND | | 0.100 | 0.0190 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| n-Propylbenzene | ND | | 0.100 | 0.0207 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.100 | 0.00750 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0141-BLK1** | **Client Sample ID: Method Blank**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14G0141** | **Prep Batch: 14G0141_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromobenzene | ND | | 0.100 | 0.00940 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.100 | 0.0186 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 2-Chlorotoluene | ND | | 0.100 | 0.0163 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.100 | 0.00840 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 4-Chlorotoluene | ND | | 0.100 | 0.0143 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| tert-Butylbenzene | ND | | 0.100 | 0.0216 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.100 | 0.0145 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| sec-Butylbenzene | ND | | 0.100 | 0.0235 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| p-Isopropyltoluene | ND | | 0.100 | 0.0239 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.100 | 0.0126 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.100 | 0.0106 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| n-Butylbenzene | ND | | 0.100 | 0.0275 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.500 | 0.0284 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Hexachlorobutadiene | ND | | 0.100 | 0.0570 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.100 | 0.0199 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Naphthalene | ND | | 0.200 | 0.0136 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.100 | 0.0355 | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *42.4 - 163* | *07/18/14 10:59* | *07/18/14 12:28* | *1.00* |
| *1,2-dichloroethane-d4* | *97.0* | | *50 - 150* | *07/18/14 10:59* | *07/18/14 12:28* | *1.00* |
| *Toluene-d8* | *103* | | *45.8 - 155* | *07/18/14 10:59* | *07/18/14 12:28* | *1.00* |
| *4-bromofluorobenzene* | *103* | | *41.5 - 162* | *07/18/14 10:59* | *07/18/14 12:28* | *1.00* |

**Lab Sample ID: 14G0141-BS1** | **Client Sample ID: Lab Control Sample**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14G0141** | **Prep Batch: 14G0141_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.500 | 0.419 | | mg/kg wet | | 83.8 | 60 - 140 |
| Chloromethane | 0.500 | 0.471 | J | mg/kg wet | | 94.2 | 60 - 140 |
| Vinyl chloride | 0.500 | 0.489 | | mg/kg wet | | 97.8 | 60 - 140 |
| Bromomethane | 0.500 | 0.572 | | mg/kg wet | | 114 | 60 - 140 |
| Chloroethane | 0.500 | 0.522 | | mg/kg wet | | 104 | 60 - 140 |
| Trichlorofluoromethane | 0.500 | 0.501 | | mg/kg wet | | 100 | 60 - 140 |
| 1,1-Dichloroethene | 0.500 | 0.457 | | mg/kg wet | | 91.4 | 76 - 187 |
| Carbon disulfide | 0.500 | 0.492 | | mg/kg wet | | 98.3 | 60 - 140 |
| Methylene chloride | 0.500 | 0.458 | | mg/kg wet | | 91.5 | 60 - 140 |
| Acetone | 2.50 | 1.64 | J | mg/kg wet | | 65.8 | 60 - 140 |
| trans-1,2-Dichloroethene | 0.500 | 0.500 | | mg/kg wet | | 100 | 60 - 140 |
| Methyl tert-butyl ether | 0.500 | 0.490 | | mg/kg wet | | 97.9 | 79 - 127 |
| 1,1-Dichloroethane | 0.500 | 0.514 | | mg/kg wet | | 103 | 60 - 140 |
| cis-1,2-Dichloroethene | 0.500 | 0.488 | | mg/kg wet | | 97.7 | 60 - 140 |
| 2,2-Dichloropropane | 0.500 | 0.470 | | mg/kg wet | | 94.1 | 60 - 140 |
| Bromochloromethane | 0.500 | 0.494 | | mg/kg wet | | 98.9 | 60 - 140 |
| Chloroform | 0.500 | 0.494 | | mg/kg wet | | 98.9 | 60 - 140 |
| Carbon tetrachloride | 0.500 | 0.487 | | mg/kg wet | | 97.4 | 60 - 140 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0141-BS1**
**Matrix: Soil**
**Analysis Batch: 14G0141**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14G0141_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.500 | 0.489 | | mg/kg wet | | 97.8 | 60 - 140 |
| 2-Butanone | 2.50 | 1.98 | | mg/kg wet | | 79.2 | 60 - 140 |
| Hexane | 0.500 | 0.478 | | mg/kg wet | | 95.7 | 50 - 150 |
| 1,1-Dichloropropene | 0.500 | 0.502 | | mg/kg wet | | 100 | 60 - 140 |
| Benzene | 0.500 | 0.486 | | mg/kg wet | | 97.1 | 75.9 - 123 |
| 1,2-Dichloroethane (EDC) | 0.500 | 0.511 | | mg/kg wet | | 102 | 60 - 140 |
| Trichloroethene | 0.500 | 0.478 | | mg/kg wet | | 95.7 | 82.7 - 120 |
| Dibromomethane | 0.500 | 0.477 | | mg/kg wet | | 95.4 | 60 - 140 |
| 1,2-Dichloropropane | 0.500 | 0.362 | | mg/kg wet | | 72.3 | 60 - 140 |
| Bromodichloromethane | 0.500 | 0.470 | | mg/kg wet | | 94.0 | 60 - 140 |
| cis-1,3-Dichloropropene | 0.500 | 0.464 | | mg/kg wet | | 92.9 | 60 - 140 |
| Toluene | 0.500 | 0.498 | | mg/kg wet | | 99.6 | 77.3 - 126 |
| 4-Methyl-2-pentanone | 2.50 | 2.45 | | mg/kg wet | | 98.0 | 60 - 140 |
| trans-1,3-Dichloropropene | 0.500 | 0.515 | | mg/kg wet | | 103 | 60 - 140 |
| Tetrachloroethene | 0.500 | 0.524 | | mg/kg wet | | 105 | 75 - 130 |
| 1,1,2-Trichloroethane | 0.500 | 0.518 | | mg/kg wet | | 104 | 60 - 140 |
| Dibromochloromethane | 0.500 | 0.476 | | mg/kg wet | | 95.3 | 60 - 140 |
| 1,3-Dichloropropane | 0.500 | 0.520 | | mg/kg wet | | 104 | 60 - 140 |
| 1,2-Dibromoethane | 0.500 | 0.508 | | mg/kg wet | | 102 | 60 - 140 |
| 2-Hexanone | 2.50 | 2.05 | | mg/kg wet | | 81.9 | 60 - 140 |
| Ethylbenzene | 0.500 | 0.482 | | mg/kg wet | | 96.4 | 80.7 - 120 |
| Chlorobenzene | 0.500 | 0.534 | | mg/kg wet | | 107 | 80 - 120 |
| 1,1,1,2-Tetrachloroethane | 0.500 | 0.524 | | mg/kg wet | | 105 | 60 - 140 |
| m,p-Xylene | 0.500 | 0.488 | | mg/kg wet | | 97.5 | 86.1 - 120 |
| o-Xylene | 0.500 | 0.512 | | mg/kg wet | | 102 | 85.3 - 120 |
| Styrene | 0.500 | 0.518 | | mg/kg wet | | 104 | 60 - 140 |
| Bromoform | 0.500 | 0.493 | | mg/kg wet | | 98.6 | 60 - 140 |
| Isopropylbenzene | 0.500 | 0.498 | | mg/kg wet | | 99.5 | 60 - 140 |
| n-Propylbenzene | 0.500 | 0.511 | | mg/kg wet | | 102 | 60 - 140 |
| 1,1,2,2-Tetrachloroethane | 0.500 | 0.531 | | mg/kg wet | | 106 | 60 - 140 |
| Bromobenzene | 0.500 | 0.500 | | mg/kg wet | | 100 | 60 - 140 |
| 1,3,5-Trimethylbenzene | 0.500 | 0.510 | | mg/kg wet | | 102 | 60 - 140 |
| 2-Chlorotoluene | 0.500 | 0.532 | | mg/kg wet | | 106 | 60 - 140 |
| 1,2,3-Trichloropropane | 0.500 | 0.476 | | mg/kg wet | | 95.3 | 60 - 140 |
| 4-Chlorotoluene | 0.500 | 0.514 | | mg/kg wet | | 103 | 60 - 140 |
| tert-Butylbenzene | 0.500 | 0.500 | | mg/kg wet | | 100 | 60 - 140 |
| 1,2,4-Trimethylbenzene | 0.500 | 0.513 | | mg/kg wet | | 103 | 60 - 140 |
| sec-Butylbenzene | 0.500 | 0.502 | | mg/kg wet | | 100 | 60 - 140 |
| p-Isopropyltoluene | 0.500 | 0.501 | | mg/kg wet | | 100 | 60 - 140 |
| 1,3-Dichlorobenzene | 0.500 | 0.513 | | mg/kg wet | | 103 | 60 - 140 |
| 1,4-Dichlorobenzene | 0.500 | 0.533 | | mg/kg wet | | 107 | 60 - 140 |
| n-Butylbenzene | 0.500 | 0.515 | | mg/kg wet | | 103 | 60 - 140 |
| 1,2-Dichlorobenzene | 0.500 | 0.524 | | mg/kg wet | | 105 | 60 - 140 |
| 1,2-Dibromo-3-chloropropane | 0.500 | 0.451 | J | mg/kg wet | | 90.2 | 60 - 140 |
| Hexachlorobutadiene | 0.500 | 0.524 | | mg/kg wet | | 105 | 60 - 140 |
| 1,2,4-Trichlorobenzene | 0.500 | 0.446 | | mg/kg wet | | 89.3 | 60 - 140 |
| Naphthalene | 0.500 | 0.410 | | mg/kg wet | | 82.1 | 58.8 - 130 |
| 1,2,3-Trichlorobenzene | 0.500 | 0.422 | | mg/kg wet | | 84.4 | 60 - 140 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0141-BS1**
**Matrix: Soil**
**Analysis Batch: 14G0141**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14G0141_P**

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *102* | | *42.4 - 163* |
| *1,2-dichloroethane-d4* | *102* | | *50 - 150* |
| *Toluene-d8* | *101* | | *45.8 - 155* |
| *4-bromofluorobenzene* | *102* | | *41.5 - 162* |

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

**Lab Sample ID: 14G0141-BLK1**
**Matrix: Soil**
**Analysis Batch: 14G0141**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14G0141_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 15.1 | | 0.1 | | ng/ml | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Toluene-d8 | 15.5 | | 0.1 | | ng/ml | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |
| Gasoline Range Hydrocarbons | ND | | 5.00 | | mg/kg wet | | 07/18/14 10:59 | 07/18/14 12:28 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *103* | | *41.5 - 162* | *07/18/14 10:59* | *07/18/14 12:28* | *1.00* |

**Lab Sample ID: 14G0141-BS2**
**Matrix: Soil**
**Analysis Batch: 14G0141**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14G0141_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 15.0 | 14.9 | | ng/ml | | 99.5 | 42.4 - 163 |
| Toluene-d8 | 15.0 | 15.6 | | ng/ml | | 104 | 45.8 - 155 |
| Gasoline Range Hydrocarbons | 50.0 | 51.1 | | mg/kg wet | | 102 | 74.4 - 124 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-bromofluorobenzene* | *99.4* | | *41.5 - 162* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 160-132701/1-A**
**Matrix: Solid**
**Analysis Batch: 133102**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 132701**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Acenaphthylene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Anthracene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Benzo[a]anthracene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Benzo[b]fluoranthene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Benzo[k]fluoranthene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Benzo[a]pyrene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 160-132701/1-A**
**Matrix: Solid**
**Analysis Batch: 133102**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 132701**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bis(2-chloroethyl)ether | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Butyl benzyl phthalate | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Carbazole | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 4-Chloroaniline | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 4-Chloro-3-methylphenol | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2-Chloronaphthalene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2-Chlorophenol | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Chrysene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Dibenzofuran | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Di-n-butyl phthalate | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 1.6 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2,4-Dichlorophenol | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Diethyl phthalate | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2,4-Dimethylphenol | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Dimethyl phthalate | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1.6 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2,4-Dinitrophenol | ND | | 1.6 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2,6-Dinitrotoluene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Di-n-octyl phthalate | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Fluoranthene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Fluorene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Hexachlorobenzene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Hexachlorobutadiene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Hexachlorocyclopentadiene | ND | | 1.6 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Hexachloroethane | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Isophorone | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2-Methylnaphthalene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2-Methylphenol | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 3 & 4 Methylphenol | ND | | 0.66 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Naphthalene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2-Nitroaniline | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 3-Nitroaniline | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 4-Nitroaniline | ND | | 1.6 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Nitrobenzene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2-Nitrophenol | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 4-Nitrophenol | ND | | 1.6 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 160-132701/1-A**
**Matrix: Solid**
**Analysis Batch: 133102**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 132701**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Pentachlorophenol | ND | | 0.66 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Phenanthrene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Phenol | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Pyrene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2,4,5-Trichlorophenol | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 2,4,6-Trichlorophenol | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Aniline | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| 1,4-Dioxane | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Benzyl alcohol | ND | | 0.33 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |
| Pyridine | ND | | 0.66 | | mg/Kg | | 07/21/14 15:06 | 07/22/14 00:19 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *95* | | *53 - 97* | *07/21/14 15:06* | *07/22/14 00:19* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *88* | | *46 - 111* | *07/21/14 15:06* | *07/22/14 00:19* | *1* |
| *Nitrobenzene-d5 (Surr)* | *90* | | *55 - 98* | *07/21/14 15:06* | *07/22/14 00:19* | *1* |
| *Phenol-d5 (Surr)* | *94* | | *54 - 101* | *07/21/14 15:06* | *07/22/14 00:19* | *1* |
| *Terphenyl-d14 (Surr)* | *92* | | *58 - 123* | *07/21/14 15:06* | *07/22/14 00:19* | *1* |
| *2-Fluorobiphenyl (Surr)* | *97* | | *56 - 97* | *07/21/14 15:06* | *07/22/14 00:19* | *1* |

**Lab Sample ID: LCS 160-132701/2-A**
**Matrix: Solid**
**Analysis Batch: 133102**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 132701**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.67 | 6.02 | | mg/Kg | | 90 | 63 - 95 |
| Acenaphthylene | 6.67 | 6.16 | | mg/Kg | | 92 | 62 - 98 |
| Anthracene | 6.68 | 5.79 | | mg/Kg | | 87 | 63 - 100 |
| Benzo[a]anthracene | 6.67 | 6.29 | | mg/Kg | | 94 | 74 - 114 |
| Benzo[b]fluoranthene | 6.67 | 6.47 | | mg/Kg | | 97 | 68 - 109 |
| Benzo[k]fluoranthene | 6.68 | 5.96 | | mg/Kg | | 89 | 69 - 111 |
| Benzo[g,h,i]perylene | 6.67 | 6.78 | | mg/Kg | | 102 | 67 - 121 |
| Benzo[a]pyrene | 6.67 | 6.27 | | mg/Kg | | 94 | 63 - 103 |
| Bis(2-chloroethoxy)methane | 6.68 | 5.97 | | mg/Kg | | 89 | 62 - 91 |
| Bis(2-chloroethyl)ether | 6.67 | 5.96 | | mg/Kg | | 89 | 58 - 92 |
| Bis(2-ethylhexyl) phthalate | 6.67 | 6.69 | | mg/Kg | | 100 | 63 - 112 |
| 4-Bromophenyl phenyl ether | 6.67 | 5.98 | | mg/Kg | | 90 | 63 - 106 |
| Butyl benzyl phthalate | 6.67 | 6.74 | | mg/Kg | | 101 | 59 - 111 |
| Carbazole | 6.69 | 5.65 | | mg/Kg | | 85 | 64 - 101 |
| 4-Chloroaniline | 6.67 | 4.35 | | mg/Kg | | 65 | 43 - 70 |
| 4-Chloro-3-methylphenol | 6.67 | 5.61 | | mg/Kg | | 84 | 58 - 95 |
| 2-Chloronaphthalene | 6.67 | 6.43 | * | mg/Kg | | 96 | 61 - 94 |
| 2-Chlorophenol | 6.67 | 5.97 | | mg/Kg | | 90 | 60 - 91 |
| 4-Chlorophenyl phenyl ether | 6.68 | 5.76 | | mg/Kg | | 86 | 61 - 96 |
| Chrysene | 6.67 | 6.27 | | mg/Kg | | 94 | 66 - 100 |
| Dibenz(a,h)anthracene | 6.67 | 7.05 | | mg/Kg | | 106 | 67 - 114 |
| Dibenzofuran | 6.67 | 5.88 | | mg/Kg | | 88 | 58 - 95 |
| Di-n-butyl phthalate | 6.67 | 5.84 | | mg/Kg | | 88 | 62 - 104 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 160-132701/2-A**
**Matrix: Solid**
**Analysis Batch: 133102**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 132701**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene | 6.67 | 6.08 | * | mg/Kg | | 91 | 59 - 90 |
| 1,3-Dichlorobenzene | 6.67 | 5.99 | * | mg/Kg | | 90 | 57 - 88 |
| 1,4-Dichlorobenzene | 6.67 | 5.89 | | mg/Kg | | 88 | 58 - 88 |
| 3,3'-Dichlorobenzidine | 6.67 | 6.20 | * | mg/Kg | | 93 | 50 - 90 |
| 2,4-Dichlorophenol | 6.67 | 5.82 | | mg/Kg | | 87 | 59 - 90 |
| Diethyl phthalate | 6.67 | 5.68 | | mg/Kg | | 85 | 62 - 97 |
| 2,4-Dimethylphenol | 6.67 | 5.91 | | mg/Kg | | 89 | 54 - 108 |
| Dimethyl phthalate | 6.67 | 5.89 | | mg/Kg | | 88 | 63 - 98 |
| 4,6-Dinitro-2-methylphenol | 6.67 | 6.12 | | mg/Kg | | 92 | 31 - 112 |
| 2,4-Dinitrophenol | 6.67 | 5.24 | | mg/Kg | | 79 | 20 - 100 |
| 2,4-Dinitrotoluene | 6.68 | 5.82 | | mg/Kg | | 87 | 61 - 103 |
| 2,6-Dinitrotoluene | 6.67 | 5.99 | | mg/Kg | | 90 | 63 - 99 |
| Di-n-octyl phthalate | 6.67 | 6.84 | | mg/Kg | | 103 | 61 - 111 |
| Fluoranthene | 6.67 | 5.57 | | mg/Kg | | 84 | 63 - 101 |
| Fluorene | 6.67 | 5.98 | | mg/Kg | | 90 | 62 - 96 |
| Hexachlorobenzene | 6.67 | 5.84 | | mg/Kg | | 88 | 62 - 106 |
| Hexachlorobutadiene | 6.67 | 5.91 | | mg/Kg | | 89 | 57 - 94 |
| Hexachlorocyclopentadiene | 6.67 | 5.91 | | mg/Kg | | 89 | 40 - 115 |
| Hexachloroethane | 6.67 | 6.03 | | mg/Kg | | 90 | 59 - 93 |
| Indeno[1,2,3-cd]pyrene | 6.67 | 7.01 | | mg/Kg | | 105 | 65 - 120 |
| Isophorone | 6.67 | 4.90 | | mg/Kg | | 74 | 57 - 86 |
| 2-Methylnaphthalene | 6.65 | 5.69 | | mg/Kg | | 86 | 59 - 90 |
| 2-Methylphenol | 6.68 | 5.75 | | mg/Kg | | 86 | 58 - 96 |
| 3 & 4 Methylphenol | 6.67 | 6.34 | | mg/Kg | | 95 | 47 - 113 |
| Naphthalene | 6.67 | 5.99 | | mg/Kg | | 90 | 60 - 90 |
| 2-Nitroaniline | 6.69 | 6.04 | | mg/Kg | | 90 | 58 - 105 |
| 3-Nitroaniline | 6.67 | 5.57 | | mg/Kg | | 84 | 55 - 91 |
| 4-Nitroaniline | 6.69 | 5.83 | | mg/Kg | | 87 | 57 - 94 |
| Nitrobenzene | 6.67 | 6.08 | | mg/Kg | | 91 | 58 - 95 |
| 2-Nitrophenol | 6.68 | 6.23 | | mg/Kg | | 93 | 60 - 93 |
| 4-Nitrophenol | 6.68 | 5.53 | | mg/Kg | | 83 | 54 - 101 |
| N-Nitrosodiphenylamine | 6.67 | 6.91 | | mg/Kg | | 104 | 78 - 133 |
| N-Nitrosodi-n-propylamine | 6.67 | 5.74 | | mg/Kg | | 86 | 60 - 104 |
| bis (2-chloroisopropyl) ether | 6.67 | 5.81 | | mg/Kg | | 87 | 47 - 105 |
| Pentachlorophenol | 6.67 | 5.68 | | mg/Kg | | 85 | 50 - 100 |
| Phenanthrene | 6.68 | 6.00 | | mg/Kg | | 90 | 63 - 99 |
| Phenol | 6.67 | 5.78 | | mg/Kg | | 87 | 53 - 89 |
| Pyrene | 6.67 | 6.58 | | mg/Kg | | 99 | 64 - 102 |
| 1,2,4-Trichlorobenzene | 6.71 | 5.89 | | mg/Kg | | 88 | 60 - 91 |
| 2,4,5-Trichlorophenol | 6.67 | 6.17 | | mg/Kg | | 93 | 59 - 94 |
| 2,4,6-Trichlorophenol | 6.67 | 6.07 | | mg/Kg | | 91 | 59 - 95 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol (Surr)* | *93* | | *53 - 97* |
| *2,4,6-Tribromophenol (Surr)* | *86* | | *46 - 111* |
| *Nitrobenzene-d5 (Surr)* | *90* | | *55 - 98* |
| *Phenol-d5 (Surr)* | *88* | | *54 - 101* |
| *Terphenyl-d14 (Surr)* | *94* | | *58 - 123* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 160-132701/2-A**
**Matrix: Solid**
**Analysis Batch: 133102**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 132701**

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *98* | *X* | *56 - 97* |

**Lab Sample ID: LCSD 160-132701/3-A**
**Matrix: Solid**
**Analysis Batch: 133102**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 132701**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.66 | 5.86 | | mg/Kg | | 88 | 63 - 95 | 3 | 20 |
| Acenaphthylene | 6.66 | 6.02 | | mg/Kg | | 90 | 62 - 98 | 2 | 20 |
| Anthracene | 6.67 | 5.74 | | mg/Kg | | 86 | 63 - 100 | 1 | 20 |
| Benzo[a]anthracene | 6.65 | 6.19 | | mg/Kg | | 93 | 74 - 114 | 2 | 20 |
| Benzo[b]fluoranthene | 6.65 | 6.21 | | mg/Kg | | 93 | 68 - 109 | 4 | 20 |
| Benzo[k]fluoranthene | 6.67 | 5.85 | | mg/Kg | | 88 | 69 - 111 | 2 | 20 |
| Benzo[g,h,i]perylene | 6.66 | 6.70 | | mg/Kg | | 101 | 67 - 121 | 1 | 20 |
| Benzo[a]pyrene | 6.65 | 6.12 | | mg/Kg | | 92 | 63 - 103 | 2 | 20 |
| Bis(2-chloroethoxy)methane | 6.67 | 5.98 | | mg/Kg | | 90 | 62 - 91 | 0 | 20 |
| Bis(2-chloroethyl)ether | 6.65 | 5.78 | | mg/Kg | | 87 | 58 - 92 | 3 | 20 |
| Bis(2-ethylhexyl) phthalate | 6.66 | 6.58 | | mg/Kg | | 99 | 63 - 112 | 2 | 20 |
| 4-Bromophenyl phenyl ether | 6.65 | 5.72 | | mg/Kg | | 86 | 63 - 106 | 5 | 20 |
| Butyl benzyl phthalate | 6.66 | 6.49 | | mg/Kg | | 97 | 59 - 111 | 4 | 20 |
| Carbazole | 6.67 | 5.62 | | mg/Kg | | 84 | 64 - 101 | 1 | 20 |
| 4-Chloroaniline | 6.65 | 4.47 | | mg/Kg | | 67 | 43 - 70 | 3 | 20 |
| 4-Chloro-3-methylphenol | 6.66 | 5.78 | | mg/Kg | | 87 | 58 - 95 | 3 | 20 |
| 2-Chloronaphthalene | 6.65 | 6.19 | | mg/Kg | | 93 | 61 - 94 | 4 | 20 |
| 2-Chlorophenol | 6.65 | 5.83 | | mg/Kg | | 88 | 60 - 91 | 2 | 20 |
| 4-Chlorophenyl phenyl ether | 6.67 | 5.81 | | mg/Kg | | 87 | 61 - 96 | 1 | 20 |
| Chrysene | 6.66 | 6.17 | | mg/Kg | | 93 | 66 - 100 | 2 | 20 |
| Dibenz(a,h)anthracene | 6.66 | 7.03 | | mg/Kg | | 106 | 67 - 114 | 0 | 20 |
| Dibenzofuran | 6.66 | 5.74 | | mg/Kg | | 86 | 58 - 95 | 2 | 20 |
| Di-n-butyl phthalate | 6.66 | 5.81 | | mg/Kg | | 87 | 62 - 104 | 1 | 20 |
| 1,2-Dichlorobenzene | 6.65 | 5.79 | | mg/Kg | | 87 | 59 - 90 | 5 | 20 |
| 1,3-Dichlorobenzene | 6.66 | 5.55 | | mg/Kg | | 83 | 57 - 88 | 8 | 20 |
| 1,4-Dichlorobenzene | 6.66 | 5.63 | | mg/Kg | | 85 | 58 - 88 | 4 | 20 |
| 3,3'-Dichlorobenzidine | 6.66 | 6.14 | * | mg/Kg | | 92 | 50 - 90 | 1 | 20 |
| 2,4-Dichlorophenol | 6.65 | 5.80 | | mg/Kg | | 87 | 59 - 90 | 0 | 20 |
| Diethyl phthalate | 6.65 | 5.71 | | mg/Kg | | 86 | 62 - 97 | 1 | 20 |
| 2,4-Dimethylphenol | 6.65 | 5.93 | | mg/Kg | | 89 | 54 - 108 | 0 | 20 |
| Dimethyl phthalate | 6.66 | 5.85 | | mg/Kg | | 88 | 63 - 98 | 1 | 20 |
| 4,6-Dinitro-2-methylphenol | 6.65 | 6.20 | | mg/Kg | | 93 | 31 - 112 | 1 | 20 |
| 2,4-Dinitrophenol | 6.65 | 5.43 | | mg/Kg | | 82 | 20 - 100 | 4 | 20 |
| 2,4-Dinitrotoluene | 6.67 | 5.78 | | mg/Kg | | 87 | 61 - 103 | 1 | 20 |
| 2,6-Dinitrotoluene | 6.66 | 6.00 | | mg/Kg | | 90 | 63 - 99 | 0 | 20 |
| Di-n-octyl phthalate | 6.65 | 6.73 | | mg/Kg | | 101 | 61 - 111 | 2 | 20 |
| Fluoranthene | 6.65 | 5.53 | | mg/Kg | | 83 | 63 - 101 | 1 | 20 |
| Fluorene | 6.65 | 5.96 | | mg/Kg | | 90 | 62 - 96 | 0 | 20 |
| Hexachlorobenzene | 6.65 | 5.63 | | mg/Kg | | 85 | 62 - 106 | 4 | 20 |
| Hexachlorobutadiene | 6.65 | 5.68 | | mg/Kg | | 85 | 57 - 94 | 4 | 20 |
| Hexachlorocyclopentadiene | 6.66 | 5.72 | | mg/Kg | | 86 | 40 - 115 | 3 | 20 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 160-132701/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 133102** — **Prep Batch: 132701**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Hexachloroethane | 6.65 | 5.79 | | mg/Kg | | 87 | 59 - 93 | 4 | 20 |
| Indeno[1,2,3-cd]pyrene | 6.65 | 6.98 | | mg/Kg | | 105 | 65 - 120 | 0 | 20 |
| Isophorone | 6.65 | 4.88 | | mg/Kg | | 73 | 57 - 86 | 0 | 20 |
| 2-Methylnaphthalene | 6.64 | 5.64 | | mg/Kg | | 85 | 59 - 90 | 1 | 20 |
| 2-Methylphenol | 6.67 | 5.74 | | mg/Kg | | 86 | 58 - 96 | 0 | 20 |
| 3 & 4 Methylphenol | 6.65 | 6.39 | | mg/Kg | | 96 | 47 - 113 | 1 | 20 |
| Naphthalene | 6.66 | 5.89 | | mg/Kg | | 88 | 60 - 90 | 2 | 20 |
| 2-Nitroaniline | 6.67 | 6.04 | | mg/Kg | | 91 | 58 - 105 | 0 | 20 |
| 3-Nitroaniline | 6.65 | 5.62 | | mg/Kg | | 84 | 55 - 91 | 1 | 20 |
| 4-Nitroaniline | 6.68 | 5.96 | | mg/Kg | | 89 | 57 - 94 | 2 | 20 |
| Nitrobenzene | 6.65 | 5.98 | | mg/Kg | | 90 | 58 - 95 | 2 | 20 |
| 2-Nitrophenol | 6.67 | 6.00 | | mg/Kg | | 90 | 60 - 93 | 4 | 20 |
| 4-Nitrophenol | 6.67 | 5.40 | | mg/Kg | | 81 | 54 - 101 | 2 | 20 |
| N-Nitrosodiphenylamine | 6.65 | 6.77 | | mg/Kg | | 102 | 78 - 133 | 2 | 20 |
| N-Nitrosodi-n-propylamine | 6.65 | 5.65 | | mg/Kg | | 85 | 60 - 104 | 2 | 20 |
| bis (2-chloroisopropyl) ether | 6.65 | 5.76 | | mg/Kg | | 87 | 47 - 105 | 1 | 20 |
| Pentachlorophenol | 6.66 | 5.74 | | mg/Kg | | 86 | 50 - 100 | 1 | 20 |
| Phenanthrene | 6.67 | 5.87 | | mg/Kg | | 88 | 63 - 99 | 2 | 20 |
| Phenol | 6.66 | 5.82 | | mg/Kg | | 87 | 53 - 89 | 1 | 20 |
| Pyrene | 6.65 | 6.36 | | mg/Kg | | 96 | 64 - 102 | 4 | 20 |
| 1,2,4-Trichlorobenzene | 6.70 | 5.71 | | mg/Kg | | 85 | 60 - 91 | 3 | 20 |
| 2,4,5-Trichlorophenol | 6.65 | 6.05 | | mg/Kg | | 91 | 59 - 94 | 2 | 20 |
| 2,4,6-Trichlorophenol | 6.66 | 5.93 | | mg/Kg | | 89 | 59 - 95 | 2 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol (Surr)* | *90* | | *53 - 97* |
| *2,4,6-Tribromophenol (Surr)* | *86* | | *46 - 111* |
| *Nitrobenzene-d5 (Surr)* | *89* | | *55 - 98* |
| *Phenol-d5 (Surr)* | *87* | | *54 - 101* |
| *Terphenyl-d14 (Surr)* | *90* | | *58 - 123* |
| *2-Fluorobiphenyl (Surr)* | *95* | | *56 - 97* |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

**Lab Sample ID: 14G0139-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0139** — **Prep Batch: 14G0139_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.0 | | mg/kg wet | | 07/18/14 09:49 | 07/19/14 11:29 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.0 | | mg/kg wet | | 07/18/14 09:49 | 07/19/14 11:29 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *96.8* | | *50 - 150* | *07/18/14 09:49* | *07/19/14 11:29* | *1.00* |
| *n-Triacontane-d62* | *81.8* | | *50 - 150* | *07/18/14 09:49* | *07/19/14 11:29* | *1.00* |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx (Continued)

**Lab Sample ID: 14G0139-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0139** — **Prep Batch: 14G0139_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | | | 66.7 | 60.6 | | mg/kg wet | | 90.9 | 50 - 150 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *99.4* | | *50 - 150* |
| *n-Triacontane-d62* | *83.6* | | *50 - 150* |

**Lab Sample ID: 14G0139-DUP1** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0139** — **Prep Batch: 14G0139_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 3.40 | | | 3.46 | | mg/kg dry | ☼ | | | 1.89 | 40 |
| Heavy Oil Range Hydrocarbons | 16.0 | | | 14.9 | | mg/kg dry | ☼ | | | 7.30 | 40 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *100* | | *50 - 150* |
| *n-Triacontane-d62* | *85.8* | | *50 - 150* |

**Lab Sample ID: 14G0139-DUP2** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0139** — **Prep Batch: 14G0139_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 2.22 | | | 2.65 | | mg/kg dry | ☼ | | | 17.6 | 40 |
| Heavy Oil Range Hydrocarbons | 7.55 | | | 7.34 | | mg/kg dry | ☼ | | | 2.86 | 40 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *103* | | *50 - 150* |
| *n-Triacontane-d62* | *86.2* | | *50 - 150* |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0129

## Client Sample ID: Ex3-2-4 — Lab Sample ID: SXG0129-01

**Date Collected: 07/17/14 14:30** — **Matrix: Soil**
**Date Received: 07/18/14 10:40** — **Percent Solids: 87.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.01 | 14G0141_P | 07/18/14 10:59 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0141 | 07/18/14 13:35 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.953 | 14G0139_P | 07/18/14 09:49 | RA | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 10.0 | 14G0139 | 07/21/14 17:08 | MS | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14G0148_P | 07/18/14 14:25 | MS | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14G0148 | 07/21/14 13:52 | MS | TAL SPK |

## Client Sample ID: Ex3-3-4 — Lab Sample ID: SXG0129-02

**Date Collected: 07/17/14 14:40** — **Matrix: Soil**
**Date Received: 07/18/14 10:40** — **Percent Solids: 80.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.25 | 14G0141_P | 07/18/14 10:59 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0141 | 07/18/14 13:58 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.746 | 14G0139_P | 07/18/14 09:49 | RA | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0139 | 07/19/14 21:09 | MS | TAL SPK |

## Client Sample ID: Ex3-4-4 — Lab Sample ID: SXG0129-03

**Date Collected: 07/17/14 14:50** — **Matrix: Soil**
**Date Received: 07/18/14 10:40** — **Percent Solids: 85.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.965 | 14G0141_P | 07/18/14 10:59 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0141 | 07/18/14 14:20 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.852 | 14G0139_P | 07/18/14 09:49 | RA | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0139 | 07/19/14 21:32 | MS | TAL SPK |

## Client Sample ID: Ex3-5-5 — Lab Sample ID: SXG0129-04

**Date Collected: 07/17/14 15:00** — **Matrix: Soil**
**Date Received: 07/18/14 10:40** — **Percent Solids: 71.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.39 | 14G0141_P | 07/18/14 10:59 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14G0141 | 07/18/14 15:05 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.39 | 14G0141_P | 07/18/14 10:59 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0141 | 07/18/14 15:05 | CBW | TAL SPK |
| Total/NA | Prep | 3550C | | | 132701 | 07/21/14 15:06 | KKA | TAL SL |
| Total/NA | Analysis | 8270D | | 1 | 133102 | 07/22/14 03:51 | JSW | TAL SL |
| Total | Prep | EPA 3550B | | 0.890 | 14G0139_P | 07/18/14 09:49 | RA | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0139 | 07/19/14 21:56 | MS | TAL SPK |
| Total/NA | Analysis | Moisture | | 1 | 132487 | 07/19/14 08:29 | SDB | TAL SL |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0129

**Laboratory References:**

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0129

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Washington | State Program | 10 | C569 | 01-06-15 |

## Laboratory: TestAmerica St. Louis

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | MO00054 | 06-30-15 |
| California | NELAP | 9 | 2886 | 03-31-15 |
| Connecticut | State Program | 1 | PH-0241 | 03-31-15 |
| Florida | NELAP | 4 | E87689 | 06-30-15 |
| Illinois | NELAP | 5 | 200023 | 11-30-14 |
| Iowa | State Program | 7 | 373 | 12-01-14 |
| Kansas | NELAP | 7 | E-10236 | 10-31-14 * |
| Kentucky (DW) | State Program | 4 | 90125 | 12-31-14 |
| L-A-B | DoD ELAP | | L2305 | 01-10-16 |
| Louisiana | NELAP | 6 | 04080 | 06-30-15 |
| Maryland | State Program | 3 | 310 | 09-30-15 |
| Missouri | State Program | 7 | 780 | 06-30-15 |
| Nevada | State Program | 9 | MO000542013-1 | 07-31-15 |
| New Jersey | NELAP | 2 | MO002 | 06-30-15 |
| New Mexico | State Program | 6 | | 06-30-10 * |
| New York | NELAP | 2 | 11616 | 03-31-15 |
| North Dakota | State Program | 8 | R207 | 06-30-14 * |
| NRC | NRC | | 24-24817-01 | 12-31-22 |
| Oklahoma | State Program | 6 | 9997 | 08-31-15 |
| Pennsylvania | NELAP | 3 | 68-00540 | 02-28-15 |
| South Carolina | State Program | 4 | 85002001 | 06-30-14 * |
| Texas | NELAP | 6 | T104704193-13-6 | 07-31-15 |
| USDA | Federal | | P330-07-00122 | 01-09-17 |
| USEPA Reg V SDWA | Federal | 1 | WG-15J | 08-30-14 |
| Utah | NELAP | 8 | MO000542013-5 | 07-31-15 |
| Virginia | NELAP | 3 | 460230 | 06-14-15 |
| Washington | State Program | 10 | C592 | 08-30-15 |
| West Virginia DEP | State Program | 3 | 381 | 12-31-14 * |

* Certification renewal pending - certification considered valid.

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0129

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 8260C | Volatile Organic Compounds by EPA Methods 5035/8260C | | TAL SPK |
| NWTPH-Gx | Gasoline Hydrocarbons by NWTPH-Gx | | TAL SPK |
| 8270D | Semivolatile Organic Compounds (GC/MS) | SW846 | TAL SL |
| NWTPH-Dx | Semivolatile Petroleum Products by NWTPH-Dx | | TAL SPK |
| Moisture | Percent Moisture | EPA | TAL SL |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 X
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

# CHAIN OF CUSTODY REPORT

Work Order #: SXG0129

CLIENT: GeoEngineers

REPORT TO: dlauder@geoengineers.com

ADDRESS: 523 E Second Ave Spokane, WA 99202

PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO: Port of Chelan

P.O. NUMBER:

PROJECT NAME: Cashmere, WA

PROJECT NUMBER: 18593-001-04

SAMPLED BY: JML

**TURNAROUND REQUEST** in Business Days *

Organic & Inorganic Analyses: 10 (STD.) 7 5 4 3 ~~2~~ 1 <1

Petroleum Hydrocarbon Analyses: 5 (STD.) 4 3 ~~2~~ 1 <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NWTPH Gx | NWTPH Dx | VOCs | SVOCs | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Ex3-2-4 | 7/17/2014 1430 | X | X | | | S | 3 | | |
| 2 | EX3-3-4 | 1440 | X | X | | | | 3 | | |
| 3 | EX3-4-4 | 1450 | X | X | | | | 3 | | |
| 4 | EX3-5-5 | 1500 | X | X | X | X | | 4 | | |
| 5 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |

RELEASED BY: [signature] DATE: 7/17/2014
PRINT NAME: Josh Lee FIRM: GEO TIME: 1600

RECEIVED BY: Cat Stapleton DATE: 7-18-14
PRINT NAME: FIRM: TestAmerica TIME: 10:40

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 8.9 PAGE 1 OF 1

TAL-1000 (0612)



11/5/2014

## TestAmerica Spokane
## Sample Receipt Form

| | | |
|---|---|---|
| **Work Order #** SXG0129 | **Client:** GeoEngineers | **Project:** Cashmere, WA |
| Date/Time Received: 7-18-14 10:40 | By: CS | |

Samples Delivered By: ☒ Shipping Service ☐ Courier ☐ Client ☐ Other: _____

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | Y | | | |
| Custody Seals are present and intact: | | | Y | |
| Are CoC documents present: | Y | | | |
| Necessary signatures: | Y | | | |

Thermal Preservation Type: ☐ Blue Ice ☐ Gel Ice ☒ Real Ice ☐ Dry Ice ☐ None ☐ Other: _____

Temperature: 8.9 °C Thermometer (Circle **one** Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐ Not enough Ice ☒ Ice melted ☐ w/in 4hrs of collection ☐ NA ☐ Other: _____

| Log-In Phase Date/Time: 7-18-14 10:53 By: CS | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | X | | | |
| Samples containers were received intact: | | X | | Ex 3-4-4, 4oz jar shattered Ex 3-3-4 one 40ml MeOH voa broken |
| Do sample IDs match the CoC | X | | | |
| Appropriate sample containers were received for tests requested | X | | | |
| Are sample volumes adequate for tests requested | X | | | |
| Appropriate preservatives were used for the tests requested | X | | | |
| pH of inorganic samples checked and is within method specification | Y | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | Y | | | |
| Are dissolved parameters field filtered | | | Y | |
| Do any samples need to be filtered or preserved by the lab | | | Y | |
| Does this project require quick turnaround analysis | X | | | 2 days |
| Are there any short hold time tests (see chart below) | | Y | | |
| Are any samples within 2 days of or past expiration | | Y | | |
| Was the CoC scanned | Y | | | |
| Were there Non-conformance issues at login | | Y | | |
| If yes, was a CAR generated # | | | Y | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

Form No. SP-FORM-SPL-002 12 December 2012

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXG0146
Client Project/Site: 18593-001-04
Client Project Description: Cashmere, WA
Revision: 1

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*11/5/2014 3:21:40 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.testamericainc.com

*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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# Case Narrative

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

## Job ID: SXG0146

### Laboratory: TestAmerica Spokane

**Narrative**

**Revision1:** The 8270 SVOC was initially evaluated and reported down to the MDL. Per the client's request the data has be re-evaluated to the RL (reporting limit) only and the data is reflected in the amended report. This final report replaces the final report generated on 07/25/2014.

# Sample Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXG0146-01 | EX3-6-4 | Soil | 07/21/14 10:00 | 07/22/14 09:55 |
| SXG0146-02 | EX4-1-6 | Soil | 07/21/14 12:30 | 07/22/14 09:55 |
| SXG0146-03 | EX4-2-6 | Soil | 07/21/14 12:40 | 07/22/14 09:55 |
| SXG0146-04 | EX4-3-6 | Soil | 07/21/14 12:50 | 07/22/14 09:55 |
| SXG0146-05 | EX4-4-6 | Soil | 07/21/14 13:00 | 07/22/14 09:55 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

## Qualifiers

### GCMS Volatiles

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

## Client Sample ID: EX3-6-4

**Lab Sample ID: SXG0146-01**
**Date Collected: 07/21/14 10:00**
**Matrix: Soil**
**Date Received: 07/22/14 09:55**
**Percent Solids: 92.6**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.72 | | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 14:11 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *101* | | *41.5 - 162* | *07/22/14 10:56* | *07/22/14 14:11* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.1 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 18:07 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.2 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 18:07 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *97.9* | | *50 - 150* | *07/23/14 10:49* | *07/23/14 18:07* | *1.00* |
| *n-Triacontane-d62* | *88.5* | | *50 - 150* | *07/23/14 10:49* | *07/23/14 18:07* | *1.00* |

## Client Sample ID: EX4-1-6

**Lab Sample ID: SXG0146-02**
**Date Collected: 07/21/14 12:30**
**Matrix: Soil**
**Date Received: 07/22/14 09:55**
**Percent Solids: 82.5**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **13.5** | | 7.06 | | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 14:34 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *101* | | *41.5 - 162* | *07/22/14 10:56* | *07/22/14 14:34* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 12.0 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 18:31 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 29.9 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 18:31 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *94.2* | | *50 - 150* | *07/23/14 10:49* | *07/23/14 18:31* | *1.00* |
| *n-Triacontane-d62* | *94.9* | | *50 - 150* | *07/23/14 10:49* | *07/23/14 18:31* | *1.00* |

## Client Sample ID: EX4-2-6

**Lab Sample ID: SXG0146-03**
**Date Collected: 07/21/14 12:40**
**Matrix: Soil**
**Date Received: 07/22/14 09:55**
**Percent Solids: 92.1**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **4.98** | | 4.60 | | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 14:56 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *102* | | *41.5 - 162* | *07/22/14 10:56* | *07/22/14 14:56* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 9.94 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 18:54 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 24.9 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 18:54 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *97.7* | | *50 - 150* | *07/23/14 10:49* | *07/23/14 18:54* | *1.00* |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

## Client Sample ID: EX4-2-6

**Lab Sample ID: SXG0146-03**
**Date Collected: 07/21/14 12:40**
**Matrix: Soil**
**Date Received: 07/22/14 09:55**
**Percent Solids: 92.1**

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx (Continued)

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| n-Triacontane-d62 | 88.3 | | 50 - 150 | 07/23/14 10:49 | 07/23/14 18:54 | 1.00 |

## Client Sample ID: EX4-3-6

**Lab Sample ID: SXG0146-04**
**Date Collected: 07/21/14 12:50**
**Matrix: Soil**
**Date Received: 07/22/14 09:55**
**Percent Solids: 94.2**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **10.0** | | 5.24 | | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:19 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 100 | | 41.5 - 162 | 07/22/14 10:56 | 07/22/14 15:19 | 1.00 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.3 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 20:03 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.7 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 20:03 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 98.6 | | 50 - 150 | 07/23/14 10:49 | 07/23/14 20:03 | 1.00 |
| n-Triacontane-d62 | 87.0 | | 50 - 150 | 07/23/14 10:49 | 07/23/14 20:03 | 1.00 |

## Client Sample ID: EX4-4-6

**Lab Sample ID: SXG0146-05**
**Date Collected: 07/21/14 13:00**
**Matrix: Soil**
**Date Received: 07/22/14 09:55**
**Percent Solids: 81.1**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.172 | 0.0160 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Chloromethane | ND | | 0.859 | 0.00911 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Vinyl chloride | ND | | 0.103 | 0.0107 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Bromomethane | ND | | 0.859 | 0.0526 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Chloroethane | ND | | 0.172 | 0.0421 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0516 | 0.0136 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.172 | 0.0218 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Carbon disulfide | ND | | 0.172 | 0.0184 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Methylene chloride | ND | | 0.0344 | 0.00894 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| **Acetone** | **0.423** | **J** | 5.16 | 0.150 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.172 | 0.0177 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0859 | 0.00550 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.172 | 0.0194 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.172 | 0.00980 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.172 | 0.0292 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Bromochloromethane | ND | | 0.172 | 0.00670 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Chloroform | ND | | 0.172 | 0.0132 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Carbon tetrachloride | ND | | 0.172 | 0.0357 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.172 | 0.0297 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 2-Butanone | ND | | 1.72 | 0.189 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Hexane | ND | | 0.172 | 0.0139 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.172 | 0.0299 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

## Client Sample ID: EX4-4-6

**Date Collected: 07/21/14 13:00**
**Date Received: 07/22/14 09:55**

## Lab Sample ID: SXG0146-05

**Matrix: Soil**
**Percent Solids: 81.1**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.0258 | 0.0167 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.172 | 0.00842 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Trichloroethene | ND | | 0.0430 | 0.0220 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Dibromomethane | ND | | 0.172 | 0.0156 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.172 | 0.0103 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Bromodichloromethane | ND | | 0.172 | 0.0120 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.172 | 0.0107 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Toluene | ND | | 0.172 | 0.0229 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.72 | 0.0351 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.172 | 0.0113 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Tetrachloroethene | ND | | 0.0687 | 0.0302 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.172 | 0.0107 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Dibromochloromethane | ND | | 0.172 | 0.0103 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.172 | 0.0127 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0172 | 0.00997 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 2-Hexanone | ND | | 1.72 | 0.0799 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Ethylbenzene | ND | | 0.172 | 0.0278 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Chlorobenzene | ND | | 0.172 | 0.0131 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.172 | 0.0175 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| m,p-Xylene | ND | | 0.687 | 0.0292 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| o-Xylene | ND | | 0.344 | 0.0225 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Styrene | ND | | 0.172 | 0.0160 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Bromoform | ND | | 0.172 | 0.0215 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Isopropylbenzene | ND | | 0.172 | 0.0327 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| n-Propylbenzene | ND | | 0.172 | 0.0356 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.172 | 0.0129 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Bromobenzene | ND | | 0.172 | 0.0162 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.172 | 0.0320 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 2-Chlorotoluene | ND | | 0.172 | 0.0280 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.172 | 0.0144 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 4-Chlorotoluene | ND | | 0.172 | 0.0246 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| tert-Butylbenzene | ND | | 0.172 | 0.0371 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.172 | 0.0249 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| sec-Butylbenzene | ND | | 0.172 | 0.0404 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| p-Isopropyltoluene | ND | | 0.172 | 0.0411 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.172 | 0.0217 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.172 | 0.0182 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| n-Butylbenzene | ND | | 0.172 | 0.0473 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.172 | 0.0131 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.859 | 0.0488 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Hexachlorobutadiene | ND | | 0.172 | 0.0980 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.172 | 0.0342 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| Naphthalene | ND | | 0.344 | 0.0234 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.172 | 0.0610 | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *103* | | *80 - 120* | *07/22/14 10:56* | *07/22/14 15:41* | *1.00* |
| *1,2-dichloroethane-d4* | *101* | | *74.7 - 120* | *07/22/14 10:56* | *07/22/14 15:41* | *1.00* |
| *Toluene-d8* | *102* | | *78.5 - 125* | *07/22/14 10:56* | *07/22/14 15:41* | *1.00* |
| *4-bromofluorobenzene* | *99.8* | | *69.8 - 140* | *07/22/14 10:56* | *07/22/14 15:41* | *1.00* |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

## Client Sample ID: EX4-4-6

**Date Collected: 07/21/14 13:00**
**Date Received: 07/22/14 09:55**

## Lab Sample ID: SXG0146-05

**Matrix: Soil**
**Percent Solids: 81.1**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 8.59 | | mg/kg dry | ☼ | 07/22/14 10:56 | 07/22/14 15:41 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *99.8* | | *41.5 - 162* | *07/22/14 10:56* | *07/22/14 15:41* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 11.3 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 20:26 | 1.00 |
| **Heavy Oil Range Hydrocarbons** | **36.7** | | 28.4 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 20:26 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *99.2* | | *50 - 150* | *07/23/14 10:49* | *07/23/14 20:26* | *1.00* |
| *n-Triacontane-d62* | *92.8* | | *50 - 150* | *07/23/14 10:49* | *07/23/14 20:26* | *1.00* |

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 1,4-Dioxane | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2,4,5-Trichlorophenol | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2,4,6-Trichlorophenol | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2,4-Dichlorophenol | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2,4-Dimethylphenol | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2,4-Dinitrophenol | ND | | 2.0 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2,6-Dinitrotoluene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2-Chloronaphthalene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2-Chlorophenol | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2-Methylnaphthalene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2-Methylphenol | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2-Nitroaniline | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 2-Nitrophenol | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 3 & 4 Methylphenol | ND | | 0.81 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 2.0 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 3-Nitroaniline | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 2.0 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 4-Chloro-3-methylphenol | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 4-Chloroaniline | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 4-Nitroaniline | ND | | 2.0 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| 4-Nitrophenol | ND | | 2.0 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Acenaphthene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Acenaphthylene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Aniline | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Anthracene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Benzo[a]anthracene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Benzo[a]pyrene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

## Client Sample ID: EX4-4-6

**Date Collected: 07/21/14 13:00**
**Date Received: 07/22/14 09:55**

## Lab Sample ID: SXG0146-05

**Matrix: Soil**
**Percent Solids: 80.8**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[b]fluoranthene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Benzo[k]fluoranthene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Benzyl alcohol | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Butyl benzyl phthalate | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Carbazole | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Chrysene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Dibenzofuran | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Diethyl phthalate | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Dimethyl phthalate | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Di-n-butyl phthalate | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Di-n-octyl phthalate | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Fluoranthene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Fluorene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Hexachlorobenzene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Hexachlorobutadiene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Hexachlorocyclopentadiene | ND | | 2.0 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Hexachloroethane | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Isophorone | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Naphthalene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Nitrobenzene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Pentachlorophenol | ND | | 0.81 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Phenanthrene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Phenol | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Pyrene | ND | | 0.41 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |
| Pyridine | ND | | 0.81 | | mg/Kg dry | ☼ | 07/24/14 08:27 | 07/24/14 20:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *78* | | *46 - 111* | *07/24/14 08:27* | *07/24/14 20:37* | *1* |
| *2-Fluorobiphenyl (Surr)* | *94* | | *56 - 97* | *07/24/14 08:27* | *07/24/14 20:37* | *1* |
| *2-Fluorophenol (Surr)* | *84* | | *53 - 97* | *07/24/14 08:27* | *07/24/14 20:37* | *1* |
| *Nitrobenzene-d5 (Surr)* | *88* | | *55 - 98* | *07/24/14 08:27* | *07/24/14 20:37* | *1* |
| *Phenol-d5 (Surr)* | *84* | | *54 - 101* | *07/24/14 08:27* | *07/24/14 20:37* | *1* |
| *Terphenyl-d14 (Surr)* | *88* | | *58 - 123* | *07/24/14 08:27* | *07/24/14 20:37* | *1* |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

**Lab Sample ID: 14G0156-BLK1**
**Matrix: Soil**
**Analysis Batch: 14G0156**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14G0156_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.100 | 0.00930 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Chloromethane | ND | | 0.500 | 0.00530 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Vinyl chloride | ND | | 0.0600 | 0.00620 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Bromomethane | ND | | 0.500 | 0.0306 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Chloroethane | ND | | 0.100 | 0.0245 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0300 | 0.00790 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.100 | 0.0127 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Carbon disulfide | ND | | 0.100 | 0.0107 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Methylene chloride | ND | | 0.0200 | 0.00520 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Acetone | ND | | 3.00 | 0.0870 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.100 | 0.0103 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0500 | 0.00320 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.100 | 0.0113 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.100 | 0.00570 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.100 | 0.0170 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Bromochloromethane | ND | | 0.100 | 0.00390 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Chloroform | ND | | 0.100 | 0.00770 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Carbon tetrachloride | ND | | 0.100 | 0.0208 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.100 | 0.0173 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 2-Butanone | ND | | 1.00 | 0.110 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Hexane | ND | | 0.100 | 0.00810 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.100 | 0.0174 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Benzene | ND | | 0.0150 | 0.00970 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.100 | 0.00490 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Trichloroethene | ND | | 0.0250 | 0.0128 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Dibromomethane | ND | | 0.100 | 0.00910 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.100 | 0.00600 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Bromodichloromethane | ND | | 0.100 | 0.00700 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.100 | 0.00620 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Toluene | ND | | 0.100 | 0.0133 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.00 | 0.0204 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.100 | 0.00660 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Tetrachloroethene | ND | | 0.0400 | 0.0176 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.100 | 0.00620 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Dibromochloromethane | ND | | 0.100 | 0.00600 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.100 | 0.00740 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0100 | 0.00580 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 2-Hexanone | ND | | 1.00 | 0.0465 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Ethylbenzene | ND | | 0.100 | 0.0162 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Chlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.100 | 0.0102 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| m,p-Xylene | ND | | 0.400 | 0.0170 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| o-Xylene | ND | | 0.200 | 0.0131 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Styrene | ND | | 0.100 | 0.00930 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Bromoform | ND | | 0.100 | 0.0125 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Isopropylbenzene | ND | | 0.100 | 0.0190 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| n-Propylbenzene | ND | | 0.100 | 0.0207 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.100 | 0.00750 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0156-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0156** — **Prep Batch: 14G0156_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromobenzene | ND | | 0.100 | 0.00940 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.100 | 0.0186 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 2-Chlorotoluene | ND | | 0.100 | 0.0163 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.100 | 0.00840 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 4-Chlorotoluene | ND | | 0.100 | 0.0143 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| tert-Butylbenzene | ND | | 0.100 | 0.0216 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.100 | 0.0145 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| sec-Butylbenzene | ND | | 0.100 | 0.0235 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| p-Isopropyltoluene | ND | | 0.100 | 0.0239 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.100 | 0.0126 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.100 | 0.0106 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| n-Butylbenzene | ND | | 0.100 | 0.0275 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.500 | 0.0284 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Hexachlorobutadiene | ND | | 0.100 | 0.0570 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.100 | 0.0199 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| Naphthalene | ND | | 0.200 | 0.0136 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.100 | 0.0355 | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *105* | | *80 - 120* | *07/22/14 10:56* | *07/22/14 12:19* | *1.00* |
| *1,2-dichloroethane-d4* | *102* | | *74.7 - 120* | *07/22/14 10:56* | *07/22/14 12:19* | *1.00* |
| *Toluene-d8* | *103* | | *78.5 - 125* | *07/22/14 10:56* | *07/22/14 12:19* | *1.00* |
| *4-bromofluorobenzene* | *99.3* | | *69.8 - 140* | *07/22/14 10:56* | *07/22/14 12:19* | *1.00* |

**Lab Sample ID: 14G0156-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0156** — **Prep Batch: 14G0156_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.500 | 0.578 | | mg/kg wet | | 116 | 60.5 - 130 |
| Chloromethane | 0.500 | 0.562 | | mg/kg wet | | 112 | 68.9 - 130 |
| Vinyl chloride | 0.500 | 0.568 | | mg/kg wet | | 114 | 74 - 142 |
| Bromomethane | 0.500 | 0.632 | | mg/kg wet | | 126 | 70.5 - 146 |
| Chloroethane | 0.500 | 0.546 | | mg/kg wet | | 109 | 60 - 140 |
| Trichlorofluoromethane | 0.500 | 0.548 | | mg/kg wet | | 110 | 70.5 - 139 |
| 1,1-Dichloroethene | 0.500 | 0.500 | | mg/kg wet | | 100 | 72.9 - 135 |
| Carbon disulfide | 0.500 | 0.555 | | mg/kg wet | | 111 | 66.8 - 146 |
| Methylene chloride | 0.500 | 0.386 | | mg/kg wet | | 77.3 | 60 - 140 |
| Acetone | 2.50 | 1.40 | J | mg/kg wet | | 56.0 | 39.2 - 145 |
| trans-1,2-Dichloroethene | 0.500 | 0.524 | | mg/kg wet | | 105 | 60 - 140 |
| Methyl tert-butyl ether | 0.500 | 0.536 | | mg/kg wet | | 107 | 60 - 140 |
| 1,1-Dichloroethane | 0.500 | 0.539 | | mg/kg wet | | 108 | 80 - 131 |
| cis-1,2-Dichloroethene | 0.500 | 0.507 | | mg/kg wet | | 101 | 80 - 126 |
| 2,2-Dichloropropane | 0.500 | 0.501 | | mg/kg wet | | 100 | 71.5 - 132 |
| Bromochloromethane | 0.500 | 0.528 | | mg/kg wet | | 106 | 69.1 - 139 |
| Chloroform | 0.500 | 0.520 | | mg/kg wet | | 104 | 80 - 130 |
| Carbon tetrachloride | 0.500 | 0.515 | | mg/kg wet | | 103 | 73.6 - 148 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0156-BS1**
**Matrix: Soil**
**Analysis Batch: 14G0156**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14G0156_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.500 | 0.522 | | mg/kg wet | | 104 | 74.3 - 138 |
| 2-Butanone | 2.50 | 1.80 | | mg/kg wet | | 72.1 | 56.1 - 124 |
| Hexane | 0.500 | 0.528 | | mg/kg wet | | 106 | 77 - 130 |
| 1,1-Dichloropropene | 0.500 | 0.536 | | mg/kg wet | | 107 | 78.3 - 132 |
| Benzene | 0.500 | 0.511 | | mg/kg wet | | 102 | 75.8 - 123 |
| 1,2-Dichloroethane (EDC) | 0.500 | 0.548 | | mg/kg wet | | 110 | 71.1 - 142 |
| Trichloroethene | 0.500 | 0.506 | | mg/kg wet | | 101 | 78.5 - 134 |
| Dibromomethane | 0.500 | 0.530 | | mg/kg wet | | 106 | 80 - 129 |
| 1,2-Dichloropropane | 0.500 | 0.378 | | mg/kg wet | | 75.6 | 50.8 - 155 |
| Bromodichloromethane | 0.500 | 0.514 | | mg/kg wet | | 103 | 80 - 128 |
| cis-1,3-Dichloropropene | 0.500 | 0.500 | | mg/kg wet | | 100 | 80 - 126 |
| Toluene | 0.500 | 0.512 | | mg/kg wet | | 102 | 76.6 - 125 |
| 4-Methyl-2-pentanone | 2.50 | 2.71 | | mg/kg wet | | 108 | 66.4 - 131 |
| trans-1,3-Dichloropropene | 0.500 | 0.557 | | mg/kg wet | | 111 | 79 - 124 |
| Tetrachloroethene | 0.500 | 0.546 | | mg/kg wet | | 109 | 80 - 127 |
| 1,1,2-Trichloroethane | 0.500 | 0.558 | | mg/kg wet | | 112 | 78.4 - 125 |
| Dibromochloromethane | 0.500 | 0.512 | | mg/kg wet | | 102 | 78.4 - 127 |
| 1,3-Dichloropropane | 0.500 | 0.550 | | mg/kg wet | | 110 | 80 - 125 |
| 1,2-Dibromoethane | 0.500 | 0.552 | | mg/kg wet | | 110 | 77.1 - 129 |
| 2-Hexanone | 2.50 | 2.06 | | mg/kg wet | | 82.2 | 64.6 - 127 |
| Ethylbenzene | 0.500 | 0.504 | | mg/kg wet | | 101 | 77.3 - 121 |
| Chlorobenzene | 0.500 | 0.555 | | mg/kg wet | | 111 | 80 - 120 |
| 1,1,1,2-Tetrachloroethane | 0.500 | 0.550 | | mg/kg wet | | 110 | 80 - 120 |
| m,p-Xylene | 0.500 | 0.506 | | mg/kg wet | | 101 | 77.7 - 124 |
| o-Xylene | 0.500 | 0.534 | | mg/kg wet | | 107 | 76.7 - 129 |
| Styrene | 0.500 | 0.532 | | mg/kg wet | | 106 | 80 - 128 |
| Bromoform | 0.500 | 0.543 | | mg/kg wet | | 109 | 76 - 135 |
| Isopropylbenzene | 0.500 | 0.514 | | mg/kg wet | | 103 | 78.4 - 131 |
| n-Propylbenzene | 0.500 | 0.510 | | mg/kg wet | | 102 | 80 - 120 |
| 1,1,2,2-Tetrachloroethane | 0.500 | 0.564 | | mg/kg wet | | 113 | 60.3 - 137 |
| Bromobenzene | 0.500 | 0.506 | | mg/kg wet | | 101 | 60 - 140 |
| 1,3,5-Trimethylbenzene | 0.500 | 0.511 | | mg/kg wet | | 102 | 80 - 121 |
| 2-Chlorotoluene | 0.500 | 0.538 | | mg/kg wet | | 108 | 80 - 123 |
| 1,2,3-Trichloropropane | 0.500 | 0.519 | | mg/kg wet | | 104 | 59.9 - 131 |
| 4-Chlorotoluene | 0.500 | 0.519 | | mg/kg wet | | 104 | 80 - 124 |
| tert-Butylbenzene | 0.500 | 0.512 | | mg/kg wet | | 102 | 78.8 - 130 |
| 1,2,4-Trimethylbenzene | 0.500 | 0.519 | | mg/kg wet | | 104 | 80 - 122 |
| sec-Butylbenzene | 0.500 | 0.510 | | mg/kg wet | | 102 | 80 - 120 |
| p-Isopropyltoluene | 0.500 | 0.510 | | mg/kg wet | | 102 | 67.2 - 147 |
| 1,3-Dichlorobenzene | 0.500 | 0.541 | | mg/kg wet | | 108 | 80 - 122 |
| 1,4-Dichlorobenzene | 0.500 | 0.522 | | mg/kg wet | | 104 | 80 - 125 |
| n-Butylbenzene | 0.500 | 0.520 | | mg/kg wet | | 104 | 80 - 120 |
| 1,2-Dichlorobenzene | 0.500 | 0.546 | | mg/kg wet | | 109 | 80 - 124 |
| 1,2-Dibromo-3-chloropropane | 0.500 | 0.572 | | mg/kg wet | | 114 | 60 - 140 |
| Hexachlorobutadiene | 0.500 | 0.517 | | mg/kg wet | | 103 | 71.8 - 138 |
| 1,2,4-Trichlorobenzene | 0.500 | 0.486 | | mg/kg wet | | 97.2 | 75.3 - 126 |
| Naphthalene | 0.500 | 0.458 | | mg/kg wet | | 91.6 | 55.1 - 142 |
| 1,2,3-Trichlorobenzene | 0.500 | 0.474 | | mg/kg wet | | 94.9 | 69.6 - 127 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0156-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0156** — **Prep Batch: 14G0156_P**

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *102* | | *80 - 120* |
| *1,2-dichloroethane-d4* | *105* | | *74.7 - 120* |
| *Toluene-d8* | *101* | | *78.5 - 125* |
| *4-bromofluorobenzene* | *98.7* | | *69.8 - 140* |

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

**Lab Sample ID: 14G0156-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0156** — **Prep Batch: 14G0156_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.00 | | mg/kg wet | | 07/22/14 10:56 | 07/22/14 12:19 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *99.3* | | *41.5 - 162* | *07/22/14 10:56* | *07/22/14 12:19* | *1.00* |

**Lab Sample ID: 14G0156-BS2** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0156** — **Prep Batch: 14G0156_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | | | 50.0 | 46.3 | | mg/kg wet | | 92.7 | 74.4 - 124 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-bromofluorobenzene* | *101* | | *41.5 - 162* |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

**Lab Sample ID: 14G0162-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0162** — **Prep Batch: 14G0162_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.0 | | mg/kg wet | | 07/23/14 10:16 | 07/23/14 12:33 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.0 | | mg/kg wet | | 07/23/14 10:16 | 07/23/14 12:33 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *91.9* | | *50 - 150* | *07/23/14 10:16* | *07/23/14 12:33* | *1.00* |
| *n-Triacontane-d62* | *85.0* | | *50 - 150* | *07/23/14 10:16* | *07/23/14 12:33* | *1.00* |

**Lab Sample ID: 14G0162-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0162** — **Prep Batch: 14G0162_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | | | 66.7 | 59.2 | | mg/kg wet | | 88.7 | 50 - 150 | | |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx (Continued)

**Lab Sample ID: 14G0162-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0162** — **Prep Batch: 14G0162_P**

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *98.3* | | *50 - 150* |
| *n-Triacontane-d62* | *86.3* | | *50 - 150* |

**Lab Sample ID: 14G0162-DUP1** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0162** — **Prep Batch: 14G0162_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 13.9 | | | 11.9 | | mg/kg dry | ☼ | | | 16.0 | 40 |
| Heavy Oil Range Hydrocarbons | 47.3 | | | 39.8 | | mg/kg dry | ☼ | | | 17.3 | 40 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *86.5* | | *50 - 150* |
| *n-Triacontane-d62* | *84.4* | | *50 - 150* |

**Lab Sample ID: 14G0162-DUP2** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0162** — **Prep Batch: 14G0162_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 23.9 | | | 25.5 | | mg/kg dry | ☼ | | | 6.72 | 40 |
| Heavy Oil Range Hydrocarbons | 29.7 | | | 31.7 | | mg/kg dry | ☼ | | | 6.74 | 40 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *96.3* | | *50 - 150* |
| *n-Triacontane-d62* | *92.1* | | *50 - 150* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: 133825-1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 133620** — **Prep Batch: 133620_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 1,4-Dioxane | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 2,4,5-Trichlorophenol | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 2,4,6-Trichlorophenol | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 2,4-Dichlorophenol | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 2,4-Dimethylphenol | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 2,4-Dinitrophenol | ND | | 1.6 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 2,6-Dinitrotoluene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 2-Chloronaphthalene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 133825-1**
**Matrix: Soil**
**Analysis Batch: 133620**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 133620_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Chlorophenol | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 2-Methylnaphthalene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 2-Methylphenol | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 2-Nitroaniline | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 2-Nitrophenol | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 3 & 4 Methylphenol | ND | | 0.66 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 1.6 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 3-Nitroaniline | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1.6 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 4-Chloro-3-methylphenol | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 4-Chloroaniline | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 4-Nitroaniline | ND | | 1.6 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| 4-Nitrophenol | ND | | 1.6 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Acenaphthene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Acenaphthylene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Aniline | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Anthracene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Benzo[a]anthracene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Benzo[a]pyrene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Benzo[b]fluoranthene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Benzo[k]fluoranthene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Benzyl alcohol | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Butyl benzyl phthalate | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Carbazole | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Chrysene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Dibenzofuran | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Diethyl phthalate | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Dimethyl phthalate | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Di-n-butyl phthalate | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Di-n-octyl phthalate | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Fluoranthene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Fluorene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Hexachlorobenzene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Hexachlorobutadiene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Hexachlorocyclopentadiene | ND | | 1.6 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Hexachloroethane | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Isophorone | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Naphthalene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Nitrobenzene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 133825-1** | **Client Sample ID: Method Blank**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 133620** | **Prep Batch: 133620_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| N-Nitrosodi-n-propylamine | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Pentachlorophenol | ND | | 0.66 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Phenanthrene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Phenol | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Pyrene | ND | | 0.33 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |
| Pyridine | ND | | 0.66 | | mg/Kg dry | | 07/24/14 08:27 | 07/24/14 18:26 | 1 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *75* | | *46 - 111* | *07/24/14 08:27* | *07/24/14 18:26* | *1* |
| *2-Fluorobiphenyl (Surr)* | *89* | | *56 - 97* | *07/24/14 08:27* | *07/24/14 18:26* | *1* |
| *2-Fluorophenol (Surr)* | *83* | | *53 - 97* | *07/24/14 08:27* | *07/24/14 18:26* | *1* |
| *Nitrobenzene-d5 (Surr)* | *82* | | *55 - 98* | *07/24/14 08:27* | *07/24/14 18:26* | *1* |
| *Phenol-d5 (Surr)* | *84* | | *54 - 101* | *07/24/14 08:27* | *07/24/14 18:26* | *1* |
| *Terphenyl-d14 (Surr)* | *84* | | *58 - 123* | *07/24/14 08:27* | *07/24/14 18:26* | *1* |

**Lab Sample ID: 133825-5** | **Client Sample ID: Lab Control Sample**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 133620** | **Prep Batch: 133620_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 6.71 | 5.45 | | mg/Kg dry | | 81 | 60 - 91 |
| 1,2-Dichlorobenzene | 6.67 | 5.42 | | mg/Kg dry | | 81 | 59 - 90 |
| 1,3-Dichlorobenzene | 6.67 | 5.37 | | mg/Kg dry | | 80 | 57 - 88 |
| 1,4-Dichlorobenzene | 6.67 | 5.33 | | mg/Kg dry | | 80 | 58 - 88 |
| 2,4,5-Trichlorophenol | 6.67 | 6.06 | | mg/Kg dry | | 91 | 59 - 94 |
| 2,4,6-Trichlorophenol | 6.67 | 6.06 | | mg/Kg dry | | 91 | 59 - 95 |
| 2,4-Dichlorophenol | 6.67 | 5.26 | | mg/Kg dry | | 79 | 59 - 90 |
| 2,4-Dimethylphenol | 6.67 | 5.40 | | mg/Kg dry | | 81 | 54 - 108 |
| 2,4-Dinitrophenol | 6.67 | 4.44 | | mg/Kg dry | | 67 | 20 - 100 |
| 2,4-Dinitrotoluene | 6.68 | 5.26 | | mg/Kg dry | | 79 | 61 - 103 |
| 2,6-Dinitrotoluene | 6.67 | 5.41 | | mg/Kg dry | | 81 | 63 - 99 |
| 2-Chloronaphthalene | 6.67 | 5.77 | | mg/Kg dry | | 87 | 61 - 94 |
| 2-Chlorophenol | 6.67 | 5.36 | | mg/Kg dry | | 80 | 60 - 91 |
| 2-Methylnaphthalene | 6.65 | 5.21 | | mg/Kg dry | | 78 | 59 - 90 |
| 2-Methylphenol | 6.68 | 5.17 | | mg/Kg dry | | 77 | 58 - 96 |
| 2-Nitroaniline | 6.69 | 6.07 | | mg/Kg dry | | 91 | 58 - 105 |
| 2-Nitrophenol | 6.68 | 5.40 | | mg/Kg dry | | 81 | 60 - 93 |
| 3 & 4 Methylphenol | 6.67 | 5.87 | | mg/Kg dry | | 88 | 47 - 113 |
| 3,3'-Dichlorobenzidine | 6.67 | 5.02 | | mg/Kg dry | | 75 | 50 - 90 |
| 3-Nitroaniline | 6.67 | 4.88 | | mg/Kg dry | | 73 | 55 - 91 |
| 4,6-Dinitro-2-methylphenol | 6.67 | 5.81 | | mg/Kg dry | | 87 | 31 - 112 |
| 4-Bromophenyl phenyl ether | 6.67 | 5.83 | | mg/Kg dry | | 87 | 63 - 106 |
| 4-Chloro-3-methylphenol | 6.67 | 5.19 | | mg/Kg dry | | 78 | 58 - 95 |
| 4-Chloroaniline | 6.67 | 3.78 | | mg/Kg dry | | 57 | 43 - 70 |
| 4-Chlorophenyl phenyl ether | 6.68 | 5.23 | | mg/Kg dry | | 78 | 61 - 96 |
| 4-Nitroaniline | 6.69 | 5.06 | | mg/Kg dry | | 76 | 57 - 94 |
| 4-Nitrophenol | 6.68 | 5.40 | | mg/Kg dry | | 81 | 54 - 101 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 133825-5**
**Matrix: Soil**
**Analysis Batch: 133620**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 133620_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.67 | 5.50 | | mg/Kg dry | | 82 | 63 - 95 |
| Acenaphthylene | 6.67 | 5.53 | | mg/Kg dry | | 83 | 62 - 98 |
| Anthracene | 6.68 | 5.48 | | mg/Kg dry | | 82 | 63 - 100 |
| Benzo[a]anthracene | 6.67 | 5.50 | | mg/Kg dry | | 82 | 74 - 114 |
| Benzo[a]pyrene | 6.67 | 5.64 | | mg/Kg dry | | 85 | 63 - 103 |
| Benzo[b]fluoranthene | 6.67 | 5.60 | | mg/Kg dry | | 84 | 68 - 109 |
| Benzo[g,h,i]perylene | 6.67 | 6.28 | | mg/Kg dry | | 94 | 67 - 121 |
| Benzo[k]fluoranthene | 6.68 | 5.80 | | mg/Kg dry | | 87 | 69 - 111 |
| bis (2-chloroisopropyl) ether | 6.67 | 5.47 | | mg/Kg dry | | 82 | 47 - 105 |
| Bis(2-chloroethoxy)methane | 6.68 | 5.52 | | mg/Kg dry | | 83 | 62 - 91 |
| Bis(2-chloroethyl)ether | 6.67 | 5.39 | | mg/Kg dry | | 81 | 58 - 92 |
| Bis(2-ethylhexyl) phthalate | 6.67 | 5.75 | | mg/Kg dry | | 86 | 63 - 112 |
| Butyl benzyl phthalate | 6.67 | 5.97 | | mg/Kg dry | | 89 | 59 - 111 |
| Carbazole | 6.69 | 5.22 | | mg/Kg dry | | 78 | 64 - 101 |
| Chrysene | 6.67 | 5.58 | | mg/Kg dry | | 84 | 66 - 100 |
| Dibenz(a,h)anthracene | 6.67 | 6.39 | | mg/Kg dry | | 96 | 67 - 114 |
| Dibenzofuran | 6.67 | 5.23 | | mg/Kg dry | | 78 | 58 - 95 |
| Diethyl phthalate | 6.67 | 5.17 | | mg/Kg dry | | 77 | 62 - 97 |
| Dimethyl phthalate | 6.67 | 5.28 | | mg/Kg dry | | 79 | 63 - 98 |
| Di-n-butyl phthalate | 6.67 | 5.45 | | mg/Kg dry | | 82 | 62 - 104 |
| Di-n-octyl phthalate | 6.67 | 5.81 | | mg/Kg dry | | 87 | 61 - 111 |
| Fluoranthene | 6.67 | 5.20 | | mg/Kg dry | | 78 | 63 - 101 |
| Fluorene | 6.67 | 5.27 | | mg/Kg dry | | 79 | 62 - 96 |
| Hexachlorobenzene | 6.67 | 5.65 | | mg/Kg dry | | 85 | 62 - 106 |
| Hexachlorobutadiene | 6.67 | 5.46 | | mg/Kg dry | | 82 | 57 - 94 |
| Hexachlorocyclopentadiene | 6.67 | 6.91 | | mg/Kg dry | | 104 | 40 - 115 |
| Hexachloroethane | 6.67 | 5.56 | | mg/Kg dry | | 83 | 59 - 93 |
| Indeno[1,2,3-cd]pyrene | 6.67 | 6.54 | | mg/Kg dry | | 98 | 65 - 120 |
| Isophorone | 6.67 | 4.69 | | mg/Kg dry | | 70 | 57 - 86 |
| Naphthalene | 6.67 | 5.50 | | mg/Kg dry | | 82 | 60 - 90 |
| Nitrobenzene | 6.67 | 5.59 | | mg/Kg dry | | 84 | 58 - 95 |
| N-Nitrosodi-n-propylamine | 6.67 | 5.29 | | mg/Kg dry | | 79 | 60 - 104 |
| N-Nitrosodiphenylamine | 6.67 | 6.78 | | mg/Kg dry | | 102 | 78 - 133 |
| Pentachlorophenol | 6.67 | 5.64 | | mg/Kg dry | | 84 | 50 - 100 |
| Phenanthrene | 6.68 | 5.60 | | mg/Kg dry | | 84 | 63 - 99 |
| Phenol | 6.67 | 4.95 | | mg/Kg dry | | 74 | 53 - 89 |
| Pyrene | 6.67 | 6.11 | | mg/Kg dry | | 92 | 64 - 102 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *77* | | *46 - 111* |
| *2-Fluorobiphenyl (Surr)* | *91* | | *56 - 97* |
| *2-Fluorophenol (Surr)* | *82* | | *53 - 97* |
| *Nitrobenzene-d5 (Surr)* | *83* | | *55 - 98* |
| *Phenol-d5 (Surr)* | *81* | | *54 - 101* |
| *Terphenyl-d14 (Surr)* | *85* | | *58 - 123* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 75961D**
**Matrix: Soil**
**Analysis Batch: 133620**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total**
**Prep Batch: 133620_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 8.23 | 6.76 | | mg/Kg dry | ☼ | 82 | 51 - 87 | 2 | 30 |
| 1,2-Dichlorobenzene | ND | | 8.18 | 6.48 | | mg/Kg dry | ☼ | 79 | 46 - 85 | 2 | 30 |
| 1,3-Dichlorobenzene | ND | | 8.18 | 6.41 | | mg/Kg dry | ☼ | 78 | 42 - 84 | 2 | 30 |
| 1,4-Dichlorobenzene | ND | | 8.18 | 6.40 | | mg/Kg dry | ☼ | 78 | 45 - 83 | 2 | 30 |
| 2,4,5-Trichlorophenol | ND | | 8.18 | 7.52 | | mg/Kg dry | ☼ | 92 | 55 - 95 | 3 | 30 |
| 2,4,6-Trichlorophenol | ND | | 8.18 | 7.69 | | mg/Kg dry | ☼ | 94 | 48 - 98 | 2 | 30 |
| 2,4-Dichlorophenol | ND | | 8.18 | 6.43 | | mg/Kg dry | ☼ | 79 | 47 - 94 | 3 | 30 |
| 2,4-Dimethylphenol | ND | | 8.18 | 6.84 | | mg/Kg dry | ☼ | 84 | 33 - 109 | 2 | 30 |
| 2,4-Dinitrophenol | ND | | 8.18 | 6.29 | | mg/Kg dry | ☼ | 77 | 13 - 103 | 4 | 30 |
| 2,4-Dinitrotoluene | ND | | 8.19 | 6.31 | | mg/Kg dry | ☼ | 77 | 55 - 108 | 5 | 30 |
| 2,6-Dinitrotoluene | ND | | 8.18 | 6.74 | | mg/Kg dry | ☼ | 82 | 58 - 101 | 4 | 30 |
| 2-Chloronaphthalene | ND | | 8.18 | 7.27 | | mg/Kg dry | ☼ | 89 | 55 - 92 | 2 | 30 |
| 2-Chlorophenol | ND | | 8.18 | 6.41 | | mg/Kg dry | ☼ | 78 | 47 - 90 | 1 | 30 |
| 2-Methylnaphthalene | ND | | 8.16 | 6.45 | | mg/Kg dry | ☼ | 79 | 52 - 88 | 2 | 30 |
| 2-Methylphenol | ND | | 8.19 | 6.17 | | mg/Kg dry | ☼ | 75 | 48 - 94 | 2 | 30 |
| 2-Nitroaniline | ND | | 8.20 | 7.58 | | mg/Kg dry | ☼ | 92 | 52 - 108 | 4 | 30 |
| 2-Nitrophenol | ND | | 8.19 | 6.84 | | mg/Kg dry | ☼ | 84 | 51 - 94 | 1 | 30 |
| 3 & 4 Methylphenol | ND | | 8.18 | 6.97 | | mg/Kg dry | ☼ | 85 | 39 - 107 | 3 | 30 |
| 3,3'-Dichlorobenzidine | ND | | 8.18 | 5.41 | | mg/Kg dry | ☼ | 66 | 10 - 84 | 2 | 30 |
| 3-Nitroaniline | ND | | 8.18 | 5.75 | | mg/Kg dry | ☼ | 70 | 44 - 103 | 2 | 30 |
| 4,6-Dinitro-2-methylphenol | ND | | 8.18 | 7.68 | | mg/Kg dry | ☼ | 94 | 32 - 112 | 2 | 30 |
| 4-Bromophenyl phenyl ether | ND | | 8.18 | 7.38 | | mg/Kg dry | ☼ | 90 | 59 - 105 | 2 | 30 |
| 4-Chloro-3-methylphenol | ND | | 8.18 | 6.22 | | mg/Kg dry | ☼ | 76 | 53 - 96 | 3 | 30 |
| 4-Chloroaniline | ND | | 8.18 | 4.83 | | mg/Kg dry | ☼ | 59 | 31 - 76 | 2 | 30 |
| 4-Chlorophenyl phenyl ether | ND | | 8.19 | 6.40 | | mg/Kg dry | ☼ | 78 | 57 - 96 | 4 | 30 |
| 4-Nitroaniline | ND | | 8.21 | 5.49 | | mg/Kg dry | ☼ | 67 | 43 - 102 | 8 | 30 |
| 4-Nitrophenol | ND | | 8.19 | 6.51 | | mg/Kg dry | ☼ | 79 | 48 - 105 | 6 | 30 |
| Acenaphthene | ND | | 8.18 | 6.85 | | mg/Kg dry | ☼ | 84 | 57 - 94 | 2 | 30 |
| Acenaphthylene | ND | | 8.18 | 6.91 | | mg/Kg dry | ☼ | 84 | 57 - 97 | 2 | 30 |
| Anthracene | ND | | 8.19 | 6.78 | | mg/Kg dry | ☼ | 83 | 58 - 99 | 3 | 30 |
| Benzo[a]anthracene | ND | | 8.18 | 6.94 | | mg/Kg dry | ☼ | 85 | 68 - 114 | 2 | 30 |
| Benzo[a]pyrene | ND | | 8.18 | 6.99 | | mg/Kg dry | ☼ | 86 | 61 - 102 | 4 | 30 |
| Benzo[b]fluoranthene | ND | | 8.18 | 6.95 | | mg/Kg dry | ☼ | 85 | 63 - 107 | 2 | 30 |
| Benzo[g,h,i]perylene | ND | | 8.18 | 7.82 | | mg/Kg dry | ☼ | 96 | 54 - 127 | 4 | 30 |
| Benzo[k]fluoranthene | ND | | 8.19 | 6.82 | | mg/Kg dry | ☼ | 83 | 65 - 108 | 4 | 30 |
| bis (2-chloroisopropyl) ether | ND | | 8.18 | 6.64 | | mg/Kg dry | ☼ | 81 | 42 - 97 | 3 | 30 |
| Bis(2-chloroethoxy)methane | ND | | 8.19 | 6.85 | | mg/Kg dry | ☼ | 84 | 54 - 89 | 2 | 30 |
| Bis(2-chloroethyl)ether | ND | | 8.18 | 6.51 | | mg/Kg dry | ☼ | 80 | 50 - 88 | 2 | 30 |
| Bis(2-ethylhexyl) phthalate | ND | | 8.18 | 7.32 | | mg/Kg dry | ☼ | 89 | 60 - 110 | 3 | 30 |
| Butyl benzyl phthalate | ND | | 8.18 | 7.55 | | mg/Kg dry | ☼ | 92 | 56 - 110 | 3 | 30 |
| Carbazole | ND | | 8.20 | 6.29 | | mg/Kg dry | ☼ | 77 | 55 - 104 | 4 | 30 |
| Chrysene | ND | | 8.18 | 7.07 | | mg/Kg dry | ☼ | 86 | 61 - 100 | 2 | 30 |
| Dibenz(a,h)anthracene | ND | | 8.18 | 8.25 | | mg/Kg dry | ☼ | 101 | 59 - 118 | 4 | 30 |
| Dibenzofuran | ND | | 8.18 | 6.51 | | mg/Kg dry | ☼ | 80 | 55 - 93 | 3 | 30 |
| Diethyl phthalate | ND | | 8.18 | 6.35 | | mg/Kg dry | ☼ | 78 | 58 - 100 | 5 | 30 |
| Dimethyl phthalate | ND | | 8.18 | 6.59 | | mg/Kg dry | ☼ | 80 | 59 - 100 | 3 | 30 |
| Di-n-butyl phthalate | ND | | 8.18 | 6.68 | | mg/Kg dry | ☼ | 81 | 58 - 106 | 3 | 30 |
| Di-n-octyl phthalate | ND | | 8.18 | 7.59 | | mg/Kg dry | ☼ | 93 | 58 - 113 | 3 | 30 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 75961D** — **Client Sample ID: Matrix Spike Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 133620** — **Prep Batch: 133620_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoranthene | ND | | 8.18 | 6.20 | | mg/Kg dry | ☼ | 76 | 58 - 103 | 4 | 30 |
| Fluorene | ND | | 8.18 | 6.42 | | mg/Kg dry | ☼ | 78 | 58 - 97 | 3 | 30 |
| Hexachlorobenzene | ND | | 8.18 | 7.16 | | mg/Kg dry | ☼ | 88 | 59 - 105 | 2 | 30 |
| Hexachlorobutadiene | ND | | 8.18 | 6.85 | | mg/Kg dry | ☼ | 84 | 47 - 89 | 1 | 30 |
| Hexachlorocyclopentadiene | ND | | 8.18 | 8.72 | | mg/Kg dry | ☼ | 107 | 17 - 112 | 2 | 30 |
| Hexachloroethane | ND | | 8.18 | 6.60 | | mg/Kg dry | ☼ | 81 | 43 - 88 | 2 | 30 |
| Indeno[1,2,3-cd]pyrene | ND | | 8.18 | 8.02 | | mg/Kg dry | ☼ | 98 | 56 - 123 | 5 | 30 |
| Isophorone | ND | | 8.18 | 5.84 | | mg/Kg dry | ☼ | 71 | 52 - 84 | 2 | 30 |
| Naphthalene | ND | | 8.18 | 6.82 | | mg/Kg dry | ☼ | 83 | 52 - 86 | 2 | 30 |
| Nitrobenzene | ND | | 8.18 | 7.09 | | mg/Kg dry | ☼ | 87 | 52 - 90 | 1 | 30 |
| N-Nitrosodi-n-propylamine | ND | | 8.18 | 6.41 | | mg/Kg dry | ☼ | 78 | 55 - 99 | 2 | 30 |
| N-Nitrosodiphenylamine | ND | | 8.18 | 8.78 | | mg/Kg dry | ☼ | 107 | 52 - 131 | 1 | 30 |
| Pentachlorophenol | ND | | 8.18 | 7.15 | | mg/Kg dry | ☼ | 87 | 35 - 104 | 1 | 30 |
| Phenanthrene | ND | | 8.19 | 6.97 | | mg/Kg dry | ☼ | 85 | 60 - 98 | 3 | 30 |
| Phenol | ND | | 8.18 | 5.92 | | mg/Kg dry | ☼ | 72 | 43 - 90 | 1 | 30 |
| Pyrene | ND | | 8.18 | 7.54 | | mg/Kg dry | ☼ | 92 | 53 - 106 | 3 | 30 |

| *Surrogate* | *Matrix Spike Dup %Recovery* | *Matrix Spike Dup Qualifier* | *Limits* |
|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *74* | | *46 - 111* |
| *2-Fluorobiphenyl (Surr)* | *94* | | *56 - 97* |
| *2-Fluorophenol (Surr)* | *80* | | *53 - 97* |
| *Nitrobenzene-d5 (Surr)* | *86* | | *55 - 98* |
| *Phenol-d5 (Surr)* | *78* | | *54 - 101* |
| *Terphenyl-d14 (Surr)* | *85* | | *58 - 123* |

**Lab Sample ID: 75961S** — **Client Sample ID: Matrix Spike**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 133620** — **Prep Batch: 133620_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 8.25 | 6.89 | | mg/Kg dry | ☼ | 83 | 51 - 87 |
| 1,2-Dichlorobenzene | ND | | 8.19 | 6.65 | | mg/Kg dry | ☼ | 81 | 46 - 85 |
| 1,3-Dichlorobenzene | ND | | 8.20 | 6.52 | | mg/Kg dry | ☼ | 80 | 42 - 84 |
| 1,4-Dichlorobenzene | ND | | 8.20 | 6.50 | | mg/Kg dry | ☼ | 79 | 45 - 83 |
| 2,4,5-Trichlorophenol | ND | | 8.19 | 7.75 | | mg/Kg dry | ☼ | 95 | 55 - 95 |
| 2,4,6-Trichlorophenol | ND | | 8.20 | 7.85 | | mg/Kg dry | ☼ | 96 | 48 - 98 |
| 2,4-Dichlorophenol | ND | | 8.19 | 6.61 | | mg/Kg dry | ☼ | 81 | 47 - 94 |
| 2,4-Dimethylphenol | ND | | 8.19 | 6.95 | | mg/Kg dry | ☼ | 85 | 33 - 109 |
| 2,4-Dinitrophenol | ND | | 8.19 | 6.57 | | mg/Kg dry | ☼ | 80 | 13 - 103 |
| 2,4-Dinitrotoluene | ND | | 8.21 | 6.65 | | mg/Kg dry | ☼ | 81 | 55 - 108 |
| 2,6-Dinitrotoluene | ND | | 8.20 | 7.02 | | mg/Kg dry | ☼ | 86 | 58 - 101 |
| 2-Chloronaphthalene | ND | | 8.19 | 7.45 | | mg/Kg dry | ☼ | 91 | 55 - 92 |
| 2-Chlorophenol | ND | | 8.19 | 6.49 | | mg/Kg dry | ☼ | 79 | 47 - 90 |
| 2-Methylnaphthalene | ND | | 8.18 | 6.58 | | mg/Kg dry | ☼ | 80 | 52 - 88 |
| 2-Methylphenol | ND | | 8.21 | 6.31 | | mg/Kg dry | ☼ | 77 | 48 - 94 |
| 2-Nitroaniline | ND | | 8.22 | 7.89 | | mg/Kg dry | ☼ | 96 | 52 - 108 |
| 2-Nitrophenol | ND | | 8.21 | 6.89 | | mg/Kg dry | ☼ | 84 | 51 - 94 |
| 3 & 4 Methylphenol | ND | | 8.19 | 7.17 | | mg/Kg dry | ☼ | 87 | 39 - 107 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 75961S**
**Matrix: Soil**
**Analysis Batch: 133620**

**Client Sample ID: Matrix Spike**
**Prep Type: Total**
**Prep Batch: 133620_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 3,3'-Dichlorobenzidine | ND | | 8.20 | 5.49 | | mg/Kg dry | ☼ | 67 | 10 - 84 |
| 3-Nitroaniline | ND | | 8.19 | 5.90 | | mg/Kg dry | ☼ | 72 | 44 - 103 |
| 4,6-Dinitro-2-methylphenol | ND | | 8.19 | 7.85 | | mg/Kg dry | ☼ | 96 | 32 - 112 |
| 4-Bromophenyl phenyl ether | ND | | 8.19 | 7.53 | | mg/Kg dry | ☼ | 92 | 59 - 105 |
| 4-Chloro-3-methylphenol | ND | | 8.20 | 6.44 | | mg/Kg dry | ☼ | 79 | 53 - 96 |
| 4-Chloroaniline | ND | | 8.19 | 4.92 | | mg/Kg dry | ☼ | 60 | 31 - 76 |
| 4-Chlorophenyl phenyl ether | ND | | 8.21 | 6.68 | | mg/Kg dry | ☼ | 81 | 57 - 96 |
| 4-Nitroaniline | ND | | 8.23 | 5.97 | | mg/Kg dry | ☼ | 73 | 43 - 102 |
| 4-Nitrophenol | ND | | 8.21 | 6.91 | | mg/Kg dry | ☼ | 84 | 48 - 105 |
| Acenaphthene | ND | | 8.20 | 6.96 | | mg/Kg dry | ☼ | 85 | 57 - 94 |
| Acenaphthylene | ND | | 8.20 | 7.08 | | mg/Kg dry | ☼ | 86 | 57 - 97 |
| Anthracene | ND | | 8.21 | 6.98 | | mg/Kg dry | ☼ | 85 | 58 - 99 |
| Benzo[a]anthracene | ND | | 8.19 | 7.06 | | mg/Kg dry | ☼ | 86 | 68 - 114 |
| Benzo[a]pyrene | ND | | 8.19 | 7.25 | | mg/Kg dry | ☼ | 89 | 61 - 102 |
| Benzo[b]fluoranthene | ND | | 8.19 | 7.11 | | mg/Kg dry | ☼ | 87 | 63 - 107 |
| Benzo[g,h,i]perylene | ND | | 8.20 | 8.17 | | mg/Kg dry | ☼ | 100 | 54 - 127 |
| Benzo[k]fluoranthene | ND | | 8.21 | 7.10 | | mg/Kg dry | ☼ | 86 | 65 - 108 |
| bis (2-chloroisopropyl) ether | ND | | 8.19 | 6.83 | | mg/Kg dry | ☼ | 83 | 42 - 97 |
| Bis(2-chloroethoxy)methane | ND | | 8.21 | 7.00 | | mg/Kg dry | ☼ | 85 | 54 - 89 |
| Bis(2-chloroethyl)ether | ND | | 8.19 | 6.66 | | mg/Kg dry | ☼ | 81 | 50 - 88 |
| Bis(2-ethylhexyl) phthalate | ND | | 8.20 | 7.52 | | mg/Kg dry | ☼ | 92 | 60 - 110 |
| Butyl benzyl phthalate | ND | | 8.20 | 7.80 | | mg/Kg dry | ☼ | 95 | 56 - 110 |
| Carbazole | ND | | 8.22 | 6.56 | | mg/Kg dry | ☼ | 80 | 55 - 104 |
| Chrysene | ND | | 8.20 | 7.25 | | mg/Kg dry | ☼ | 88 | 61 - 100 |
| Dibenz(a,h)anthracene | ND | | 8.20 | 8.56 | | mg/Kg dry | ☼ | 104 | 59 - 118 |
| Dibenzofuran | ND | | 8.20 | 6.69 | | mg/Kg dry | ☼ | 82 | 55 - 93 |
| Diethyl phthalate | ND | | 8.19 | 6.66 | | mg/Kg dry | ☼ | 81 | 58 - 100 |
| Dimethyl phthalate | ND | | 8.20 | 6.81 | | mg/Kg dry | ☼ | 83 | 59 - 100 |
| Di-n-butyl phthalate | ND | | 8.20 | 6.91 | | mg/Kg dry | ☼ | 83 | 58 - 106 |
| Di-n-octyl phthalate | ND | | 8.19 | 7.80 | | mg/Kg dry | ☼ | 95 | 58 - 113 |
| Fluoranthene | ND | | 8.19 | 6.47 | | mg/Kg dry | ☼ | 79 | 58 - 103 |
| Fluorene | ND | | 8.19 | 6.63 | | mg/Kg dry | ☼ | 81 | 58 - 97 |
| Hexachlorobenzene | ND | | 8.19 | 7.28 | | mg/Kg dry | ☼ | 89 | 59 - 105 |
| Hexachlorobutadiene | ND | | 8.19 | 6.94 | | mg/Kg dry | ☼ | 85 | 47 - 89 |
| Hexachlorocyclopentadiene | ND | | 8.20 | 8.90 | | mg/Kg dry | ☼ | 108 | 17 - 112 |
| Hexachloroethane | ND | | 8.19 | 6.74 | | mg/Kg dry | ☼ | 82 | 43 - 88 |
| Indeno[1,2,3-cd]pyrene | ND | | 8.19 | 8.44 | | mg/Kg dry | ☼ | 103 | 56 - 123 |
| Isophorone | ND | | 8.19 | 5.94 | | mg/Kg dry | ☼ | 73 | 52 - 84 |
| Naphthalene | ND | | 8.20 | 6.94 | | mg/Kg dry | ☼ | 85 | 52 - 86 |
| Nitrobenzene | ND | | 8.19 | 7.18 | | mg/Kg dry | ☼ | 88 | 52 - 90 |
| N-Nitrosodi-n-propylamine | ND | | 8.19 | 6.55 | | mg/Kg dry | ☼ | 80 | 55 - 99 |
| N-Nitrosodiphenylamine | ND | | 8.19 | 8.86 | | mg/Kg dry | ☼ | 108 | 52 - 131 |
| Pentachlorophenol | ND | | 8.20 | 7.26 | | mg/Kg dry | ☼ | 88 | 35 - 104 |
| Phenanthrene | ND | | 8.21 | 7.18 | | mg/Kg dry | ☼ | 87 | 60 - 98 |
| Phenol | ND | | 8.20 | 5.99 | | mg/Kg dry | ☼ | 73 | 43 - 90 |
| Pyrene | ND | | 8.19 | 7.77 | | mg/Kg dry | ☼ | 95 | 53 - 106 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 75961S**
**Matrix: Soil**
**Analysis Batch: 133620**

**Client Sample ID: Matrix Spike**
**Prep Type: Total**
**Prep Batch: 133620_P**

| *Surrogate* | *Matrix Spike %Recovery* | *Matrix Spike Qualifier* | *Limits* |
|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *80* | | *46 - 111* |
| *2-Fluorobiphenyl (Surr)* | *95* | | *56 - 97* |
| *2-Fluorophenol (Surr)* | *81* | | *53 - 97* |
| *Nitrobenzene-d5 (Surr)* | *88* | | *55 - 98* |
| *Phenol-d5 (Surr)* | *80* | | *54 - 101* |
| *Terphenyl-d14 (Surr)* | *89* | | *58 - 123* |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

## Client Sample ID: EX3-6-4 — Lab Sample ID: SXG0146-01

**Date Collected: 07/21/14 10:00** — **Matrix: Soil**
**Date Received: 07/22/14 09:55** — **Percent Solids: 92.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.986 | 14G0156_P | 07/22/14 10:56 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0156 | 07/22/14 14:11 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.932 | 14G0162_P | 07/23/14 10:49 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0162 | 07/23/14 18:07 | MS | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14G0178_P | 07/23/14 16:27 | MS | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14G0178 | 07/24/14 10:30 | MS | TAL SPK |

## Client Sample ID: EX4-1-6 — Lab Sample ID: SXG0146-02

**Date Collected: 07/21/14 12:30** — **Matrix: Soil**
**Date Received: 07/22/14 09:55** — **Percent Solids: 82.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.990 | 14G0156_P | 07/22/14 10:56 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0156 | 07/22/14 14:34 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.986 | 14G0162_P | 07/23/14 10:49 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0162 | 07/23/14 18:31 | MS | TAL SPK |

## Client Sample ID: EX4-2-6 — Lab Sample ID: SXG0146-03

**Date Collected: 07/21/14 12:40** — **Matrix: Soil**
**Date Received: 07/22/14 09:55** — **Percent Solids: 92.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.768 | 14G0156_P | 07/22/14 10:56 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0156 | 07/22/14 14:56 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.916 | 14G0162_P | 07/23/14 10:49 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0162 | 07/23/14 18:54 | MS | TAL SPK |

## Client Sample ID: EX4-3-6 — Lab Sample ID: SXG0146-04

**Date Collected: 07/21/14 12:50** — **Matrix: Soil**
**Date Received: 07/22/14 09:55** — **Percent Solids: 94.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.929 | 14G0156_P | 07/22/14 10:56 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0156 | 07/22/14 15:19 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.970 | 14G0162_P | 07/23/14 10:49 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0162 | 07/23/14 20:03 | MS | TAL SPK |

## Client Sample ID: EX4-4-6 — Lab Sample ID: SXG0146-05

**Date Collected: 07/21/14 13:00** — **Matrix: Soil**
**Date Received: 07/22/14 09:55** — **Percent Solids: 81.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.20 | 14G0156_P | 07/22/14 10:56 | CBW | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

## Client Sample ID: EX4-4-6

**Date Collected: 07/21/14 13:00**
**Date Received: 07/22/14 09:55**

## Lab Sample ID: SXG0146-05

**Matrix: Soil**
**Percent Solids: 81.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Analysis | EPA 8260C | | 1.00 | 14G0156 | 07/22/14 15:41 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.20 | 14G0156_P | 07/22/14 10:56 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0156 | 07/22/14 15:41 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.920 | 14G0162_P | 07/23/14 10:49 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0162 | 07/23/14 20:26 | MS | TAL SPK |
| Total | Prep | 3550C | | | 133620_P | 07/24/14 08:27 | | TAL SL |
| Total | Analysis | 8270D | | 1 | 133620 | 07/24/14 20:37 | JSW | TAL SL |
| Total | Analysis | Moisture | | 1 | 133616 | 07/24/14 08:08 | SDB | TAL SL |
| Total | Prep | NA | | | 133616_P | 07/24/14 08:08 | | TAL SL |

**Laboratory References:**

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL 314.298.8566

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Washington | State Program | 10 | C569 | 01-06-15 |

## Laboratory: TestAmerica St. Louis

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | MO00054 | 06-30-15 |
| California | NELAP | 9 | 2886 | 03-31-15 |
| Connecticut | State Program | 1 | PH-0241 | 03-31-15 |
| Florida | NELAP | 4 | E87689 | 06-30-15 |
| Illinois | NELAP | 5 | 200023 | 11-30-14 |
| Iowa | State Program | 7 | 373 | 12-01-14 |
| Kansas | NELAP | 7 | E-10236 | 10-31-14 |
| Kentucky (DW) | State Program | 4 | 90125 | 12-31-14 |
| L-A-B | DoD ELAP | | L2305 | 01-10-16 |
| Louisiana | NELAP | 6 | 04080 | 06-30-15 |
| Louisiana | NELAP | 6 | LA140007 | 12-31-14 |
| Maryland | State Program | 3 | 310 | 09-30-15 |
| Missouri | State Program | 7 | 780 | 06-30-15 |
| Nevada | State Program | 9 | MO000542013-1 | 07-31-15 |
| New Jersey | NELAP | 2 | MO002 | 06-30-15 |
| New York | NELAP | 2 | 11616 | 03-31-15 |
| North Dakota | State Program | 8 | R207 | 06-30-14 |
| NRC | NRC | | 24-24817-01 | 12-31-22 |
| Oklahoma | State Program | 6 | 9997 | 08-31-15 |
| Pennsylvania | NELAP | 3 | 68-00540 | 02-28-15 |
| South Carolina | State Program | 4 | 85002001 | 06-30-14 |
| Texas | NELAP | 6 | T104704193-13-6 | 07-31-15 |
| USDA | Federal | | P330-07-00122 | 01-09-17 |
| Utah | NELAP | 8 | MO000542013-5 | 07-31-15 |
| Virginia | NELAP | 3 | 460230 | 06-14-15 |
| Washington | State Program | 10 | C592 | 08-30-15 |
| West Virginia DEP | State Program | 3 | 381 | 12-31-14 |

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0146

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 8260C | Volatile Organic Compounds by EPA Methods 5035/8260C | | TAL SPK |
| NWTPH-Gx | Gasoline Hydrocarbons by NWTPH-Gx | | TAL SPK |
| NWTPH-Dx | Semivolatile Petroleum Products by NWTPH-Dx | | TAL SPK |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |
| 8270D | Semivolatile Organic Compounds (GC/MS) | | TAL SL |
| Moisture | Percent Moisture | | TAL SL |

**Protocol References:**

**Laboratory References:**

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL 314.298.8566

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 ☒
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

# CHAIN OF CUSTODY REPORT

Work Order #: SXG0146

CLIENT: GeoEngineers
REPORT TO: DLAUDER@GEOENGINEERS.COM
ADDRESS: 523 E Second Ave
Spokane WA 99202
PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO: Port of Chelan
P.O. NUMBER:

PROJECT NAME: Cashmere, WA
PROJECT NUMBER: 18593-001-04
SAMPLED BY: JML

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 STD. | 7 | 5 | 4 | 3 | ☒ | 1 | <1
Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | ☒ | 1 | <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | MWTPH-GX | MWTPH-DX | VOCs | SVOCs | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EX3-6-4 | 7/21/2014 1000 | X | X | | | S | 3 | | |
| 2 | EX4-1-6 | 1230 | X | X | | | | 3 | | |
| 3 | EX4-2-6 | 1240 | X | X | | | | 3 | | |
| 4 | EX4-3-6 | 1250 | X | X | | | | 3 | | |
| 5 | EX4-4-6 | 1300 | X | X | X | X | | 4 | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |

| | | | |
|---|---|---|---|
| RELEASED BY: Josh Lee | DATE: 7/21/2014 | RECEIVED BY: Cat Stapleton | DATE: 7-22-14 |
| PRINT NAME: | FIRM: GeoEngineers | PRINT NAME: | FIRM: TestAmerica |
| | TIME: 1610 | | TIME: 9:55 |
| RELEASED BY: | DATE: | RECEIVED BY: | DATE: |
| PRINT NAME: | FIRM: | PRINT NAME: | FIRM: |
| | TIME: | | TIME: |

ADDITIONAL REMARKS:

TEMP: 4.4

PAGE 1 OF 1

TAL-1000 (0612)

**TestAmerica Spokane**
**Sample Receipt Form**

| | | |
|---|---|---|
| **Work Order #:** SXG0146 | **Client:** GeoEngineers | **Project:** Cashmere, WA |
| Date/Time Received: 7-22-14 9:55 | By: CS | |

Samples Delivered By: ☑ Shipping Service ☐ Courier ☐ Client ☐ Other: _____

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | ✓ | | | |
| Custody Seals are present and intact: | | | ✓ | |
| Are CoC documents present: | ✓ | | | |
| Necessary signatures: | ✓ | | | |

Thermal Preservation Type: ☐ Blue Ice ☐ Gel Ice ☑ Real Ice ☐ Dry Ice ☐ None ☐ Other: _____

Temperature: 4.4 °C Thermometer (Circle **one** Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐ Not enough ice ☐ Ice melted ☐ w/in 4hrs of collection ☐ NA ☐ Other: _____

| Log-in Phase Date/Time: 7-22-14 10:08 By: CD | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | ✓ | | | |
| Samples containers were received intact: | ✓ | | | |
| Do sample IDs match the CoC | ✓ | | | |
| Appropriate sample containers were received for tests requested | ✓ | | | |
| Are sample volumes adequate for tests requested | ✓ | | | |
| Appropriate preservatives were used for the tests requested | ✓ | | | |
| pH of inorganic samples checked and is within method specification | ✓ | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | ✓ | | | |
| Are dissolved parameters field filtered | | | ✓ | |
| Do any samples need to be filtered or preserved by the lab | | | ✓ | |
| Does this project require quick turnaround analysis | ✓ | | ~~✓~~ | 2days |
| Are there any short hold time tests (see chart below) | | ✓ | | |
| Are any samples within 2 days of or past expiration | | ✓ | | |
| Was the CoC scanned | ✓ | | | |
| Were there Non-conformance issues at login | | ✓ | | |
| If yes, was a CAR generated # _____ | | | ✓ | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

**Form No. SP-FORM-SPL-002 12 December 2012**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXG0152
Client Project/Site: 18593-001-04
Client Project Description: Cashmere, WA

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*7/31/2014 3:54:05 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*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: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXG0152-01 | EX5-1-8 | Soil | 07/22/14 14:00 | 07/23/14 09:50 |
| SXG0152-02 | EX5-2-8 | Soil | 07/22/14 14:10 | 07/23/14 09:50 |
| SXG0152-03 | EX5-3-8 | Soil | 07/22/14 14:30 | 07/23/14 09:50 |
| SXG0152-04 | EX5-4-8 | Soil | 07/22/14 14:50 | 07/23/14 09:50 |
| SXG0152-07 | EX5-7-8 | Soil | 07/22/14 15:20 | 07/23/14 09:50 |
| SXG0152-08 | EX5-8-8 | Soil | 07/22/14 15:25 | 07/23/14 09:50 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

## Qualifiers

### GCMS Volatiles

| Qualifier | Qualifier Description |
|---|---|
| ZX | Due to sample matrix effects, the surrogate recovery was outside the acceptance limits. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

## Client Sample ID: EX5-1-8

**Lab Sample ID: SXG0152-01**
**Date Collected: 07/22/14 14:00**
**Matrix: Soil**
**Date Received: 07/23/14 09:50**
**Percent Solids: 92.5**

### Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| 2-Methylnaphthalene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| 1-Methylnaphthalene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Acenaphthylene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Acenaphthene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Fluorene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Phenanthrene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Anthracene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Fluoranthene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Pyrene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Benzo (a) anthracene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Chrysene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Benzo (b) fluoranthene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Benzo (k) fluoranthene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Benzo (a) pyrene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Indeno (1,2,3-cd) pyrene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Dibenzo (a,h) anthracene | ND | | 0.00638 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |
| Benzo (ghi) perylene | ND | | 0.0106 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 16:27 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *75.4* | | *36.3 - 152* | *07/24/14 08:26* | *07/24/14 16:27* | *1.00* |
| *2-FBP* | *68.4* | | *30.2 - 135* | *07/24/14 08:26* | *07/24/14 16:27* | *1.00* |
| *p-Terphenyl-d14* | *83.4* | | *65.1 - 134* | *07/24/14 08:26* | *07/24/14 16:27* | *1.00* |

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 47.2 | | ug/kg dry | ☼ | 07/25/14 08:18 | 07/25/14 13:55 | 1.00 |

## Client Sample ID: EX5-2-8

**Lab Sample ID: SXG0152-02**
**Date Collected: 07/22/14 14:10**
**Matrix: Soil**
**Date Received: 07/23/14 09:50**
**Percent Solids: 93.9**

### Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| 2-Methylnaphthalene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| 1-Methylnaphthalene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Acenaphthylene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Acenaphthene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Fluorene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Phenanthrene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Anthracene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Fluoranthene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Pyrene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Benzo (a) anthracene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Chrysene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Benzo (b) fluoranthene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Benzo (k) fluoranthene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Benzo (a) pyrene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Indeno (1,2,3-cd) pyrene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

## Client Sample ID: EX5-2-8

**Lab Sample ID: SXG0152-02**

**Date Collected: 07/22/14 14:10**
**Matrix: Soil**
**Date Received: 07/23/14 09:50**
**Percent Solids: 93.9**

### Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dibenzo (a,h) anthracene | ND | | 0.00628 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |
| Benzo (ghi) perylene | ND | | 0.0105 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:34 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *104* | | *36.3 - 152* | *07/24/14 08:26* | *07/24/14 17:34* | *1.00* |
| *2-FBP* | *77.0* | | *30.2 - 135* | *07/24/14 08:26* | *07/24/14 17:34* | *1.00* |
| *p-Terphenyl-d14* | *87.6* | | *65.1 - 134* | *07/24/14 08:26* | *07/24/14 17:34* | *1.00* |

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 44.6 | | ug/kg dry | ☼ | 07/25/14 08:18 | 07/25/14 14:04 | 1.00 |

## Client Sample ID: EX5-3-8

**Lab Sample ID: SXG0152-03**

**Date Collected: 07/22/14 14:30**
**Matrix: Soil**
**Date Received: 07/23/14 09:50**
**Percent Solids: 91.9**

### Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| 2-Methylnaphthalene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| 1-Methylnaphthalene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Acenaphthylene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Acenaphthene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Fluorene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Phenanthrene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Anthracene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Fluoranthene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Pyrene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Benzo (a) anthracene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Chrysene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Benzo (b) fluoranthene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Benzo (k) fluoranthene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Benzo (a) pyrene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Indeno (1,2,3-cd) pyrene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Dibenzo (a,h) anthracene | ND | | 0.00650 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |
| Benzo (ghi) perylene | ND | | 0.0108 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 17:56 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *97.2* | | *36.3 - 152* | *07/24/14 08:26* | *07/24/14 17:56* | *1.00* |
| *2-FBP* | *78.4* | | *30.2 - 135* | *07/24/14 08:26* | *07/24/14 17:56* | *1.00* |
| *p-Terphenyl-d14* | *87.4* | | *65.1 - 134* | *07/24/14 08:26* | *07/24/14 17:56* | *1.00* |

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 44.6 | | ug/kg dry | ☼ | 07/25/14 08:18 | 07/25/14 14:06 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

## Client Sample ID: EX5-4-8

**Date Collected: 07/22/14 14:50**
**Date Received: 07/23/14 09:50**

## Lab Sample ID: SXG0152-04

**Matrix: Soil**
**Percent Solids: 83.5**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.0158 | | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 11:23 | 1.00 |
| Toluene | ND | | 0.105 | | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 11:23 | 1.00 |
| Ethylbenzene | ND | | 0.105 | | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 11:23 | 1.00 |
| m,p-Xylene | ND | | 0.421 | | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 11:23 | 1.00 |
| o-Xylene | ND | | 0.211 | | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 11:23 | 1.00 |
| Xylenes (total) | ND | | 0.632 | | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 11:23 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *102* | | *80 - 120* | *07/24/14 11:15* | *07/24/14 11:23* | *1.00* |
| *1,2-dichloroethane-d4* | *101* | | *74.7 - 120* | *07/24/14 11:15* | *07/24/14 11:23* | *1.00* |
| *Toluene-d8* | *92.3* | | *78.5 - 125* | *07/24/14 11:15* | *07/24/14 11:23* | *1.00* |
| *4-bromofluorobenzene* | *190* | *ZX* | *69.8 - 140* | *07/24/14 11:15* | *07/24/14 11:23* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **164** | | 5.27 | | mg/kg dry | ☼ | 07/24/14 08:07 | 07/24/14 11:23 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *169* | *ZX* | *41.5 - 162* | *07/24/14 08:07* | *07/24/14 11:23* | *1.00* |

### Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Naphthalene** | **0.201** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **2-Methylnaphthalene** | **0.178** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **1-Methylnaphthalene** | **0.422** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| Acenaphthylene | ND | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| Acenaphthene | ND | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **Fluorene** | **0.0341** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **Phenanthrene** | **0.0728** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **Anthracene** | **0.0225** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **Fluoranthene** | **0.0317** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **Pyrene** | **0.0286** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **Benzo (a) anthracene** | **0.0116** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **Chrysene** | **0.0194** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **Benzo (b) fluoranthene** | **0.0255** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| Benzo (k) fluoranthene | ND | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **Benzo (a) pyrene** | **0.0194** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **Indeno (1,2,3-cd) pyrene** | **0.0147** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| Dibenzo (a,h) anthracene | ND | | 0.00697 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |
| **Benzo (ghi) perylene** | **0.0194** | | 0.0116 | | mg/kg dry | ☼ | 07/24/14 08:26 | 07/24/14 18:41 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *118* | | *36.3 - 152* | *07/24/14 08:26* | *07/24/14 18:41* | *1.00* |
| *2-FBP* | *73.4* | | *30.2 - 135* | *07/24/14 08:26* | *07/24/14 18:41* | *1.00* |
| *p-Terphenyl-d14* | *78.8* | | *65.1 - 134* | *07/24/14 08:26* | *07/24/14 18:41* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **289** | | 21.4 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 20:48 | 1.00 |
| **Heavy Oil Range Hydrocarbons** | **203** | | 53.4 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 20:48 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

## Client Sample ID: EX5-4-8 — Lab Sample ID: SXG0152-04

**Date Collected: 07/22/14 14:50** — **Matrix: Soil**
**Date Received: 07/23/14 09:50** — **Percent Solids: 83.5**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 102 | | 50 - 150 | 07/23/14 10:49 | 07/23/14 20:48 | 1.00 |
| n-Triacontane-d62 | 91.1 | | 50 - 150 | 07/23/14 10:49 | 07/23/14 20:48 | 1.00 |

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 43.1 | | ug/kg dry | ☼ | 07/25/14 08:18 | 07/25/14 14:08 | 1.00 |

## Client Sample ID: EX5-7-8 — Lab Sample ID: SXG0152-07

**Date Collected: 07/22/14 15:20** — **Matrix: Soil**
**Date Received: 07/23/14 09:50** — **Percent Solids: 92.3**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 5.43 | | 5.04 | | mg/kg dry | ☼ | 07/24/14 08:07 | 07/24/14 17:48 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 98.7 | | 41.5 - 162 | 07/24/14 08:07 | 07/24/14 17:48 | 1.00 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.5 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 21:11 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 26.3 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 21:11 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 96.6 | | 50 - 150 | 07/23/14 10:49 | 07/23/14 21:11 | 1.00 |
| n-Triacontane-d62 | 93.1 | | 50 - 150 | 07/23/14 10:49 | 07/23/14 21:11 | 1.00 |

## Client Sample ID: EX5-8-8 — Lab Sample ID: SXG0152-08

**Date Collected: 07/22/14 15:25** — **Matrix: Soil**
**Date Received: 07/23/14 09:50** — **Percent Solids: 94.2**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 6.29 | | 4.60 | | mg/kg dry | ☼ | 07/24/14 08:07 | 07/24/14 12:08 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 102 | | 41.5 - 162 | 07/24/14 08:07 | 07/24/14 12:08 | 1.00 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 7.63 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 21:34 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 19.1 | | mg/kg dry | ☼ | 07/23/14 10:49 | 07/23/14 21:34 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 101 | | 50 - 150 | 07/23/14 10:49 | 07/23/14 21:34 | 1.00 |
| n-Triacontane-d62 | 91.1 | | 50 - 150 | 07/23/14 10:49 | 07/23/14 21:34 | 1.00 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

## Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

**Lab Sample ID: 14G0166-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0166** — **Prep Batch: 14G0166_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 0.0300 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Benzene | ND | | 0.0150 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Toluene | ND | | 0.100 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Ethylbenzene | ND | | 0.100 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| m,p-Xylene | ND | | 0.400 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| o-Xylene | ND | | 0.200 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Naphthalene | ND | | 0.200 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.100 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.100 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Xylenes (total) | ND | | 0.600 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Hexane | ND | | 0.100 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *105* | | *80 - 120* | *07/24/14 08:07* | *07/24/14 09:52* | *1.00* |
| *1,2-dichloroethane-d4* | *103* | | *74.7 - 120* | *07/24/14 08:07* | *07/24/14 09:52* | *1.00* |
| *Toluene-d8* | *103* | | *78.5 - 125* | *07/24/14 08:07* | *07/24/14 09:52* | *1.00* |
| *4-bromofluorobenzene* | *99.1* | | *69.8 - 140* | *07/24/14 08:07* | *07/24/14 09:52* | *1.00* |

**Lab Sample ID: 14G0166-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0166** — **Prep Batch: 14G0166_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | 0.500 | 0.582 | | mg/kg wet | | 116 | 60 - 140 |
| Benzene | 0.500 | 0.520 | | mg/kg wet | | 104 | 75.8 - 123 |
| Toluene | 0.500 | 0.546 | | mg/kg wet | | 109 | 76.6 - 125 |
| Ethylbenzene | 0.500 | 0.534 | | mg/kg wet | | 107 | 77.3 - 121 |
| m,p-Xylene | 0.500 | 0.538 | | mg/kg wet | | 108 | 77.7 - 124 |
| o-Xylene | 0.500 | 0.562 | | mg/kg wet | | 112 | 76.7 - 129 |
| Naphthalene | 0.500 | 0.546 | | mg/kg wet | | 109 | 55.1 - 142 |
| Xylenes (total) | 1.00 | 1.10 | | mg/kg wet | | 110 | 76.5 - 124 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *103* | | *80 - 120* |
| *1,2-dichloroethane-d4* | *105* | | *74.7 - 120* |
| *Toluene-d8* | *102* | | *78.5 - 125* |
| *4-bromofluorobenzene* | *101* | | *69.8 - 140* |

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

**Lab Sample ID: 14G0166-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0166** — **Prep Batch: 14G0166_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.00 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx (Continued)

**Lab Sample ID: 14G0166-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0166** — **Prep Batch: 14G0166_P**

| Surrogate | Blank %Recovery | Blank Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 99.1 | | 41.5 - 162 | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |

**Lab Sample ID: 14G0166-BS2** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0166** — **Prep Batch: 14G0166_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 50.0 | 49.4 | | mg/kg wet | | 98.8 | 74.4 - 124 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 4-bromofluorobenzene | 98.2 | | 41.5 - 162 |

## Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

**Lab Sample ID: 14G0173-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0173** — **Prep Batch: 14G0173_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| 2-Methylnaphthalene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| 1-Methylnaphthalene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Acenaphthylene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Acenaphthene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Fluorene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Phenanthrene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Anthracene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Fluoranthene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Pyrene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Benzo (a) anthracene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Chrysene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Benzo (b) fluoranthene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Benzo (k) fluoranthene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Benzo (a) pyrene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Indeno (1,2,3-cd) pyrene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Dibenzo (a,h) anthracene | ND | | 0.00600 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| Benzo (ghi) perylene | ND | | 0.0100 | | mg/kg wet | | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |

| Surrogate | Blank %Recovery | Blank Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 103 | | 36.3 - 152 | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| 2-FBP | 82.0 | | 30.2 - 135 | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |
| p-Terphenyl-d14 | 94.4 | | 65.1 - 134 | 07/24/14 08:26 | 07/24/14 16:04 | 1.00 |

## Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring (Continued)

**Lab Sample ID: 14G0173-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0173** — **Prep Batch: 14G0173_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Naphthalene | 0.133 | 0.119 | | mg/kg wet | | 89.0 | 62.7 - 120 |
| Fluorene | 0.133 | 0.115 | | mg/kg wet | | 86.5 | 67.9 - 124 |
| Chrysene | 0.133 | 0.123 | | mg/kg wet | | 92.5 | 68.2 - 132 |
| Indeno (1,2,3-cd) pyrene | 0.133 | 0.137 | | mg/kg wet | | 103 | 52.6 - 149 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrobenzene-d5* | *88.6* | | *36.3 - 152* |
| *2-FBP* | *74.6* | | *30.2 - 135* |
| *p-Terphenyl-d14* | *90.6* | | *65.1 - 134* |

**Lab Sample ID: 14G0173-MS1** — **Client Sample ID: EX5-1-8**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0173** — **Prep Batch: 14G0173_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 0.156 | 0.126 | | mg/kg dry | ☼ | 80.5 | 30 - 120 |
| Fluorene | ND | | 0.156 | 0.119 | | mg/kg dry | ☼ | 76.0 | 30 - 140 |
| Chrysene | ND | | 0.156 | 0.136 | | mg/kg dry | ☼ | 87.0 | 30 - 133 |
| Indeno (1,2,3-cd) pyrene | ND | | 0.156 | 0.170 | | mg/kg dry | ☼ | 109 | 30 - 140 |

| *Surrogate* | *Matrix Spike %Recovery* | *Matrix Spike Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrobenzene-d5* | *94.0* | | *36.3 - 152* |
| *2-FBP* | *69.2* | | *30.2 - 135* |
| *p-Terphenyl-d14* | *82.6* | | *65.1 - 134* |

**Lab Sample ID: 14G0173-MSD1** — **Client Sample ID: EX5-1-8**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0173** — **Prep Batch: 14G0173_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 0.153 | 0.0894 | | mg/kg dry | ☼ | 58.5 | 30 - 120 | 33.8 | 35 |
| Fluorene | ND | | 0.153 | 0.130 | | mg/kg dry | ☼ | 85.0 | 30 - 140 | 8.93 | 35 |
| Chrysene | ND | | 0.153 | 0.137 | | mg/kg dry | ☼ | 89.5 | 30 - 133 | 0.582 | 35 |
| Indeno (1,2,3-cd) pyrene | ND | | 0.153 | 0.134 | | mg/kg dry | ☼ | 87.5 | 30 - 140 | 24.1 | 35 |

| *Surrogate* | *Matrix Spike Dup %Recovery* | *Matrix Spike Dup Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrobenzene-d5* | *71.2* | | *36.3 - 152* |
| *2-FBP* | *65.6* | | *30.2 - 135* |
| *p-Terphenyl-d14* | *88.6* | | *65.1 - 134* |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

**Lab Sample ID: 14G0162-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0162** — **Prep Batch: 14G0162_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.0 | | mg/kg wet | | 07/23/14 10:16 | 07/23/14 12:33 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.0 | | mg/kg wet | | 07/23/14 10:16 | 07/23/14 12:33 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *91.9* | | *50 - 150* | *07/23/14 10:16* | *07/23/14 12:33* | *1.00* |
| *n-Triacontane-d62* | *85.0* | | *50 - 150* | *07/23/14 10:16* | *07/23/14 12:33* | *1.00* |

**Lab Sample ID: 14G0162-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0162** — **Prep Batch: 14G0162_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | | | 66.7 | 59.2 | | mg/kg wet | | 88.7 | 50 - 150 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *98.3* | | *50 - 150* |
| *n-Triacontane-d62* | *86.3* | | *50 - 150* |

**Lab Sample ID: 14G0162-DUP1** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0162** — **Prep Batch: 14G0162_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 13.9 | | | 11.9 | | mg/kg dry | ☼ | | | 16.0 | 40 |
| Heavy Oil Range Hydrocarbons | 47.3 | | | 39.8 | | mg/kg dry | ☼ | | | 17.3 | 40 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *86.5* | | *50 - 150* |
| *n-Triacontane-d62* | *84.4* | | *50 - 150* |

**Lab Sample ID: 14G0162-DUP2** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0162** — **Prep Batch: 14G0162_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 23.9 | | | 25.5 | | mg/kg dry | ☼ | | | 6.72 | 40 |
| Heavy Oil Range Hydrocarbons | 29.7 | | | 31.7 | | mg/kg dry | ☼ | | | 6.74 | 40 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *96.3* | | *50 - 150* |
| *n-Triacontane-d62* | *92.1* | | *50 - 150* |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

## Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

**Lab Sample ID: 14G0187-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0187** — **Prep Batch: 14G0187_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 50.0 | | ug/kg wet | | 07/25/14 08:18 | 07/25/14 13:52 | 1.00 |

**Lab Sample ID: 14G0187-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0187** — **Prep Batch: 14G0187_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 200 | 200 | | ug/kg wet | | 100 | 80 - 120 | | |

**Lab Sample ID: 14G0187-MS1** — **Client Sample ID: EX5-1-8**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0187** — **Prep Batch: 14G0187_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 186 | 197 | | ug/kg dry | ☼ | 106 | 80 - 120 | | |

**Lab Sample ID: 14G0187-MSD1** — **Client Sample ID: EX5-1-8**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0187** — **Prep Batch: 14G0187_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | trix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 166 | 175 | | ug/kg dry | ☼ | 106 | 80 - 120 | 11.4 | 20 |

**Lab Sample ID: 14G0187-DUP1** — **Client Sample ID: EX5-1-8**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0187** — **Prep Batch: 14G0187_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | | ND | | ug/kg dry | ☼ | | | | 40 |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

## Client Sample ID: EX5-1-8 — Lab Sample ID: SXG0152-01

**Date Collected: 07/22/14 14:00** — **Matrix: Soil**
**Date Received: 07/23/14 09:50** — **Percent Solids: 92.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 3550B | | 0.984 | 14G0173_P | 07/24/14 08:26 | MS | TAL SPK |
| Total | Analysis | EPA 8270D | | 1.00 | 14G0173 | 07/24/14 16:27 | MRS | TAL SPK |
| Total | Prep | EPA 7471 | | 0.943 | 14G0187_P | 07/25/14 08:18 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0187 | 07/25/14 13:55 | ZZZ | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14G0178_P | 07/23/14 16:27 | MS | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14G0178 | 07/24/14 10:30 | MS | TAL SPK |

## Client Sample ID: EX5-2-8 — Lab Sample ID: SXG0152-02

**Date Collected: 07/22/14 14:10** — **Matrix: Soil**
**Date Received: 07/23/14 09:50** — **Percent Solids: 93.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 3550B | | 0.983 | 14G0173_P | 07/24/14 08:26 | MS | TAL SPK |
| Total | Analysis | EPA 8270D | | 1.00 | 14G0173 | 07/24/14 17:34 | MRS | TAL SPK |
| Total | Prep | EPA 7471 | | 0.893 | 14G0187_P | 07/25/14 08:18 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0187 | 07/25/14 14:04 | ZZZ | TAL SPK |

## Client Sample ID: EX5-3-8 — Lab Sample ID: SXG0152-03

**Date Collected: 07/22/14 14:30** — **Matrix: Soil**
**Date Received: 07/23/14 09:50** — **Percent Solids: 91.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 3550B | | 0.995 | 14G0173_P | 07/24/14 08:26 | MS | TAL SPK |
| Total | Analysis | EPA 8270D | | 1.00 | 14G0173 | 07/24/14 17:56 | MRS | TAL SPK |
| Total | Prep | EPA 7471 | | 0.893 | 14G0187_P | 07/25/14 08:18 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0187 | 07/25/14 14:06 | ZZZ | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14G0190_P | 07/24/14 13:40 | MS | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14G0190 | 07/25/14 15:05 | MS | TAL SPK |

## Client Sample ID: EX5-4-8 — Lab Sample ID: SXG0152-04

**Date Collected: 07/22/14 14:50** — **Matrix: Soil**
**Date Received: 07/23/14 09:50** — **Percent Solids: 83.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.714 | 14G0166_P | 07/24/14 11:15 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14G0166 | 07/24/14 11:23 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.714 | 14G0166_P | 07/24/14 08:07 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0166 | 07/24/14 11:23 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.970 | 14G0173_P | 07/24/14 08:26 | MS | TAL SPK |
| Total | Analysis | EPA 8270D | | 1.00 | 14G0173 | 07/24/14 18:41 | MRS | TAL SPK |
| Total | Prep | EPA 3550B | | 1.78 | 14G0162_P | 07/23/14 10:49 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0162 | 07/23/14 20:48 | MS | TAL SPK |
| Total | Prep | EPA 7471 | | 0.862 | 14G0187_P | 07/25/14 08:18 | JSP | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

## Client Sample ID: EX5-4-8 — Lab Sample ID: SXG0152-04

**Date Collected: 07/22/14 14:50** — **Matrix: Soil**
**Date Received: 07/23/14 09:50** — **Percent Solids: 83.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Analysis | EPA 7471B | | 1.00 | 14G0187 | 07/25/14 14:08 | ZZZ | TAL SPK |

## Client Sample ID: EX5-7-8 — Lab Sample ID: SXG0152-07

**Date Collected: 07/22/14 15:20** — **Matrix: Soil**
**Date Received: 07/23/14 09:50** — **Percent Solids: 92.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.853 | 14G0166_P | 07/24/14 08:07 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0166 | 07/24/14 17:48 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.970 | 14G0162_P | 07/23/14 10:49 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0162 | 07/23/14 21:11 | MS | TAL SPK |

## Client Sample ID: EX5-8-8 — Lab Sample ID: SXG0152-08

**Date Collected: 07/22/14 15:25** — **Matrix: Soil**
**Date Received: 07/23/14 09:50** — **Percent Solids: 94.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.808 | 14G0166_P | 07/24/14 08:07 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0166 | 07/24/14 12:08 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.719 | 14G0162_P | 07/23/14 10:49 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0162 | 07/23/14 21:34 | MS | TAL SPK |

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-071 | 10-31-14 |
| Washington | State Program | 10 | C569 | 01-06-15 |

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0152

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 8260C | Volatile Organic Compounds by EPA Method 8260C | | TAL SPK |
| NWTPH-Gx | Gasoline Hydrocarbons by NWTPH-Gx | | TAL SPK |
| EPA 8270D | Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring | | TAL SPK |
| NWTPH-Dx | Semivolatile Petroleum Products by NWTPH-Dx | | TAL SPK |
| EPA 7471B | Total Metals by EPA 6010/7000 Series Methods | | TAL SPK |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 X
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

# CHAIN OF CUSTODY REPORT

Work Order #: SXG0152

CLIENT: Geo Engineers
REPORT TO: 523 E Second Ave
ADDRESS: Spokane, WA 99202
PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO: Port of Chelan

P.O. NUMBER:

PROJECT NAME: Cashmere, WA
PROJECT NUMBER: 18593-001-04
SAMPLED BY: JML

**TURNAROUND REQUEST** in Business Days *

Organic & Inorganic Analyses: 10 (STD.) 7 5 4 3 X 1 <1

Petroleum Hydrocarbon Analyses: 5 (STD.) 4 3 X 1 <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NWTPH Gx | NWTPH Dx | Hg | [illegible] | PAHs | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EX5-1-8 | 7/22/2014 1400 | | | X | | X | S | 4 | | |
| 2 | EX5-2-8 | 1410 | | | X | | X | | | | |
| 3 | EX5-3-8 | 1430 | | | X | | X | | | | |
| 4 | EX5-4-8 | 1450 | X | X | X | | X | | | | |
| 5 | EX5-5-8 | 1500 | | | | | | | | hold | |
| 6 | EX5-6-8 | 1510 | | | | | | | | hold | |
| 7 | EX5-7-8 | 1520 | X | X | | | | | | | |
| 8 | EX5-8-8 | 1525 | X | X | | | | | | | |
| 9 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |

RELEASED BY: [signature] DATE: 7/22/2014
PRINT NAME: Josh Lee FIRM: Geo TIME: 1600

RECEIVED BY: DATE: 7-23-14
PRINT NAME: Cat Stapleton FIRM: TestAmerica TIME: 950

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 6.9 PAGE 1 OF 1

TAL-1000 (0612)



7/31/2014

# TestAmerica Spokane
## Sample Receipt Form

| | | |
|---|---|---|
| **Work Order #:** SXG0152 | **Client:** Geo Engineers | **Project:** Cashmere, WA |
| Date/Time Received: 7-23-14 9:50 | By: CS | |

Samples Delivered By: ☒ Shipping Service ☐ Courier ☐ Client ☐ Other: _____

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | ✓ | | | |
| Custody Seals are present and intact: | | | ✓ | |
| Are CoC documents present: | ✓ | | | |
| Necessary signatures: | ✓ | | | |

Thermal Preservation Type: ☐ Blue Ice ☐ Gel Ice ☒ Real Ice ☐ Dry Ice ☐ None ☐ Other: _____

Temperature: 6.9 °C Thermometer (Circle **one** Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☒ Not enough ice ☒ Ice melted ☐ w/in 4hrs of collection ☐ NA ☐ Other: _____

| Log-In Phase Date/Time: 7-23-14 10:18 By: CS | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | ✓ | | | |
| Samples containers were received intact: | ✓ | | | |
| Do sample IDs match the CoC | ✓ | | | |
| Appropriate sample containers were received for tests requested | ✓ | | | |
| Are sample volumes adequate for tests requested | ✓ | | | |
| Appropriate preservatives were used for the tests requested | ✓ | | | |
| pH of inorganic samples checked and is within method specification | | | ✓ | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | | | ✓ | |
| Are dissolved parameters field filtered | | ✓ | | |
| Do any samples need to be filtered or preserved by the lab | | ✓ | | |
| Does this project require quick turnaround analysis | ✓ | | | 2 days |
| Are there any short hold time tests (see chart below) | | ✓ | | |
| Are any samples within 2 days of or past expiration | | ✓ | | |
| Was the CoC scanned | ✓ | | | |
| Were there Non-conformance issues at login | | ✓ | | |
| If yes, was a CAR generated # _____ | | | ✓ | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

**Form No. SP-FORM-SPL-002 12 December 2012**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXG0169
Client Project/Site: 18593-001-04
Client Project Description: Cashmere, WA
Revision: 1

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*11/7/2014 10:13:52 AM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*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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## Job ID: SXG0169

**Laboratory: TestAmerica Spokane**

**Narrative**

**Revision1:** The 8270 SVOC was initially evaluated and reported down to the MDL. Per the client's request the data has be re-evaluated to the RL (reporting limit) only and the data is reflected in the amended report. This final report replaces the final report generated on 08/04/2014.

**Laboratory: TestAmerica St. Louis**

**Narrative**

# CASE NARRATIVE

## Client: TestAmerica Laboratories, Inc

## Project: Analytical Subcontract

## Report Number: 160-7628-1

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 St. Louis 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 described 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 for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

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

**Revision 1 and 2-** Client requested data to be reported to RL rather than MDL.

**RECEIPT**

The samples were received on 07/25/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.7 C.

**SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS)**

Sample SXG0169-06 (160-7628-1) was analyzed for Semivolatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 07/25/2014 and analyzed on 07/27/2014.

## Job ID: SXG0169 (Continued)

### Laboratory: TestAmerica St. Louis (Continued)

The laboratory control sample (LCS) for batch 134230 recovered outside control limits for 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, and Hexachlorocyclopentadiene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. (LCS 160-133955/2-A)

The MS/MSD recoveries are outside the upper QC limit, indicating a potential positive bias for that analytes. These analytes were not detected above the reporting limit in the associated samples; therefore the sample data was not adversely affected by this excursion. The original sample results are provided. (160-7628-1 MS), (160-7628-1 MSD)

Surrogate recoveries for the following samples were outside the upper control limit: (160-7628-1 MS), (160-7628-1 MSD), (LCS 160-133955/2-A), SXG0169-06 (160-7628-1). These samples did not contain any target analytes (except for QC); therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**PERCENT SOLIDS**

Sample SXG0169-06 (160-7628-1) was analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 07/27/2014.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Sample Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0169

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXG0169-01 | EX6-1-3 | Soil | 07/23/14 12:40 | 07/24/14 10:15 |
| SXG0169-02 | EX6-2-3 | Soil | 07/23/14 12:50 | 07/24/14 10:15 |
| SXG0169-03 | EX6-3-3 | Soil | 07/23/14 13:00 | 07/24/14 10:15 |
| SXG0169-04 | EX6-4-3 | Soil | 07/23/14 13:05 | 07/24/14 10:15 |
| SXG0169-05 | EX6-5-3 | Soil | 07/23/14 13:10 | 07/24/14 10:15 |
| SXG0169-06 | EX6-6-3 | Soil | 07/23/14 13:15 | 07/24/14 10:15 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0169

## Qualifiers

### GCMS Volatiles

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| S2 | Compound is a common lab solvent and contaminant. |

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD exceeds the control limits |
| X | Surrogate is outside control limits |
| F1 | MS and/or MSD Recovery exceeds the control limits |

### Fuels

| Qualifier | Qualifier Description |
|---|---|
| ZX | Due to sample matrix effects, the surrogate recovery was outside the acceptance limits. |
| Z3 | The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0169

## Client Sample ID: EX6-1-3 — Lab Sample ID: SXG0169-01

**Date Collected: 07/23/14 12:40** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 86.9**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 6.21 | | 5.01 | | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 14:47 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *98.5* | | *41.5 - 162* | *07/24/14 11:15* | *07/24/14 14:47* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 31.6 | | 11.5 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/25/14 15:08 | 1.00 |
| Heavy Oil Range Hydrocarbons | 55.7 | | 28.8 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/25/14 15:08 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *97.2* | | *50 - 150* | *07/25/14 10:39* | *07/25/14 15:08* | *1.00* |
| *n-Triacontane-d62* | *89.2* | | *50 - 150* | *07/25/14 10:39* | *07/25/14 15:08* | *1.00* |

## Client Sample ID: EX6-2-3 — Lab Sample ID: SXG0169-02

**Date Collected: 07/23/14 12:50** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 86.2**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 7.56 | | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 15:10 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *106* | | *41.5 - 162* | *07/24/14 11:15* | *07/24/14 15:10* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 419 | | 58.0 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/25/14 15:55 | 5.00 |
| Heavy Oil Range Hydrocarbons | 1480 | | 145 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/25/14 15:55 | 5.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *97.2* | | *50 - 150* | *07/25/14 10:39* | *07/25/14 15:55* | *5.00* |
| *n-Triacontane-d62* | *169* | *ZX* | *50 - 150* | *07/25/14 10:39* | *07/25/14 15:55* | *5.00* |

## Client Sample ID: EX6-3-3 — Lab Sample ID: SXG0169-03

**Date Collected: 07/23/14 13:00** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 90.8**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.70 | | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 15:32 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *99.2* | | *41.5 - 162* | *07/24/14 11:15* | *07/24/14 15:32* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 65.7 | | 11.0 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/25/14 16:41 | 1.00 |
| Heavy Oil Range Hydrocarbons | 207 | | 27.5 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/25/14 16:41 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *110* | | *50 - 150* | *07/25/14 10:39* | *07/25/14 16:41* | *1.00* |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0169

## Client Sample ID: EX6-3-3 — Lab Sample ID: SXG0169-03

**Date Collected: 07/23/14 13:00** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 90.8**

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx (Continued)

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| n-Triacontane-d62 | 91.8 | | 50 - 150 | 07/25/14 10:39 | 07/25/14 16:41 | 1.00 |

## Client Sample ID: EX6-4-3 — Lab Sample ID: SXG0169-04

**Date Collected: 07/23/14 13:05** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 86**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 11.0 | | 6.19 | | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 15:55 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 99.8 | | 41.5 - 162 | 07/24/14 11:15 | 07/24/14 15:55 | 1.00 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 68.0 | | 11.6 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/25/14 17:05 | 1.00 |
| Heavy Oil Range Hydrocarbons | 131 | | 29.1 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/25/14 17:05 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 101 | | 50 - 150 | 07/25/14 10:39 | 07/25/14 17:05 | 1.00 |
| n-Triacontane-d62 | 94.7 | | 50 - 150 | 07/25/14 10:39 | 07/25/14 17:05 | 1.00 |

## Client Sample ID: EX6-5-3 — Lab Sample ID: SXG0169-05

**Date Collected: 07/23/14 13:10** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 92.1**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 4.96 | | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:17 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 99.5 | | 41.5 - 162 | 07/24/14 11:15 | 07/24/14 16:17 | 1.00 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.9 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/25/14 17:28 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 27.1 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/25/14 17:28 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 103 | | 50 - 150 | 07/25/14 10:39 | 07/25/14 17:28 | 1.00 |
| n-Triacontane-d62 | 91.0 | | 50 - 150 | 07/25/14 10:39 | 07/25/14 17:28 | 1.00 |

## Client Sample ID: EX6-6-3 — Lab Sample ID: SXG0169-06

**Date Collected: 07/23/14 13:15** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 73.8**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.144 | 0.0134 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Chloromethane | ND | | 0.721 | 0.00765 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Vinyl chloride | ND | | 0.0866 | 0.00894 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0169

## Client Sample ID: EX6-6-3

**Date Collected: 07/23/14 13:15**
**Date Received: 07/24/14 10:15**

## Lab Sample ID: SXG0169-06

**Matrix: Soil**
**Percent Solids: 73.8**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromomethane | ND | | 0.721 | 0.0441 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Chloroethane | ND | | 0.144 | 0.0353 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0433 | 0.0114 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.144 | 0.0183 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Carbon disulfide | ND | | 0.144 | 0.0154 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| **Methylene chloride** | **0.0563** | **S2 J** | 0.289 | 0.00750 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| **Acetone** | **2.32** | **J** | 4.33 | 0.125 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.144 | 0.0149 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0721 | 0.00462 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.144 | 0.0163 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.144 | 0.00822 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.144 | 0.0245 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Bromochloromethane | ND | | 0.144 | 0.00563 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Chloroform | ND | | 0.144 | 0.0111 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Carbon tetrachloride | ND | | 0.144 | 0.0300 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.144 | 0.0250 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 2-Butanone | ND | | 1.44 | 0.159 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Hexane | ND | | 0.144 | 0.0117 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.144 | 0.0251 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Benzene | ND | | 0.0216 | 0.0140 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.144 | 0.00707 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Trichloroethene | ND | | 0.0361 | 0.0185 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Dibromomethane | ND | | 0.144 | 0.0131 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.144 | 0.00866 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Bromodichloromethane | ND | | 0.144 | 0.0101 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.144 | 0.00894 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| **Toluene** | **0.0606** | **J** | 0.144 | 0.0192 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.44 | 0.0294 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.144 | 0.00952 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Tetrachloroethene | ND | | 0.0577 | 0.0254 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.144 | 0.00894 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Dibromochloromethane | ND | | 0.144 | 0.00866 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.144 | 0.0107 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0144 | 0.00837 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 2-Hexanone | ND | | 1.44 | 0.0671 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Ethylbenzene | ND | | 0.144 | 0.0234 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Chlorobenzene | ND | | 0.144 | 0.0110 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.144 | 0.0147 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| m,p-Xylene | ND | | 0.577 | 0.0245 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| o-Xylene | ND | | 0.289 | 0.0189 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Styrene | ND | | 0.144 | 0.0134 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Bromoform | ND | | 0.144 | 0.0180 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Isopropylbenzene | ND | | 0.144 | 0.0274 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| n-Propylbenzene | ND | | 0.144 | 0.0299 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.144 | 0.0108 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Bromobenzene | ND | | 0.144 | 0.0136 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.144 | 0.0268 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 2-Chlorotoluene | ND | | 0.144 | 0.0235 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.144 | 0.0121 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0169

## Client Sample ID: EX6-6-3

**Date Collected: 07/23/14 13:15**
**Date Received: 07/24/14 10:15**

## Lab Sample ID: SXG0169-06

**Matrix: Soil**
**Percent Solids: 73.8**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Chlorotoluene | ND | | 0.144 | 0.0206 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| tert-Butylbenzene | ND | | 0.144 | 0.0312 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.144 | 0.0209 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| sec-Butylbenzene | ND | | 0.144 | 0.0339 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| p-Isopropyltoluene | ND | | 0.144 | 0.0345 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.144 | 0.0182 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.144 | 0.0153 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| n-Butylbenzene | ND | | 0.144 | 0.0397 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.144 | 0.0110 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.721 | 0.0410 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Hexachlorobutadiene | ND | | 0.144 | 0.0822 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.144 | 0.0287 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| Naphthalene | ND | | 0.289 | 0.0196 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.144 | 0.0512 | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *99.6* | | *80 - 120* | *07/24/14 11:15* | *07/24/14 16:40* | *1.00* |
| *1,2-dichloroethane-d4* | *101* | | *74.7 - 120* | *07/24/14 11:15* | *07/24/14 16:40* | *1.00* |
| *Toluene-d8* | *101* | | *78.5 - 125* | *07/24/14 11:15* | *07/24/14 16:40* | *1.00* |
| *4-bromofluorobenzene* | *111* | | *69.8 - 140* | *07/24/14 11:15* | *07/24/14 16:40* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 7.21 | | mg/kg dry | ☼ | 07/24/14 11:15 | 07/24/14 16:40 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *111* | | *41.5 - 162* | *07/24/14 11:15* | *07/24/14 16:40* | *1.00* |

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Acenaphthylene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Anthracene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Benzo[a]anthracene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Benzo[b]fluoranthene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Benzo[k]fluoranthene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Benzo[a]pyrene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Butyl benzyl phthalate | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Carbazole | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 4-Chloroaniline | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 4-Chloro-3-methylphenol | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2-Chloronaphthalene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2-Chlorophenol | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Chrysene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0169

## Client Sample ID: EX6-6-3

**Date Collected: 07/23/14 13:15**
**Date Received: 07/24/14 10:15**

## Lab Sample ID: SXG0169-06

**Matrix: Soil**
**Percent Solids: 80.2**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dibenz(a,h)anthracene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Dibenzofuran | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Di-n-butyl phthalate | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 2.0 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2,4-Dichlorophenol | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Diethyl phthalate | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2,4-Dimethylphenol | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Dimethyl phthalate | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 2.0 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2,4-Dinitrophenol | ND | | 2.0 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2,6-Dinitrotoluene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Di-n-octyl phthalate | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Fluoranthene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Fluorene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Hexachlorobenzene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Hexachlorobutadiene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Hexachlorocyclopentadiene | ND | * | 2.0 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Hexachloroethane | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Isophorone | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2-Methylnaphthalene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2-Methylphenol | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 3 & 4 Methylphenol | ND | | 0.82 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Naphthalene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2-Nitroaniline | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 3-Nitroaniline | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 4-Nitroaniline | ND | | 2.0 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Nitrobenzene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2-Nitrophenol | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 4-Nitrophenol | ND | | 2.0 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Pentachlorophenol | ND | | 0.82 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Phenanthrene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Phenol | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Pyrene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2,4,5-Trichlorophenol | ND | * | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2,4,6-Trichlorophenol | ND | * | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Aniline | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 1,4-Dioxane | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Benzyl alcohol | ND | | 0.41 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Pyridine | ND | | 0.82 | | mg/Kg | ☼ | 07/25/14 12:28 | 07/27/14 19:55 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0169

## Client Sample ID: EX6-6-3

**Date Collected: 07/23/14 13:15**
**Date Received: 07/24/14 10:15**

## Lab Sample ID: SXG0169-06

**Matrix: Soil**
**Percent Solids: 80.2**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2-Fluorophenol (Surr) | 92 | | 53 - 97 | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2,4,6-Tribromophenol (Surr) | 84 | | 46 - 111 | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Nitrobenzene-d5 (Surr) | 97 | | 55 - 98 | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Phenol-d5 (Surr) | 91 | | 54 - 101 | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| Terphenyl-d14 (Surr) | 82 | | 58 - 123 | 07/25/14 12:28 | 07/27/14 19:55 | 1 |
| 2-Fluorobiphenyl (Surr) | 101 | X | 56 - 97 | 07/25/14 12:28 | 07/27/14 19:55 | 1 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 796 | | 678 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/28/14 10:15 | 50.0 |
| Heavy Oil Range Hydrocarbons | 3250 | | 1690 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/28/14 10:15 | 50.0 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 77.2 | Z3 | 50 - 150 | 07/25/14 10:39 | 07/28/14 10:15 | 50.0 |
| n-Triacontane-d62 | | Z3 | 50 - 150 | 07/25/14 10:39 | 07/28/14 10:15 | 50.0 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

**Lab Sample ID: 14G0166-BLK1**
**Matrix: Soil**
**Analysis Batch: 14G0166**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14G0166_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.100 | 0.00930 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Chloromethane | ND | | 0.500 | 0.00530 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Vinyl chloride | ND | | 0.0600 | 0.00620 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Bromomethane | ND | | 0.500 | 0.0306 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Chloroethane | ND | | 0.100 | 0.0245 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0300 | 0.00790 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.100 | 0.0127 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Carbon disulfide | ND | | 0.100 | 0.0107 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Methylene chloride | ND | | 0.200 | 0.00520 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Acetone | ND | | 3.00 | 0.0870 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.100 | 0.0103 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0500 | 0.00320 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.100 | 0.0113 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.100 | 0.00570 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.100 | 0.0170 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Bromochloromethane | ND | | 0.100 | 0.00390 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Chloroform | ND | | 0.100 | 0.00770 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Carbon tetrachloride | ND | | 0.100 | 0.0208 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.100 | 0.0173 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 2-Butanone | ND | | 1.00 | 0.110 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Hexane | ND | | 0.100 | 0.00810 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.100 | 0.0174 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Benzene | ND | | 0.0150 | 0.00970 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.100 | 0.00490 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Trichloroethene | ND | | 0.0250 | 0.0128 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Dibromomethane | ND | | 0.100 | 0.00910 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.100 | 0.00600 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Bromodichloromethane | ND | | 0.100 | 0.00700 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.100 | 0.00620 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Toluene | ND | | 0.100 | 0.0133 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.00 | 0.0204 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.100 | 0.00660 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Tetrachloroethene | ND | | 0.0400 | 0.0176 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.100 | 0.00620 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Dibromochloromethane | ND | | 0.100 | 0.00600 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.100 | 0.00740 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0100 | 0.00580 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 2-Hexanone | ND | | 1.00 | 0.0465 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Ethylbenzene | ND | | 0.100 | 0.0162 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Chlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.100 | 0.0102 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| m,p-Xylene | ND | | 0.400 | 0.0170 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| o-Xylene | ND | | 0.200 | 0.0131 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Styrene | ND | | 0.100 | 0.00930 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Bromoform | ND | | 0.100 | 0.0125 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Isopropylbenzene | ND | | 0.100 | 0.0190 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| n-Propylbenzene | ND | | 0.100 | 0.0207 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.100 | 0.00750 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0166-BLK1** | **Client Sample ID: Method Blank**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14G0166** | **Prep Batch: 14G0166_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromobenzene | ND | | 0.100 | 0.00940 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.100 | 0.0186 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 2-Chlorotoluene | ND | | 0.100 | 0.0163 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.100 | 0.00840 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 4-Chlorotoluene | ND | | 0.100 | 0.0143 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| tert-Butylbenzene | ND | | 0.100 | 0.0216 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.100 | 0.0145 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| sec-Butylbenzene | ND | | 0.100 | 0.0235 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| p-Isopropyltoluene | ND | | 0.100 | 0.0239 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.100 | 0.0126 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.100 | 0.0106 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| n-Butylbenzene | ND | | 0.100 | 0.0275 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.500 | 0.0284 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Hexachlorobutadiene | ND | | 0.100 | 0.0570 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.100 | 0.0199 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| Naphthalene | ND | | 0.200 | 0.0136 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.100 | 0.0355 | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *105* | | *80 - 120* | *07/24/14 08:07* | *07/24/14 09:52* | *1.00* |
| *1,2-dichloroethane-d4* | *103* | | *74.7 - 120* | *07/24/14 08:07* | *07/24/14 09:52* | *1.00* |
| *Toluene-d8* | *103* | | *78.5 - 125* | *07/24/14 08:07* | *07/24/14 09:52* | *1.00* |
| *4-bromofluorobenzene* | *99.1* | | *69.8 - 140* | *07/24/14 08:07* | *07/24/14 09:52* | *1.00* |

**Lab Sample ID: 14G0166-BS1** | **Client Sample ID: Lab Control Sample**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14G0166** | **Prep Batch: 14G0166_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.500 | 0.551 | | mg/kg wet | | 110 | 60.5 - 130 |
| Chloromethane | 0.500 | 0.512 | | mg/kg wet | | 102 | 68.9 - 130 |
| Vinyl chloride | 0.500 | 0.533 | | mg/kg wet | | 107 | 74 - 142 |
| Bromomethane | 0.500 | 0.608 | | mg/kg wet | | 122 | 70.5 - 146 |
| Chloroethane | 0.500 | 0.516 | | mg/kg wet | | 103 | 60 - 140 |
| Trichlorofluoromethane | 0.500 | 0.480 | | mg/kg wet | | 96.1 | 70.5 - 139 |
| 1,1-Dichloroethene | 0.500 | 0.504 | | mg/kg wet | | 101 | 72.9 - 135 |
| Carbon disulfide | 0.500 | 0.532 | | mg/kg wet | | 106 | 66.8 - 146 |
| Methylene chloride | 0.500 | 0.474 | | mg/kg wet | | 94.7 | 60 - 140 |
| Acetone | 2.50 | 3.28 | | mg/kg wet | | 131 | 39.2 - 145 |
| trans-1,2-Dichloroethene | 0.500 | 0.524 | | mg/kg wet | | 105 | 60 - 140 |
| Methyl tert-butyl ether | 0.500 | 0.582 | | mg/kg wet | | 116 | 60 - 140 |
| 1,1-Dichloroethane | 0.500 | 0.550 | | mg/kg wet | | 110 | 80 - 131 |
| cis-1,2-Dichloroethene | 0.500 | 0.520 | | mg/kg wet | | 104 | 80 - 126 |
| 2,2-Dichloropropane | 0.500 | 0.502 | | mg/kg wet | | 100 | 71.5 - 132 |
| Bromochloromethane | 0.500 | 0.530 | | mg/kg wet | | 106 | 69.1 - 139 |
| Chloroform | 0.500 | 0.529 | | mg/kg wet | | 106 | 80 - 130 |
| Carbon tetrachloride | 0.500 | 0.526 | | mg/kg wet | | 105 | 73.6 - 148 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0166-BS1**
**Matrix: Soil**
**Analysis Batch: 14G0166**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14G0166_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.500 | 0.520 | | mg/kg wet | | 104 | 74.3 - 138 |
| 2-Butanone | 2.50 | 3.08 | | mg/kg wet | | 123 | 56.1 - 124 |
| Hexane | 0.500 | 0.554 | | mg/kg wet | | 111 | 77 - 130 |
| 1,1-Dichloropropene | 0.500 | 0.528 | | mg/kg wet | | 106 | 78.3 - 132 |
| Benzene | 0.500 | 0.520 | | mg/kg wet | | 104 | 75.8 - 123 |
| 1,2-Dichloroethane (EDC) | 0.500 | 0.574 | | mg/kg wet | | 115 | 71.1 - 142 |
| Trichloroethene | 0.500 | 0.528 | | mg/kg wet | | 106 | 78.5 - 134 |
| Dibromomethane | 0.500 | 0.534 | | mg/kg wet | | 107 | 80 - 129 |
| 1,2-Dichloropropane | 0.500 | 0.526 | | mg/kg wet | | 105 | 50.8 - 155 |
| Bromodichloromethane | 0.500 | 0.522 | | mg/kg wet | | 104 | 80 - 128 |
| cis-1,3-Dichloropropene | 0.500 | 0.513 | | mg/kg wet | | 103 | 80 - 126 |
| Toluene | 0.500 | 0.546 | | mg/kg wet | | 109 | 76.6 - 125 |
| 4-Methyl-2-pentanone | 2.50 | 3.29 | | mg/kg wet | | 131 | 66.4 - 131 |
| trans-1,3-Dichloropropene | 0.500 | 0.586 | | mg/kg wet | | 117 | 79 - 124 |
| Tetrachloroethene | 0.500 | 0.576 | | mg/kg wet | | 115 | 80 - 127 |
| 1,1,2-Trichloroethane | 0.500 | 0.601 | | mg/kg wet | | 120 | 78.4 - 125 |
| Dibromochloromethane | 0.500 | 0.546 | | mg/kg wet | | 109 | 78.4 - 127 |
| 1,3-Dichloropropane | 0.500 | 0.600 | | mg/kg wet | | 120 | 80 - 125 |
| 1,2-Dibromoethane | 0.500 | 0.591 | | mg/kg wet | | 118 | 77.1 - 129 |
| 2-Hexanone | 2.50 | 3.04 | | mg/kg wet | | 122 | 64.6 - 127 |
| Ethylbenzene | 0.500 | 0.534 | | mg/kg wet | | 107 | 77.3 - 121 |
| Chlorobenzene | 0.500 | 0.580 | | mg/kg wet | | 116 | 80 - 120 |
| 1,1,1,2-Tetrachloroethane | 0.500 | 0.556 | | mg/kg wet | | 111 | 80 - 120 |
| m,p-Xylene | 0.500 | 0.538 | | mg/kg wet | | 108 | 77.7 - 124 |
| o-Xylene | 0.500 | 0.562 | | mg/kg wet | | 112 | 76.7 - 129 |
| Styrene | 0.500 | 0.552 | | mg/kg wet | | 110 | 80 - 128 |
| Bromoform | 0.500 | 0.592 | | mg/kg wet | | 118 | 76 - 135 |
| Isopropylbenzene | 0.500 | 0.545 | | mg/kg wet | | 109 | 78.4 - 131 |
| n-Propylbenzene | 0.500 | 0.546 | | mg/kg wet | | 109 | 80 - 120 |
| 1,1,2,2-Tetrachloroethane | 0.500 | 0.626 | | mg/kg wet | | 125 | 60.3 - 137 |
| Bromobenzene | 0.500 | 0.540 | | mg/kg wet | | 108 | 60 - 140 |
| 1,3,5-Trimethylbenzene | 0.500 | 0.539 | | mg/kg wet | | 108 | 80 - 121 |
| 2-Chlorotoluene | 0.500 | 0.562 | | mg/kg wet | | 112 | 80 - 123 |
| 1,2,3-Trichloropropane | 0.500 | 0.578 | | mg/kg wet | | 116 | 59.9 - 131 |
| 4-Chlorotoluene | 0.500 | 0.536 | | mg/kg wet | | 107 | 80 - 124 |
| tert-Butylbenzene | 0.500 | 0.536 | | mg/kg wet | | 107 | 78.8 - 130 |
| 1,2,4-Trimethylbenzene | 0.500 | 0.548 | | mg/kg wet | | 110 | 80 - 122 |
| sec-Butylbenzene | 0.500 | 0.544 | | mg/kg wet | | 109 | 80 - 120 |
| p-Isopropyltoluene | 0.500 | 0.542 | | mg/kg wet | | 108 | 67.2 - 147 |
| 1,3-Dichlorobenzene | 0.500 | 0.562 | | mg/kg wet | | 112 | 80 - 122 |
| 1,4-Dichlorobenzene | 0.500 | 0.554 | | mg/kg wet | | 111 | 80 - 125 |
| n-Butylbenzene | 0.500 | 0.554 | | mg/kg wet | | 111 | 80 - 120 |
| 1,2-Dichlorobenzene | 0.500 | 0.586 | | mg/kg wet | | 117 | 80 - 124 |
| 1,2-Dibromo-3-chloropropane | 0.500 | 0.654 | | mg/kg wet | | 131 | 60 - 140 |
| Hexachlorobutadiene | 0.500 | 0.556 | | mg/kg wet | | 111 | 71.8 - 138 |
| 1,2,4-Trichlorobenzene | 0.500 | 0.558 | | mg/kg wet | | 112 | 75.3 - 126 |
| Naphthalene | 0.500 | 0.546 | | mg/kg wet | | 109 | 55.1 - 142 |
| 1,2,3-Trichlorobenzene | 0.500 | 0.531 | | mg/kg wet | | 106 | 69.6 - 127 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0166-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0166** — **Prep Batch: 14G0166_P**

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *103* | | *80 - 120* |
| *1,2-dichloroethane-d4* | *105* | | *74.7 - 120* |
| *Toluene-d8* | *102* | | *78.5 - 125* |
| *4-bromofluorobenzene* | *101* | | *69.8 - 140* |

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

**Lab Sample ID: 14G0166-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0166** — **Prep Batch: 14G0166_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.00 | | mg/kg wet | | 07/24/14 08:07 | 07/24/14 09:52 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *99.1* | | *41.5 - 162* | *07/24/14 08:07* | *07/24/14 09:52* | *1.00* |

**Lab Sample ID: 14G0166-BS2** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0166** — **Prep Batch: 14G0166_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 50.0 | 49.4 | | mg/kg wet | | 98.8 | 74.4 - 124 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-bromofluorobenzene* | *98.2* | | *41.5 - 162* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 160-133955/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 134230** — **Prep Batch: 133955**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Acenaphthylene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Anthracene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Benzo[a]anthracene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Benzo[b]fluoranthene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Benzo[k]fluoranthene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Benzo[a]pyrene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Butyl benzyl phthalate | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 160-133955/1-A**
**Matrix: Solid**
**Analysis Batch: 134230**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 133955**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbazole | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 4-Chloroaniline | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 4-Chloro-3-methylphenol | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2-Chloronaphthalene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2-Chlorophenol | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Chrysene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Dibenzofuran | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Di-n-butyl phthalate | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 1.6 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2,4-Dichlorophenol | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Diethyl phthalate | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2,4-Dimethylphenol | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Dimethyl phthalate | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1.6 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2,4-Dinitrophenol | ND | | 1.6 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2,6-Dinitrotoluene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Di-n-octyl phthalate | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Fluoranthene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Fluorene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Hexachlorobenzene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Hexachlorobutadiene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Hexachlorocyclopentadiene | ND | | 1.6 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Hexachloroethane | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Isophorone | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2-Methylnaphthalene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2-Methylphenol | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 3 & 4 Methylphenol | ND | | 0.66 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Naphthalene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2-Nitroaniline | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 3-Nitroaniline | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 4-Nitroaniline | ND | | 1.6 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Nitrobenzene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2-Nitrophenol | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 4-Nitrophenol | ND | | 1.6 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Pentachlorophenol | ND | | 0.66 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Phenanthrene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Phenol | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Pyrene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 160-133955/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 134230** — **Prep Batch: 133955**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2,4,5-Trichlorophenol | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 2,4,6-Trichlorophenol | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Aniline | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| 1,4-Dioxane | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Benzyl alcohol | ND | | 0.33 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |
| Pyridine | ND | | 0.66 | | mg/Kg | | 07/25/14 12:28 | 07/27/14 18:50 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *89* | | *53 - 97* | *07/25/14 12:28* | *07/27/14 18:50* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *86* | | *46 - 111* | *07/25/14 12:28* | *07/27/14 18:50* | *1* |
| *Nitrobenzene-d5 (Surr)* | *89* | | *55 - 98* | *07/25/14 12:28* | *07/27/14 18:50* | *1* |
| *Phenol-d5 (Surr)* | *92* | | *54 - 101* | *07/25/14 12:28* | *07/27/14 18:50* | *1* |
| *Terphenyl-d14 (Surr)* | *89* | | *58 - 123* | *07/25/14 12:28* | *07/27/14 18:50* | *1* |
| *2-Fluorobiphenyl (Surr)* | *95* | | *56 - 97* | *07/25/14 12:28* | *07/27/14 18:50* | *1* |

**Lab Sample ID: LCS 160-133955/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 134230** — **Prep Batch: 133955**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.67 | 5.98 | | mg/Kg | | 90 | 63 - 95 |
| Acenaphthylene | 6.67 | 6.11 | | mg/Kg | | 92 | 62 - 98 |
| Anthracene | 6.68 | 5.91 | | mg/Kg | | 88 | 63 - 100 |
| Benzo[a]anthracene | 6.67 | 5.98 | | mg/Kg | | 90 | 74 - 114 |
| Benzo[b]fluoranthene | 6.67 | 6.08 | | mg/Kg | | 91 | 68 - 109 |
| Benzo[k]fluoranthene | 6.68 | 6.30 | | mg/Kg | | 94 | 69 - 111 |
| Benzo[g,h,i]perylene | 6.67 | 6.94 | | mg/Kg | | 104 | 67 - 121 |
| Benzo[a]pyrene | 6.67 | 6.15 | | mg/Kg | | 92 | 63 - 103 |
| Bis(2-chloroethoxy)methane | 6.68 | 5.95 | | mg/Kg | | 89 | 62 - 91 |
| Bis(2-chloroethyl)ether | 6.67 | 5.74 | | mg/Kg | | 86 | 58 - 92 |
| Bis(2-ethylhexyl) phthalate | 6.67 | 6.34 | | mg/Kg | | 95 | 63 - 112 |
| 4-Bromophenyl phenyl ether | 6.67 | 6.30 | | mg/Kg | | 94 | 63 - 106 |
| Butyl benzyl phthalate | 6.67 | 6.53 | | mg/Kg | | 98 | 59 - 111 |
| Carbazole | 6.69 | 5.65 | | mg/Kg | | 85 | 64 - 101 |
| 4-Chloroaniline | 6.67 | 4.26 | | mg/Kg | | 64 | 43 - 70 |
| 4-Chloro-3-methylphenol | 6.67 | 5.70 | | mg/Kg | | 85 | 58 - 95 |
| 2-Chloronaphthalene | 6.67 | 6.28 | | mg/Kg | | 94 | 61 - 94 |
| 2-Chlorophenol | 6.67 | 5.78 | | mg/Kg | | 87 | 60 - 91 |
| 4-Chlorophenyl phenyl ether | 6.68 | 5.74 | | mg/Kg | | 86 | 61 - 96 |
| Chrysene | 6.67 | 6.09 | | mg/Kg | | 91 | 66 - 100 |
| Dibenz(a,h)anthracene | 6.67 | 7.10 | | mg/Kg | | 106 | 67 - 114 |
| Dibenzofuran | 6.67 | 5.74 | | mg/Kg | | 86 | 58 - 95 |
| Di-n-butyl phthalate | 6.67 | 5.97 | | mg/Kg | | 89 | 62 - 104 |
| 1,2-Dichlorobenzene | 6.67 | 5.76 | | mg/Kg | | 86 | 59 - 90 |
| 1,3-Dichlorobenzene | 6.67 | 5.66 | | mg/Kg | | 85 | 57 - 88 |
| 1,4-Dichlorobenzene | 6.67 | 5.73 | | mg/Kg | | 86 | 58 - 88 |
| 3,3'-Dichlorobenzidine | 6.67 | 5.64 | | mg/Kg | | 85 | 50 - 90 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 160-133955/2-A**
**Matrix: Solid**
**Analysis Batch: 134230**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 133955**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 2,4-Dichlorophenol | 6.67 | 5.76 | | mg/Kg | | 86 | 59 - 90 |
| Diethyl phthalate | 6.67 | 5.80 | | mg/Kg | | 87 | 62 - 97 |
| 2,4-Dimethylphenol | 6.67 | 5.91 | | mg/Kg | | 89 | 54 - 108 |
| Dimethyl phthalate | 6.67 | 5.98 | | mg/Kg | | 90 | 63 - 98 |
| 4,6-Dinitro-2-methylphenol | 6.67 | 6.58 | | mg/Kg | | 99 | 31 - 112 |
| 2,4-Dinitrophenol | 6.67 | 5.56 | | mg/Kg | | 83 | 20 - 100 |
| 2,4-Dinitrotoluene | 6.68 | 5.81 | | mg/Kg | | 87 | 61 - 103 |
| 2,6-Dinitrotoluene | 6.67 | 6.02 | | mg/Kg | | 90 | 63 - 99 |
| Di-n-octyl phthalate | 6.67 | 6.37 | | mg/Kg | | 96 | 61 - 111 |
| Fluoranthene | 6.67 | 5.66 | | mg/Kg | | 85 | 63 - 101 |
| Fluorene | 6.67 | 5.76 | | mg/Kg | | 86 | 62 - 96 |
| Hexachlorobenzene | 6.67 | 6.09 | | mg/Kg | | 91 | 62 - 106 |
| Hexachlorobutadiene | 6.67 | 5.85 | | mg/Kg | | 88 | 57 - 94 |
| Hexachlorocyclopentadiene | 6.67 | 7.76 | * | mg/Kg | | 116 | 40 - 115 |
| Hexachloroethane | 6.67 | 5.88 | | mg/Kg | | 88 | 59 - 93 |
| Indeno[1,2,3-cd]pyrene | 6.67 | 6.92 | | mg/Kg | | 104 | 65 - 120 |
| Isophorone | 6.67 | 5.06 | | mg/Kg | | 76 | 57 - 86 |
| 2-Methylnaphthalene | 6.65 | 5.68 | | mg/Kg | | 85 | 59 - 90 |
| 2-Methylphenol | 6.68 | 5.68 | | mg/Kg | | 85 | 58 - 96 |
| 3 & 4 Methylphenol | 6.67 | 6.43 | | mg/Kg | | 96 | 47 - 113 |
| Naphthalene | 6.67 | 5.90 | | mg/Kg | | 88 | 60 - 90 |
| 2-Nitroaniline | 6.69 | 6.69 | | mg/Kg | | 100 | 58 - 105 |
| 3-Nitroaniline | 6.67 | 5.46 | | mg/Kg | | 82 | 55 - 91 |
| 4-Nitroaniline | 6.69 | 5.66 | | mg/Kg | | 85 | 57 - 94 |
| Nitrobenzene | 6.67 | 6.07 | | mg/Kg | | 91 | 58 - 95 |
| 2-Nitrophenol | 6.68 | 5.87 | | mg/Kg | | 88 | 60 - 93 |
| 4-Nitrophenol | 6.68 | 6.16 | | mg/Kg | | 92 | 54 - 101 |
| N-Nitrosodiphenylamine | 6.67 | 7.42 | | mg/Kg | | 111 | 78 - 133 |
| N-Nitrosodi-n-propylamine | 6.67 | 5.80 | | mg/Kg | | 87 | 60 - 104 |
| bis (2-chloroisopropyl) ether | 6.67 | 5.96 | | mg/Kg | | 89 | 47 - 105 |
| Pentachlorophenol | 6.67 | 6.18 | | mg/Kg | | 93 | 50 - 100 |
| Phenanthrene | 6.68 | 6.09 | | mg/Kg | | 91 | 63 - 99 |
| Phenol | 6.67 | 5.36 | | mg/Kg | | 80 | 53 - 89 |
| Pyrene | 6.67 | 6.61 | | mg/Kg | | 99 | 64 - 102 |
| 1,2,4-Trichlorobenzene | 6.71 | 5.77 | | mg/Kg | | 86 | 60 - 91 |
| 2,4,5-Trichlorophenol | 6.67 | 6.69 | * | mg/Kg | | 100 | 59 - 94 |
| 2,4,6-Trichlorophenol | 6.67 | 6.60 | * | mg/Kg | | 99 | 59 - 95 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol (Surr)* | *88* | | *53 - 97* |
| *2,4,6-Tribromophenol (Surr)* | *85* | | *46 - 111* |
| *Nitrobenzene-d5 (Surr)* | *91* | | *55 - 98* |
| *Phenol-d5 (Surr)* | *88* | | *54 - 101* |
| *Terphenyl-d14 (Surr)* | *93* | | *58 - 123* |
| *2-Fluorobiphenyl (Surr)* | *98* | *X* | *56 - 97* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 160-7628-1 MS**
**Matrix: Solid**
**Analysis Batch: 134230**

**Client Sample ID: SXG0169-06**
**Prep Type: Total/NA**
**Prep Batch: 133955**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 8.31 | 7.61 | | mg/Kg | ☼ | 92 | 57 - 94 |
| Acenaphthylene | ND | | 8.31 | 7.66 | | mg/Kg | ☼ | 92 | 57 - 97 |
| Anthracene | ND | | 8.31 | 7.51 | | mg/Kg | ☼ | 90 | 58 - 99 |
| Benzo[a]anthracene | ND | | 8.30 | 7.62 | | mg/Kg | ☼ | 92 | 68 - 114 |
| Benzo[b]fluoranthene | ND | | 8.30 | 8.68 | | mg/Kg | ☼ | 105 | 63 - 107 |
| Benzo[k]fluoranthene | ND | | 8.31 | 8.23 | | mg/Kg | ☼ | 99 | 65 - 108 |
| Benzo[g,h,i]perylene | ND | | 8.31 | 4.71 | | mg/Kg | ☼ | 57 | 54 - 127 |
| Benzo[a]pyrene | ND | | 8.30 | 7.67 | | mg/Kg | ☼ | 92 | 61 - 102 |
| Bis(2-chloroethoxy)methane | ND | | 8.31 | 7.79 | F1 | mg/Kg | ☼ | 94 | 54 - 89 |
| Bis(2-chloroethyl)ether | ND | | 8.30 | 7.41 | F1 | mg/Kg | ☼ | 89 | 50 - 88 |
| Bis(2-ethylhexyl) phthalate | ND | | 8.31 | 7.54 | | mg/Kg | ☼ | 89 | 60 - 110 |
| 4-Bromophenyl phenyl ether | ND | | 8.30 | 8.02 | | mg/Kg | ☼ | 97 | 59 - 105 |
| Butyl benzyl phthalate | ND | | 8.31 | 7.73 | | mg/Kg | ☼ | 93 | 56 - 110 |
| Carbazole | ND | | 8.32 | 7.19 | | mg/Kg | ☼ | 86 | 55 - 104 |
| 4-Chloroaniline | ND | | 8.30 | 5.32 | | mg/Kg | ☼ | 64 | 31 - 76 |
| 4-Chloro-3-methylphenol | ND | | 8.31 | 7.15 | | mg/Kg | ☼ | 86 | 53 - 96 |
| 2-Chloronaphthalene | ND | | 8.30 | 8.07 | F1 | mg/Kg | ☼ | 97 | 55 - 92 |
| 2-Chlorophenol | ND | | 8.30 | 7.33 | | mg/Kg | ☼ | 88 | 47 - 90 |
| 4-Chlorophenyl phenyl ether | ND | | 8.31 | 7.12 | | mg/Kg | ☼ | 86 | 57 - 96 |
| Chrysene | ND | | 8.31 | 7.36 | | mg/Kg | ☼ | 89 | 61 - 100 |
| Dibenz(a,h)anthracene | ND | | 8.31 | 5.39 | | mg/Kg | ☼ | 65 | 59 - 118 |
| Dibenzofuran | ND | | 8.31 | 7.24 | | mg/Kg | ☼ | 87 | 55 - 93 |
| Di-n-butyl phthalate | ND | | 8.31 | 7.68 | | mg/Kg | ☼ | 92 | 58 - 106 |
| 1,2-Dichlorobenzene | ND | | 8.30 | 7.19 | F1 | mg/Kg | ☼ | 87 | 46 - 85 |
| 1,3-Dichlorobenzene | ND | | 8.31 | 7.10 | F1 | mg/Kg | ☼ | 86 | 42 - 84 |
| 1,4-Dichlorobenzene | ND | | 8.31 | 7.11 | F1 | mg/Kg | ☼ | 86 | 45 - 83 |
| 3,3'-Dichlorobenzidine | ND | | 8.31 | 4.93 | | mg/Kg | ☼ | 59 | 10 - 84 |
| 2,4-Dichlorophenol | ND | | 8.30 | 7.29 | | mg/Kg | ☼ | 88 | 47 - 94 |
| Diethyl phthalate | ND | | 8.30 | 7.53 | | mg/Kg | ☼ | 91 | 58 - 100 |
| 2,4-Dimethylphenol | ND | | 8.30 | 7.80 | | mg/Kg | ☼ | 94 | 33 - 109 |
| Dimethyl phthalate | ND | | 8.31 | 8.23 | | mg/Kg | ☼ | 99 | 59 - 100 |
| 4,6-Dinitro-2-methylphenol | ND | | 8.30 | 5.39 | | mg/Kg | ☼ | 65 | 32 - 112 |
| 2,4-Dinitrophenol | ND | | 8.30 | 4.28 | | mg/Kg | ☼ | 52 | 13 - 103 |
| 2,4-Dinitrotoluene | ND | | 8.31 | 7.54 | | mg/Kg | ☼ | 91 | 55 - 108 |
| 2,6-Dinitrotoluene | ND | | 8.31 | 7.84 | | mg/Kg | ☼ | 94 | 58 - 101 |
| Di-n-octyl phthalate | ND | | 8.30 | 7.95 | | mg/Kg | ☼ | 96 | 58 - 113 |
| Fluoranthene | ND | | 8.30 | 7.23 | | mg/Kg | ☼ | 87 | 58 - 103 |
| Fluorene | ND | | 8.30 | 7.24 | | mg/Kg | ☼ | 87 | 58 - 97 |
| Hexachlorobenzene | ND | | 8.30 | 7.59 | | mg/Kg | ☼ | 91 | 59 - 105 |
| Hexachlorobutadiene | ND | | 8.30 | 7.27 | | mg/Kg | ☼ | 88 | 47 - 89 |
| Hexachlorocyclopentadiene | ND | | 8.31 | 8.14 | | mg/Kg | ☼ | 98 | 17 - 112 |
| Hexachloroethane | ND | | 8.30 | 7.39 | F1 | mg/Kg | ☼ | 89 | 43 - 88 |
| Indeno[1,2,3-cd]pyrene | ND | | 8.30 | 5.43 | | mg/Kg | ☼ | 65 | 56 - 123 |
| Isophorone | ND | | 8.30 | 6.51 | | mg/Kg | ☼ | 79 | 52 - 84 |
| 2-Methylnaphthalene | ND | | 8.28 | 6.96 | | mg/Kg | ☼ | 84 | 52 - 88 |
| 2-Methylphenol | ND | | 8.31 | 7.08 | | mg/Kg | ☼ | 85 | 48 - 94 |
| 3 & 4 Methylphenol | ND | | 8.30 | 8.08 | | mg/Kg | ☼ | 97 | 39 - 107 |
| Naphthalene | ND | | 8.31 | 7.40 | F1 | mg/Kg | ☼ | 89 | 52 - 86 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 160-7628-1 MS** — **Client Sample ID: SXG0169-06**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 134230** — **Prep Batch: 133955**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 2-Nitroaniline | ND | | 8.32 | 9.11 | F1 | mg/Kg | ☼ | 109 | 52 - 108 |
| 3-Nitroaniline | ND | | 8.30 | 7.12 | | mg/Kg | ☼ | 86 | 44 - 103 |
| 4-Nitroaniline | ND | | 8.33 | 6.71 | | mg/Kg | ☼ | 81 | 43 - 102 |
| Nitrobenzene | ND | | 8.30 | 7.98 | F1 | mg/Kg | ☼ | 96 | 52 - 90 |
| 2-Nitrophenol | ND | | 8.31 | 7.62 | | mg/Kg | ☼ | 92 | 51 - 94 |
| 4-Nitrophenol | ND | | 8.31 | 8.17 | | mg/Kg | ☼ | 98 | 48 - 105 |
| N-Nitrosodiphenylamine | ND | | 8.30 | 9.85 | | mg/Kg | ☼ | 119 | 52 - 131 |
| N-Nitrosodi-n-propylamine | ND | | 8.30 | 7.46 | | mg/Kg | ☼ | 90 | 55 - 99 |
| bis (2-chloroisopropyl) ether | ND | | 8.30 | 7.74 | | mg/Kg | ☼ | 93 | 42 - 97 |
| Pentachlorophenol | ND | | 8.31 | 8.16 | | mg/Kg | ☼ | 98 | 35 - 104 |
| Phenanthrene | ND | | 8.31 | 7.74 | | mg/Kg | ☼ | 93 | 60 - 98 |
| Phenol | ND | | 8.31 | 6.80 | | mg/Kg | ☼ | 82 | 43 - 90 |
| Pyrene | ND | | 8.30 | 7.43 | | mg/Kg | ☼ | 88 | 53 - 106 |
| 1,2,4-Trichlorobenzene | ND | | 8.36 | 7.27 | | mg/Kg | ☼ | 87 | 51 - 87 |
| 2,4,5-Trichlorophenol | ND | | 8.30 | 8.54 | F1 | mg/Kg | ☼ | 103 | 55 - 95 |
| 2,4,6-Trichlorophenol | ND | | 8.31 | 8.61 | F1 | mg/Kg | ☼ | 104 | 48 - 98 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol (Surr)* | *91* | | *53 - 97* |
| *2,4,6-Tribromophenol (Surr)* | *83* | | *46 - 111* |
| *Nitrobenzene-d5 (Surr)* | *96* | | *55 - 98* |
| *Phenol-d5 (Surr)* | *91* | | *54 - 101* |
| *Terphenyl-d14 (Surr)* | *83* | | *58 - 123* |
| *2-Fluorobiphenyl (Surr)* | *103* | *X* | *56 - 97* |

**Lab Sample ID: 160-7628-1 MSD** — **Client Sample ID: SXG0169-06**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 134230** — **Prep Batch: 133955**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 8.31 | 7.96 | F1 | mg/Kg | ☼ | 96 | 57 - 94 | 4 | 30 |
| Acenaphthylene | ND | | 8.31 | 7.97 | | mg/Kg | ☼ | 96 | 57 - 97 | 4 | 30 |
| Anthracene | ND | | 8.32 | 7.87 | | mg/Kg | ☼ | 95 | 58 - 99 | 5 | 30 |
| Benzo[a]anthracene | ND | | 8.31 | 7.94 | | mg/Kg | ☼ | 96 | 68 - 114 | 4 | 30 |
| Benzo[b]fluoranthene | ND | | 8.31 | 8.98 | F1 | mg/Kg | ☼ | 108 | 63 - 107 | 3 | 30 |
| Benzo[k]fluoranthene | ND | | 8.32 | 8.94 | | mg/Kg | ☼ | 107 | 65 - 108 | 8 | 30 |
| Benzo[g,h,i]perylene | ND | | 8.31 | 4.61 | | mg/Kg | ☼ | 55 | 54 - 127 | 2 | 30 |
| Benzo[a]pyrene | ND | | 8.31 | 8.02 | | mg/Kg | ☼ | 97 | 61 - 102 | 4 | 30 |
| Bis(2-chloroethoxy)methane | ND | | 8.32 | 8.14 | F1 | mg/Kg | ☼ | 98 | 54 - 89 | 4 | 30 |
| Bis(2-chloroethyl)ether | ND | | 8.31 | 7.76 | F1 | mg/Kg | ☼ | 93 | 50 - 88 | 5 | 30 |
| Bis(2-ethylhexyl) phthalate | ND | | 8.31 | 7.93 | | mg/Kg | ☼ | 94 | 60 - 110 | 5 | 30 |
| 4-Bromophenyl phenyl ether | ND | | 8.31 | 8.41 | | mg/Kg | ☼ | 101 | 59 - 105 | 5 | 30 |
| Butyl benzyl phthalate | ND | | 8.31 | 8.07 | | mg/Kg | ☼ | 97 | 56 - 110 | 4 | 30 |
| Carbazole | ND | | 8.33 | 7.57 | | mg/Kg | ☼ | 91 | 55 - 104 | 5 | 30 |
| 4-Chloroaniline | ND | | 8.31 | 5.51 | | mg/Kg | ☼ | 66 | 31 - 76 | 3 | 30 |
| 4-Chloro-3-methylphenol | ND | | 8.31 | 7.50 | | mg/Kg | ☼ | 90 | 53 - 96 | 5 | 30 |
| 2-Chloronaphthalene | ND | | 8.31 | 8.38 | F1 | mg/Kg | ☼ | 101 | 55 - 92 | 4 | 30 |
| 2-Chlorophenol | ND | | 8.31 | 7.68 | F1 | mg/Kg | ☼ | 92 | 47 - 90 | 5 | 30 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 160-7628-1 MSD** | **Client Sample ID: SXG0169-06**
**Matrix: Solid** | **Prep Type: Total/NA**
**Analysis Batch: 134230** | **Prep Batch: 133955**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4-Chlorophenyl phenyl ether | ND | | 8.32 | 7.43 | | mg/Kg | ☼ | 89 | 57 - 96 | 4 | 30 |
| Chrysene | ND | | 8.31 | 7.76 | | mg/Kg | ☼ | 93 | 61 - 100 | 5 | 30 |
| Dibenz(a,h)anthracene | ND | | 8.31 | 5.43 | | mg/Kg | ☼ | 65 | 59 - 118 | 1 | 30 |
| Dibenzofuran | ND | | 8.31 | 7.58 | | mg/Kg | ☼ | 91 | 55 - 93 | 5 | 30 |
| Di-n-butyl phthalate | ND | | 8.31 | 8.07 | | mg/Kg | ☼ | 97 | 58 - 106 | 5 | 30 |
| 1,2-Dichlorobenzene | ND | | 8.31 | 7.48 | F1 | mg/Kg | ☼ | 90 | 46 - 85 | 4 | 30 |
| 1,3-Dichlorobenzene | ND | | 8.31 | 7.50 | F1 | mg/Kg | ☼ | 90 | 42 - 84 | 5 | 30 |
| 1,4-Dichlorobenzene | ND | | 8.31 | 7.45 | F1 | mg/Kg | ☼ | 90 | 45 - 83 | 5 | 30 |
| 3,3'-Dichlorobenzidine | ND | | 8.31 | 5.12 | | mg/Kg | ☼ | 62 | 10 - 84 | 4 | 30 |
| 2,4-Dichlorophenol | ND | | 8.31 | 7.59 | | mg/Kg | ☼ | 91 | 47 - 94 | 4 | 30 |
| Diethyl phthalate | ND | | 8.31 | 7.95 | | mg/Kg | ☼ | 96 | 58 - 100 | 5 | 30 |
| 2,4-Dimethylphenol | ND | | 8.31 | 8.19 | | mg/Kg | ☼ | 99 | 33 - 109 | 5 | 30 |
| Dimethyl phthalate | ND | | 8.31 | 8.53 | F1 | mg/Kg | ☼ | 103 | 59 - 100 | 3 | 30 |
| 4,6-Dinitro-2-methylphenol | ND | | 8.31 | 4.75 | | mg/Kg | ☼ | 57 | 32 - 112 | 12 | 30 |
| 2,4-Dinitrophenol | ND | | 8.31 | 3.72 | | mg/Kg | ☼ | 45 | 13 - 103 | 14 | 30 |
| 2,4-Dinitrotoluene | ND | | 8.32 | 7.83 | | mg/Kg | ☼ | 94 | 55 - 108 | 4 | 30 |
| 2,6-Dinitrotoluene | ND | | 8.31 | 8.23 | | mg/Kg | ☼ | 99 | 58 - 101 | 5 | 30 |
| Di-n-octyl phthalate | ND | | 8.31 | 8.31 | | mg/Kg | ☼ | 100 | 58 - 113 | 4 | 30 |
| Fluoranthene | ND | | 8.31 | 7.60 | | mg/Kg | ☼ | 91 | 58 - 103 | 5 | 30 |
| Fluorene | ND | | 8.31 | 7.55 | | mg/Kg | ☼ | 91 | 58 - 97 | 4 | 30 |
| Hexachlorobenzene | ND | | 8.31 | 7.99 | | mg/Kg | ☼ | 96 | 59 - 105 | 5 | 30 |
| Hexachlorobutadiene | ND | | 8.31 | 7.77 | F1 | mg/Kg | ☼ | 93 | 47 - 89 | 7 | 30 |
| Hexachlorocyclopentadiene | ND | | 8.31 | 7.85 | | mg/Kg | ☼ | 94 | 17 - 112 | 4 | 30 |
| Hexachloroethane | ND | | 8.31 | 7.74 | F1 | mg/Kg | ☼ | 93 | 43 - 88 | 5 | 30 |
| Indeno[1,2,3-cd]pyrene | ND | | 8.31 | 5.37 | | mg/Kg | ☼ | 65 | 56 - 123 | 1 | 30 |
| Isophorone | ND | | 8.31 | 6.88 | | mg/Kg | ☼ | 83 | 52 - 84 | 5 | 30 |
| 2-Methylnaphthalene | ND | | 8.29 | 7.30 | | mg/Kg | ☼ | 88 | 52 - 88 | 5 | 30 |
| 2-Methylphenol | ND | | 8.32 | 7.42 | | mg/Kg | ☼ | 89 | 48 - 94 | 5 | 30 |
| 3 & 4 Methylphenol | ND | | 8.31 | 8.40 | | mg/Kg | ☼ | 101 | 39 - 107 | 4 | 30 |
| Naphthalene | ND | | 8.31 | 7.77 | F1 | mg/Kg | ☼ | 93 | 52 - 86 | 5 | 30 |
| 2-Nitroaniline | ND | | 8.33 | 9.60 | F1 | mg/Kg | ☼ | 115 | 52 - 108 | 5 | 30 |
| 3-Nitroaniline | ND | | 8.31 | 7.16 | | mg/Kg | ☼ | 86 | 44 - 103 | 1 | 30 |
| 4-Nitroaniline | ND | | 8.34 | 7.14 | | mg/Kg | ☼ | 86 | 43 - 102 | 6 | 30 |
| Nitrobenzene | ND | | 8.31 | 8.38 | F1 | mg/Kg | ☼ | 101 | 52 - 90 | 5 | 30 |
| 2-Nitrophenol | ND | | 8.32 | 7.99 | F1 | mg/Kg | ☼ | 96 | 51 - 94 | 5 | 30 |
| 4-Nitrophenol | ND | | 8.32 | 8.52 | | mg/Kg | ☼ | 102 | 48 - 105 | 4 | 30 |
| N-Nitrosodiphenylamine | ND | | 8.31 | 10.3 | | mg/Kg | ☼ | 124 | 52 - 131 | 4 | 30 |
| N-Nitrosodi-n-propylamine | ND | | 8.31 | 7.86 | | mg/Kg | ☼ | 95 | 55 - 99 | 5 | 30 |
| bis (2-chloroisopropyl) ether | ND | | 8.31 | 8.19 | F1 | mg/Kg | ☼ | 99 | 42 - 97 | 6 | 30 |
| Pentachlorophenol | ND | | 8.31 | 8.53 | | mg/Kg | ☼ | 103 | 35 - 104 | 4 | 30 |
| Phenanthrene | ND | | 8.32 | 8.09 | | mg/Kg | ☼ | 97 | 60 - 98 | 4 | 30 |
| Phenol | ND | | 8.31 | 7.06 | | mg/Kg | ☼ | 85 | 43 - 90 | 4 | 30 |
| Pyrene | ND | | 8.31 | 7.86 | | mg/Kg | ☼ | 94 | 53 - 106 | 6 | 30 |
| 1,2,4-Trichlorobenzene | ND | | 8.36 | 7.57 | F1 | mg/Kg | ☼ | 90 | 51 - 87 | 4 | 30 |
| 2,4,5-Trichlorophenol | ND | | 8.31 | 9.04 | F1 | mg/Kg | ☼ | 109 | 55 - 95 | 6 | 30 |
| 2,4,6-Trichlorophenol | ND | | 8.31 | 9.08 | F1 | mg/Kg | ☼ | 109 | 48 - 98 | 5 | 30 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 160-7628-1 MSD** — **Client Sample ID: SXG0169-06**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 134230** — **Prep Batch: 133955**

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 2-Fluorophenol (Surr) | 94 | | 53 - 97 |
| 2,4,6-Tribromophenol (Surr) | 87 | | 46 - 111 |
| Nitrobenzene-d5 (Surr) | 100 | X | 55 - 98 |
| Phenol-d5 (Surr) | 93 | | 54 - 101 |
| Terphenyl-d14 (Surr) | 87 | | 58 - 123 |
| 2-Fluorobiphenyl (Surr) | 106 | X | 56 - 97 |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

**Lab Sample ID: 14G0189-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0189** — **Prep Batch: 14G0189_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.0 | | mg/kg wet | | 07/25/14 10:39 | 07/25/14 14:19 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.0 | | mg/kg wet | | 07/25/14 10:39 | 07/25/14 14:19 | 1.00 |

| Surrogate | Blank %Recovery | Blank Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 99.1 | | 50 - 150 | 07/25/14 10:39 | 07/25/14 14:19 | 1.00 |
| n-Triacontane-d62 | 81.3 | | 50 - 150 | 07/25/14 10:39 | 07/25/14 14:19 | 1.00 |

**Lab Sample ID: 14G0189-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0189** — **Prep Batch: 14G0189_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | | | 66.7 | 62.2 | | mg/kg wet | | 93.3 | 50 - 150 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| o-Terphenyl | 101 | | 50 - 150 |
| n-Triacontane-d62 | 81.9 | | 50 - 150 |

**Lab Sample ID: 14G0189-DUP1** — **Client Sample ID: EX6-1-3**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0189** — **Prep Batch: 14G0189_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 31.6 | | | 25.2 | | mg/kg dry | ☼ | | | 22.6 | 40 |
| Heavy Oil Range Hydrocarbons | 55.7 | | | 38.0 | | mg/kg dry | ☼ | | | 37.8 | 40 |

| Surrogate | Duplicate %Recovery | Duplicate Qualifier | Limits |
|---|---|---|---|
| o-Terphenyl | 103 | | 50 - 150 |
| n-Triacontane-d62 | 92.7 | | 50 - 150 |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx (Continued)

**Lab Sample ID: 14G0189-DUP2** | **Client Sample ID: EX6-2-3**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14G0189** | **Prep Batch: 14G0189_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 419 | | | 401 | | mg/kg dry | ☼ | | | 4.52 | 40 |
| Heavy Oil Range Hydrocarbons | 1480 | | | 1420 | | mg/kg dry | ☼ | | | 3.96 | 40 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *98.8* | | *50 - 150* |
| *n-Triacontane-d62* | *101* | | *50 - 150* |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0169

## Client Sample ID: EX6-1-3 — Lab Sample ID: SXG0169-01

**Date Collected: 07/23/14 12:40** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 86.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.740 | 14G0166_P | 07/24/14 11:15 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0166 | 07/24/14 14:47 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.00 | 14G0189_P | 07/25/14 10:39 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0189 | 07/25/14 15:08 | MS | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14G0196_P | 07/25/14 16:00 | MS | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14G0196 | 07/28/14 13:30 | MS | TAL SPK |

## Client Sample ID: EX6-2-3 — Lab Sample ID: SXG0169-02

**Date Collected: 07/23/14 12:50** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 86.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.17 | 14G0166_P | 07/24/14 11:15 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0166 | 07/24/14 15:10 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.00 | 14G0189_P | 07/25/14 10:39 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 5.00 | 14G0189 | 07/25/14 15:55 | MS | TAL SPK |

## Client Sample ID: EX6-3-3 — Lab Sample ID: SXG0169-03

**Date Collected: 07/23/14 13:00** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 90.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.943 | 14G0166_P | 07/24/14 11:15 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0166 | 07/24/14 15:32 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.00 | 14G0189_P | 07/25/14 10:39 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0189 | 07/25/14 16:41 | MS | TAL SPK |

## Client Sample ID: EX6-4-3 — Lab Sample ID: SXG0169-04

**Date Collected: 07/23/14 13:05** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 86**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.924 | 14G0166_P | 07/24/14 11:15 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0166 | 07/24/14 15:55 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.00 | 14G0189_P | 07/25/14 10:39 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0189 | 07/25/14 17:05 | MS | TAL SPK |

## Client Sample ID: EX6-5-3 — Lab Sample ID: SXG0169-05

**Date Collected: 07/23/14 13:10** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 92.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.835 | 14G0166_P | 07/24/14 11:15 | CBW | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0169

## Client Sample ID: EX6-5-3 — Lab Sample ID: SXG0169-05

**Date Collected: 07/23/14 13:10** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 92.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0166 | 07/24/14 16:17 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.00 | 14G0189_P | 07/25/14 10:39 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0189 | 07/25/14 17:28 | MS | TAL SPK |

## Client Sample ID: EX6-6-3 — Lab Sample ID: SXG0169-06

**Date Collected: 07/23/14 13:15** — **Matrix: Soil**
**Date Received: 07/24/14 10:15** — **Percent Solids: 73.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.803 | 14G0166_P | 07/24/14 11:15 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14G0166 | 07/24/14 16:40 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.803 | 14G0166_P | 07/24/14 11:15 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0166 | 07/24/14 16:40 | CBW | TAL SPK |
| Total/NA | Prep | 3550C | | | 133955 | 07/25/14 12:28 | KKA | TAL SL |
| Total/NA | Analysis | 8270D | | 1 | 134230 | 07/27/14 19:55 | JSW | TAL SL |
| Total | Prep | EPA 3550B | | 1.00 | 14G0189_P | 07/25/14 10:39 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 50.0 | 14G0189 | 07/28/14 10:15 | MS | TAL SPK |
| Total/NA | Analysis | Moisture | | 1 | 133986 | 07/27/14 07:21 | SDB | TAL SL |

**Laboratory References:**

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0169

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Washington | State Program | 10 | C569 | 01-06-15 |

## Laboratory: TestAmerica St. Louis

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | MO00054 | 06-30-15 |
| California | NELAP | 9 | 2886 | 03-31-15 |
| Connecticut | State Program | 1 | PH-0241 | 03-31-15 |
| Florida | NELAP | 4 | E87689 | 06-30-15 |
| Illinois | NELAP | 5 | 200023 | 11-30-14 |
| Iowa | State Program | 7 | 373 | 12-01-14 |
| Kansas | NELAP | 7 | E-10236 | 10-31-14 * |
| Kentucky (DW) | State Program | 4 | 90125 | 12-31-14 |
| L-A-B | DoD ELAP | | L2305 | 01-10-16 |
| Louisiana | NELAP | 6 | 04080 | 06-30-15 |
| Maryland | State Program | 3 | 310 | 09-30-15 |
| Missouri | State Program | 7 | 780 | 06-30-15 |
| Nevada | State Program | 9 | MO000542013-1 | 07-31-15 |
| New Jersey | NELAP | 2 | MO002 | 06-30-15 |
| New Mexico | State Program | 6 | | 06-30-10 * |
| New York | NELAP | 2 | 11616 | 03-31-15 |
| North Dakota | State Program | 8 | R207 | 06-30-14 * |
| NRC | NRC | | 24-24817-01 | 12-31-22 |
| Oklahoma | State Program | 6 | 9997 | 08-31-15 |
| Pennsylvania | NELAP | 3 | 68-00540 | 02-28-15 |
| South Carolina | State Program | 4 | 85002001 | 06-30-14 * |
| Texas | NELAP | 6 | T104704193-13-6 | 07-31-15 |
| USDA | Federal | | P330-07-00122 | 01-09-17 |
| USEPA Reg V SDWA | Federal | 1 | WG-15J | 08-30-14 |
| Utah | NELAP | 8 | MO000542013-5 | 07-31-15 |
| Virginia | NELAP | 3 | 460230 | 06-14-15 |
| Washington | State Program | 10 | C592 | 08-30-15 |
| West Virginia DEP | State Program | 3 | 381 | 12-31-14 * |

* Certification renewal pending - certification considered valid.

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0169

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 8260C | Volatile Organic Compounds by EPA Methods 5035/8260C | | TAL SPK |
| NWTPH-Gx | Gasoline Hydrocarbons by NWTPH-Gx | | TAL SPK |
| 8270D | Semivolatile Organic Compounds (GC/MS) | SW846 | TAL SL |
| NWTPH-Dx | Semivolatile Petroleum Products by NWTPH-Dx | | TAL SPK |
| Moisture | Percent Moisture | EPA | TAL SL |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING


5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 ☒
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210


## CHAIN OF CUSTODY REPORT

Work Order #: SXG0169

CLIENT: GeoEngineers

REPORT TO: dfinder@geoengineers.com

ADDRESS: 523 E Second Ave
Spokane, WA 99202

PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO: Port of Chelan

P.O. NUMBER:

PROJECT NAME: Cashmere, WA

PROJECT NUMBER: 18593-001-04

SAMPLED BY: JML

**TURNAROUND REQUEST** in Business Days *

Organic & Inorganic Analyses: 10 (STD.) | 7 | 5 | 4 | 3 | ~~2~~ | 1 | <1

Petroleum Hydrocarbon Analyses: 5 (STD.) | 4 | 3 | ~~2~~ | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NWTPH-Gx | NWTPH-Dx | VOCs | SVOCs | $H_2$ | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EX6-1-3 | 7/23/2014 1240 | X | X | | | | S | 3 | | |
| 2 | EX6-2-3 | 1250 | X | X | | | | | 3 | | |
| 3 | EX6-3-3 | 1300 | X | X | | | | | 3 | | |
| 4 | EX6-4-3 | 1305 | X | X | | | | | 3 | | |
| 5 | EX6-5-3 | 1310 | X | X | | | | | 3 | | |
| 6 | EX6-6-3 | 1315 | X | X | X | X | | | 4 | | |
| 7 | EX6-7-8 | 1320 | | | | | | | 3 | hold | |
| 8 | EX6-8-8 | 1330 | | | | | | | 3 | hold | |
| 9 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |

RELEASED BY: Josh Lee DATE: 7/23/2014
PRINT NAME: Josh Lee FIRM: Geo TIME: 1600

RECEIVED BY: Cat Stapleton DATE: 7-24-14
PRINT NAME: FIRM: TestAmerica TIME: 10:15

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 5.4

PAGE 1 OF 1

TAL-1000 (0612)

## TestAmerica Spokane
## Sample Receipt Form

| | | |
|---|---|---|
| Work Order #: SXG0169 | Client: GeoEngineers | Project: Cashmere, WA |
| Date/Time Received: 7-24-14 10:15 | By: CS | |

Samples Delivered By: ☒ Shipping Service ☐ Courier ☐ Client ☐ Other: _____

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | X | | | |
| Custody Seals are present and intact: | | | X | |
| Are CoC documents present: | X | | | |
| Necessary signatures: | X | | | |

Thermal Preservation Type: ☐ Blue Ice ☐ Gel Ice ☒ Real Ice ☐ Dry Ice ☐ None ☐ Other: _____

Temperature: 5.4 °C Thermometer (Circle **one** Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐ Not enough ice ☐ Ice melted ☐ w/in 4hrs of collection ☐ NA ☐ Other: _____

| Log-In Phase Date/Time: 7-24-14 10:40 By: CS | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | Y | | | |
| Samples containers were received intact: | Y | | | |
| Do sample IDs match the CoC | Y | | | |
| Appropriate sample containers were received for tests requested | Y | | | |
| Are sample volumes adequate for tests requested | Y | | | |
| Appropriate preservatives were used for the tests requested | Y | | | |
| pH of inorganic samples checked and is within method specification | Y | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | Y | | | |
| Are dissolved parameters field filtered | | | Y | |
| Do any samples need to be filtered or preserved by the lab | | | Y | |
| Does this project require quick turnaround analysis | Y | | | 2days |
| Are there any short hold time tests (see chart below) | | Y | | |
| Are any samples within 2 days of or past expiration | | Y | | |
| Was the CoC scanned | Y | | | |
| Were there Non-conformance issues at login | | Y | | |
| If yes, was a CAR generated # _____ | | | P | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

Form No. SP-FORM-SPL-002 12 December 2012

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXG0172
Client Project/Site: 18593-001-04
Client Project Description: Cashmere, WA

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*7/30/2014 2:45:38 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*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: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXG0172-01 | EX7-1-2 | Soil | 07/24/14 07:50 | 07/25/14 09:50 |
| SXG0172-02 | EX7-2-2 | Soil | 07/24/14 07:55 | 07/25/14 09:50 |
| SXG0172-03 | EX7-3-2 | Soil | 07/24/14 08:00 | 07/25/14 09:50 |
| SXG0172-04 | EX7-4-2 | Soil | 07/24/14 08:05 | 07/25/14 09:50 |
| SXG0172-06 | EX8-1-5 | Soil | 07/24/14 10:00 | 07/25/14 09:50 |
| SXG0172-07 | EX8-2-5 | Soil | 07/24/14 10:05 | 07/25/14 09:50 |
| SXG0172-08 | EX8-3-5 | Soil | 07/24/14 10:10 | 07/25/14 09:50 |
| SXG0172-09 | EX8-4-5 | Soil | 07/24/14 10:15 | 07/25/14 09:50 |
| SXG0172-11 | EX9-1-4 | Soil | 07/24/14 12:00 | 07/25/14 09:50 |
| SXG0172-12 | EX9-2-4 | Soil | 07/24/14 12:05 | 07/25/14 09:50 |
| SXG0172-13 | EX9-3-4 | Soil | 07/24/14 12:10 | 07/25/14 09:50 |
| SXG0172-14 | EX9-4-4 | Soil | 07/24/14 12:15 | 07/25/14 09:50 |
| SXG0172-15 | EX9-5-4 | Soil | 07/24/14 12:20 | 07/25/14 09:50 |
| SXG0172-16 | EX10-1-2 | Soil | 07/24/14 13:00 | 07/25/14 09:50 |
| SXG0172-17 | EX10-2-6 | Soil | 07/24/14 14:50 | 07/25/14 09:50 |
| SXG0172-18 | EX10-3-6 | Soil | 07/24/14 14:55 | 07/25/14 09:50 |
| SXG0172-19 | EX10-4-6 | Soil | 07/24/14 15:00 | 07/25/14 09:50 |
| SXG0172-20 | EX10-5-6 | Soil | 07/24/14 15:05 | 07/25/14 09:50 |
| SXG0172-21 | EX10-6-6 | Soil | 07/24/14 15:10 | 07/25/14 09:50 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

## Qualifiers

### Metals

| Qualifier | Qualifier Description |
|---|---|
| M4 | The sample required a dilution due to matrix interference. Because of this dilution, the matrix spike concentrations in the sample were reduced to a level where the recovery calculation does not provide useful information. See Blank Spike (LCS). |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

## Client Sample ID: EX7-1-2 — Lab Sample ID: SXG0172-01

Date Collected: 07/24/14 07:50
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 71.6

**Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 6500 | | 385 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 17:01 | 10.0 |

## Client Sample ID: EX7-2-2 — Lab Sample ID: SXG0172-02

Date Collected: 07/24/14 07:55
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 67.3

**Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1610 | | 455 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 17:03 | 10.0 |

## Client Sample ID: EX7-3-2 — Lab Sample ID: SXG0172-03

Date Collected: 07/24/14 08:00
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 68.5

**Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1890 | | 472 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 17:05 | 10.0 |

## Client Sample ID: EX7-4-2 — Lab Sample ID: SXG0172-04

Date Collected: 07/24/14 08:05
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 84

**Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1220 | | 391 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 17:08 | 10.0 |

## Client Sample ID: EX8-1-5 — Lab Sample ID: SXG0172-06

Date Collected: 07/24/14 10:00
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 73.5

**Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 43.1 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 15:27 | 1.00 |

## Client Sample ID: EX8-2-5 — Lab Sample ID: SXG0172-07

Date Collected: 07/24/14 10:05
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 73.6

**Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 48.1 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 15:29 | 1.00 |

## Client Sample ID: EX8-3-5 — Lab Sample ID: SXG0172-08

Date Collected: 07/24/14 10:10
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 80.1

**Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 41.7 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 15:32 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

## Client Sample ID: EX8-4-5 — Lab Sample ID: SXG0172-09

**Date Collected: 07/24/14 10:15** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 44.1**

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 2510 | | 410 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 17:10 | 10.0 |

## Client Sample ID: EX9-1-4 — Lab Sample ID: SXG0172-11

**Date Collected: 07/24/14 12:00** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 93.2**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.17 | | mg/kg dry | ☼ | 07/28/14 08:07 | 07/28/14 12:07 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *91.1* | | *41.5 - 162* | *07/28/14 08:07* | *07/28/14 12:07* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.7 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/28/14 10:59 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 26.8 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/28/14 10:59 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *93.5* | | *50 - 150* | *07/25/14 10:39* | *07/28/14 10:59* | *1.00* |
| *n-Triacontane-d62* | *86.8* | | *50 - 150* | *07/25/14 10:39* | *07/28/14 10:59* | *1.00* |

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 47.2 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 15:38 | 1.00 |

## Client Sample ID: EX9-2-4 — Lab Sample ID: SXG0172-12

**Date Collected: 07/24/14 12:05** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 87.1**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 6.16 | | mg/kg dry | ☼ | 07/28/14 08:07 | 07/28/14 12:30 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *90.3* | | *41.5 - 162* | *07/28/14 08:07* | *07/28/14 12:30* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 11.5 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/28/14 11:23 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 28.7 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/28/14 11:23 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *99.9* | | *50 - 150* | *07/25/14 10:39* | *07/28/14 11:23* | *1.00* |
| *n-Triacontane-d62* | *90.8* | | *50 - 150* | *07/25/14 10:39* | *07/28/14 11:23* | *1.00* |

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 45.5 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 15:41 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

## Client Sample ID: EX9-3-4

**Lab Sample ID: SXG0172-13**
**Date Collected: 07/24/14 12:10**
**Matrix: Soil**
**Date Received: 07/25/14 09:50**
**Percent Solids: 91.8**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 10.8 | | 5.07 | | mg/kg dry | ☼ | 07/28/14 08:07 | 07/28/14 12:54 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *89.0* | | *41.5 - 162* | *07/28/14 08:07* | *07/28/14 12:54* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.9 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/28/14 11:46 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 27.2 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/28/14 11:46 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *99.0* | | *50 - 150* | *07/25/14 10:39* | *07/28/14 11:46* | *1.00* |
| *n-Triacontane-d62* | *90.4* | | *50 - 150* | *07/25/14 10:39* | *07/28/14 11:46* | *1.00* |

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 41.7 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 16:27 | 1.00 |

## Client Sample ID: EX9-4-4

**Lab Sample ID: SXG0172-14**
**Date Collected: 07/24/14 12:15**
**Matrix: Soil**
**Date Received: 07/25/14 09:50**
**Percent Solids: 92.7**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 4.53 | | mg/kg dry | ☼ | 07/28/14 08:07 | 07/28/14 13:17 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *88.9* | | *41.5 - 162* | *07/28/14 08:07* | *07/28/14 13:17* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.8 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/28/14 12:10 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 27.0 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/28/14 12:10 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *94.6* | | *50 - 150* | *07/25/14 10:39* | *07/28/14 12:10* | *1.00* |
| *n-Triacontane-d62* | *87.0* | | *50 - 150* | *07/25/14 10:39* | *07/28/14 12:10* | *1.00* |

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 40.3 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 16:29 | 1.00 |

## Client Sample ID: EX9-5-4

**Lab Sample ID: SXG0172-15**
**Date Collected: 07/24/14 12:20**
**Matrix: Soil**
**Date Received: 07/25/14 09:50**
**Percent Solids: 74.7**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 10.0 | | mg/kg dry | ☼ | 07/28/14 08:07 | 07/28/14 13:40 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *90.4* | | *41.5 - 162* | *07/28/14 08:07* | *07/28/14 13:40* | *1.00* |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

## Client Sample ID: EX9-5-4 — Lab Sample ID: SXG0172-15

Date Collected: 07/24/14 12:20
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 74.7

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 42.5 | | 13.4 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/28/14 09:31 | 1.00 |
| Heavy Oil Range Hydrocarbons | 121 | | 33.5 | | mg/kg dry | ☼ | 07/25/14 10:39 | 07/28/14 09:31 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *97.5* | | *50 - 150* | *07/25/14 10:39* | *07/28/14 09:31* | *1.00* |
| *n-Triacontane-d62* | *90.4* | | *50 - 150* | *07/25/14 10:39* | *07/28/14 09:31* | *1.00* |

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 120 | | 43.9 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 16:31 | 1.00 |

## Client Sample ID: EX10-1-2 — Lab Sample ID: SXG0172-16

Date Collected: 07/24/14 13:00
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 85.4

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 39.7 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 16:34 | 1.00 |

## Client Sample ID: EX10-2-6 — Lab Sample ID: SXG0172-17

Date Collected: 07/24/14 14:50
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 84.8

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 38.5 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 16:36 | 1.00 |

## Client Sample ID: EX10-3-6 — Lab Sample ID: SXG0172-18

Date Collected: 07/24/14 14:55
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 94.4

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 47.2 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 16:43 | 1.00 |

## Client Sample ID: EX10-4-6 — Lab Sample ID: SXG0172-19

Date Collected: 07/24/14 15:00
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 85.8

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 44.6 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 16:45 | 1.00 |

## Client Sample ID: EX10-5-6 — Lab Sample ID: SXG0172-20

Date Collected: 07/24/14 15:05
Date Received: 07/25/14 09:50
Matrix: Soil
Percent Solids: 84.8

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 33.8 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 16:47 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

**Client Sample ID: EX10-6-6**
**Date Collected: 07/24/14 15:10**
**Date Received: 07/25/14 09:50**

**Lab Sample ID: SXG0172-21**
**Matrix: Soil**
**Percent Solids: 86.3**

**Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 46.3 | | ug/kg dry | ☼ | 07/29/14 09:08 | 07/29/14 16:50 | 1.00 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

**Lab Sample ID: 14G0191-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0191** — **Prep Batch: 14G0191_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.00 | | mg/kg wet | | 07/28/14 08:07 | 07/28/14 10:14 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *98.6* | | *41.5 - 162* | *07/28/14 08:07* | *07/28/14 10:14* | *1.00* |

**Lab Sample ID: 14G0191-BS2** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0191** — **Prep Batch: 14G0191_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 50.0 | 46.3 | | mg/kg wet | | 92.6 | 74.4 - 124 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-bromofluorobenzene* | *90.6* | | *41.5 - 162* |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

**Lab Sample ID: 14G0189-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0189** — **Prep Batch: 14G0189_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.0 | | mg/kg wet | | 07/25/14 10:39 | 07/25/14 14:19 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.0 | | mg/kg wet | | 07/25/14 10:39 | 07/25/14 14:19 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *99.1* | | *50 - 150* | *07/25/14 10:39* | *07/25/14 14:19* | *1.00* |
| *n-Triacontane-d62* | *81.3* | | *50 - 150* | *07/25/14 10:39* | *07/25/14 14:19* | *1.00* |

**Lab Sample ID: 14G0189-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0189** — **Prep Batch: 14G0189_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 66.7 | 62.2 | | mg/kg wet | | 93.3 | 50 - 150 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *101* | | *50 - 150* |
| *n-Triacontane-d62* | *81.9* | | *50 - 150* |

**Lab Sample ID: 14G0189-DUP1** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0189** — **Prep Batch: 14G0189_P**

| Analyte | Sample Result | Sample Qualifier | Duplicate Result | Duplicate Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 31.6 | | 25.2 | | mg/kg dry | ☼ | 22.6 | 40 |
| Heavy Oil Range Hydrocarbons | 55.7 | | 38.0 | | mg/kg dry | ☼ | 37.8 | 40 |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx (Continued)

**Lab Sample ID: 14G0189-DUP1** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0189** — **Prep Batch: 14G0189_P**

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *103* | | *50 - 150* |
| *n-Triacontane-d62* | *92.7* | | *50 - 150* |

**Lab Sample ID: 14G0189-DUP2** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0189** — **Prep Batch: 14G0189_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 419 | | | 401 | | mg/kg dry | ☼ | | | 4.52 | 40 |
| Heavy Oil Range Hydrocarbons | 1480 | | | 1420 | | mg/kg dry | ☼ | | | 3.96 | 40 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *98.8* | | *50 - 150* |
| *n-Triacontane-d62* | *101* | | *50 - 150* |

## Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

**Lab Sample ID: 14G0198-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0198** — **Prep Batch: 14G0198_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 50.0 | | ug/kg wet | | 07/29/14 09:08 | 07/29/14 14:46 | 1.00 |

**Lab Sample ID: 14G0198-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0198** — **Prep Batch: 14G0198_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 200 | 205 | | ug/kg wet | | 102 | 80 - 120 | | |

**Lab Sample ID: 14G0198-MS1** — **Client Sample ID: EX7-1-2**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0198** — **Prep Batch: 14G0198_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 6500 | | 237 | 7580 | M4 | ug/kg dry | ☼ | 454 | 80 - 120 | | |

**Lab Sample ID: 14G0198-MSD1** — **Client Sample ID: EX7-1-2**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0198** — **Prep Batch: 14G0198_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | trix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 6500 | | 215 | 6530 | M4 | ug/kg dry | ☼ | 15.0 | 80 - 120 | 14.8 | 20 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

## Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods (Continued)

**Lab Sample ID: 14G0198-DUP1** — **Client Sample ID: EX7-1-2**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0198** — **Prep Batch: 14G0198_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 6500 | | | 7840 | | ug/kg dry | ☼ | | | 18.7 | 40 |

**Lab Sample ID: 14G0199-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0199** — **Prep Batch: 14G0199_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 50.0 | | ug/kg wet | | 07/29/14 09:08 | 07/29/14 15:50 | 1.00 |

**Lab Sample ID: 14G0199-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0199** — **Prep Batch: 14G0199_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 200 | 200 | | ug/kg wet | | 100 | 80 - 120 | | |

**Lab Sample ID: 14G0199-MS1** — **Client Sample ID: Matrix Spike**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0199** — **Prep Batch: 14G0199_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 194 | 200 | | ug/kg dry | ☼ | 103 | 80 - 120 | | |

**Lab Sample ID: 14G0199-MSD1** — **Client Sample ID: Matrix Spike Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0199** — **Prep Batch: 14G0199_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | ıtrix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 194 | 202 | | ug/kg dry | ☼ | 104 | 80 - 120 | 0.966 | 20 |

**Lab Sample ID: 14G0199-DUP1** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0199** — **Prep Batch: 14G0199_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | | ND | | ug/kg dry | ☼ | | | | 40 |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

## Client Sample ID: EX7-1-2 — Lab Sample ID: SXG0172-01

**Date Collected: 07/24/14 07:50** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 71.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.769 | 14G0198_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 10.0 | 14G0198 | 07/29/14 17:01 | ZZZ | TAL SPK |

## Client Sample ID: EX7-2-2 — Lab Sample ID: SXG0172-02

**Date Collected: 07/24/14 07:55** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 67.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.909 | 14G0198_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 10.0 | 14G0198 | 07/29/14 17:03 | ZZZ | TAL SPK |

## Client Sample ID: EX7-3-2 — Lab Sample ID: SXG0172-03

**Date Collected: 07/24/14 08:00** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 68.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.943 | 14G0198_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 10.0 | 14G0198 | 07/29/14 17:05 | ZZZ | TAL SPK |

## Client Sample ID: EX7-4-2 — Lab Sample ID: SXG0172-04

**Date Collected: 07/24/14 08:05** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 84**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.781 | 14G0198_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 10.0 | 14G0198 | 07/29/14 17:08 | ZZZ | TAL SPK |

## Client Sample ID: EX8-1-5 — Lab Sample ID: SXG0172-06

**Date Collected: 07/24/14 10:00** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 73.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.862 | 14G0198_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0198 | 07/29/14 15:27 | ZZZ | TAL SPK |

## Client Sample ID: EX8-2-5 — Lab Sample ID: SXG0172-07

**Date Collected: 07/24/14 10:05** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 73.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.962 | 14G0198_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0198 | 07/29/14 15:29 | ZZZ | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

## Client Sample ID: EX8-3-5 — Lab Sample ID: SXG0172-08

**Date Collected: 07/24/14 10:10** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 80.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.833 | 14G0198_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0198 | 07/29/14 15:32 | ZZZ | TAL SPK |

## Client Sample ID: EX8-4-5 — Lab Sample ID: SXG0172-09

**Date Collected: 07/24/14 10:15** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 44.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.820 | 14G0198_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 10.0 | 14G0198 | 07/29/14 17:10 | ZZZ | TAL SPK |

## Client Sample ID: EX9-1-4 — Lab Sample ID: SXG0172-11

**Date Collected: 07/24/14 12:00** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 93.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.896 | 14G0191_P | 07/28/14 08:07 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0191 | 07/28/14 12:07 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.00 | 14G0189_P | 07/25/14 10:39 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0189 | 07/28/14 10:59 | MS | TAL SPK |
| Total | Prep | EPA 7471 | | 0.943 | 14G0198_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0198 | 07/29/14 15:38 | ZZZ | TAL SPK |

## Client Sample ID: EX9-2-4 — Lab Sample ID: SXG0172-12

**Date Collected: 07/24/14 12:05** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 87.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.943 | 14G0191_P | 07/28/14 08:07 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0191 | 07/28/14 12:30 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.00 | 14G0189_P | 07/25/14 10:39 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0189 | 07/28/14 11:23 | MS | TAL SPK |
| Total | Prep | EPA 7471 | | 0.909 | 14G0198_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0198 | 07/29/14 15:41 | ZZZ | TAL SPK |

## Client Sample ID: EX9-3-4 — Lab Sample ID: SXG0172-13

**Date Collected: 07/24/14 12:10** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 91.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.849 | 14G0191_P | 07/28/14 08:07 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0191 | 07/28/14 12:54 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.00 | 14G0189_P | 07/25/14 10:39 | MS | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

## Client Sample ID: EX9-3-4 — Lab Sample ID: SXG0172-13

**Date Collected: 07/24/14 12:10** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 91.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0189 | 07/28/14 11:46 | MS | TAL SPK |
| Total | Prep | EPA 7471 | | 0.833 | 14G0199_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0199 | 07/29/14 16:27 | ZZZ | TAL SPK |

## Client Sample ID: EX9-4-4 — Lab Sample ID: SXG0172-14

**Date Collected: 07/24/14 12:15** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 92.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.767 | 14G0191_P | 07/28/14 08:07 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0191 | 07/28/14 13:17 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.00 | 14G0189_P | 07/25/14 10:39 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0189 | 07/28/14 12:10 | MS | TAL SPK |
| Total | Prep | EPA 7471 | | 0.806 | 14G0199_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0199 | 07/29/14 16:29 | ZZZ | TAL SPK |

## Client Sample ID: EX9-5-4 — Lab Sample ID: SXG0172-15

**Date Collected: 07/24/14 12:20** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 74.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.25 | 14G0191_P | 07/28/14 08:07 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14G0191 | 07/28/14 13:40 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.00 | 14G0189_P | 07/25/14 10:39 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14G0189 | 07/28/14 09:31 | MS | TAL SPK |
| Total | Prep | EPA 7471 | | 0.877 | 14G0199_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0199 | 07/29/14 16:31 | ZZZ | TAL SPK |

## Client Sample ID: EX10-1-2 — Lab Sample ID: SXG0172-16

**Date Collected: 07/24/14 13:00** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 85.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.794 | 14G0199_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0199 | 07/29/14 16:34 | ZZZ | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14G0196_P | 07/25/14 16:00 | MS | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14G0196 | 07/28/14 13:30 | MS | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

## Client Sample ID: EX10-2-6 — Lab Sample ID: SXG0172-17

**Date Collected: 07/24/14 14:50** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 84.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.769 | 14G0199_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0199 | 07/29/14 16:36 | ZZZ | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14G0207_P | 07/28/14 16:30 | MS | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14G0207 | 07/29/14 11:21 | MS | TAL SPK |

## Client Sample ID: EX10-3-6 — Lab Sample ID: SXG0172-18

**Date Collected: 07/24/14 14:55** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 94.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.943 | 14G0199_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0199 | 07/29/14 16:43 | ZZZ | TAL SPK |

## Client Sample ID: EX10-4-6 — Lab Sample ID: SXG0172-19

**Date Collected: 07/24/14 15:00** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 85.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.893 | 14G0199_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0199 | 07/29/14 16:45 | ZZZ | TAL SPK |

## Client Sample ID: EX10-5-6 — Lab Sample ID: SXG0172-20

**Date Collected: 07/24/14 15:05** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 84.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.676 | 14G0199_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0199 | 07/29/14 16:47 | ZZZ | TAL SPK |

## Client Sample ID: EX10-6-6 — Lab Sample ID: SXG0172-21

**Date Collected: 07/24/14 15:10** — **Matrix: Soil**
**Date Received: 07/25/14 09:50** — **Percent Solids: 86.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.926 | 14G0199_P | 07/29/14 09:08 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14G0199 | 07/29/14 16:50 | ZZZ | TAL SPK |

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-071 | 10-31-14 |
| Washington | State Program | 10 | C569 | 01-06-15 |

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXG0172

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| NWTPH-Gx | Gasoline Hydrocarbons by NWTPH-Gx | | TAL SPK |
| NWTPH-Dx | Semivolatile Petroleum Products by NWTPH-Dx | | TAL SPK |
| EPA 7471B | Total Metals by EPA 6010/7000 Series Methods | | TAL SPK |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 X
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order # SXG0172

CLIENT: GeoEngineers
REPORT TO: dlander@geoengineers.com
ADDRESS: 523 E Second Ave Spokane, WA 99202
PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO: Port of Chelan
P.O. NUMBER:

PROJECT NAME: Cashmere
PROJECT NUMBER: 18593-001-04
SAMPLED BY: JML

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 (STD.) 7 5 4 3 ~~2~~ 1 <1
Petroleum Hydrocarbon Analyses: 5 (STD.) 4 3 ~~2~~ 1 <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NWTPH Gx | NWTPH Dx | Hg | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|
| 1 | EX7-1-2 | 7/24/2014 0750 | | | X | S | 3 | | |
| 2 | EX7-2-2 | 0755 | | | X | | | | |
| 3 | EX7-3-2 | 0800 | | | X | | | | |
| 4 | EX7-4-2 | 0805 | | | X | | | | |
| 5 | EX7-5-6 | 0810 | | | ~~X~~ | | | hold | |
| 6 | EX8-1-5 | 1000 | | | X | | | | |
| 7 | EX8-2-5 | 1005 | | | X | | | | |
| 8 | EX8-3-5 | 1010 | | | X | | | | |
| 9 | EX8-4-5 | 1015 | | | X | | | | |
| 10 | EX8-5-7 | 1020 | | | ~~X~~ | | | hold | |

RELEASED BY: [signature] DATE: 7/24/14
PRINT NAME: Josh Lee FIRM: Geo TIME: 1600
RECEIVED BY: Cat Stapleton DATE: 7-25-14
PRINT NAME: FIRM: TestAmerica TIME: 9:50
RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:
RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 73 PAGE 1 OF 3

TAL-1000 (0612)



7/30/2014

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 X
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

# CHAIN OF CUSTODY REPORT

Work Order #: SXG0172

CLIENT: GeoEngineers

REPORT TO: dlander@geoengineers.com

ADDRESS: 523 E Second Ave Spokane, WA 99202

PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO: Port of Chelan

P.O. NUMBER:

PROJECT NAME: Cashmere

PROJECT NUMBER: 18593-001-04

SAMPLED BY: JML

**TURNAROUND REQUEST** in Business Days *

Organic & Inorganic Analyses: 10 (STD.) | 7 | 5 | 4 | 3 | X | 1 | <1

Petroleum Hydrocarbon Analyses: 5 (STD.) | 4 | 3 | X | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NWTPH Gx | NWTPH Dx | Hg | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|
| 1 | EX9-1-4 | 7/24/2014 1200 | X | X | X | S | 3 | | |
| 2 | EX9-2-4 | 1205 | X | X | X | | | | |
| 3 | EX9-3-4 | 1210 | X | X | X | | | | |
| 4 | EX9-4-4 | 1215 | X | X | X | | | | |
| 5 | EX9-5-4 | 1220 | X | X | X | | | | |
| 6 | EX10-1-2 | 1300 | | | X | | | | |
| 7 | EX10-2-6 | 1450 | | | X | | | | |
| 8 | EX10-3-6 | 1455 | | | X | | | | |
| 9 | EX10-4-6 | 1500 | | | X | | | | |
| 10 | EX10-5-6 | 1505 | | | X | | | | |

RELEASED BY: [signature] DATE: 7/24/2014
PRINT NAME: Josh Lee FIRM: Geo TIME: 1600

RECEIVED BY: Cat Stapleton DATE: 7-25-14
PRINT NAME: FIRM: TestAmerica TIME: 9:50

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 7.3 PAGE 2 OF 3

TAL-1000 (0612)



7/30/2014

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING


5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 ☒
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210


## CHAIN OF CUSTODY REPORT

Work Order #: SXG0172

CLIENT: Geoengineers

REPORT TO: dlandor@geoengineers.com

ADDRESS: 525 E Second Ave

PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO: Port of Chelan

P.O. NUMBER:

PROJECT NAME: Cashmere

PROJECT NUMBER: 18593-001-04

SAMPLED BY: JML

**TURNAROUND REQUEST** in Business Days *

Organic & Inorganic Analyses: 10 (STD.) | 7 | 5 | 4 | 3 | ~~2~~ | 1 | <1

Petroleum Hydrocarbon Analyses: 5 (STD.) | 4 | 3 | ~~2~~ | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | Hg | | | | | | | | | | | | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EX10-6-6 | 7/24/2014 1510 | X | | | | | | | | | | | | S | 3 | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| RELEASED BY: | DATE: 7/24/2014 | RECEIVED BY: | | DATE: 7-25-14 | |
| PRINT NAME: Josh Lu | FIRM: Geo / TIME: 1600 | PRINT NAME: Cat Stapleton | FIRM: TestAmerica | TIME: 9:50 | |
| RELEASED BY: | DATE: | RECEIVED BY: | | DATE: | |
| PRINT NAME: | FIRM: / TIME: | PRINT NAME: | FIRM: | TIME: | |

ADDITIONAL REMARKS:

TEMP:

PAGE 3 OF 3

TAL-1000 (0612)

## TestAmerica Spokane
## Sample Receipt Form

| Work Order #: SXG0172 | Client: GeoEngineers | Project: Cashmere, WA |
|---|---|---|
| Date/Time Received: 7-25-14 9:50 | By: CS | |

Samples Delivered By: ☒ Shipping Service ☐ Courier ☐ Client ☐ Other: _____

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | X | | | |
| Custody Seals are present and intact: | | | X | |
| Are CoC documents present: | X | | | |
| Necessary signatures: | X | | | |

Thermal Preservation Type: ☐ Blue Ice ☐ Gel Ice ☒ Real Ice ☐ Dry Ice ☐ None ☐ Other: _____

Temperature: 7.3 °C Thermometer (Circle **one** Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☒ Not enough ice ☒ Ice melted ☐ w/in 4hrs of collection ☐ NA ☐ Other: _____

| Log-in Phase Date/Time: 7-25-14 10:40 By: CS | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | Y | | | |
| Samples containers were received intact: | Y | | | |
| Do sample IDs match the CoC | Y | | | |
| Appropriate sample containers were received for tests requested | Y | | | |
| Are sample volumes adequate for tests requested | Y | | | |
| Appropriate preservatives were used for the tests requested | Y | | | |
| pH of inorganic samples checked and is within method specification | Y | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | | | Y | |
| Are dissolved parameters field filtered | | | Y | |
| Do any samples need to be filtered or preserved by the lab | | X | | |
| Does this project require quick turnaround analysis | X | | | 2days |
| Are there any short hold time tests (see chart below) | | X | | |
| Are any samples within 2 days of or past expiration | | X | | |
| Was the CoC scanned | X | | | |
| Were there Non-conformance issues at login | | Y | | |
| If yes, was a CAR generated # _____ | | | Y | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

Form No. SP-FORM-SPL-002 12 December 2012

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXH0001
Client Project/Site: 18593-001-04
Client Project Description: Cashmere, WA

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*8/5/2014 4:27:31 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.testamericainc.com

*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: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0001

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXH0001-01 | EX8-6-4 | Soil | 07/31/14 09:30 | 08/01/14 10:30 |
| SXH0001-02 | EX6-9-3 | Soil | 07/31/14 12:30 | 08/01/14 10:30 |
| SXH0001-03 | EX6-10-3 | Soil | 07/31/14 12:40 | 08/01/14 10:30 |
| SXH0001-04 | EX7-6-2 | Soil | 07/31/14 08:30 | 08/01/14 10:30 |
| SXH0001-05 | EX7-7-3 | Soil | 07/31/14 14:10 | 08/01/14 10:30 |
| SXH0001-06 | EX7-8-2 | Soil | 07/31/14 14:15 | 08/01/14 10:30 |
| SXH0001-07 | EX7-9-3 | Soil | 07/31/14 14:20 | 08/01/14 10:30 |
| SXH0001-08 | EX7-10-2 | Soil | 07/31/14 14:25 | 08/01/14 10:30 |
| SXH0001-09 | EX7-11-3 | Soil | 07/31/14 14:30 | 08/01/14 10:30 |
| SXH0001-10 | EX7-12-2 | Soil | 07/31/14 14:35 | 08/01/14 10:30 |
| SXH0001-11 | EX7-13-3 | Soil | 07/31/14 14:40 | 08/01/14 10:30 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0001

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0001

## Client Sample ID: EX8-6-4 — Lab Sample ID: SXH0001-01

**Date Collected: 07/31/14 09:30** — **Matrix: Soil**
**Date Received: 08/01/14 10:30** — **Percent Solids: 74.0**

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.55 | | 0.12 | | mg/Kg | ☼ | 08/04/14 16:23 | 08/04/14 22:27 | 1 |

## Client Sample ID: EX6-9-3 — Lab Sample ID: SXH0001-02

**Date Collected: 07/31/14 12:30** — **Matrix: Soil**
**Date Received: 08/01/14 10:30** — **Percent Solids: 87.9**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 6.61 | | mg/kg dry | ☼ | 08/04/14 12:28 | 08/04/14 15:28 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *91.0* | | *41.5 - 162* | *08/04/14 12:28* | *08/04/14 15:28* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 33.8 | | 9.74 | | mg/kg dry | ☼ | 08/04/14 11:40 | 08/04/14 14:31 | 1.00 |
| Heavy Oil Range Hydrocarbons | 108 | | 24.4 | | mg/kg dry | ☼ | 08/04/14 11:40 | 08/04/14 14:31 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *103* | | *50 - 150* | *08/04/14 11:40* | *08/04/14 14:31* | *1.00* |
| *n-Triacontane-d62* | *94.3* | | *50 - 150* | *08/04/14 11:40* | *08/04/14 14:31* | *1.00* |

## Client Sample ID: EX6-10-3 — Lab Sample ID: SXH0001-03

**Date Collected: 07/31/14 12:40** — **Matrix: Soil**
**Date Received: 08/01/14 10:30** — **Percent Solids: 91.7**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.61 | | mg/kg dry | ☼ | 08/04/14 12:28 | 08/04/14 15:50 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *90.7* | | *41.5 - 162* | *08/04/14 12:28* | *08/04/14 15:50* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 269 | | 107 | | mg/kg dry | ☼ | 08/04/14 11:40 | 08/04/14 15:42 | 10.0 |
| Heavy Oil Range Hydrocarbons | 1720 | | 268 | | mg/kg dry | ☼ | 08/04/14 11:40 | 08/04/14 15:42 | 10.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *90.2* | | *50 - 150* | *08/04/14 11:40* | *08/04/14 15:42* | *10.0* |
| *n-Triacontane-d62* | *125* | | *50 - 150* | *08/04/14 11:40* | *08/04/14 15:42* | *10.0* |

## Client Sample ID: EX7-6-2 — Lab Sample ID: SXH0001-04

**Date Collected: 07/31/14 08:30** — **Matrix: Soil**
**Date Received: 08/01/14 10:30** — **Percent Solids: 94.2**

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.91 | | 0.10 | | mg/Kg | ☼ | 08/04/14 16:23 | 08/04/14 22:37 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0001

## Client Sample ID: EX7-7-3 — Lab Sample ID: SXH0001-05

Date Collected: 07/31/14 14:10
Date Received: 08/01/14 10:30
Matrix: Soil
Percent Solids: 19.3

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 29 | | 18 | | mg/Kg | ☼ | 08/04/14 16:23 | 08/04/14 23:36 | 50 |

## Client Sample ID: EX7-8-2 — Lab Sample ID: SXH0001-06

Date Collected: 07/31/14 14:15
Date Received: 08/01/14 10:30
Matrix: Soil
Percent Solids: 75.6

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.87 | | 0.13 | | mg/Kg | ☼ | 08/04/14 16:23 | 08/04/14 23:03 | 1 |

## Client Sample ID: EX7-9-3 — Lab Sample ID: SXH0001-07

Date Collected: 07/31/14 14:20
Date Received: 08/01/14 10:30
Matrix: Soil
Percent Solids: 59.1

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 3.7 | | 1.6 | | mg/Kg | ☼ | 08/04/14 16:23 | 08/04/14 23:38 | 10 |

## Client Sample ID: EX7-10-2 — Lab Sample ID: SXH0001-08

Date Collected: 07/31/14 14:25
Date Received: 08/01/14 10:30
Matrix: Soil
Percent Solids: 73.9

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.2 | | 0.12 | | mg/Kg | ☼ | 08/04/14 16:23 | 08/04/14 23:10 | 1 |

## Client Sample ID: EX7-11-3 — Lab Sample ID: SXH0001-09

Date Collected: 07/31/14 14:30
Date Received: 08/01/14 10:30
Matrix: Soil
Percent Solids: 79.4

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.086 | | mg/Kg | ☼ | 08/04/14 16:23 | 08/04/14 23:12 | 1 |

## Client Sample ID: EX7-12-2 — Lab Sample ID: SXH0001-10

Date Collected: 07/31/14 14:35
Date Received: 08/01/14 10:30
Matrix: Soil
Percent Solids: 80.0

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.60 | | 0.11 | | mg/Kg | ☼ | 08/04/14 16:23 | 08/04/14 23:15 | 1 |

## Client Sample ID: EX7-13-3 — Lab Sample ID: SXH0001-11

Date Collected: 07/31/14 14:40
Date Received: 08/01/14 10:30
Matrix: Soil
Percent Solids: 32.3

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.3 | | 0.25 | | mg/Kg | ☼ | 08/04/14 16:23 | 08/04/14 23:18 | 1 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0001

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

**Lab Sample ID: 14H0005-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0005** — **Prep Batch: 14H0005_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.00 | | mg/kg wet | | 08/04/14 12:28 | 08/04/14 14:20 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *99.4* | | *41.5 - 162* | *08/04/14 12:28* | *08/04/14 14:20* | *1.00* |

**Lab Sample ID: 14H0005-BS2** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0005** — **Prep Batch: 14H0005_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 50.0 | 49.4 | | mg/kg wet | | 98.9 | 74.4 - 124 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-bromofluorobenzene* | *88.5* | | *41.5 - 162* |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

**Lab Sample ID: 14H0004-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0004** — **Prep Batch: 14H0004_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.0 | | mg/kg wet | | 08/04/14 11:40 | 08/04/14 13:45 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.0 | | mg/kg wet | | 08/04/14 11:40 | 08/04/14 13:45 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *98.1* | | *50 - 150* | *08/04/14 11:40* | *08/04/14 13:45* | *1.00* |
| *n-Triacontane-d62* | *80.4* | | *50 - 150* | *08/04/14 11:40* | *08/04/14 13:45* | *1.00* |

**Lab Sample ID: 14H0004-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0004** — **Prep Batch: 14H0004_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 66.7 | 62.1 | | mg/kg wet | | 93.1 | 50 - 150 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *100* | | *50 - 150* |
| *n-Triacontane-d62* | *80.7* | | *50 - 150* |

**Lab Sample ID: 14H0004-DUP1** — **Client Sample ID: EX6-9-3**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0004** — **Prep Batch: 14H0004_P**

| Analyte | Sample Result | Sample Qualifier | Duplicate Result | Duplicate Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 33.8 | | 26.7 | | mg/kg dry | ☼ | 23.3 | 40 |
| Heavy Oil Range Hydrocarbons | 108 | | 111 | | mg/kg dry | ☼ | 3.02 | 40 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0001

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx (Continued)

**Lab Sample ID: 14H0004-DUP1** — **Client Sample ID: EX6-9-3**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0004** — **Prep Batch: 14H0004_P**

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *98.0* | | *50 - 150* |
| *n-Triacontane-d62* | *90.1* | | *50 - 150* |

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID: MB 250-29232/10-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 29247** — **Prep Batch: 29232**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.084 | | mg/Kg | | 08/04/14 16:23 | 08/04/14 22:12 | 1 |

**Lab Sample ID: LCS 250-29232/11-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 29247** — **Prep Batch: 29232**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 0.542 | 0.547 | | mg/Kg | | 101 | 80 - 120 | | |

**Lab Sample ID: 250-20571-1 MS** — **Client Sample ID: SXH0001-01**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 29247** — **Prep Batch: 29232**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.55 | | 0.691 | 1.16 | | mg/Kg | ☼ | 88 | 75 - 125 | | |

**Lab Sample ID: 250-20571-1 MSD** — **Client Sample ID: SXH0001-01**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 29247** — **Prep Batch: 29232**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.55 | | 0.696 | 1.21 | | mg/Kg | ☼ | 94 | 75 - 125 | 4 | 40 |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0001

## Client Sample ID: EX8-6-4 — Lab Sample ID: SXH0001-01

**Date Collected: 07/31/14 09:30** — **Matrix: Soil**
**Date Received: 08/01/14 10:30** — **Percent Solids: 74.0**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 7471A | | | 29232 | 08/04/14 16:23 | LQN | TAL PRT |
| Total/NA | Analysis | 7471A | | 1 | 29247 | 08/04/14 22:27 | LQN | TAL PRT |
| Total/NA | Analysis | D2216-80 | | 1 | 29244 | 08/04/14 19:33 | LQN | TAL PRT |

## Client Sample ID: EX6-9-3 — Lab Sample ID: SXH0001-02

**Date Collected: 07/31/14 12:30** — **Matrix: Soil**
**Date Received: 08/01/14 10:30** — **Percent Solids: 87.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.04 | 14H0005_P | 08/04/14 12:28 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14H0005 | 08/04/14 15:28 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.856 | 14H0004_P | 08/04/14 11:40 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14H0004 | 08/04/14 14:31 | MS | TAL SPK |

## Client Sample ID: EX6-10-3 — Lab Sample ID: SXH0001-03

**Date Collected: 07/31/14 12:40** — **Matrix: Soil**
**Date Received: 08/01/14 10:30** — **Percent Solids: 91.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.945 | 14H0005_P | 08/04/14 12:28 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14H0005 | 08/04/14 15:50 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.982 | 14H0004_P | 08/04/14 11:40 | MS | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 10.0 | 14H0004 | 08/04/14 15:42 | MS | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14H0012_P | 08/05/14 11:23 | MS | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14H0012 | 08/05/14 16:23 | MS | TAL SPK |

## Client Sample ID: EX7-6-2 — Lab Sample ID: SXH0001-04

**Date Collected: 07/31/14 08:30** — **Matrix: Soil**
**Date Received: 08/01/14 10:30** — **Percent Solids: 94.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 7471A | | | 29232 | 08/04/14 16:23 | LQN | TAL PRT |
| Total/NA | Analysis | 7471A | | 1 | 29247 | 08/04/14 22:37 | LQN | TAL PRT |
| Total/NA | Analysis | D2216-80 | | 1 | 29244 | 08/04/14 19:33 | LQN | TAL PRT |

## Client Sample ID: EX7-7-3 — Lab Sample ID: SXH0001-05

**Date Collected: 07/31/14 14:10** — **Matrix: Soil**
**Date Received: 08/01/14 10:30** — **Percent Solids: 19.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 7471A | | | 29232 | 08/04/14 16:23 | LQN | TAL PRT |
| Total/NA | Analysis | 7471A | | 50 | 29247 | 08/04/14 23:36 | LQN | TAL PRT |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0001

## Client Sample ID: EX7-7-3 — Lab Sample ID: SXH0001-05

**Date Collected: 07/31/14 14:10**
**Matrix: Soil**
**Date Received: 08/01/14 10:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | D2216-80 | | 1 | 29244 | 08/04/14 19:33 | LQN | TAL PRT |

## Client Sample ID: EX7-8-2 — Lab Sample ID: SXH0001-06

**Date Collected: 07/31/14 14:15**
**Matrix: Soil**
**Date Received: 08/01/14 10:30**
**Percent Solids: 75.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 7471A | | | 29232 | 08/04/14 16:23 | LQN | TAL PRT |
| Total/NA | Analysis | 7471A | | 1 | 29247 | 08/04/14 23:03 | LQN | TAL PRT |
| Total/NA | Analysis | D2216-80 | | 1 | 29244 | 08/04/14 19:33 | LQN | TAL PRT |

## Client Sample ID: EX7-9-3 — Lab Sample ID: SXH0001-07

**Date Collected: 07/31/14 14:20**
**Matrix: Soil**
**Date Received: 08/01/14 10:30**
**Percent Solids: 59.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 7471A | | | 29232 | 08/04/14 16:23 | LQN | TAL PRT |
| Total/NA | Analysis | 7471A | | 10 | 29247 | 08/04/14 23:38 | LQN | TAL PRT |
| Total/NA | Analysis | D2216-80 | | 1 | 29244 | 08/04/14 19:33 | LQN | TAL PRT |

## Client Sample ID: EX7-10-2 — Lab Sample ID: SXH0001-08

**Date Collected: 07/31/14 14:25**
**Matrix: Soil**
**Date Received: 08/01/14 10:30**
**Percent Solids: 73.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 7471A | | | 29232 | 08/04/14 16:23 | LQN | TAL PRT |
| Total/NA | Analysis | 7471A | | 1 | 29247 | 08/04/14 23:10 | LQN | TAL PRT |
| Total/NA | Analysis | D2216-80 | | 1 | 29244 | 08/04/14 19:33 | LQN | TAL PRT |

## Client Sample ID: EX7-11-3 — Lab Sample ID: SXH0001-09

**Date Collected: 07/31/14 14:30**
**Matrix: Soil**
**Date Received: 08/01/14 10:30**
**Percent Solids: 79.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 7471A | | | 29232 | 08/04/14 16:23 | LQN | TAL PRT |
| Total/NA | Analysis | 7471A | | 1 | 29247 | 08/04/14 23:12 | LQN | TAL PRT |
| Total/NA | Analysis | D2216-80 | | 1 | 29244 | 08/04/14 19:33 | LQN | TAL PRT |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0001

## Client Sample ID: EX7-12-2

**Lab Sample ID: SXH0001-10**

**Date Collected: 07/31/14 14:35**
**Matrix: Soil**
**Date Received: 08/01/14 10:30**
**Percent Solids: 80.0**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 7471A | | | 29232 | 08/04/14 16:23 | LQN | TAL PRT |
| Total/NA | Analysis | 7471A | | 1 | 29247 | 08/04/14 23:15 | LQN | TAL PRT |
| Total/NA | Analysis | D2216-80 | | 1 | 29244 | 08/04/14 19:33 | LQN | TAL PRT |

## Client Sample ID: EX7-13-3

**Lab Sample ID: SXH0001-11**

**Date Collected: 07/31/14 14:40**
**Matrix: Soil**
**Date Received: 08/01/14 10:30**
**Percent Solids: 32.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 7471A | | | 29232 | 08/04/14 16:23 | LQN | TAL PRT |
| Total/NA | Analysis | 7471A | | 1 | 29247 | 08/04/14 23:18 | LQN | TAL PRT |
| Total/NA | Analysis | D2216-80 | | 1 | 29244 | 08/04/14 19:33 | LQN | TAL PRT |

**Laboratory References:**

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0001

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-071 | 10-31-14 |
| Washington | State Program | 10 | C569 | 01-06-15 |

## Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-012 | 12-26-13 * |
| California | State Program | 9 | 2597 | 09-30-15 |
| Oregon | NELAP | 10 | OR100021 | 01-09-15 |
| USDA | Federal | | P330-11-00092 | 04-17-17 |
| Washington | State Program | 10 | C586 | 06-23-15 |

* Certification renewal pending - certification considered valid.

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0001

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| NWTPH-Gx | Gasoline Hydrocarbons by NWTPH-Gx | | TAL SPK |
| NWTPH-Dx | Semivolatile Petroleum Products by NWTPH-Dx | | TAL SPK |
| 7471A | Mercury (CVAA) | SW846 | TAL PRT |
| D2216-80 | Percent Dry Weight (Solids) per ASTM D2216-80 | ASTM | TAL PRT |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

ASTM = ASTM International

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

**Laboratory References:**

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

>>> Select a Laboratory <<<
#N/A
#N/A
#N/A
#N/A

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

| Client Contact | Project Manager: Dave Lander | Site Contact: JM | Date: | COC No: |
|---|---|---|---|---|
| Your Company Name here GeoEngineers | Tel/Fax: | Lab Contact: Renee Arrington | Carrier: | ____ of ____ COCs |
| Address 523 E Second Ave | Analysis Turnaround Time | | | Sampler: JM |
| City/State/Zip Spokane/WA/99202 | ☐ CALENDAR DAYS ☐ WORKING DAYS | | | For Lab Use Only: |
| (xxx) xxx-xxxx 509-363-3125 Phone | TAT if different from Below ____ | | | Walk-in Client: |
| (xxx) xxx-xxxx 509-363-3126 FAX | ☐ 2 weeks | | | Lab Sampling: |
| Project Name: Cashmere, WA | ☐ 1 week | | | |
| Site: Mill Site | ☒ 2 days | | | Job / SDG No.: |
| PO# 18593-001-04 | ☐ 1 day | | | SXH0001 |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=Grab) | Matrix | # of Cont. | Filtered Sample (Y/N) | Perform MS/MSD (Y/N) | HCl | DX | GX | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| EX8-6-4 | 7/31/2014 | 0930 | G | S | 3 | | | X | | | |
| EX6-9-3 | | 1230 | | | | | | | X | X | |
| EX6-10-3 | | 1240 | | | | | | | X | X | |
| EX7-6-2 | | 0830 | | | | | | X | | | |
| EX7-7-3 | | 1410 | | | | | | X | | | |
| EX7-8-2 | | 1415 | | | | | | X | | | |
| EX7-9-3 | | 1420 | | | | | | X | | | |
| EX7-10-2 | | 1425 | | | | | | X | | | |
| EX7-11-3 | | 1430 | | | | | | X | | | |
| EX7-12-2 | | 1435 | | | | | | X | | | |
| EX7-13-3 | | 1440 | | | | | | X | | | |

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

**Possible Hazard Identification:**
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

**Special Instructions/QC Requirements & Comments:**

5.6°C

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ | Therm ID No.: ____

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| Josh | GEO | 7/31 1600 | | TA-Spk | 8-1-14 @ 10:30 |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| Relinquished by: | Company: | Date/Time: | Received in Laboratory by: | Company: | Date/Time: |

Form No. CA-C-WI-002, Rev. 4.3, dated 12/05/2013

# TestAmerica Spokane
## Sample Receipt Form

| | | |
|---|---|---|
| **Work Order #:** SXH0001 | **Client:** Geo Eng. | **Project:** Cashmere |
| Date/Time Received: 10:30 8-1-14 | By: CW | |
| Samples Delivered By: ☒ Shipping Service ☐ Courier ☐ Client ☐ Other: UPS | | |
| List Air Bill Number(s) or Attach a photocopy of the Air Bill: J2270626761 | | |

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | X | | | |
| Custody Seals are present and intact: | | | X | |
| Are CoC documents present: | X | | | |
| Necessary signatures: | X | | | |

Thermal Preservation Type: ☐ Blue Ice ☐ Gel Ice ☒ Real Ice ☐ Dry Ice ☐ None ☐ Other:

Temperature: 5.6 °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐ Not enough ice ☐ Ice melted ☐ w/in 4hrs of collection ☐ NA ☐ Other:

| Log-in Phase Date/Time: 8/1/14 1055 By: CA | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | X | | | |
| Samples containers were received intact: | X | | | |
| Do sample IDs match the CoC | X | | | |
| Appropriate sample containers were received for tests requested | X | | | |
| Are sample volumes adequate for tests requested | X | | | |
| Appropriate preservatives were used for the tests requested | X | | | |
| pH of inorganic samples checked and is within method specification | | | X | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | | | X | |
| Are dissolved parameters field filtered | | | X | |
| Do any samples need to be filtered or preserved by the lab | | | X | |
| Does this project require quick turnaround analysis | X | | | |
| Are there any short hold time tests (see chart below) | | X | | |
| Are any samples within 2 days of or past expiration | | X | | |
| Was the CoC scanned | X | | | |
| Were there Non-conformance issues at login | | X | | |
| If yes, was a CAR generated # | | | X | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

Form No. SP-FORM-SPL-002 12 December 2012

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXH0053
Client Project/Site: 18593-001-04
Client Project Description: Cashmere, WA

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*8/26/2014 4:31:04 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.testamericainc.com

*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: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0053

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXH0053-01 | EX7-14-2 | Soil | 08/07/14 14:00 | 08/08/14 11:45 |
| SXH0053-02 | EX7-15-3 | Soil | 08/07/14 14:05 | 08/08/14 11:45 |
| SXH0053-03 | EX7-16-2 | Soil | 08/07/14 14:10 | 08/08/14 11:45 |
| SXH0053-04 | EX7-17-3 | Soil | 08/07/14 14:15 | 08/08/14 11:45 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0053

## Qualifiers

### Metals

| Qualifier | Qualifier Description |
|---|---|
| M2 | The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS). |
| T5 | Less than the prescribed sample amount was available to perform the leachate extraction. The volume of extraction fluid was adjusted proportionately based on the method prescribed ratio of extraction fluid to sample weight. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0053

## Client Sample ID: EX7-14-2

**Lab Sample ID: SXH0053-01**
**Date Collected: 08/07/14 14:00**
**Matrix: Soil**
**Date Received: 08/08/14 11:45**
**Percent Solids: 91.1**

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 567 | | 46.3 | | ug/kg dry | ☼ | 08/12/14 10:22 | 08/12/14 15:50 | 1.00 |

## Client Sample ID: EX7-15-3

**Lab Sample ID: SXH0053-02**
**Date Collected: 08/07/14 14:05**
**Matrix: Soil**
**Date Received: 08/08/14 11:45**
**Percent Solids: 51.3**

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1500 | | 41.0 | | ug/kg dry | ☼ | 08/12/14 10:22 | 08/12/14 15:53 | 1.00 |

## Client Sample ID: EX7-16-2

**Lab Sample ID: SXH0053-03**
**Date Collected: 08/07/14 14:10**
**Matrix: Soil**
**Date Received: 08/08/14 11:45**
**Percent Solids: 57.2**

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 3380 | | 472 | | ug/kg dry | ☼ | 08/12/14 10:22 | 08/12/14 16:19 | 10.0 |

## Client Sample ID: EX7-17-3

**Lab Sample ID: SXH0053-04**
**Date Collected: 08/07/14 14:15**
**Matrix: Soil**
**Date Received: 08/08/14 11:45**
**Percent Solids: 28.1**

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 29300 | | 446 | | ug/kg dry | ☼ | 08/12/14 10:22 | 08/12/14 16:21 | 10.0 |

### Method: EPA 7471 - TCLP Metals by EPA 1311/6010/7000 Series Methods - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | T5 | 0.000500 | | mg/L | | 08/26/14 08:57 | 08/26/14 14:10 | 1.00 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0053

## Method: EPA 7471 - TCLP Metals by EPA 1311/6010/7000 Series Methods

**Lab Sample ID: 14H0145-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: TCLP**
**Analysis Batch: 14H0145** — **Prep Batch: 14H0145_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.000500 | | mg/L | | 08/26/14 08:57 | 08/26/14 14:08 | 1.00 |

**Lab Sample ID: 14H0145-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: TCLP**
**Analysis Batch: 14H0145** — **Prep Batch: 14H0145_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 0.00200 | 0.00201 | | mg/L | | 100 | 80 - 120 |

**Lab Sample ID: 14H0145-MS1** — **Client Sample ID: EX7-17-3**
**Matrix: Soil** — **Prep Type: TCLP**
**Analysis Batch: 14H0145** — **Prep Batch: 14H0145_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | T5 | 0.00200 | 0.00188 | | mg/L | | 94.0 | 80 - 120 |

**Lab Sample ID: 14H0145-MSD1** — **Client Sample ID: EX7-17-3**
**Matrix: Soil** — **Prep Type: TCLP**
**Analysis Batch: 14H0145** — **Prep Batch: 14H0145_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | trix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | T5 | 0.00200 | 0.00196 | | mg/L | | 98.0 | 80 - 120 | 4.17 | 20 |

**Lab Sample ID: 14H0145-DUP1** — **Client Sample ID: EX7-17-3**
**Matrix: Soil** — **Prep Type: TCLP**
**Analysis Batch: 14H0145** — **Prep Batch: 14H0145_P**

| Analyte | Sample Result | Sample Qualifier | Duplicate Result | Duplicate Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Mercury | ND | T5 | ND | | mg/L | | | 20 |

## Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

**Lab Sample ID: 14H0044-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0044** — **Prep Batch: 14H0044_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 50.0 | | ug/kg wet | | 08/12/14 10:22 | 08/12/14 15:18 | 1.00 |

**Lab Sample ID: 14H0044-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0044** — **Prep Batch: 14H0044_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 200 | 200 | | ug/kg wet | | 100 | 80 - 120 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0053

## Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods (Continued)

**Lab Sample ID: 14H0044-MS1** — **Client Sample ID: Matrix Spike**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0044** — **Prep Batch: 14H0044_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 43.1 | | 200 | 212 | | ug/kg wet | | 84.4 | 80 - 120 | | |

**Lab Sample ID: 14H0044-MSD1** — **Client Sample ID: Matrix Spike Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0044** — **Prep Batch: 14H0044_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | trix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 43.1 | | 135 | 140 | M2 | ug/kg wet | | 71.6 | 80 - 120 | 41.0 | 20 |

**Lab Sample ID: 14H0044-DUP1** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0044** — **Prep Batch: 14H0044_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 43.1 | | | 43.9 | | ug/kg wet | | | | 1.70 | 40 |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0053

## Client Sample ID: EX7-14-2 — Lab Sample ID: SXH0053-01

**Date Collected: 08/07/14 14:00** — **Matrix: Soil**
**Date Received: 08/08/14 11:45** — **Percent Solids: 91.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.926 | 14H0044_P | 08/12/14 10:22 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14H0044 | 08/12/14 15:50 | ZZZ | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14H0048_P | 08/12/14 16:19 | JSP | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14H0048 | 08/12/14 16:41 | JSP | TAL SPK |

## Client Sample ID: EX7-15-3 — Lab Sample ID: SXH0053-02

**Date Collected: 08/07/14 14:05** — **Matrix: Soil**
**Date Received: 08/08/14 11:45** — **Percent Solids: 51.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.820 | 14H0044_P | 08/12/14 10:22 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14H0044 | 08/12/14 15:53 | ZZZ | TAL SPK |

## Client Sample ID: EX7-16-2 — Lab Sample ID: SXH0053-03

**Date Collected: 08/07/14 14:10** — **Matrix: Soil**
**Date Received: 08/08/14 11:45** — **Percent Solids: 57.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.943 | 14H0044_P | 08/12/14 10:22 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 10.0 | 14H0044 | 08/12/14 16:19 | ZZZ | TAL SPK |

## Client Sample ID: EX7-17-3 — Lab Sample ID: SXH0053-04

**Date Collected: 08/07/14 14:15** — **Matrix: Soil**
**Date Received: 08/08/14 11:45** — **Percent Solids: 28.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| TCLP | Leach | TCLP Extraction | | 1.00 | 14H0138 | 08/25/14 08:50 | JSP | TAL SPK |
| TCLP | Prep | EPA 7471 | | 1.00 | 14H0145_P | 08/26/14 08:57 | JSP | TAL SPK |
| TCLP | Analysis | EPA 7471 | | 1.00 | 14H0145 | 08/26/14 14:10 | ZZZ | TAL SPK |
| Total | Prep | EPA 7471 | | 0.893 | 14H0044_P | 08/12/14 10:22 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 10.0 | 14H0044 | 08/12/14 16:21 | ZZZ | TAL SPK |

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0053

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-071 | 10-31-14 |
| Washington | State Program | 10 | C569 | 01-06-15 |

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0053

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 7471 | TCLP Metals by EPA 1311/6010/7000 Series Methods | | TAL SPK |
| EPA 7471B | Total Metals by EPA 6010/7000 Series Methods | | TAL SPK |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 [X]
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

# CHAIN OF CUSTODY REPORT

Work Order #: 8XH0058

CLIENT: GeoEngineers
REPORT TO: DLAUBER@GEOENGINEERS.COM
ADDRESS: 523 E Second Ave
Spokane, WA 99202
PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO: Port of Chelan
P.O. NUMBER:

PROJECT NAME: Cashmere
PROJECT NUMBER: 18593-001-04
SAMPLED BY: JML

**TURNAROUND REQUEST** in Business Days *

Organic & Inorganic Analyses: 10 (STD.) | 7 | 5 | 4 | 3 | X | 1 | <1

Petroleum Hydrocarbon Analyses: 5 (STD.) | 4 | 3 | X | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | Hg | | | | | | | | | | | | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EX7-14-2 | 1400 8/7/2014 | X | | | | | | | | | | | | S | 3 | | |
| 2 | EX7-15-3 | 1405 | X | | | | | | | | | | | | S | 3 | | |
| 3 | EX7-16-2 | 1410 | X | | | | | | | | | | | | S | 3 | | |
| 4 | EX7-17-3 | 1415 | X | | | | | | | | | | | | S | 3 | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |

RELEASED BY: Josh L
PRINT NAME: Josh Lee FIRM: GeO DATE: 8/8/2014 TIME: 1145

RECEIVED BY: Pat Stapleton
PRINT NAME: FIRM: TestAmerica DATE: 8.8.14 TIME: 11:45

RELEASED BY: PRINT NAME: FIRM: DATE: TIME:

RECEIVED BY: PRINT NAME: FIRM: DATE: TIME:

ADDITIONAL REMARKS:

TEMP: 1.4/8

PAGE OF

TAL-1000 (0612)

# TestAmerica Spokane
## Sample Receipt Form

| | | |
|---|---|---|
| **Work Order #** SXH0053 | **Client:** GeoEngineers | **Project:** Cashmere |
| Date/Time Received: 8-8-14 11:45 | By: CS | |

Samples Delivered By: ☐Shipping Service ☐Courier ☐Client ☐Other:

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | X | ~~X~~ 8 | | |
| Custody Seals are present and intact: | | | X | |
| Are CoC documents present: | X | | | |
| Necessary signatures: | X | | | |

Thermal Preservation Type: ☐Blue Ice ☐Gel Ice ☒Real Ice ☐Dry Ice ☐None ☐Other:

Temperature: 14.8 °C Thermometer (Circle **one** Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐Not enough ice ☐Ice melted ☐w/in 4hrs of collection ☐NA ☐Other:

| Log-In Phase Date/Time: 8-8-14 13:45 By: CS | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | X | | | |
| Samples containers were received intact: | X | | | |
| Do sample IDs match the CoC | X | | | |
| Appropriate sample containers were received for tests requested | X | | | |
| Are sample volumes adequate for tests requested | X | | | |
| Appropriate preservatives were used for the tests requested | X | | | |
| pH of inorganic samples checked and is within method specification | X | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | X | | | |
| Are dissolved parameters field filtered | | | X | |
| Do any samples need to be filtered or preserved by the lab | | | X | |
| Does this project require quick turnaround analysis | X | | | 2days |
| Are there any short hold time tests (see chart below) | | X | | |
| Are any samples within 2 days of or past expiration | | X | | |
| Was the CoC scanned | X | | | |
| Were there Non-conformance issues at login | | e | | |
| If yes, was a CAR generated # | | | X | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

Form No. SP-FORM-SPL-002 12 December 2012

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXH0188
Client Project/Site: 18593-001-04
Client Project Description: Cashmere, WA

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*9/3/2014 5:16:17 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.testamericainc.com

*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: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0188

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXH0188-01 | EX7-SP-1 | Soil | 08/27/14 08:15 | 08/28/14 10:15 |
| SXH0188-02 | EX7-SP-2 | Soil | 08/27/14 08:25 | 08/28/14 10:15 |
| SXH0188-03 | EX7-SP-3 | Soil | 08/27/14 08:35 | 08/28/14 10:15 |
| SXH0188-04 | EX7-18-3.5 | Soil | 08/27/14 09:00 | 08/28/14 10:15 |
| SXH0188-05 | EX7-19-3 | Soil | 08/27/14 09:10 | 08/28/14 10:15 |
| SXH0188-06 | EX7-20-2 | Soil | 08/27/14 09:20 | 08/28/14 10:15 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0188

## Qualifiers

### Metals

| Qualifier | Qualifier Description |
|---|---|
| R3 | The RPD exceeded the acceptance limit due to sample matrix effects. |
| M2 | The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS). |
| M1 | The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS). |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0188

## Client Sample ID: EX7-SP-1 — Lab Sample ID: SXH0188-01

Date Collected: 08/27/14 08:15
Date Received: 08/28/14 10:15
Matrix: Soil
Percent Solids: 74.2

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1930 | | 223 | | ug/kg dry | ☼ | 09/03/14 09:04 | 09/03/14 16:50 | 5.00 |

### Method: EPA 7471 - TCLP Metals by EPA 1311/6010/7000 Series Methods - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.000500 | | mg/L | | 08/29/14 08:33 | 08/29/14 14:20 | 1.00 |

## Client Sample ID: EX7-SP-2 — Lab Sample ID: SXH0188-02

Date Collected: 08/27/14 08:25
Date Received: 08/28/14 10:15
Matrix: Soil
Percent Solids: 71.3

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1170 | | 45.5 | | ug/kg dry | ☼ | 09/03/14 09:04 | 09/03/14 16:19 | 1.00 |

### Method: EPA 7471 - TCLP Metals by EPA 1311/6010/7000 Series Methods - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.000500 | | mg/L | | 08/29/14 08:33 | 08/29/14 14:29 | 1.00 |

## Client Sample ID: EX7-SP-3 — Lab Sample ID: SXH0188-03

Date Collected: 08/27/14 08:35
Date Received: 08/28/14 10:15
Matrix: Soil
Percent Solids: 81.3

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 779 | | 41.7 | | ug/kg dry | ☼ | 09/03/14 09:04 | 09/03/14 16:21 | 1.00 |

### Method: EPA 7471 - TCLP Metals by EPA 1311/6010/7000 Series Methods - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.000500 | | mg/L | | 08/29/14 08:33 | 08/29/14 14:32 | 1.00 |

## Client Sample ID: EX7-18-3.5 — Lab Sample ID: SXH0188-04

Date Collected: 08/27/14 09:00
Date Received: 08/28/14 10:15
Matrix: Soil
Percent Solids: 63.8

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 804 | | 45.5 | | ug/kg dry | ☼ | 09/02/14 10:01 | 09/02/14 15:23 | 1.00 |

## Client Sample ID: EX7-19-3 — Lab Sample ID: SXH0188-05

Date Collected: 08/27/14 09:10
Date Received: 08/28/14 10:15
Matrix: Soil
Percent Solids: 91

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1520 | | 106 | | ug/kg dry | ☼ | 09/02/14 10:01 | 09/02/14 15:42 | 2.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0188

## Client Sample ID: EX7-20-2

**Date Collected: 08/27/14 09:20**
**Date Received: 08/28/14 10:15**

## Lab Sample ID: SXH0188-06

**Matrix: Soil**
**Percent Solids: 91.8**

### Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 351 | | 52.1 | | ug/kg dry | ☼ | 09/02/14 10:01 | 09/02/14 15:34 | 1.00 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0188

## Method: EPA 7471 - TCLP Metals by EPA 1311/6010/7000 Series Methods

**Lab Sample ID: 14H0180-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: TCLP**
**Analysis Batch: 14H0180** — **Prep Batch: 14H0180_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.000500 | | mg/L | | 08/29/14 08:33 | 09/02/14 14:30 | 1.00 |

**Lab Sample ID: 14H0180-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: TCLP**
**Analysis Batch: 14H0180** — **Prep Batch: 14H0180_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 0.00200 | 0.00199 | | mg/L | | 99.5 | 80 - 120 |

**Lab Sample ID: 14H0180-MS1** — **Client Sample ID: EX7-SP-1**
**Matrix: Soil** — **Prep Type: TCLP**
**Analysis Batch: 14H0180** — **Prep Batch: 14H0180_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.000173 | | 0.00200 | 0.00219 | | mg/L | | 101 | 80 - 120 |

**Lab Sample ID: 14H0180-MSD1** — **Client Sample ID: EX7-SP-1**
**Matrix: Soil** — **Prep Type: TCLP**
**Analysis Batch: 14H0180** — **Prep Batch: 14H0180_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | trix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.000173 | | 0.00200 | 0.00215 | | mg/L | | 98.8 | 80 - 120 | 1.84 | 20 |

**Lab Sample ID: 14H0180-DUP1** — **Client Sample ID: EX7-SP-1**
**Matrix: Soil** — **Prep Type: TCLP**
**Analysis Batch: 14H0180** — **Prep Batch: 14H0180_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.000173 | | | 0.000199 | | mg/L | | | | 14.0 | 20 |

## Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

**Lab Sample ID: 14I0002-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0002** — **Prep Batch: 14I0002_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 50.0 | | ug/kg wet | | 09/02/14 10:01 | 09/02/14 15:20 | 1.00 |

**Lab Sample ID: 14I0002-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0002** — **Prep Batch: 14I0002_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 200 | 204 | | ug/kg wet | | 102 | 80 - 120 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0188

## Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods (Continued)

**Lab Sample ID: 14I0002-MS1** — **Client Sample ID: EX7-18-3.5**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0002** — **Prep Batch: 14I0002_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 804 | | 307 | 974 | M2 | ug/kg dry | ☼ | 55.5 | 80 - 120 |

**Lab Sample ID: 14I0002-MSD1** — **Client Sample ID: EX7-18-3.5**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0002** — **Prep Batch: 14I0002_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | trix Spike Dup Result | Matrix Spike Du Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 804 | | 307 | 1230 | M1 | ug/kg dry | ☼ | 140 | 80 - 120 | 23.5 | 20 |

**Lab Sample ID: 14I0002-DUP1** — **Client Sample ID: EX7-18-3.5**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0002** — **Prep Batch: 14I0002_P**

| Analyte | Sample Result | Sample Qualifier | Duplicate Result | Duplicate Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Mercury | 804 | | 511 | R3 | ug/kg dry | ☼ | 44.5 | 40 |

**Lab Sample ID: 14I0015-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0015** — **Prep Batch: 14I0015_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 50.0 | | ug/kg wet | | 09/03/14 09:04 | 09/03/14 15:55 | 1.00 |

**Lab Sample ID: 14I0015-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0015** — **Prep Batch: 14I0015_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 200 | 198 | | ug/kg wet | | 99.0 | 80 - 120 |

**Lab Sample ID: 14I0015-MS1** — **Client Sample ID: EX7-SP-1**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0015** — **Prep Batch: 14I0015_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1930 | | 259 | 2720 | M1 | ug/kg dry | ☼ | 307 | 80 - 120 |

**Lab Sample ID: 14I0015-MSD1** — **Client Sample ID: EX7-SP-1**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0015** — **Prep Batch: 14I0015_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | trix Spike Dup Result | Matrix Spike Du Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1930 | | 217 | 2540 | M1 | ug/kg dry | ☼ | 282 | 80 - 120 | 6.98 | 20 |

**Lab Sample ID: 14I0015-DUP1** — **Client Sample ID: EX7-SP-1**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0015** — **Prep Batch: 14I0015_P**

| Analyte | Sample Result | Sample Qualifier | Duplicate Result | Duplicate Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Mercury | 1930 | | 1580 | | ug/kg dry | ☼ | 19.9 | 40 |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0188

## Client Sample ID: EX7-SP-1 — Lab Sample ID: SXH0188-01

**Date Collected: 08/27/14 08:15** — **Matrix: Soil**
**Date Received: 08/28/14 10:15** — **Percent Solids: 74.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| TCLP | Leach | TCLP Extraction | | 1.00 | 14H0173 | 08/28/14 15:36 | JSP | TAL SPK |
| TCLP | Prep | EPA 7471 | | 1.00 | 14H0180_P | 08/29/14 08:33 | JSP | TAL SPK |
| TCLP | Analysis | EPA 7471 | | 1.00 | 14H0180 | 08/29/14 14:20 | ZZZ | TAL SPK |
| Total | Prep | EPA 7471 | | 0.893 | 14I0015_P | 09/03/14 09:04 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 5.00 | 14I0015 | 09/03/14 16:50 | ZZZ | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14I0020 | 09/03/14 16:42 | JSP | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14I0020_P | 09/03/14 16:42 | JSP | TAL SPK |

## Client Sample ID: EX7-SP-2 — Lab Sample ID: SXH0188-02

**Date Collected: 08/27/14 08:25** — **Matrix: Soil**
**Date Received: 08/28/14 10:15** — **Percent Solids: 71.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| TCLP | Leach | TCLP Extraction | | 1.00 | 14H0173 | 08/28/14 15:36 | JSP | TAL SPK |
| TCLP | Prep | EPA 7471 | | 1.00 | 14H0180_P | 08/29/14 08:33 | JSP | TAL SPK |
| TCLP | Analysis | EPA 7471 | | 1.00 | 14H0180 | 08/29/14 14:29 | ZZZ | TAL SPK |
| Total | Prep | EPA 7471 | | 0.909 | 14I0015_P | 09/03/14 09:04 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14I0015 | 09/03/14 16:19 | ZZZ | TAL SPK |

## Client Sample ID: EX7-SP-3 — Lab Sample ID: SXH0188-03

**Date Collected: 08/27/14 08:35** — **Matrix: Soil**
**Date Received: 08/28/14 10:15** — **Percent Solids: 81.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| TCLP | Leach | TCLP Extraction | | 1.00 | 14H0173 | 08/28/14 15:36 | JSP | TAL SPK |
| TCLP | Prep | EPA 7471 | | 1.00 | 14H0180_P | 08/29/14 08:33 | JSP | TAL SPK |
| TCLP | Analysis | EPA 7471 | | 1.00 | 14H0180 | 08/29/14 14:32 | ZZZ | TAL SPK |
| Total | Prep | EPA 7471 | | 0.833 | 14I0015_P | 09/03/14 09:04 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14I0015 | 09/03/14 16:21 | ZZZ | TAL SPK |

## Client Sample ID: EX7-18-3.5 — Lab Sample ID: SXH0188-04

**Date Collected: 08/27/14 09:00** — **Matrix: Soil**
**Date Received: 08/28/14 10:15** — **Percent Solids: 63.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 0.909 | 14I0002_P | 09/02/14 10:01 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14I0002 | 09/02/14 15:23 | ZZZ | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14I0010_P | 09/02/14 16:08 | JSP | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14I0010 | 09/02/14 16:09 | JSP | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0188

## Client Sample ID: EX7-19-3

**Lab Sample ID: SXH0188-05**

**Date Collected: 08/27/14 09:10**
**Matrix: Soil**
**Date Received: 08/28/14 10:15**
**Percent Solids: 91**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 1.06 | 14I0002_P | 09/02/14 10:01 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 2.00 | 14I0002 | 09/02/14 15:42 | ZZZ | TAL SPK |

## Client Sample ID: EX7-20-2

**Lab Sample ID: SXH0188-06**

**Date Collected: 08/27/14 09:20**
**Matrix: Soil**
**Date Received: 08/28/14 10:15**
**Percent Solids: 91.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | EPA 7471 | | 1.04 | 14I0002_P | 09/02/14 10:01 | JSP | TAL SPK |
| Total | Analysis | EPA 7471B | | 1.00 | 14I0002 | 09/02/14 15:34 | ZZZ | TAL SPK |

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0188

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-071 | 10-31-14 |
| Washington | State Program | 10 | C569 | 01-06-15 |

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0188

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 7471 | TCLP Metals by EPA 1311/6010/7000 Series Methods | | TAL SPK |
| EPA 7471B | Total Metals by EPA 6010/7000 Series Methods | | TAL SPK |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 X
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

# CHAIN OF CUSTODY REPORT

Work Order #: SXH0188

CLIENT: GeoEngineers

REPORT TO: Dave Lauder DLAUDER@GEOENGINEERS.COM

ADDRESS: 523 E Second Ave Spokane, WA 99202

PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO:

P.O. NUMBER:

PROJECT NAME: Cashmere

PROJECT NUMBER: 18593-001-04

SAMPLED BY: JML

**TURNAROUND REQUEST** in Business Days *

Organic & Inorganic Analyses: 10 (STD.) 7 5 4 3 2 1 <1

Petroleum Hydrocarbon Analyses: 5 (STD.) 4 3 2 1 <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | TCLP Hg | Hg | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|
| 1 | Ex7-SP-1 | 8/27/14 0815 | X | | S | 2 | | |
| 2 | Ex7-SP-2 | 8/27/14 0825 | X | | | 2 | | |
| 3 | Ex7-SP-3 | 8/27/14 0835 ~~0900~~ | X | | | 2 | | |
| 4 | Ex7-18-3.5 | 8/27/14 0900 | | X | | 3 | | |
| 5 | Ex7-19-3 | 8/27/14 0910 | | X | | 3 | | |
| 6 | Ex7-20-2 | 8/27/14 0920 | | X | | 3 | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| RELEASED BY: | | DATE: 8/27/14 | RECEIVED BY: | | DATE: 8-28-14 |
| PRINT NAME: Justin Rice | FIRM: Geo | TIME: 1530 | PRINT NAME: Rick Stapleton | FIRM: TA | TIME: 10:15 |
| RELEASED BY: | | DATE: | RECEIVED BY: | | DATE: |
| PRINT NAME: | FIRM: | TIME: | PRINT NAME: | FIRM: | TIME: |

ADDITIONAL REMARKS:

TEMP: 5.1

PAGE 1 OF 1

TAL-1000 (0612)

**TestAmerica Spokane**
**Sample Receipt Form**

| | | |
|---|---|---|
| **Work Order #:** SNH0188 | **Client:** GeoEngineers | **Project:** Cashmere |
| Date/Time Received: 8-28-14 10:15 | By: | |

Samples Delivered By: ☑ Shipping Service ☐ Courier ☐ Client ☐ Other: _____

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | ✓ | | | |
| Custody Seals are present and intact: | | | ✓ | |
| Are CoC documents present: | ✓ | | | |
| Necessary signatures: | ✓ | | | |

Thermal Preservation Type: ☐ Blue Ice ☐ Gel Ice ☑ Real Ice ☐ Dry Ice ☐ None ☐ Other: _____

Temperature: 5.1 °C Thermometer (Circle **one** Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐ Not enough ice ☐ Ice melted ☐ w/in 4hrs of collection ☐ NA ☐ Other: _____

| Log-in Phase Date/Time: 8-28-14 10:45 By: CD | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | ✓ | | | |
| Samples containers were received intact: | ✓ | | | |
| Do sample IDs match the CoC | ✓ | | | |
| Appropriate sample containers were received for tests requested | ✓ | | | |
| Are sample volumes adequate for tests requested | ✓ | | | |
| Appropriate preservatives were used for the tests requested | ✓ | | | |
| pH of inorganic samples checked and is within method specification | ✓ | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | | | X | |
| Are dissolved parameters field filtered | | | X | |
| Do any samples need to be filtered or preserved by the lab | | ✓ | | |
| Does this project require quick turnaround analysis | ✓ | ~~✓~~ | | 1day |
| Are there any short hold time tests (see chart below) | | ✓ | | |
| ~~Are any samples within 2 days of or past expiration~~ | | ✓ | | |
| Was the CoC scanned | ✓ | | | |
| Were there Non-conformance issues at login | | ✓ | | |
| If yes, was a CAR generated # _____ | | | ✓ | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

**Form No. SP-FORM-SPL-002 12 December 2012**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXH0199
Client Project/Site: 18593-001-04
Client Project Description: Cashmere, WA

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*9/8/2014 4:33:00 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*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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# Case Narrative

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Job ID: SXH0199

### Laboratory: TestAmerica Portland

**Narrative**

**Receipt**
The sample was received on 9/2/2014 9:25 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 21.5º C.

**Metals**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

### Laboratory: TestAmerica Seattle

**Narrative**

**Receipt**
The sample was received on 9/3/2014 10:05 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.6º C.

**GC/MS Semi VOA Method(s) 8270C:**
In analytical batch 168957, the following analyte(s) recovered outside control limits for the LCS/LCSD associated with prep batch 168810: 4-Nitroaniline, 2-Nitrophenol and Benzo(a)anthracene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 168957 recovered outside control limits for the following analytes: 2,4-Dinitrophenol and Pentachlorophenol. Individual LCS/LCSD recoveries for these analytes were in control; re-extraction/re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

### Laboratory: TestAmerica Spokane

**Narrative**

**Receipt**
The sample(s) were received on 8/29/2014 9:52:00 AM ; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 9.1 ºC.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Sample Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXH0199-01 | EX11-1-6 | Soil | 08/28/14 09:23 | 08/29/14 09:52 |
| SXH0199-02 | EX11-2-10 | Soil | 08/28/14 14:40 | 08/29/14 09:52 |
| SXH0199-03 | EX11-3-4 | Soil | 08/28/14 14:10 | 08/29/14 09:52 |
| SXH0199-04 | EX11-4-3 | Soil | 08/28/14 14:15 | 08/29/14 09:52 |
| SXH0199-05 | EX11-5-3.25 | Soil | 08/28/14 14:30 | 08/29/14 09:52 |
| SXH0199-06 | Infiltration Pond 8/28/14 | Water | 08/28/14 15:30 | 08/29/14 09:52 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Qualifiers

### GCMS Volatiles

| Qualifier | Qualifier Description |
|---|---|
| C | Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| * | RPD of the LCS and LCSD exceeds the control limits |
| * | LCS or LCSD exceeds the control limits |
| F1 | MS and/or MSD Recovery exceeds the control limits |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### Fuels

| Qualifier | Qualifier Description |
|---|---|
| R4 | Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information. |
| Q9 | Hydrocarbon pattern most closely resembles biogenic intereference.. |
| Q6 | Results in the diesel organics range are primarily due to overlap from a heavy oil range product. |
| Z3 | The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-1-6

**Date Collected: 08/28/14 09:23**
**Date Received: 08/29/14 09:52**

## Lab Sample ID: SXH0199-01

**Matrix: Soil**
**Percent Solids: 87.2**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.118 | 0.0110 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Chloromethane | ND | | 0.591 | 0.00626 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Vinyl chloride | ND | | 0.0709 | 0.00733 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Bromomethane | ND | | 0.591 | 0.0362 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Chloroethane | ND | | 0.118 | 0.0290 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0355 | 0.00934 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.118 | 0.0150 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Carbon disulfide | ND | | 0.118 | 0.0126 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Methylene chloride | ND | C | 0.236 | 0.00615 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| **Acetone** | **1.06** | **J** | 3.55 | 0.103 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.118 | 0.0122 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0591 | 0.00378 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.118 | 0.0134 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.118 | 0.00674 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.118 | 0.0201 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Bromochloromethane | ND | | 0.118 | 0.00461 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Chloroform | ND | | 0.118 | 0.00910 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Carbon tetrachloride | ND | | 0.118 | 0.0246 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.118 | 0.0204 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 2-Butanone | ND | | 1.18 | 0.130 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Hexane | ND | | 0.118 | 0.00957 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.118 | 0.0206 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Benzene | ND | | 0.0177 | 0.0115 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.118 | 0.00579 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Trichloroethene | ND | | 0.0295 | 0.0151 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Dibromomethane | ND | | 0.118 | 0.0108 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.118 | 0.00709 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Bromodichloromethane | ND | | 0.118 | 0.00827 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.118 | 0.00733 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Toluene | ND | | 0.118 | 0.0157 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.18 | 0.0241 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.118 | 0.00780 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Tetrachloroethene | ND | | 0.0473 | 0.0208 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.118 | 0.00733 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Dibromochloromethane | ND | | 0.118 | 0.00709 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.118 | 0.00875 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0118 | 0.00685 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 2-Hexanone | ND | | 1.18 | 0.0550 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Ethylbenzene | ND | | 0.118 | 0.0191 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Chlorobenzene | ND | | 0.118 | 0.00898 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.118 | 0.0121 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| m,p-Xylene | ND | | 0.473 | 0.0201 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| o-Xylene | ND | | 0.236 | 0.0155 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Styrene | ND | | 0.118 | 0.0110 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Bromoform | ND | | 0.118 | 0.0148 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| **Isopropylbenzene** | **0.0349** | **J** | 0.118 | 0.0225 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| n-Propylbenzene | ND | | 0.118 | 0.0245 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.118 | 0.00886 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Bromobenzene | ND | | 0.118 | 0.0111 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-1-6

**Date Collected: 08/28/14 09:23**
**Date Received: 08/29/14 09:52**

## Lab Sample ID: SXH0199-01

**Matrix: Soil**
**Percent Solids: 87.2**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | ND | | 0.118 | 0.0220 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 2-Chlorotoluene | ND | | 0.118 | 0.0193 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.118 | 0.00993 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 4-Chlorotoluene | ND | | 0.118 | 0.0169 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| tert-Butylbenzene | ND | | 0.118 | 0.0255 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.118 | 0.0171 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| sec-Butylbenzene | ND | | 0.118 | 0.0278 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| p-Isopropyltoluene | ND | | 0.118 | 0.0282 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.118 | 0.0149 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.118 | 0.0125 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| n-Butylbenzene | ND | | 0.118 | 0.0325 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.118 | 0.00898 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.591 | 0.0336 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Hexachlorobutadiene | ND | | 0.118 | 0.0674 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.118 | 0.0235 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| Naphthalene | ND | | 0.236 | 0.0161 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.118 | 0.0420 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *98.3* | | *80 - 120* | *09/02/14 10:27* | *09/02/14 12:24* | *1.00* |
| *1,2-dichloroethane-d4* | *94.2* | | *74.7 - 120* | *09/02/14 10:27* | *09/02/14 12:24* | *1.00* |
| *Toluene-d8* | *104* | | *78.5 - 125* | *09/02/14 10:27* | *09/02/14 12:24* | *1.00* |
| *4-bromofluorobenzene* | *102* | | *69.8 - 140* | *09/02/14 10:27* | *09/02/14 12:24* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **13.7** | | 5.91 | | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:24 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *102* | | *41.5 - 162* | *09/02/14 10:27* | *09/02/14 12:24* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **10.9** | | 10.6 | | mg/kg dry | ☼ | 09/02/14 08:07 | 09/02/14 13:55 | 1.00 |
| **Heavy Oil Range Hydrocarbons** | **34.8** | | 26.5 | | mg/kg dry | ☼ | 09/02/14 08:07 | 09/02/14 13:55 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *92.8* | | *50 - 150* | *09/02/14 08:07* | *09/02/14 13:55* | *1.00* |
| *n-Triacontane-d62* | *89.7* | | *50 - 150* | *09/02/14 08:07* | *09/02/14 13:55* | *1.00* |

## Client Sample ID: EX11-2-10

**Date Collected: 08/28/14 14:40**
**Date Received: 08/29/14 09:52**

## Lab Sample ID: SXH0199-02

**Matrix: Soil**
**Percent Solids: 74.3**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.157 | 0.0146 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Chloromethane | ND | | 0.787 | 0.00834 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Vinyl chloride | ND | | 0.0944 | 0.00976 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Bromomethane | ND | | 0.787 | 0.0482 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Chloroethane | ND | | 0.157 | 0.0386 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-2-10

**Date Collected: 08/28/14 14:40**
**Date Received: 08/29/14 09:52**

## Lab Sample ID: SXH0199-02

**Matrix: Soil**
**Percent Solids: 74.3**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | 0.0472 | 0.0124 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.157 | 0.0200 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Carbon disulfide | ND | | 0.157 | 0.0168 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Methylene chloride | ND | C | 0.315 | 0.00818 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| **Acetone** | **0.888** | **J** | 4.72 | 0.137 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.157 | 0.0162 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0787 | 0.00504 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.157 | 0.0178 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.157 | 0.00897 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.157 | 0.0268 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Bromochloromethane | ND | | 0.157 | 0.00614 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Chloroform | ND | | 0.157 | 0.0121 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Carbon tetrachloride | ND | | 0.157 | 0.0327 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.157 | 0.0272 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 2-Butanone | ND | | 1.57 | 0.173 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Hexane | ND | | 0.157 | 0.0127 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.157 | 0.0274 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Benzene | ND | | 0.0236 | 0.0153 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.157 | 0.00771 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Trichloroethene | ND | | 0.0393 | 0.0201 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Dibromomethane | ND | | 0.157 | 0.0143 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.157 | 0.00944 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Bromodichloromethane | ND | | 0.157 | 0.0110 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.157 | 0.00976 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Toluene | ND | | 0.157 | 0.0209 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.57 | 0.0321 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.157 | 0.0104 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Tetrachloroethene | ND | | 0.0630 | 0.0277 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.157 | 0.00976 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Dibromochloromethane | ND | | 0.157 | 0.00944 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.157 | 0.0116 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0157 | 0.00913 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 2-Hexanone | ND | | 1.57 | 0.0732 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Ethylbenzene | ND | | 0.157 | 0.0255 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Chlorobenzene | ND | | 0.157 | 0.0120 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.157 | 0.0161 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| **m,p-Xylene** | **0.124** | **J** | 0.630 | 0.0268 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| o-Xylene | ND | | 0.315 | 0.0206 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Styrene | ND | | 0.157 | 0.0146 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Bromoform | ND | | 0.157 | 0.0197 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| **Isopropylbenzene** | **0.0630** | **J** | 0.157 | 0.0299 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| **n-Propylbenzene** | **0.0992** | **J** | 0.157 | 0.0326 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.157 | 0.0118 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Bromobenzene | ND | | 0.157 | 0.0148 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| **1,3,5-Trimethylbenzene** | **0.259** | | 0.157 | 0.0293 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 2-Chlorotoluene | ND | | 0.157 | 0.0257 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.157 | 0.0132 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 4-Chlorotoluene | ND | | 0.157 | 0.0225 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| tert-Butylbenzene | ND | | 0.157 | 0.0340 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-2-10

**Lab Sample ID: SXH0199-02**

**Date Collected: 08/28/14 14:40**
**Matrix: Soil**
**Date Received: 08/29/14 09:52**
**Percent Solids: 74.3**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,2,4-Trimethylbenzene** | **0.830** | | 0.157 | 0.0228 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| **sec-Butylbenzene** | **0.0944** | **J** | 0.157 | 0.0370 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| **p-Isopropyltoluene** | **0.172** | | 0.157 | 0.0376 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.157 | 0.0198 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.157 | 0.0167 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| **n-Butylbenzene** | **0.153** | **J** | 0.157 | 0.0433 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.157 | 0.0120 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.787 | 0.0447 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| Hexachlorobutadiene | ND | | 0.157 | 0.0897 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.157 | 0.0313 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| **Naphthalene** | **0.331** | | 0.315 | 0.0214 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.157 | 0.0559 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *80 - 120* | *09/02/14 10:27* | *09/02/14 12:47* | *1.00* |
| *1,2-dichloroethane-d4* | *97.6* | | *74.7 - 120* | *09/02/14 10:27* | *09/02/14 12:47* | *1.00* |
| *Toluene-d8* | *101* | | *78.5 - 125* | *09/02/14 10:27* | *09/02/14 12:47* | *1.00* |
| *4-bromofluorobenzene* | *127* | | *69.8 - 140* | *09/02/14 10:27* | *09/02/14 12:47* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **40.7** | | 7.87 | | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 12:47 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *127* | | *41.5 - 162* | *09/02/14 10:27* | *09/02/14 12:47* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **458** | | 128 | | mg/kg dry | ☼ | 09/02/14 08:07 | 09/02/14 19:03 | 10.0 |
| **Heavy Oil Range Hydrocarbons** | **1860** | | 320 | | mg/kg dry | ☼ | 09/02/14 08:07 | 09/02/14 19:03 | 10.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *98.4* | | *50 - 150* | *09/02/14 08:07* | *09/02/14 19:03* | *10.0* |
| *n-Triacontane-d62* | *84.2* | | *50 - 150* | *09/02/14 08:07* | *09/02/14 19:03* | *10.0* |

## Client Sample ID: EX11-3-4

**Lab Sample ID: SXH0199-03**

**Date Collected: 08/28/14 14:10**
**Matrix: Soil**
**Date Received: 08/29/14 09:52**
**Percent Solids: 71.1**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.207 | 0.0193 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Chloromethane | ND | | 1.04 | 0.0110 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Vinyl chloride | ND | | 0.124 | 0.0129 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Bromomethane | ND | | 1.04 | 0.0634 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Chloroethane | ND | | 0.207 | 0.0508 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0622 | 0.0164 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.207 | 0.0263 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Carbon disulfide | ND | | 0.207 | 0.0222 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Methylene chloride | ND | C | 0.415 | 0.0108 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| **Acetone** | **0.961** | **J** | 6.22 | 0.180 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-3-4

**Date Collected: 08/28/14 14:10**
**Date Received: 08/29/14 09:52**

## Lab Sample ID: SXH0199-03

**Matrix: Soil**
**Percent Solids: 71.1**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 0.207 | 0.0214 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.104 | 0.00663 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.207 | 0.0234 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.207 | 0.0118 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.207 | 0.0352 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Bromochloromethane | ND | | 0.207 | 0.00808 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Chloroform | ND | | 0.207 | 0.0160 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Carbon tetrachloride | ND | | 0.207 | 0.0431 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.207 | 0.0359 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 2-Butanone | ND | | 2.07 | 0.228 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Hexane | ND | | 0.207 | 0.0168 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.207 | 0.0361 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Benzene | ND | | 0.0311 | 0.0201 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.207 | 0.0102 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Trichloroethene | ND | | 0.0518 | 0.0265 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Dibromomethane | ND | | 0.207 | 0.0189 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.207 | 0.0124 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Bromodichloromethane | ND | | 0.207 | 0.0145 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.207 | 0.0129 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Toluene | ND | | 0.207 | 0.0276 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 2.07 | 0.0423 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.207 | 0.0137 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Tetrachloroethene | ND | | 0.0829 | 0.0365 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.207 | 0.0129 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Dibromochloromethane | ND | | 0.207 | 0.0124 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.207 | 0.0153 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0207 | 0.0120 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 2-Hexanone | ND | | 2.07 | 0.0964 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Ethylbenzene | ND | | 0.207 | 0.0336 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Chlorobenzene | ND | | 0.207 | 0.0158 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.207 | 0.0211 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| **m,p-Xylene** | **0.0591** | **J** | 0.829 | 0.0352 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| o-Xylene | ND | | 0.415 | 0.0272 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Styrene | ND | | 0.207 | 0.0193 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Bromoform | ND | | 0.207 | 0.0259 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Isopropylbenzene | ND | | 0.207 | 0.0394 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| n-Propylbenzene | ND | | 0.207 | 0.0429 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.207 | 0.0155 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Bromobenzene | ND | | 0.207 | 0.0195 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.207 | 0.0386 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 2-Chlorotoluene | ND | | 0.207 | 0.0338 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.207 | 0.0174 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 4-Chlorotoluene | ND | | 0.207 | 0.0296 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| tert-Butylbenzene | ND | | 0.207 | 0.0448 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| **1,2,4-Trimethylbenzene** | **0.0321** | **J** | 0.207 | 0.0301 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| sec-Butylbenzene | ND | | 0.207 | 0.0487 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| p-Isopropyltoluene | ND | | 0.207 | 0.0495 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.207 | 0.0261 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.207 | 0.0220 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-3-4

**Lab Sample ID: SXH0199-03**
**Date Collected: 08/28/14 14:10**
**Matrix: Soil**
**Date Received: 08/29/14 09:52**
**Percent Solids: 71.1**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| n-Butylbenzene | ND | | 0.207 | 0.0570 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.207 | 0.0158 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 1.04 | 0.0589 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Hexachlorobutadiene | ND | | 0.207 | 0.118 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.207 | 0.0413 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| Naphthalene | ND | | 0.415 | 0.0282 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.207 | 0.0736 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *103* | | *80 - 120* | *09/02/14 10:27* | *09/02/14 13:10* | *1.00* |
| *1,2-dichloroethane-d4* | *92.9* | | *74.7 - 120* | *09/02/14 10:27* | *09/02/14 13:10* | *1.00* |
| *Toluene-d8* | *100* | | *78.5 - 125* | *09/02/14 10:27* | *09/02/14 13:10* | *1.00* |
| *4-bromofluorobenzene* | *105* | | *69.8 - 140* | *09/02/14 10:27* | *09/02/14 13:10* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 10.4 | | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:10 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *105* | | *41.5 - 162* | *09/02/14 10:27* | *09/02/14 13:10* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **22.0** | **Q9** | 13.9 | | mg/kg dry | ☼ | 09/02/14 08:07 | 09/02/14 14:43 | 1.00 |
| **Heavy Oil Range Hydrocarbons** | **84.0** | **Q9** | 34.7 | | mg/kg dry | ☼ | 09/02/14 08:07 | 09/02/14 14:43 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *121* | | *50 - 150* | *09/02/14 08:07* | *09/02/14 14:43* | *1.00* |
| *n-Triacontane-d62* | *126* | | *50 - 150* | *09/02/14 08:07* | *09/02/14 14:43* | *1.00* |

## Client Sample ID: EX11-4-3

**Lab Sample ID: SXH0199-04**
**Date Collected: 08/28/14 14:15**
**Matrix: Soil**
**Date Received: 08/29/14 09:52**
**Percent Solids: 73.4**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.155 | 0.0144 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Chloromethane | ND | | 0.777 | 0.00823 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Vinyl chloride | ND | | 0.0932 | 0.00963 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Bromomethane | ND | | 0.777 | 0.0475 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Chloroethane | ND | | 0.155 | 0.0381 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0466 | 0.0123 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.155 | 0.0197 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Carbon disulfide | ND | | 0.155 | 0.0166 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Methylene chloride | ND | C | 0.311 | 0.00808 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| **Acetone** | **0.414** | **J** | 4.66 | 0.135 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.155 | 0.0160 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0777 | 0.00497 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.155 | 0.0176 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.155 | 0.00885 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.155 | 0.0264 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-4-3

**Date Collected: 08/28/14 14:15**
**Date Received: 08/29/14 09:52**

## Lab Sample ID: SXH0199-04

**Matrix: Soil**
**Percent Solids: 73.4**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromochloromethane | ND | | 0.155 | 0.00606 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Chloroform | ND | | 0.155 | 0.0120 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Carbon tetrachloride | ND | | 0.155 | 0.0323 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.155 | 0.0269 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 2-Butanone | ND | | 1.55 | 0.171 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Hexane | ND | | 0.155 | 0.0126 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.155 | 0.0270 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Benzene | ND | | 0.0233 | 0.0151 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.155 | 0.00761 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Trichloroethene | ND | | 0.0388 | 0.0199 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Dibromomethane | ND | | 0.155 | 0.0141 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.155 | 0.00932 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Bromodichloromethane | ND | | 0.155 | 0.0109 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.155 | 0.00963 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Toluene | ND | | 0.155 | 0.0207 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.55 | 0.0317 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.155 | 0.0103 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Tetrachloroethene | ND | | 0.0621 | 0.0273 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.155 | 0.00963 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Dibromochloromethane | ND | | 0.155 | 0.00932 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.155 | 0.0115 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0155 | 0.00901 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 2-Hexanone | ND | | 1.55 | 0.0722 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Ethylbenzene | ND | | 0.155 | 0.0252 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Chlorobenzene | ND | | 0.155 | 0.0118 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.155 | 0.0158 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| m,p-Xylene | ND | | 0.621 | 0.0264 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| o-Xylene | ND | | 0.311 | 0.0203 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Styrene | ND | | 0.155 | 0.0144 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Bromoform | ND | | 0.155 | 0.0194 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Isopropylbenzene | ND | | 0.155 | 0.0295 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| n-Propylbenzene | ND | | 0.155 | 0.0322 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.155 | 0.0116 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Bromobenzene | ND | | 0.155 | 0.0146 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.155 | 0.0289 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 2-Chlorotoluene | ND | | 0.155 | 0.0253 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.155 | 0.0130 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 4-Chlorotoluene | ND | | 0.155 | 0.0222 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| tert-Butylbenzene | ND | | 0.155 | 0.0336 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.155 | 0.0225 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| sec-Butylbenzene | ND | | 0.155 | 0.0365 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| p-Isopropyltoluene | ND | | 0.155 | 0.0371 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.155 | 0.0196 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.155 | 0.0165 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| n-Butylbenzene | ND | | 0.155 | 0.0427 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.155 | 0.0118 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.777 | 0.0441 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| Hexachlorobutadiene | ND | | 0.155 | 0.0885 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.155 | 0.0309 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-4-3

**Date Collected: 08/28/14 14:15**
**Date Received: 08/29/14 09:52**

## Lab Sample ID: SXH0199-04

**Matrix: Soil**
**Percent Solids: 73.4**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 0.311 | 0.0211 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.155 | 0.0551 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *80 - 120* | *09/02/14 10:27* | *09/02/14 13:32* | *1.00* |
| *1,2-dichloroethane-d4* | *93.0* | | *74.7 - 120* | *09/02/14 10:27* | *09/02/14 13:32* | *1.00* |
| *Toluene-d8* | *103* | | *78.5 - 125* | *09/02/14 10:27* | *09/02/14 13:32* | *1.00* |
| *4-bromofluorobenzene* | *103* | | *69.8 - 140* | *09/02/14 10:27* | *09/02/14 13:32* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 7.77 | | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:32 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *103* | | *41.5 - 162* | *09/02/14 10:27* | *09/02/14 13:32* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 13.1 | | mg/kg dry | ☼ | 09/02/14 08:07 | 09/02/14 15:07 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 32.8 | | mg/kg dry | ☼ | 09/02/14 08:07 | 09/02/14 15:07 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *106* | | *50 - 150* | *09/02/14 08:07* | *09/02/14 15:07* | *1.00* |
| *n-Triacontane-d62* | *108* | | *50 - 150* | *09/02/14 08:07* | *09/02/14 15:07* | *1.00* |

## Client Sample ID: EX11-5-3.25

**Date Collected: 08/28/14 14:30**
**Date Received: 08/29/14 09:52**

## Lab Sample ID: SXH0199-05

**Matrix: Soil**
**Percent Solids: 78.3**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.150 | 0.0139 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Chloromethane | ND | | 0.749 | 0.00794 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Vinyl chloride | ND | | 0.0899 | 0.00929 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Bromomethane | ND | | 0.749 | 0.0458 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Chloroethane | ND | | 0.150 | 0.0367 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0449 | 0.0118 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.150 | 0.0190 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Carbon disulfide | ND | | 0.150 | 0.0160 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Methylene chloride | ND | C | 0.300 | 0.00779 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| **Acetone** | **0.502** | **J** | 4.49 | 0.130 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.150 | 0.0154 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0749 | 0.00479 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.150 | 0.0169 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.150 | 0.00854 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.150 | 0.0255 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Bromochloromethane | ND | | 0.150 | 0.00584 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Chloroform | ND | | 0.150 | 0.0115 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Carbon tetrachloride | ND | | 0.150 | 0.0312 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.150 | 0.0259 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 2-Butanone | ND | | 1.50 | 0.165 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-5-3.25

**Date Collected: 08/28/14 14:30**
**Date Received: 08/29/14 09:52**

## Lab Sample ID: SXH0199-05

**Matrix: Soil**
**Percent Solids: 78.3**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexane | ND | | 0.150 | 0.0121 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.150 | 0.0261 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Benzene | ND | | 0.0225 | 0.0145 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.150 | 0.00734 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Trichloroethene | ND | | 0.0375 | 0.0192 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Dibromomethane | ND | | 0.150 | 0.0136 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.150 | 0.00899 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Bromodichloromethane | ND | | 0.150 | 0.0105 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.150 | 0.00929 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Toluene | ND | | 0.150 | 0.0199 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.50 | 0.0306 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.150 | 0.00989 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Tetrachloroethene | ND | | 0.0599 | 0.0264 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.150 | 0.00929 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Dibromochloromethane | ND | | 0.150 | 0.00899 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.150 | 0.0111 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0150 | 0.00869 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 2-Hexanone | ND | | 1.50 | 0.0697 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Ethylbenzene | ND | | 0.150 | 0.0243 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Chlorobenzene | ND | | 0.150 | 0.0114 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.150 | 0.0153 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| **m,p-Xylene** | **0.0315** | **J** | 0.599 | 0.0255 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| o-Xylene | ND | | 0.300 | 0.0196 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Styrene | ND | | 0.150 | 0.0139 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Bromoform | ND | | 0.150 | 0.0187 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Isopropylbenzene | ND | | 0.150 | 0.0285 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| n-Propylbenzene | ND | | 0.150 | 0.0310 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.150 | 0.0112 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Bromobenzene | ND | | 0.150 | 0.0141 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.150 | 0.0279 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 2-Chlorotoluene | ND | | 0.150 | 0.0244 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.150 | 0.0126 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 4-Chlorotoluene | ND | | 0.150 | 0.0214 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| tert-Butylbenzene | ND | | 0.150 | 0.0324 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| **1,2,4-Trimethylbenzene** | **0.0764** | **J** | 0.150 | 0.0217 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| sec-Butylbenzene | ND | | 0.150 | 0.0352 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| p-Isopropyltoluene | ND | | 0.150 | 0.0358 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.150 | 0.0189 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.150 | 0.0159 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| n-Butylbenzene | ND | | 0.150 | 0.0412 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.150 | 0.0114 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.749 | 0.0425 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Hexachlorobutadiene | ND | | 0.150 | 0.0854 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.150 | 0.0298 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| Naphthalene | ND | | 0.300 | 0.0204 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.150 | 0.0532 | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *99.8* | | *80 - 120* | *09/02/14 10:27* | *09/02/14 13:55* | *1.00* |
| *1,2-dichloroethane-d4* | *94.1* | | *74.7 - 120* | *09/02/14 10:27* | *09/02/14 13:55* | *1.00* |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-5-3.25

**Date Collected: 08/28/14 14:30**
**Date Received: 08/29/14 09:52**

## Lab Sample ID: SXH0199-05

**Matrix: Soil**
**Percent Solids: 78.3**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8* | *101* | | *78.5 - 125* | *09/02/14 10:27* | *09/02/14 13:55* | *1.00* |
| *4-bromofluorobenzene* | *101* | | *69.8 - 140* | *09/02/14 10:27* | *09/02/14 13:55* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 7.49 | | mg/kg dry | ☼ | 09/02/14 10:27 | 09/02/14 13:55 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *101* | | *41.5 - 162* | *09/02/14 10:27* | *09/02/14 13:55* | *1.00* |

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Bis(2-chloroethyl)ether | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 2-Chlorophenol | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 1,3-Dichlorobenzene | ND | | 67 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 1,4-Dichlorobenzene | ND | | 67 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Benzyl alcohol | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 1,2-Dichlorobenzene | ND | | 73 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 2-Methylphenol | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 3 & 4 Methylphenol | ND | | 270 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Hexachloroethane | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Nitrobenzene | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Isophorone | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 2-Nitrophenol | ND | * | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 2,4-Dimethylphenol | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Benzoic acid | ND | | 3300 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 2,4-Dichlorophenol | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 67 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| **Naphthalene** | **43** | | 27 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 4-Chloroaniline | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Hexachlorobutadiene | ND | | 67 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 4-Chloro-3-methylphenol | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| **2-Methylnaphthalene** | **65** | | 27 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Hexachlorocyclopentadiene | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 2,4,6-Trichlorophenol | ND | | 200 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 2,4,5-Trichlorophenol | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 2-Chloronaphthalene | ND | | 27 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 2-Nitroaniline | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Dimethyl phthalate | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Acenaphthylene | ND | | 27 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 2,6-Dinitrotoluene | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 3-Nitroaniline | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Acenaphthene | ND | | 27 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 2,4-Dinitrophenol | ND | * | 1300 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 4-Nitrophenol | ND | | 1300 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Dibenzofuran | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 2,4-Dinitrotoluene | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-5-3.25

**Date Collected: 08/28/14 14:30**
**Date Received: 08/29/14 09:52**

## Lab Sample ID: SXH0199-05

**Matrix: Soil**
**Percent Solids: 73.1**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diethyl phthalate | ND | | 270 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Fluorene | ND | | 27 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 4-Nitroaniline | ND | * | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1300 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| N-Nitrosodiphenylamine | ND | | 67 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Hexachlorobenzene | ND | | 67 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Pentachlorophenol | ND | * | 270 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| **Phenanthrene** | **47** | | 27 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Anthracene | ND | | 27 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Di-n-butyl phthalate | ND | | 670 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| **Fluoranthene** | **54** | | 27 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| **Pyrene** | **58** | | 27 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Butyl benzyl phthalate | ND | | 270 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 270 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Benzo[a]anthracene | ND | * | 27 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Chrysene | ND | | 33 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 800 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Di-n-octyl phthalate | ND | | 670 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Benzo[a]pyrene | ND | | 40 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 53 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Dibenz(a,h)anthracene | ND | | 53 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Benzo[g,h,i]perylene | ND | | 33 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Carbazole | ND | | 130 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| **1-Methylnaphthalene** | **47** | | 40 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Benzo[b]fluoranthene | ND | | 27 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| Benzo[k]fluoranthene | ND | | 33 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 330 | | ug/Kg | ☼ | 09/04/14 12:15 | 09/06/14 00:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol* | *81* | | *36 - 145* | *09/04/14 12:15* | *09/06/14 00:41* | *1* |
| *Phenol-d5* | *85* | | *38 - 149* | *09/04/14 12:15* | *09/06/14 00:41* | *1* |
| *Nitrobenzene-d5* | *76* | | *38 - 141* | *09/04/14 12:15* | *09/06/14 00:41* | *1* |
| *2-Fluorobiphenyl* | *82* | | *42 - 140* | *09/04/14 12:15* | *09/06/14 00:41* | *1* |
| *2,4,6-Tribromophenol* | *81* | | *28 - 143* | *09/04/14 12:15* | *09/06/14 00:41* | *1* |
| *Terphenyl-d14* | *89* | | *42 - 151* | *09/04/14 12:15* | *09/06/14 00:41* | *1* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **132** | **Q6** | 123 | | mg/kg dry | ☼ | 09/02/14 08:07 | 09/02/14 19:27 | 10.0 |
| **Heavy Oil Range Hydrocarbons** | **589** | | 307 | | mg/kg dry | ☼ | 09/02/14 08:07 | 09/02/14 19:27 | 10.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *20.2* | *Z3* | *50 - 150* | *09/02/14 08:07* | *09/02/14 19:27* | *10.0* |
| *n-Triacontane-d62* | *17.8* | *Z3* | *50 - 150* | *09/02/14 08:07* | *09/02/14 19:27* | *10.0* |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: Infiltration Pond 8/28/14

**Lab Sample ID: SXH0199-06**

**Date Collected: 08/28/14 15:30**

**Matrix: Water**

**Date Received: 08/29/14 09:52**

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **0.0057** | | 0.0010 | | mg/L | | 09/02/14 15:37 | 09/02/14 19:29 | 1 |

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 09/03/14 08:47 | 09/03/14 15:16 | 1.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

**Lab Sample ID: 14I0003-BLK1**
**Matrix: Soil**
**Analysis Batch: 14I0003**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14I0003_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.100 | 0.00930 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Chloromethane | ND | | 0.500 | 0.00530 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Vinyl chloride | ND | | 0.0600 | 0.00620 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Bromomethane | ND | | 0.500 | 0.0306 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Chloroethane | ND | | 0.100 | 0.0245 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0300 | 0.00790 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.100 | 0.0127 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Carbon disulfide | ND | | 0.100 | 0.0107 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Methylene chloride | ND | C | 0.200 | 0.00520 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Acetone | ND | | 3.00 | 0.0870 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.100 | 0.0103 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0500 | 0.00320 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.100 | 0.0113 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.100 | 0.00570 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.100 | 0.0170 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Bromochloromethane | ND | | 0.100 | 0.00390 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Chloroform | ND | | 0.100 | 0.00770 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Carbon tetrachloride | ND | | 0.100 | 0.0208 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.100 | 0.0173 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 2-Butanone | ND | | 1.00 | 0.110 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Hexane | ND | | 0.100 | 0.00810 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.100 | 0.0174 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Benzene | ND | | 0.0150 | 0.00970 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.100 | 0.00490 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Trichloroethene | ND | | 0.0250 | 0.0128 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Dibromomethane | ND | | 0.100 | 0.00910 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.100 | 0.00600 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Bromodichloromethane | ND | | 0.100 | 0.00700 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.100 | 0.00620 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Toluene | ND | | 0.100 | 0.0133 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.00 | 0.0204 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.100 | 0.00660 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Tetrachloroethene | ND | | 0.0400 | 0.0176 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.100 | 0.00620 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Dibromochloromethane | ND | | 0.100 | 0.00600 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.100 | 0.00740 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0100 | 0.00580 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 2-Hexanone | ND | | 1.00 | 0.0465 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Ethylbenzene | ND | | 0.100 | 0.0162 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Chlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.100 | 0.0102 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| m,p-Xylene | ND | | 0.400 | 0.0170 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| o-Xylene | ND | | 0.200 | 0.0131 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Styrene | ND | | 0.100 | 0.00930 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Bromoform | ND | | 0.100 | 0.0125 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Isopropylbenzene | ND | | 0.100 | 0.0190 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| n-Propylbenzene | ND | | 0.100 | 0.0207 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.100 | 0.00750 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14I0003-BLK1**
**Matrix: Soil**
**Analysis Batch: 14I0003**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14I0003_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromobenzene | ND | | 0.100 | 0.00940 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.100 | 0.0186 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 2-Chlorotoluene | ND | | 0.100 | 0.0163 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.100 | 0.00840 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 4-Chlorotoluene | ND | | 0.100 | 0.0143 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| tert-Butylbenzene | ND | | 0.100 | 0.0216 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.100 | 0.0145 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| sec-Butylbenzene | ND | | 0.100 | 0.0235 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| p-Isopropyltoluene | ND | | 0.100 | 0.0239 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.100 | 0.0126 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.100 | 0.0106 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| n-Butylbenzene | ND | | 0.100 | 0.0275 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.500 | 0.0284 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Hexachlorobutadiene | ND | | 0.100 | 0.0570 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.100 | 0.0199 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| Naphthalene | ND | | 0.200 | 0.0136 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.100 | 0.0355 | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *100* | | *80 - 120* | *09/02/14 10:27* | *09/02/14 11:16* | *1.00* |
| *1,2-dichloroethane-d4* | *91.7* | | *74.7 - 120* | *09/02/14 10:27* | *09/02/14 11:16* | *1.00* |
| *Toluene-d8* | *104* | | *78.5 - 125* | *09/02/14 10:27* | *09/02/14 11:16* | *1.00* |
| *4-bromofluorobenzene* | *105* | | *69.8 - 140* | *09/02/14 10:27* | *09/02/14 11:16* | *1.00* |

**Lab Sample ID: 14I0003-BS1**
**Matrix: Soil**
**Analysis Batch: 14I0003**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14I0003_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.500 | 0.524 | | mg/kg wet | | 105 | 60.5 - 130 |
| Chloromethane | 0.500 | 0.501 | | mg/kg wet | | 100 | 68.9 - 130 |
| Vinyl chloride | 0.500 | 0.498 | | mg/kg wet | | 99.6 | 74 - 142 |
| Bromomethane | 0.500 | 0.456 | J | mg/kg wet | | 91.1 | 70.5 - 146 |
| Chloroethane | 0.500 | 0.508 | | mg/kg wet | | 102 | 60 - 140 |
| Trichlorofluoromethane | 0.500 | 0.477 | | mg/kg wet | | 95.4 | 70.5 - 139 |
| 1,1-Dichloroethene | 0.500 | 0.498 | | mg/kg wet | | 99.6 | 72.9 - 135 |
| Carbon disulfide | 0.500 | 0.510 | | mg/kg wet | | 102 | 66.8 - 146 |
| Methylene chloride | 0.500 | 0.434 | | mg/kg wet | | 86.9 | 60 - 140 |
| Acetone | 2.50 | 2.16 | J | mg/kg wet | | 86.6 | 39.2 - 145 |
| trans-1,2-Dichloroethene | 0.500 | 0.486 | | mg/kg wet | | 97.1 | 60 - 140 |
| Methyl tert-butyl ether | 0.500 | 0.454 | | mg/kg wet | | 90.9 | 60 - 140 |
| 1,1-Dichloroethane | 0.500 | 0.489 | | mg/kg wet | | 97.8 | 80 - 131 |
| cis-1,2-Dichloroethene | 0.500 | 0.506 | | mg/kg wet | | 101 | 80 - 126 |
| 2,2-Dichloropropane | 0.500 | 0.471 | | mg/kg wet | | 94.2 | 71.5 - 132 |
| Bromochloromethane | 0.500 | 0.498 | | mg/kg wet | | 99.6 | 69.1 - 139 |
| Chloroform | 0.500 | 0.479 | | mg/kg wet | | 95.8 | 80 - 130 |
| Carbon tetrachloride | 0.500 | 0.471 | | mg/kg wet | | 94.2 | 73.6 - 148 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14I0003-BS1**
**Matrix: Soil**
**Analysis Batch: 14I0003**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14I0003_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.500 | 0.480 | | mg/kg wet | | 96.0 | 74.3 - 138 |
| 2-Butanone | 2.50 | 2.04 | | mg/kg wet | | 81.6 | 56.1 - 124 |
| Hexane | 0.500 | 0.496 | | mg/kg wet | | 99.1 | 77 - 130 |
| 1,1-Dichloropropene | 0.500 | 0.492 | | mg/kg wet | | 98.3 | 78.3 - 132 |
| Benzene | 0.500 | 0.484 | | mg/kg wet | | 96.8 | 75.8 - 123 |
| 1,2-Dichloroethane (EDC) | 0.500 | 0.462 | | mg/kg wet | | 92.5 | 71.1 - 142 |
| Trichloroethene | 0.500 | 0.514 | | mg/kg wet | | 103 | 78.5 - 134 |
| Dibromomethane | 0.500 | 0.464 | | mg/kg wet | | 92.8 | 80 - 129 |
| 1,2-Dichloropropane | 0.500 | 0.491 | | mg/kg wet | | 98.2 | 50.8 - 155 |
| Bromodichloromethane | 0.500 | 0.490 | | mg/kg wet | | 98.0 | 80 - 128 |
| cis-1,3-Dichloropropene | 0.500 | 0.484 | | mg/kg wet | | 96.8 | 80 - 126 |
| Toluene | 0.500 | 0.478 | | mg/kg wet | | 95.5 | 76.6 - 125 |
| 4-Methyl-2-pentanone | 2.50 | 2.40 | | mg/kg wet | | 96.0 | 66.4 - 131 |
| trans-1,3-Dichloropropene | 0.500 | 0.502 | | mg/kg wet | | 100 | 79 - 124 |
| Tetrachloroethene | 0.500 | 0.490 | | mg/kg wet | | 98.1 | 80 - 127 |
| 1,1,2-Trichloroethane | 0.500 | 0.512 | | mg/kg wet | | 102 | 78.4 - 125 |
| Dibromochloromethane | 0.500 | 0.506 | | mg/kg wet | | 101 | 78.4 - 127 |
| 1,3-Dichloropropane | 0.500 | 0.484 | | mg/kg wet | | 96.9 | 80 - 125 |
| 1,2-Dibromoethane | 0.500 | 0.503 | | mg/kg wet | | 101 | 77.1 - 129 |
| 2-Hexanone | 2.50 | 2.31 | | mg/kg wet | | 92.4 | 64.6 - 127 |
| Ethylbenzene | 0.500 | 0.476 | | mg/kg wet | | 95.2 | 77.3 - 121 |
| Chlorobenzene | 0.500 | 0.506 | | mg/kg wet | | 101 | 80 - 120 |
| 1,1,1,2-Tetrachloroethane | 0.500 | 0.515 | | mg/kg wet | | 103 | 80 - 120 |
| m,p-Xylene | 0.500 | 0.468 | | mg/kg wet | | 93.5 | 77.7 - 124 |
| o-Xylene | 0.500 | 0.476 | | mg/kg wet | | 95.3 | 76.7 - 129 |
| Styrene | 0.500 | 0.520 | | mg/kg wet | | 104 | 80 - 128 |
| Bromoform | 0.500 | 0.504 | | mg/kg wet | | 101 | 76 - 135 |
| Isopropylbenzene | 0.500 | 0.470 | | mg/kg wet | | 94.1 | 78.4 - 131 |
| n-Propylbenzene | 0.500 | 0.465 | | mg/kg wet | | 93.0 | 80 - 120 |
| 1,1,2,2-Tetrachloroethane | 0.500 | 0.476 | | mg/kg wet | | 95.2 | 60.3 - 137 |
| Bromobenzene | 0.500 | 0.450 | | mg/kg wet | | 90.0 | 60 - 140 |
| 1,3,5-Trimethylbenzene | 0.500 | 0.482 | | mg/kg wet | | 96.3 | 80 - 121 |
| 2-Chlorotoluene | 0.500 | 0.496 | | mg/kg wet | | 99.1 | 80 - 123 |
| 1,2,3-Trichloropropane | 0.500 | 0.528 | | mg/kg wet | | 106 | 59.9 - 131 |
| 4-Chlorotoluene | 0.500 | 0.470 | | mg/kg wet | | 94.1 | 80 - 124 |
| tert-Butylbenzene | 0.500 | 0.488 | | mg/kg wet | | 97.6 | 78.8 - 130 |
| 1,2,4-Trimethylbenzene | 0.500 | 0.488 | | mg/kg wet | | 97.6 | 80 - 122 |
| sec-Butylbenzene | 0.500 | 0.472 | | mg/kg wet | | 94.3 | 80 - 120 |
| p-Isopropyltoluene | 0.500 | 0.472 | | mg/kg wet | | 94.3 | 67.2 - 147 |
| 1,3-Dichlorobenzene | 0.500 | 0.484 | | mg/kg wet | | 96.8 | 80 - 122 |
| 1,4-Dichlorobenzene | 0.500 | 0.478 | | mg/kg wet | | 95.5 | 80 - 125 |
| n-Butylbenzene | 0.500 | 0.442 | | mg/kg wet | | 88.4 | 80 - 120 |
| 1,2-Dichlorobenzene | 0.500 | 0.476 | | mg/kg wet | | 95.2 | 80 - 124 |
| 1,2-Dibromo-3-chloropropane | 0.500 | 0.519 | | mg/kg wet | | 104 | 60 - 140 |
| Hexachlorobutadiene | 0.500 | 0.490 | | mg/kg wet | | 97.9 | 71.8 - 138 |
| 1,2,4-Trichlorobenzene | 0.500 | 0.458 | | mg/kg wet | | 91.7 | 75.3 - 126 |
| Naphthalene | 0.500 | 0.439 | | mg/kg wet | | 87.8 | 55.1 - 142 |
| 1,2,3-Trichlorobenzene | 0.500 | 0.492 | | mg/kg wet | | 98.5 | 69.6 - 127 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14I0003-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0003** — **Prep Batch: 14I0003_P**

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *103* | | *80 - 120* |
| *1,2-dichloroethane-d4* | *95.4* | | *74.7 - 120* |
| *Toluene-d8* | *101* | | *78.5 - 125* |
| *4-bromofluorobenzene* | *102* | | *69.8 - 140* |

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

**Lab Sample ID: 14I0003-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0003** — **Prep Batch: 14I0003_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.00 | | mg/kg wet | | 09/02/14 10:27 | 09/02/14 11:16 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *105* | | *41.5 - 162* | *09/02/14 10:27* | *09/02/14 11:16* | *1.00* |

**Lab Sample ID: 14I0003-BS2** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0003** — **Prep Batch: 14I0003_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | | | 50.0 | 46.2 | | mg/kg wet | | 92.3 | 74.4 - 124 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-bromofluorobenzene* | *90.9* | | *41.5 - 162* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 580-168810/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 168957** — **Prep Batch: 168810**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Bis(2-chloroethyl)ether | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 2-Chlorophenol | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 1,3-Dichlorobenzene | ND | | 50 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 1,4-Dichlorobenzene | ND | | 50 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Benzyl alcohol | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 1,2-Dichlorobenzene | ND | | 55 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 2-Methylphenol | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 3 & 4 Methylphenol | ND | | 200 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Hexachloroethane | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Nitrobenzene | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Isophorone | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 580-168810/1-A**
**Matrix: Solid**
**Analysis Batch: 168957**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 168810**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Nitrophenol | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 2,4-Dimethylphenol | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Benzoic acid | ND | | 2500 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 2,4-Dichlorophenol | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 50 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Naphthalene | ND | | 20 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 4-Chloroaniline | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Hexachlorobutadiene | ND | | 50 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 4-Chloro-3-methylphenol | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 2-Methylnaphthalene | ND | | 20 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Hexachlorocyclopentadiene | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 2,4,6-Trichlorophenol | ND | | 150 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 2,4,5-Trichlorophenol | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 2-Chloronaphthalene | ND | | 20 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 2-Nitroaniline | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Dimethyl phthalate | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Acenaphthylene | ND | | 20 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 2,6-Dinitrotoluene | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 3-Nitroaniline | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Acenaphthene | ND | | 20 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 2,4-Dinitrophenol | ND | | 1000 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 4-Nitrophenol | ND | | 1000 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Dibenzofuran | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 2,4-Dinitrotoluene | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Diethyl phthalate | ND | | 200 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Fluorene | ND | | 20 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 4-Nitroaniline | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1000 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| N-Nitrosodiphenylamine | ND | | 50 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Hexachlorobenzene | ND | | 50 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Pentachlorophenol | ND | | 200 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Phenanthrene | ND | | 20 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Anthracene | ND | | 20 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Di-n-butyl phthalate | ND | | 500 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Fluoranthene | ND | | 20 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Pyrene | ND | | 20 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Butyl benzyl phthalate | ND | | 200 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 200 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Benzo[a]anthracene | ND | | 20 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Chrysene | ND | | 25 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 600 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Di-n-octyl phthalate | ND | | 500 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Benzo[a]pyrene | ND | | 30 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 40 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Dibenz(a,h)anthracene | ND | | 40 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 580-168810/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 168957** — **Prep Batch: 168810**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[g,h,i]perylene | ND | | 25 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Carbazole | ND | | 100 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| 1-Methylnaphthalene | ND | | 30 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Benzo[b]fluoranthene | ND | | 20 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| Benzo[k]fluoranthene | ND | | 25 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 250 | | ug/Kg | | 09/04/14 12:15 | 09/05/14 19:31 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol* | *85* | | *36 - 145* | *09/04/14 12:15* | *09/05/14 19:31* | *1* |
| *Phenol-d5* | *81* | | *38 - 149* | *09/04/14 12:15* | *09/05/14 19:31* | *1* |
| *Nitrobenzene-d5* | *74* | | *38 - 141* | *09/04/14 12:15* | *09/05/14 19:31* | *1* |
| *2-Fluorobiphenyl* | *85* | | *42 - 140* | *09/04/14 12:15* | *09/05/14 19:31* | *1* |
| *2,4,6-Tribromophenol* | *63* | | *28 - 143* | *09/04/14 12:15* | *09/05/14 19:31* | *1* |
| *Terphenyl-d14* | *88* | | *42 - 151* | *09/04/14 12:15* | *09/05/14 19:31* | *1* |

**Lab Sample ID: LCS 580-168810/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 168957** — **Prep Batch: 168810**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Phenol | 1000 | 815 | | ug/Kg | | 81 | 63 - 111 |
| Bis(2-chloroethyl)ether | 1000 | 727 | | ug/Kg | | 73 | 62 - 110 |
| 2-Chlorophenol | 1000 | 812 | | ug/Kg | | 81 | 68 - 117 |
| 1,3-Dichlorobenzene | 1000 | 732 | | ug/Kg | | 73 | 64 - 111 |
| 1,4-Dichlorobenzene | 1000 | 702 | | ug/Kg | | 70 | 65 - 110 |
| Benzyl alcohol | 1000 | 812 | | ug/Kg | | 81 | 55 - 123 |
| 1,2-Dichlorobenzene | 1000 | 757 | | ug/Kg | | 76 | 64 - 112 |
| 2-Methylphenol | 1000 | 779 | | ug/Kg | | 78 | 71 - 116 |
| 3 & 4 Methylphenol | 1000 | 827 | | ug/Kg | | 83 | 70 - 116 |
| N-Nitrosodi-n-propylamine | 1000 | 727 | | ug/Kg | | 73 | 62 - 116 |
| Hexachloroethane | 1000 | 762 | | ug/Kg | | 76 | 62 - 120 |
| Nitrobenzene | 1000 | 759 | | ug/Kg | | 76 | 64 - 118 |
| Isophorone | 1000 | 766 | | ug/Kg | | 77 | 67 - 119 |
| 2-Nitrophenol | 1000 | 662 | * | ug/Kg | | 66 | 67 - 127 |
| 2,4-Dimethylphenol | 1000 | 747 | | ug/Kg | | 75 | 54 - 139 |
| Benzoic acid | 2000 | 1420 | J | ug/Kg | | 71 | 29 - 158 |
| Bis(2-chloroethoxy)methane | 1000 | 790 | | ug/Kg | | 79 | 69 - 107 |
| 2,4-Dichlorophenol | 1000 | 759 | | ug/Kg | | 76 | 68 - 125 |
| 1,2,4-Trichlorobenzene | 1000 | 785 | | ug/Kg | | 79 | 66 - 115 |
| Naphthalene | 1000 | 781 | | ug/Kg | | 78 | 62 - 112 |
| 4-Chloroaniline | 1000 | 366 | | ug/Kg | | 37 | 20 - 103 |
| Hexachlorobutadiene | 1000 | 757 | | ug/Kg | | 76 | 65 - 116 |
| 4-Chloro-3-methylphenol | 1000 | 782 | | ug/Kg | | 78 | 69 - 121 |
| 2-Methylnaphthalene | 1000 | 805 | | ug/Kg | | 81 | 64 - 119 |
| Hexachlorocyclopentadiene | 1000 | 749 | | ug/Kg | | 75 | 46 - 131 |
| 2,4,6-Trichlorophenol | 1000 | 763 | | ug/Kg | | 76 | 62 - 133 |
| 2,4,5-Trichlorophenol | 1000 | 775 | | ug/Kg | | 78 | 57 - 133 |
| 2-Chloronaphthalene | 1000 | 741 | | ug/Kg | | 74 | 68 - 112 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 580-168810/2-A**
**Matrix: Solid**
**Analysis Batch: 168957**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 168810**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 2-Nitroaniline | 1000 | 811 | | ug/Kg | | 81 | 64 - 112 |
| Dimethyl phthalate | 1000 | 870 | | ug/Kg | | 87 | 78 - 117 |
| Acenaphthylene | 1000 | 829 | | ug/Kg | | 83 | 68 - 120 |
| 2,6-Dinitrotoluene | 1000 | 687 | | ug/Kg | | 69 | 66 - 123 |
| 3-Nitroaniline | 1000 | 620 | | ug/Kg | | 62 | 27 - 103 |
| Acenaphthene | 1000 | 766 | | ug/Kg | | 77 | 68 - 116 |
| 2,4-Dinitrophenol | 2000 | 888 | J | ug/Kg | | 44 | 20 - 141 |
| 4-Nitrophenol | 2000 | 1540 | | ug/Kg | | 77 | 20 - 165 |
| Dibenzofuran | 1000 | 805 | | ug/Kg | | 80 | 72 - 109 |
| 2,4-Dinitrotoluene | 1000 | 733 | | ug/Kg | | 73 | 68 - 121 |
| Diethyl phthalate | 1000 | 904 | | ug/Kg | | 90 | 73 - 116 |
| 4-Chlorophenyl phenyl ether | 1000 | 804 | | ug/Kg | | 80 | 75 - 108 |
| Fluorene | 1000 | 817 | | ug/Kg | | 82 | 70 - 121 |
| 4-Nitroaniline | 1000 | 1460 | * | ug/Kg | | 146 | 58 - 108 |
| 4,6-Dinitro-2-methylphenol | 2000 | 1240 | | ug/Kg | | 62 | 48 - 130 |
| N-Nitrosodiphenylamine | 1000 | 864 | | ug/Kg | | 86 | 73 - 115 |
| 4-Bromophenyl phenyl ether | 1000 | 843 | | ug/Kg | | 84 | 68 - 122 |
| Hexachlorobenzene | 1000 | 773 | | ug/Kg | | 77 | 66 - 117 |
| Pentachlorophenol | 2000 | 1250 | | ug/Kg | | 62 | 45 - 117 |
| Phenanthrene | 1000 | 803 | | ug/Kg | | 80 | 73 - 106 |
| Anthracene | 1000 | 795 | | ug/Kg | | 80 | 73 - 116 |
| Di-n-butyl phthalate | 1000 | 849 | | ug/Kg | | 85 | 66 - 140 |
| Fluoranthene | 1000 | 794 | | ug/Kg | | 79 | 73 - 125 |
| Pyrene | 1000 | 815 | | ug/Kg | | 82 | 70 - 120 |
| Butyl benzyl phthalate | 1000 | 767 | | ug/Kg | | 77 | 69 - 142 |
| 3,3'-Dichlorobenzidine | 2000 | 1480 | | ug/Kg | | 74 | 20 - 103 |
| Benzo[a]anthracene | 1000 | 821 | | ug/Kg | | 82 | 76 - 119 |
| Chrysene | 1000 | 772 | | ug/Kg | | 77 | 75 - 114 |
| Bis(2-ethylhexyl) phthalate | 1000 | 825 | | ug/Kg | | 82 | 62 - 144 |
| Di-n-octyl phthalate | 1000 | 740 | | ug/Kg | | 74 | 65 - 141 |
| Benzo[a]pyrene | 1000 | 803 | | ug/Kg | | 80 | 72 - 117 |
| Indeno[1,2,3-cd]pyrene | 1000 | 707 | | ug/Kg | | 71 | 56 - 127 |
| Dibenz(a,h)anthracene | 1000 | 734 | | ug/Kg | | 73 | 56 - 134 |
| Benzo[g,h,i]perylene | 1000 | 762 | | ug/Kg | | 76 | 55 - 139 |
| Carbazole | 1000 | 1310 | | ug/Kg | | 131 | 76 - 135 |
| 1-Methylnaphthalene | 1000 | 797 | | ug/Kg | | 80 | 62 - 118 |
| Benzo[b]fluoranthene | 1000 | 737 | | ug/Kg | | 74 | 63 - 132 |
| Benzo[k]fluoranthene | 1000 | 800 | | ug/Kg | | 80 | 63 - 119 |
| bis (2-chloroisopropyl) ether | 1000 | 763 | | ug/Kg | | 76 | 41 - 126 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol* | *81* | | *36 - 145* |
| *Phenol-d5* | *78* | | *38 - 149* |
| *Nitrobenzene-d5* | *72* | | *38 - 141* |
| *2-Fluorobiphenyl* | *81* | | *42 - 140* |
| *2,4,6-Tribromophenol* | *80* | | *28 - 143* |
| *Terphenyl-d14* | *80* | | *42 - 151* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 580-168810/3-A**
**Matrix: Solid**
**Analysis Batch: 168957**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 168810**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | 1000 | 809 | | ug/Kg | | 81 | 63 - 111 | 1 | 26 |
| Bis(2-chloroethyl)ether | 1000 | 729 | | ug/Kg | | 73 | 62 - 110 | 0 | 22 |
| 2-Chlorophenol | 1000 | 781 | | ug/Kg | | 78 | 68 - 117 | 4 | 27 |
| 1,3-Dichlorobenzene | 1000 | 740 | | ug/Kg | | 74 | 64 - 111 | 1 | 30 |
| 1,4-Dichlorobenzene | 1000 | 730 | | ug/Kg | | 73 | 65 - 110 | 4 | 30 |
| Benzyl alcohol | 1000 | 760 | | ug/Kg | | 76 | 55 - 123 | 7 | 60 |
| 1,2-Dichlorobenzene | 1000 | 752 | | ug/Kg | | 75 | 64 - 112 | 1 | 30 |
| 2-Methylphenol | 1000 | 734 | | ug/Kg | | 73 | 71 - 116 | 6 | 25 |
| 3 & 4 Methylphenol | 1000 | 826 | | ug/Kg | | 83 | 70 - 116 | 0 | 27 |
| N-Nitrosodi-n-propylamine | 1000 | 735 | | ug/Kg | | 74 | 62 - 116 | 1 | 28 |
| Hexachloroethane | 1000 | 729 | | ug/Kg | | 73 | 62 - 120 | 4 | 30 |
| Nitrobenzene | 1000 | 673 | | ug/Kg | | 67 | 64 - 118 | 12 | 30 |
| Isophorone | 1000 | 728 | | ug/Kg | | 73 | 67 - 119 | 5 | 30 |
| 2-Nitrophenol | 1000 | 635 | * | ug/Kg | | 63 | 67 - 127 | 4 | 30 |
| 2,4-Dimethylphenol | 1000 | 736 | | ug/Kg | | 74 | 54 - 139 | 2 | 30 |
| Benzoic acid | 2000 | 1220 | J | ug/Kg | | 61 | 29 - 158 | 15 | 28 |
| Bis(2-chloroethoxy)methane | 1000 | 737 | | ug/Kg | | 74 | 69 - 107 | 7 | 30 |
| 2,4-Dichlorophenol | 1000 | 705 | | ug/Kg | | 70 | 68 - 125 | 7 | 30 |
| 1,2,4-Trichlorobenzene | 1000 | 728 | | ug/Kg | | 73 | 66 - 115 | 8 | 28 |
| Naphthalene | 1000 | 718 | | ug/Kg | | 72 | 62 - 112 | 8 | 26 |
| 4-Chloroaniline | 1000 | 333 | | ug/Kg | | 33 | 20 - 103 | 10 | 60 |
| Hexachlorobutadiene | 1000 | 702 | | ug/Kg | | 70 | 65 - 116 | 8 | 30 |
| 4-Chloro-3-methylphenol | 1000 | 735 | | ug/Kg | | 74 | 69 - 121 | 6 | 27 |
| 2-Methylnaphthalene | 1000 | 743 | | ug/Kg | | 74 | 64 - 119 | 8 | 27 |
| Hexachlorocyclopentadiene | 1000 | 665 | | ug/Kg | | 66 | 46 - 131 | 12 | 29 |
| 2,4,6-Trichlorophenol | 1000 | 696 | | ug/Kg | | 70 | 62 - 133 | 9 | 30 |
| 2,4,5-Trichlorophenol | 1000 | 696 | | ug/Kg | | 70 | 57 - 133 | 11 | 30 |
| 2-Chloronaphthalene | 1000 | 705 | | ug/Kg | | 70 | 68 - 112 | 5 | 25 |
| 2-Nitroaniline | 1000 | 697 | | ug/Kg | | 70 | 64 - 112 | 15 | 22 |
| Dimethyl phthalate | 1000 | 834 | | ug/Kg | | 83 | 78 - 117 | 4 | 30 |
| Acenaphthylene | 1000 | 780 | | ug/Kg | | 78 | 68 - 120 | 6 | 28 |
| 2,6-Dinitrotoluene | 1000 | 741 | | ug/Kg | | 74 | 66 - 123 | 8 | 30 |
| 3-Nitroaniline | 1000 | 574 | | ug/Kg | | 57 | 27 - 103 | 8 | 33 |
| Acenaphthene | 1000 | 697 | | ug/Kg | | 70 | 68 - 116 | 9 | 27 |
| 2,4-Dinitrophenol | 2000 | 611 | J * | ug/Kg | | 31 | 20 - 141 | 37 | 36 |
| 4-Nitrophenol | 2000 | 1450 | | ug/Kg | | 73 | 20 - 165 | 6 | 30 |
| Dibenzofuran | 1000 | 783 | | ug/Kg | | 78 | 72 - 109 | 3 | 30 |
| 2,4-Dinitrotoluene | 1000 | 704 | | ug/Kg | | 70 | 68 - 121 | 4 | 30 |
| Diethyl phthalate | 1000 | 860 | | ug/Kg | | 86 | 73 - 116 | 5 | 26 |
| 4-Chlorophenyl phenyl ether | 1000 | 775 | | ug/Kg | | 77 | 75 - 108 | 4 | 30 |
| Fluorene | 1000 | 790 | | ug/Kg | | 79 | 70 - 121 | 3 | 30 |
| 4-Nitroaniline | 1000 | 1360 | * | ug/Kg | | 136 | 58 - 108 | 7 | 32 |
| 4,6-Dinitro-2-methylphenol | 2000 | 995 | J | ug/Kg | | 50 | 48 - 130 | 22 | 22 |
| N-Nitrosodiphenylamine | 1000 | 820 | | ug/Kg | | 82 | 73 - 115 | 5 | 30 |
| 4-Bromophenyl phenyl ether | 1000 | 777 | | ug/Kg | | 78 | 68 - 122 | 8 | 30 |
| Hexachlorobenzene | 1000 | 758 | | ug/Kg | | 76 | 66 - 117 | 2 | 30 |
| Pentachlorophenol | 2000 | 962 | * | ug/Kg | | 48 | 45 - 117 | 26 | 23 |
| Phenanthrene | 1000 | 789 | | ug/Kg | | 79 | 73 - 106 | 2 | 28 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 580-168810/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 168957** — **Prep Batch: 168810**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Anthracene | 1000 | 758 | | ug/Kg | | 76 | 73 - 116 | 5 | 27 |
| Di-n-butyl phthalate | 1000 | 815 | | ug/Kg | | 81 | 66 - 140 | 4 | 30 |
| Fluoranthene | 1000 | 768 | | ug/Kg | | 77 | 73 - 125 | 3 | 30 |
| Pyrene | 1000 | 777 | | ug/Kg | | 78 | 70 - 120 | 5 | 30 |
| Butyl benzyl phthalate | 1000 | 720 | | ug/Kg | | 72 | 69 - 142 | 6 | 30 |
| 3,3'-Dichlorobenzidine | 2000 | 1340 | | ug/Kg | | 67 | 20 - 103 | 10 | 60 |
| Benzo[a]anthracene | 1000 | 754 | * | ug/Kg | | 75 | 76 - 119 | 9 | 27 |
| Chrysene | 1000 | 781 | | ug/Kg | | 78 | 75 - 114 | 1 | 26 |
| Bis(2-ethylhexyl) phthalate | 1000 | 762 | | ug/Kg | | 76 | 62 - 144 | 8 | 30 |
| Di-n-octyl phthalate | 1000 | 702 | | ug/Kg | | 70 | 65 - 141 | 5 | 30 |
| Benzo[a]pyrene | 1000 | 717 | | ug/Kg | | 72 | 72 - 117 | 11 | 30 |
| Indeno[1,2,3-cd]pyrene | 1000 | 674 | | ug/Kg | | 67 | 56 - 127 | 5 | 29 |
| Dibenz(a,h)anthracene | 1000 | 686 | | ug/Kg | | 69 | 56 - 134 | 7 | 30 |
| Benzo[g,h,i]perylene | 1000 | 758 | | ug/Kg | | 76 | 55 - 139 | 0 | 28 |
| Carbazole | 1000 | 1260 | | ug/Kg | | 126 | 76 - 135 | 4 | 30 |
| 1-Methylnaphthalene | 1000 | 723 | | ug/Kg | | 72 | 62 - 118 | 10 | 30 |
| Benzo[b]fluoranthene | 1000 | 719 | | ug/Kg | | 72 | 63 - 132 | 3 | 30 |
| Benzo[k]fluoranthene | 1000 | 803 | | ug/Kg | | 80 | 63 - 119 | 0 | 30 |
| bis (2-chloroisopropyl) ether | 1000 | 700 | | ug/Kg | | 70 | 41 - 126 | 9 | 57 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol* | *79* | | *36 - 145* |
| *Phenol-d5* | *78* | | *38 - 149* |
| *Nitrobenzene-d5* | *70* | | *38 - 141* |
| *2-Fluorobiphenyl* | *76* | | *42 - 140* |
| *2,4,6-Tribromophenol* | *75* | | *28 - 143* |
| *Terphenyl-d14* | *78* | | *42 - 151* |

**Lab Sample ID: 580-45211-1 MS** — **Client Sample ID: SXH0199-05**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 168957** — **Prep Batch: 168810**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | ND | | 1350 | 1200 | | ug/Kg | ☼ | 89 | 63 - 111 |
| Bis(2-chloroethyl)ether | ND | | 1350 | 992 | | ug/Kg | ☼ | 74 | 62 - 110 |
| 2-Chlorophenol | ND | | 1350 | 1200 | | ug/Kg | ☼ | 89 | 68 - 117 |
| 1,3-Dichlorobenzene | ND | | 1350 | 1050 | | ug/Kg | ☼ | 78 | 64 - 111 |
| 1,4-Dichlorobenzene | ND | | 1350 | 980 | | ug/Kg | ☼ | 73 | 65 - 110 |
| Benzyl alcohol | ND | | 1350 | 1100 | | ug/Kg | ☼ | 82 | 55 - 123 |
| 1,2-Dichlorobenzene | ND | | 1350 | 1080 | | ug/Kg | ☼ | 80 | 64 - 112 |
| 2-Methylphenol | ND | | 1350 | 1210 | | ug/Kg | ☼ | 89 | 71 - 116 |
| 3 & 4 Methylphenol | ND | | 1350 | 1190 | | ug/Kg | ☼ | 89 | 70 - 116 |
| N-Nitrosodi-n-propylamine | ND | | 1350 | 1080 | | ug/Kg | ☼ | 80 | 62 - 116 |
| Hexachloroethane | ND | | 1350 | 826 | F1 | ug/Kg | ☼ | 61 | 62 - 120 |
| Nitrobenzene | ND | | 1350 | 1020 | | ug/Kg | ☼ | 75 | 64 - 118 |
| Isophorone | ND | | 1350 | 1140 | | ug/Kg | ☼ | 84 | 67 - 119 |
| 2-Nitrophenol | ND | * | 1350 | 1020 | | ug/Kg | ☼ | 75 | 67 - 127 |
| 2,4-Dimethylphenol | ND | | 1350 | 1150 | | ug/Kg | ☼ | 85 | 54 - 139 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 580-45211-1 MS**
**Matrix: Solid**
**Analysis Batch: 168957**

**Client Sample ID: SXH0199-05**
**Prep Type: Total/NA**
**Prep Batch: 168810**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Benzoic acid | ND | | 2700 | ND | | ug/Kg | ☼ | 121 | 29 - 158 |
| Bis(2-chloroethoxy)methane | ND | | 1350 | 1020 | | ug/Kg | ☼ | 76 | 69 - 107 |
| 2,4-Dichlorophenol | ND | | 1350 | 1070 | | ug/Kg | ☼ | 80 | 68 - 125 |
| 1,2,4-Trichlorobenzene | ND | | 1350 | 1040 | | ug/Kg | ☼ | 77 | 66 - 115 |
| Naphthalene | 43 | | 1350 | 1100 | | ug/Kg | ☼ | 78 | 62 - 112 |
| 4-Chloroaniline | ND | | 1350 | 405 | | ug/Kg | ☼ | 30 | 20 - 103 |
| Hexachlorobutadiene | ND | | 1350 | 947 | | ug/Kg | ☼ | 70 | 65 - 116 |
| 4-Chloro-3-methylphenol | ND | | 1350 | 1140 | | ug/Kg | ☼ | 84 | 69 - 121 |
| 2-Methylnaphthalene | 65 | | 1350 | 1180 | | ug/Kg | ☼ | 83 | 64 - 119 |
| Hexachlorocyclopentadiene | ND | | 1350 | 172 | F1 | ug/Kg | ☼ | 13 | 46 - 131 |
| 2,4,6-Trichlorophenol | ND | | 1350 | 1130 | | ug/Kg | ☼ | 84 | 62 - 133 |
| 2,4,5-Trichlorophenol | ND | | 1350 | 1120 | | ug/Kg | ☼ | 83 | 57 - 133 |
| 2-Chloronaphthalene | ND | | 1350 | 1040 | | ug/Kg | ☼ | 77 | 68 - 112 |
| 2-Nitroaniline | ND | | 1350 | 1180 | | ug/Kg | ☼ | 87 | 64 - 112 |
| Dimethyl phthalate | ND | | 1350 | 1140 | | ug/Kg | ☼ | 85 | 78 - 117 |
| Acenaphthylene | ND | | 1350 | 1170 | | ug/Kg | ☼ | 87 | 68 - 120 |
| 2,6-Dinitrotoluene | ND | | 1350 | 1020 | | ug/Kg | ☼ | 76 | 66 - 123 |
| 3-Nitroaniline | ND | | 1350 | 845 | | ug/Kg | ☼ | 63 | 27 - 103 |
| Acenaphthene | ND | | 1350 | 1030 | | ug/Kg | ☼ | 77 | 68 - 116 |
| 2,4-Dinitrophenol | ND | * | 2700 | ND | F1 | ug/Kg | ☼ | 18 | 20 - 141 |
| 4-Nitrophenol | ND | | 2700 | 2200 | | ug/Kg | ☼ | 81 | 20 - 165 |
| Dibenzofuran | ND | | 1350 | 1090 | | ug/Kg | ☼ | 81 | 72 - 109 |
| 2,4-Dinitrotoluene | ND | | 1350 | 994 | | ug/Kg | ☼ | 74 | 68 - 121 |
| Diethyl phthalate | ND | | 1350 | 1140 | | ug/Kg | ☼ | 76 | 73 - 116 |
| 4-Chlorophenyl phenyl ether | ND | | 1350 | 1050 | | ug/Kg | ☼ | 78 | 75 - 108 |
| Fluorene | ND | | 1350 | 1110 | | ug/Kg | ☼ | 82 | 70 - 121 |
| 4-Nitroaniline | ND | * | 1350 | 1700 | F1 | ug/Kg | ☼ | 126 | 58 - 108 |
| 4,6-Dinitro-2-methylphenol | ND | | 2700 | ND | F1 | ug/Kg | ☼ | 19 | 48 - 130 |
| N-Nitrosodiphenylamine | ND | | 1350 | 1190 | | ug/Kg | ☼ | 88 | 73 - 115 |
| 4-Bromophenyl phenyl ether | ND | | 1350 | 1110 | | ug/Kg | ☼ | 82 | 68 - 122 |
| Hexachlorobenzene | ND | | 1350 | 1040 | | ug/Kg | ☼ | 77 | 66 - 117 |
| Pentachlorophenol | ND | * | 2700 | 2200 | | ug/Kg | ☼ | 81 | 45 - 117 |
| Phenanthrene | 47 | | 1350 | 1150 | | ug/Kg | ☼ | 82 | 73 - 106 |
| Anthracene | ND | | 1350 | 1090 | | ug/Kg | ☼ | 81 | 73 - 116 |
| Di-n-butyl phthalate | ND | | 1350 | 1280 | | ug/Kg | ☼ | 95 | 66 - 140 |
| Fluoranthene | 54 | | 1350 | 1260 | | ug/Kg | ☼ | 89 | 73 - 125 |
| Pyrene | 58 | | 1350 | 1260 | | ug/Kg | ☼ | 89 | 70 - 120 |
| Butyl benzyl phthalate | ND | | 1350 | 1290 | | ug/Kg | ☼ | 95 | 69 - 142 |
| 3,3'-Dichlorobenzidine | ND | | 2700 | 1050 | | ug/Kg | ☼ | 39 | 20 - 103 |
| Benzo[a]anthracene | ND | * | 1350 | 1280 | | ug/Kg | ☼ | 95 | 76 - 119 |
| Chrysene | ND | | 1350 | 1120 | | ug/Kg | ☼ | 83 | 75 - 114 |
| Bis(2-ethylhexyl) phthalate | ND | | 1350 | 1520 | | ug/Kg | ☼ | 113 | 62 - 144 |
| Di-n-octyl phthalate | ND | | 1350 | 1490 | | ug/Kg | ☼ | 111 | 65 - 141 |
| Benzo[a]pyrene | ND | | 1350 | 1130 | | ug/Kg | ☼ | 84 | 72 - 117 |
| Indeno[1,2,3-cd]pyrene | ND | | 1350 | 630 | F1 | ug/Kg | ☼ | 47 | 56 - 127 |
| Dibenz(a,h)anthracene | ND | | 1350 | 552 | F1 | ug/Kg | ☼ | 41 | 56 - 134 |
| Benzo[g,h,i]perylene | ND | | 1350 | 562 | F1 | ug/Kg | ☼ | 42 | 55 - 139 |
| Carbazole | ND | | 1350 | 1840 | F1 | ug/Kg | ☼ | 136 | 76 - 135 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 580-45211-1 MS** — **Client Sample ID: SXH0199-05**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 168957** — **Prep Batch: 168810**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1-Methylnaphthalene | 47 | | 1350 | 1150 | | ug/Kg | ☼ | 82 | 62 - 118 |
| Benzo[b]fluoranthene | ND | | 1350 | 1230 | | ug/Kg | ☼ | 91 | 63 - 132 |
| Benzo[k]fluoranthene | ND | | 1350 | 1070 | | ug/Kg | ☼ | 79 | 63 - 119 |
| bis (2-chloroisopropyl) ether | ND | | 1350 | 995 | | ug/Kg | ☼ | 74 | 41 - 126 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol* | *87* | | *36 - 145* |
| *Phenol-d5* | *85* | | *38 - 149* |
| *Nitrobenzene-d5* | *78* | | *38 - 141* |
| *2-Fluorobiphenyl* | *82* | | *42 - 140* |
| *2,4,6-Tribromophenol* | *83* | | *28 - 143* |
| *Terphenyl-d14* | *92* | | *42 - 151* |

**Lab Sample ID: 580-45211-1 MSD** — **Client Sample ID: SXH0199-05**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 168957** — **Prep Batch: 168810**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Phenol | ND | | 1310 | 1120 | | ug/Kg | ☼ | 85 | 63 - 111 | 7 | 26 |
| Bis(2-chloroethyl)ether | ND | | 1310 | 992 | | ug/Kg | ☼ | 76 | 62 - 110 | 0 | 60 |
| 2-Chlorophenol | ND | | 1310 | 1130 | | ug/Kg | ☼ | 86 | 68 - 117 | 6 | 27 |
| 1,3-Dichlorobenzene | ND | | 1310 | 943 | | ug/Kg | ☼ | 72 | 64 - 111 | 11 | 60 |
| 1,4-Dichlorobenzene | ND | | 1310 | 918 | | ug/Kg | ☼ | 70 | 65 - 110 | 7 | 32 |
| Benzyl alcohol | ND | | 1310 | 946 | | ug/Kg | ☼ | 72 | 55 - 123 | 15 | 60 |
| 1,2-Dichlorobenzene | ND | | 1310 | 1020 | | ug/Kg | ☼ | 78 | 64 - 112 | 6 | 60 |
| 2-Methylphenol | ND | | 1310 | 1090 | | ug/Kg | ☼ | 83 | 71 - 116 | 10 | 25 |
| 3 & 4 Methylphenol | ND | | 1310 | 1220 | | ug/Kg | ☼ | 93 | 70 - 116 | 2 | 27 |
| N-Nitrosodi-n-propylamine | ND | | 1310 | 997 | | ug/Kg | ☼ | 76 | 62 - 116 | 8 | 28 |
| Hexachloroethane | ND | | 1310 | 828 | | ug/Kg | ☼ | 63 | 62 - 120 | 0 | 60 |
| Nitrobenzene | ND | | 1310 | 1040 | | ug/Kg | ☼ | 80 | 64 - 118 | 3 | 60 |
| Isophorone | ND | | 1310 | 1090 | | ug/Kg | ☼ | 83 | 67 - 119 | 4 | 60 |
| 2-Nitrophenol | ND | * | 1310 | 995 | | ug/Kg | ☼ | 76 | 67 - 127 | 2 | 60 |
| 2,4-Dimethylphenol | ND | | 1310 | 1150 | | ug/Kg | ☼ | 87 | 54 - 139 | 0 | 60 |
| Benzoic acid | ND | | 2620 | ND | | ug/Kg | ☼ | 123 | 29 - 158 | 2 | 60 |
| Bis(2-chloroethoxy)methane | ND | | 1310 | 1010 | | ug/Kg | ☼ | 77 | 69 - 107 | 2 | 60 |
| 2,4-Dichlorophenol | ND | | 1310 | 1090 | | ug/Kg | ☼ | 83 | 68 - 125 | 2 | 60 |
| 1,2,4-Trichlorobenzene | ND | | 1310 | 1050 | | ug/Kg | ☼ | 80 | 66 - 115 | 2 | 28 |
| Naphthalene | 43 | | 1310 | 1080 | | ug/Kg | ☼ | 79 | 62 - 112 | 1 | 26 |
| 4-Chloroaniline | ND | | 1310 | 393 | | ug/Kg | ☼ | 30 | 20 - 103 | 3 | 60 |
| Hexachlorobutadiene | ND | | 1310 | 971 | | ug/Kg | ☼ | 74 | 65 - 116 | 3 | 60 |
| 4-Chloro-3-methylphenol | ND | | 1310 | 1160 | | ug/Kg | ☼ | 88 | 69 - 121 | 2 | 27 |
| 2-Methylnaphthalene | 65 | | 1310 | 1170 | | ug/Kg | ☼ | 84 | 64 - 119 | 1 | 27 |
| Hexachlorocyclopentadiene | ND | | 1310 | 154 | F1 | ug/Kg | ☼ | 12 | 46 - 131 | 11 | 60 |
| 2,4,6-Trichlorophenol | ND | | 1310 | 1130 | | ug/Kg | ☼ | 86 | 62 - 133 | 0 | 60 |
| 2,4,5-Trichlorophenol | ND | | 1310 | 1050 | | ug/Kg | ☼ | 80 | 57 - 133 | 7 | 60 |
| 2-Chloronaphthalene | ND | | 1310 | 979 | | ug/Kg | ☼ | 75 | 68 - 112 | 6 | 25 |
| 2-Nitroaniline | ND | | 1310 | 1060 | | ug/Kg | ☼ | 81 | 64 - 112 | 10 | 60 |
| Dimethyl phthalate | ND | | 1310 | 1120 | | ug/Kg | ☼ | 85 | 78 - 117 | 2 | 60 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 580-45211-1 MSD** | **Client Sample ID: SXH0199-05**
**Matrix: Solid** | **Prep Type: Total/NA**
**Analysis Batch: 168957** | **Prep Batch: 168810**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthylene | ND | | 1310 | 1130 | | ug/Kg | ☼ | 86 | 68 - 120 | 3 | 28 |
| 2,6-Dinitrotoluene | ND | | 1310 | 1070 | | ug/Kg | ☼ | 82 | 66 - 123 | 5 | 60 |
| 3-Nitroaniline | ND | | 1310 | 930 | | ug/Kg | ☼ | 71 | 27 - 103 | 10 | 60 |
| Acenaphthene | ND | | 1310 | 995 | | ug/Kg | ☼ | 76 | 68 - 116 | 4 | 27 |
| 2,4-Dinitrophenol | ND | * | 2620 | ND | F1 | ug/Kg | ☼ | 15 | 20 - 141 | 19 | 60 |
| 4-Nitrophenol | ND | | 2620 | 2410 | | ug/Kg | ☼ | 92 | 20 - 165 | 9 | 33 |
| Dibenzofuran | ND | | 1310 | 1080 | | ug/Kg | ☼ | 82 | 72 - 109 | 2 | 60 |
| 2,4-Dinitrotoluene | ND | | 1310 | 992 | | ug/Kg | ☼ | 76 | 68 - 121 | 0 | 31 |
| Diethyl phthalate | ND | | 1310 | 1150 | | ug/Kg | ☼ | 79 | 73 - 116 | 1 | 26 |
| 4-Chlorophenyl phenyl ether | ND | | 1310 | 1010 | | ug/Kg | ☼ | 77 | 75 - 108 | 4 | 60 |
| Fluorene | ND | | 1310 | 1100 | | ug/Kg | ☼ | 84 | 70 - 121 | 1 | 31 |
| 4-Nitroaniline | ND | * | 1310 | 1860 | F1 | ug/Kg | ☼ | 142 | 58 - 108 | 9 | 60 |
| 4,6-Dinitro-2-methylphenol | ND | | 2620 | ND | F1 | ug/Kg | ☼ | 14 | 48 - 130 | 33 | 60 |
| N-Nitrosodiphenylamine | ND | | 1310 | 1240 | | ug/Kg | ☼ | 94 | 73 - 115 | 4 | 60 |
| 4-Bromophenyl phenyl ether | ND | | 1310 | 1090 | | ug/Kg | ☼ | 83 | 68 - 122 | 2 | 60 |
| Hexachlorobenzene | ND | | 1310 | 1010 | | ug/Kg | ☼ | 77 | 66 - 117 | 3 | 60 |
| Pentachlorophenol | ND | * | 2620 | 2200 | | ug/Kg | ☼ | 84 | 45 - 117 | 0 | 68 |
| Phenanthrene | 47 | | 1310 | 1130 | | ug/Kg | ☼ | 82 | 73 - 106 | 2 | 28 |
| Anthracene | ND | | 1310 | 1100 | | ug/Kg | ☼ | 84 | 73 - 116 | 1 | 27 |
| Di-n-butyl phthalate | ND | | 1310 | 1300 | | ug/Kg | ☼ | 99 | 66 - 140 | 1 | 60 |
| Fluoranthene | 54 | | 1310 | 1210 | | ug/Kg | ☼ | 88 | 73 - 125 | 4 | 36 |
| Pyrene | 58 | | 1310 | 1200 | | ug/Kg | ☼ | 87 | 70 - 120 | 4 | 31 |
| Butyl benzyl phthalate | ND | | 1310 | 1200 | | ug/Kg | ☼ | 92 | 69 - 142 | 7 | 60 |
| 3,3'-Dichlorobenzidine | ND | | 2620 | 933 | | ug/Kg | ☼ | 36 | 20 - 103 | 12 | 60 |
| Benzo[a]anthracene | ND | * | 1310 | 1190 | | ug/Kg | ☼ | 91 | 76 - 119 | 7 | 27 |
| Chrysene | ND | | 1310 | 1050 | | ug/Kg | ☼ | 80 | 75 - 114 | 6 | 26 |
| Bis(2-ethylhexyl) phthalate | ND | | 1310 | 1390 | | ug/Kg | ☼ | 106 | 62 - 144 | 10 | 60 |
| Di-n-octyl phthalate | ND | | 1310 | 1530 | | ug/Kg | ☼ | 117 | 65 - 141 | 3 | 31 |
| Benzo[a]pyrene | ND | | 1310 | 1100 | | ug/Kg | ☼ | 84 | 72 - 117 | 4 | 30 |
| Indeno[1,2,3-cd]pyrene | ND | | 1310 | 664 | F1 | ug/Kg | ☼ | 51 | 56 - 127 | 5 | 29 |
| Dibenz(a,h)anthracene | ND | | 1310 | 571 | F1 | ug/Kg | ☼ | 44 | 56 - 134 | 3 | 30 |
| Benzo[g,h,i]perylene | ND | | 1310 | 521 | F1 | ug/Kg | ☼ | 40 | 55 - 139 | 8 | 28 |
| Carbazole | ND | | 1310 | 1870 | F1 | ug/Kg | ☼ | 143 | 76 - 135 | 2 | 60 |
| 1-Methylnaphthalene | 47 | | 1310 | 1130 | | ug/Kg | ☼ | 83 | 62 - 118 | 2 | 30 |
| Benzo[b]fluoranthene | ND | | 1310 | 1240 | | ug/Kg | ☼ | 95 | 63 - 132 | 1 | 31 |
| Benzo[k]fluoranthene | ND | | 1310 | 1090 | | ug/Kg | ☼ | 83 | 63 - 119 | 1 | 31 |
| bis (2-chloroisopropyl) ether | ND | | 1310 | 919 | | ug/Kg | ☼ | 70 | 41 - 126 | 8 | 60 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol* | *87* | | *36 - 145* |
| *Phenol-d5* | *85* | | *38 - 149* |
| *Nitrobenzene-d5* | *81* | | *38 - 141* |
| *2-Fluorobiphenyl* | *84* | | *42 - 140* |
| *2,4,6-Tribromophenol* | *85* | | *28 - 143* |
| *Terphenyl-d14* | *92* | | *42 - 151* |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

**Lab Sample ID: 14I0001-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0001** — **Prep Batch: 14I0001_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.0 | | mg/kg wet | | 09/02/14 08:07 | 09/02/14 12:44 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.0 | | mg/kg wet | | 09/02/14 08:07 | 09/02/14 12:44 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *110* | | *50 - 150* | *09/02/14 08:07* | *09/02/14 12:44* | *1.00* |
| *n-Triacontane-d62* | *107* | | *50 - 150* | *09/02/14 08:07* | *09/02/14 12:44* | *1.00* |

**Lab Sample ID: 14I0001-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0001** — **Prep Batch: 14I0001_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | | | 66.7 | 60.1 | | mg/kg wet | | 90.1 | 50 - 150 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *120* | | *50 - 150* |
| *n-Triacontane-d62* | *116* | | *50 - 150* |

**Lab Sample ID: 14I0001-DUP1** — **Client Sample ID: EX11-1-6**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0001** — **Prep Batch: 14I0001_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 10.9 | | | 12.8 | | mg/kg dry | ☼ | | | 15.7 | 40 |
| Heavy Oil Range Hydrocarbons | 34.8 | | | 40.9 | | mg/kg dry | ☼ | | | 16.0 | 40 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *117* | | *50 - 150* |
| *n-Triacontane-d62* | *114* | | *50 - 150* |

**Lab Sample ID: 14I0001-DUP2** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0001** — **Prep Batch: 14I0001_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 7.33 | | | 11.2 | R4 | mg/kg dry | ☼ | | | 42.1 | 40 |
| Heavy Oil Range Hydrocarbons | 8.54 | | | 11.6 | | mg/kg dry | ☼ | | | 30.1 | 40 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *106* | | *50 - 150* |
| *n-Triacontane-d62* | *103* | | *50 - 150* |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Method: 200.8 - Metals (ICP/MS)

**Lab Sample ID: MB 250-30033/1-A** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 30058** — **Prep Batch: 30033**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 0.0010 | | mg/L | | 09/02/14 10:08 | 09/02/14 17:54 | 1 |

**Lab Sample ID: LCS 250-30033/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 30058** — **Prep Batch: 30033**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Arsenic | 0.100 | 0.0992 | | mg/L | | 99 | 85 - 115 |

**Lab Sample ID: 250-21110-C-1-B MS** — **Client Sample ID: Matrix Spike**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 30058** — **Prep Batch: 30033**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 0.100 | 0.100 | | mg/L | | 97 | 70 - 130 |

**Lab Sample ID: 250-21107-A-11-B DU** — **Client Sample ID: Duplicate**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 30058** — **Prep Batch: 30033**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | ND | | mg/L | | NC | 20 |

## Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

**Lab Sample ID: 14I0014-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14I0014** — **Prep Batch: 14I0014_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 09/03/14 08:47 | 09/03/14 14:58 | 1.00 |

**Lab Sample ID: 14I0014-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14I0014** — **Prep Batch: 14I0014_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 2.00 | 1.92 | | ug/L | | 96.0 | 85 - 115 |

**Lab Sample ID: 14I0014-MS1** — **Client Sample ID: Matrix Spike**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14I0014** — **Prep Batch: 14I0014_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 2.00 | 1.61 | | ug/L | | 80.5 | 70 - 130 |

## Method: EPA 245.1 - Total Metals by EPA 200 Series Methods (Continued)

**Lab Sample ID: 14I0014-MSD1** — **Client Sample ID: Matrix Spike Duplicate**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14I0014** — **Prep Batch: 14I0014_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | ıtrix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 2.00 | 1.65 | | ug/L | | 82.5 | 70 - 130 | 2.45 | 18.2 |

**Lab Sample ID: 14I0014-DUP1** — **Client Sample ID: Duplicate**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14I0014** — **Prep Batch: 14I0014_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | | ND | | ug/L | | | | | 17.1 |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-1-6 — Lab Sample ID: SXH0199-01

**Date Collected: 08/28/14 09:23** — **Matrix: Soil**
**Date Received: 08/29/14 09:52** — **Percent Solids: 87.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.903 | 14I0003_P | 09/02/14 10:27 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14I0003 | 09/02/14 12:24 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.903 | 14I0003_P | 09/02/14 10:27 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0003 | 09/02/14 12:24 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.924 | 14I0001_P | 09/02/14 08:07 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14I0001 | 09/02/14 13:55 | NMI | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14I0016_P | 09/02/14 11:45 | NI | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14I0016 | 09/03/14 09:54 | NI | TAL SPK |

## Client Sample ID: EX11-2-10 — Lab Sample ID: SXH0199-02

**Date Collected: 08/28/14 14:40** — **Matrix: Soil**
**Date Received: 08/29/14 09:52** — **Percent Solids: 74.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.912 | 14I0003_P | 09/02/14 10:27 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14I0003 | 09/02/14 12:47 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.912 | 14I0003_P | 09/02/14 10:27 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0003 | 09/02/14 12:47 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.952 | 14I0001_P | 09/02/14 08:07 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 10.0 | 14I0001 | 09/02/14 19:03 | NMI | TAL SPK |

## Client Sample ID: EX11-3-4 — Lab Sample ID: SXH0199-03

**Date Collected: 08/28/14 14:10** — **Matrix: Soil**
**Date Received: 08/29/14 09:52** — **Percent Solids: 71.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.18 | 14I0003_P | 09/02/14 10:27 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14I0003 | 09/02/14 13:10 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.18 | 14I0003_P | 09/02/14 10:27 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0003 | 09/02/14 13:10 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.986 | 14I0001_P | 09/02/14 08:07 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14I0001 | 09/02/14 14:43 | NMI | TAL SPK |

## Client Sample ID: EX11-4-3 — Lab Sample ID: SXH0199-04

**Date Collected: 08/28/14 14:15** — **Matrix: Soil**
**Date Received: 08/29/14 09:52** — **Percent Solids: 73.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.874 | 14I0003_P | 09/02/14 10:27 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14I0003 | 09/02/14 13:32 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.874 | 14I0003_P | 09/02/14 10:27 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0003 | 09/02/14 13:32 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.963 | 14I0001_P | 09/02/14 08:07 | IAB | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Client Sample ID: EX11-4-3

**Lab Sample ID: SXH0199-04**

**Date Collected: 08/28/14 14:15**
**Matrix: Soil**
**Date Received: 08/29/14 09:52**
**Percent Solids: 73.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Analysis | NWTPH-Dx | | 1.00 | 14I0001 | 09/02/14 15:07 | NMI | TAL SPK |

## Client Sample ID: EX11-5-3.25

**Lab Sample ID: SXH0199-05**

**Date Collected: 08/28/14 14:30**
**Matrix: Soil**
**Date Received: 08/29/14 09:52**
**Percent Solids: 78.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.956 | 14I0003_P | 09/02/14 10:27 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14I0003 | 09/02/14 13:55 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.956 | 14I0003_P | 09/02/14 10:27 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0003 | 09/02/14 13:55 | CBW | TAL SPK |
| Total/NA | Prep | 3550B | | | 168810 | 09/04/14 12:15 | RMB | TAL SEA |
| Total/NA | Analysis | 8270C | | 1 | 168957 | 09/06/14 00:41 | ERB | TAL SEA |
| Total | Prep | EPA 3550B | | 0.963 | 14I0001_P | 09/02/14 08:07 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 10.0 | 14I0001 | 09/02/14 19:27 | NMI | TAL SPK |
| Total/NA | Analysis | D 2216 | | 1 | 168773 | 09/04/14 10:12 | LHJ | TAL SEA |

## Client Sample ID: Infiltration Pond 8/28/14

**Lab Sample ID: SXH0199-06**

**Date Collected: 08/28/14 15:30**
**Matrix: Water**
**Date Received: 08/29/14 09:52**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 200.8 | | | 30033 | 09/02/14 15:37 | KTN | TAL PRT |
| Total/NA | Analysis | 200.8 | | 1 | 30058 | 09/02/14 19:29 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14I0014_P | 09/03/14 08:47 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14I0014 | 09/03/14 15:16 | ZZZ | TAL SPK |

**Laboratory References:**

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-071 | 10-31-14 |
| Washington | State Program | 10 | C569 | 01-06-15 |

## Laboratory: TestAmerica Portland

The certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Washington | State Program | 10 | C586 | 06-23-15 |

## Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-113 | 07-25-15 |
| California | NELAP | 9 | 01115CA | 01-31-14 * |
| California | State Program | 9 | 2901 | 01-31-15 |
| L-A-B | DoD ELAP | | L2236 | 01-19-16 |
| L-A-B | ISO/IEC 17025 | | L2236 | 01-19-16 |
| Montana (UST) | State Program | 8 | N/A | 04-30-20 |
| Oregon | NELAP | 10 | WA100007 | 11-06-14 |
| USDA | Federal | | P330-11-00222 | 04-08-17 |
| Washington | State Program | 10 | C553 | 02-17-15 |

* Certification renewal pending - certification considered valid.

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXH0199

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 8260C | Volatile Organic Compounds by EPA Methods 5035/8260C | | TAL SPK |
| NWTPH-Gx | Gasoline Hydrocarbons by NWTPH-Gx | | TAL SPK |
| 8270C | Semivolatile Organic Compounds (GC/MS) | SW846 | TAL SEA |
| NWTPH-Dx | Semivolatile Petroleum Products by NWTPH-Dx | | TAL SPK |
| 200.8 | Metals (ICP/MS) | EPA | TAL PRT |
| EPA 245.1 | Total Metals by EPA 200 Series Methods | | TAL SPK |
| D 2216 | Percent Moisture | ASTM | TAL SEA |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

**Laboratory References:**

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 X
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #: SXH0199

CLIENT: GeoEngineers
REPORT TO: dlauder@geoengineers.com (Dave Lauder)
ADDRESS: 523 E Second Ave
Spokane WA 99202
PHONE: 509-363-3125 FAX: 509-363-3126
PROJECT NAME: Cashmere
PROJECT NUMBER: 18593-001-04
SAMPLED BY: JWR

INVOICE TO:
P.O. NUMBER:

**TURNAROUND REQUEST** in Business Days *
Organic & Inorganic Analyses: 10 (STD.) 7 5 4 3 ~~2~~ 1 <1
Petroleum Hydrocarbon Analyses: 5 (STD.) 4 3 ~~2~~ 1 <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | | NWTPH-Gx | NWTPH-Dx | VOCs | SVOCs | Hg | As | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Ex11-1-6 | 8/28/14 | 0923 | X | X | X | | | | S | 3 | | |
| 2 | Ex11-2-10 | 8/28/14 | 1440 | X | X | X | | | | S | 3 | | |
| 3 | Ex11-3-4 | 8/28/14 | 1410 | X | X | X | | | | S | 3 | | |
| 4 | Ex11-4-3 | 8/28/14 | 1415 | X | X | X | | | | S | 3 | | |
| 5 | Ex11-5-3.25 | 8/28/14 | 1430 | X | X | X | X | | | S | 4 | | |
| 6 | Infiltration-Pond-8/28/14 | 8/28/14 | 1530 | | | | | X | X | W | 1 | | |
| 7 | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | |

RELEASED BY: [signature] DATE: 8/29/14
PRINT NAME: Justin Rice FIRM: Geo TIME: 0932
RECEIVED BY: [signature] DATE: 8-29-14
PRINT NAME: Cal Stapleton FIRM: TA TIME: 9:02
RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:
RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:
ADDITIONAL REMARKS:
TEMP: 9.1
PAGE 1 OF 1

TAL-1000 (0612)

## TestAmerica Spokane
## Sample Receipt Form

| | | |
|---|---|---|
| **Work Order #** SXH0199 | **Client** GeoEngineers | **Project:** Cashmere |
| Date/Time Received: 8-29-14 9:52 | By: CS | |

Samples Delivered By: ☐Shipping Service ☐Courier ☒Client ☐Other:

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | X | | | |
| Custody Seals are present and intact: | | | X | |
| Are CoC documents present: | X | | | |
| Necessary signatures: | X | | | |

Thermal Preservation Type: ☐Blue Ice ☐Gel Ice ☒Real Ice ☐Dry Ice ☐None ☐Other:

Temperature: 4.1 °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐Not enough ice ☒Ice melted ☐w/in 4hrs of collection ☐NA ☐Other:

| Log-In Phase Date/Time: 8-29-14 10:00 By: CS | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | X | | | |
| Samples containers were received intact: | X | | | |
| Do sample IDs match the CoC | X | | | |
| Appropriate sample containers were received for tests requested | X | | | |
| Are sample volumes adequate for tests requested | Y | | | |
| Appropriate preservatives were used for the tests requested | X | | | |
| pH of inorganic samples checked and is within method specification | X | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | | | Y | |
| Are dissolved parameters field filtered | | | Y | |
| Do any samples need to be filtered or preserved by the lab | | | Y | |
| Does this project require quick turnaround analysis | X | | | 2days |
| Are there any short hold time tests (see chart below) | | Y | | |
| Are any samples within 2 days of or past expiration | | Y | | |
| Was the CoC scanned | Y | | | |
| Were there Non-conformance issues at login | | Y | | |
| If yes, was a CAR generated # | | | Y | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

**Form No. SP-FORM-SPL-002 12 December 2012**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXI0031
Client Project/Site: 18593-001-04
Client Project Description: Cashmere, WA

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*9/11/2014 11:34:25 AM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*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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# Case Narrative

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Job ID: SXI0031

### Laboratory: TestAmerica Seattle

**Narrative**

**Receipt**
The sample was received on 9/6/2014 10:10 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5º C.

**GC/MS Semi VOA Method(s) 8270C:**
The continuing calibration verification (CCV) associated with batch 169302 recovered above the upper control limit for n-Octadecane and 2,2'-Oxybis(1-chloropropane). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (580-45261-1), (580-45261-1 MS), (580-45261-1 MSD), (CCVIS 580-169302/3), (LCS 580-169185/2-A), (LCSD 580-169185/3-A), (MB 580-169185/1-A), SXI0031-04 (580-45261-1).

Diethyl phthalate recovered below control limits for the LCS and LCSD associated with batch 169185. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

### Laboratory: TestAmerica Spokane

**Narrative**

**Receipt**
The sample(s) were received on 9/4/2014 3:50:00 PM ; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 9.8 ºC.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Sample Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXI0031-01 | EX12-1-2.5 | Soil | 09/04/14 09:35 | 09/04/14 15:50 |
| SXI0031-02 | EX12-2-3 | Soil | 09/04/14 10:03 | 09/04/14 15:50 |
| SXI0031-03 | EX12-3-2 | Soil | 09/04/14 10:20 | 09/04/14 15:50 |
| SXI0031-04 | EX12-4-3 | Soil | 09/04/14 11:15 | 09/04/14 15:50 |
| SXI0031-05 | EX12-6-8 | Soil | 09/04/14 11:30 | 09/04/14 15:50 |
| SXI0031-06 | EX12-7-6 | Soil | 09/04/14 11:40 | 09/04/14 15:50 |
| SXI0031-07 | EX12-5-3 | Soil | 09/04/14 11:00 | 09/04/14 15:50 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Qualifiers

### GCMS Volatiles

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| ZX | Due to sample matrix effects, the surrogate recovery was outside the acceptance limits. |

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| ^ | ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits. |
| * | LCS or LCSD exceeds the control limits |
| F1 | MS and/or MSD Recovery exceeds the control limits |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### Fuels

| Qualifier | Qualifier Description |
|---|---|
| Q6 | Results in the diesel organics range are primarily due to overlap from a heavy oil range product. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-1-2.5

**Date Collected: 09/04/14 09:35**
**Date Received: 09/04/14 15:50**

## Lab Sample ID: SXI0031-01

**Matrix: Soil**
**Percent Solids: 92.2**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.129 | 0.0120 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Chloromethane | ND | | 0.644 | 0.00682 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Vinyl chloride | ND | | 0.0772 | 0.00798 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Bromomethane | ND | | 0.644 | 0.0394 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Chloroethane | ND | | 0.129 | 0.0315 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0386 | 0.0102 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.129 | 0.0163 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Carbon disulfide | ND | | 0.129 | 0.0138 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Methylene chloride | ND | | 0.257 | 0.00669 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Acetone | ND | | 3.86 | 0.112 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.129 | 0.0133 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0644 | 0.00412 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.129 | 0.0145 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.129 | 0.00734 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.129 | 0.0219 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Bromochloromethane | ND | | 0.129 | 0.00502 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Chloroform | ND | | 0.129 | 0.00991 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Carbon tetrachloride | ND | | 0.129 | 0.0268 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.129 | 0.0223 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 2-Butanone | ND | | 1.29 | 0.142 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Hexane | ND | | 0.129 | 0.0104 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.129 | 0.0224 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Benzene | ND | | 0.0193 | 0.0125 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.129 | 0.00631 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Trichloroethene | ND | | 0.0322 | 0.0165 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Dibromomethane | ND | | 0.129 | 0.0117 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.129 | 0.00772 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Bromodichloromethane | ND | | 0.129 | 0.00901 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.129 | 0.00798 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Toluene | ND | | 0.129 | 0.0171 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.29 | 0.0263 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.129 | 0.00849 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Tetrachloroethene | ND | | 0.0515 | 0.0227 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.129 | 0.00798 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Dibromochloromethane | ND | | 0.129 | 0.00772 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.129 | 0.00952 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0129 | 0.00746 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 2-Hexanone | ND | | 1.29 | 0.0598 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Ethylbenzene | ND | | 0.129 | 0.0208 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Chlorobenzene | ND | | 0.129 | 0.00978 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.129 | 0.0131 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| m,p-Xylene | ND | | 0.515 | 0.0219 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| o-Xylene | ND | | 0.257 | 0.0169 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Styrene | ND | | 0.129 | 0.0120 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Bromoform | ND | | 0.129 | 0.0161 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Isopropylbenzene | ND | | 0.129 | 0.0245 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| n-Propylbenzene | ND | | 0.129 | 0.0266 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.129 | 0.00965 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Bromobenzene | ND | | 0.129 | 0.0121 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-1-2.5

**Lab Sample ID: SXI0031-01**

**Date Collected: 09/04/14 09:35**
**Matrix: Soil**
**Date Received: 09/04/14 15:50**
**Percent Solids: 92.2**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,3,5-Trimethylbenzene** | **0.0367** | **J** | 0.129 | 0.0239 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 2-Chlorotoluene | ND | | 0.129 | 0.0210 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.129 | 0.0108 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 4-Chlorotoluene | ND | | 0.129 | 0.0184 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| tert-Butylbenzene | ND | | 0.129 | 0.0278 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| **1,2,4-Trimethylbenzene** | **0.0592** | **J** | 0.129 | 0.0187 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| sec-Butylbenzene | ND | | 0.129 | 0.0302 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| p-Isopropyltoluene | ND | | 0.129 | 0.0308 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.129 | 0.0162 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.129 | 0.0136 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| n-Butylbenzene | ND | | 0.129 | 0.0354 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.129 | 0.00978 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.644 | 0.0366 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Hexachlorobutadiene | ND | | 0.129 | 0.0734 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.129 | 0.0256 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| Naphthalene | ND | | 0.257 | 0.0175 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.129 | 0.0457 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *103* | | *80 - 120* | *09/05/14 11:06* | *09/05/14 13:13* | *1.00* |
| *1,2-dichloroethane-d4* | *97.5* | | *74.7 - 120* | *09/05/14 11:06* | *09/05/14 13:13* | *1.00* |
| *Toluene-d8* | *99.9* | | *78.5 - 125* | *09/05/14 11:06* | *09/05/14 13:13* | *1.00* |
| *4-bromofluorobenzene* | *148* | *ZX* | *69.8 - 140* | *09/05/14 11:06* | *09/05/14 13:13* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **76.2** | | 6.44 | | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:13 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *148* | | *41.5 - 162* | *09/05/14 11:06* | *09/05/14 13:13* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **914** | | 106 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 12:10 | 10.0 |
| **Heavy Oil Range Hydrocarbons** | **2800** | | 265 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 12:10 | 10.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *116* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 12:10* | *10.0* |
| *n-Triacontane-d62* | *134* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 12:10* | *10.0* |

## Client Sample ID: EX12-2-3

**Lab Sample ID: SXI0031-02**

**Date Collected: 09/04/14 10:03**
**Matrix: Soil**
**Date Received: 09/04/14 15:50**
**Percent Solids: 69.4**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.194 | 0.0181 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Chloromethane | ND | | 0.971 | 0.0103 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Vinyl chloride | ND | | 0.117 | 0.0120 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Bromomethane | ND | | 0.971 | 0.0594 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Chloroethane | ND | | 0.194 | 0.0476 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-2-3

**Date Collected: 09/04/14 10:03**
**Date Received: 09/04/14 15:50**

## Lab Sample ID: SXI0031-02

**Matrix: Soil**
**Percent Solids: 69.4**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | 0.0583 | 0.0153 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.194 | 0.0247 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Carbon disulfide | ND | | 0.194 | 0.0208 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Methylene chloride | ND | | 0.388 | 0.0101 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Acetone | ND | | 5.83 | 0.169 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.194 | 0.0200 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0971 | 0.00621 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.194 | 0.0219 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.194 | 0.0111 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.194 | 0.0330 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Bromochloromethane | ND | | 0.194 | 0.00757 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Chloroform | ND | | 0.194 | 0.0150 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Carbon tetrachloride | ND | | 0.194 | 0.0404 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.194 | 0.0336 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 2-Butanone | ND | | 1.94 | 0.214 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Hexane | ND | | 0.194 | 0.0157 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.194 | 0.0338 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Benzene | ND | | 0.0291 | 0.0188 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.194 | 0.00952 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Trichloroethene | ND | | 0.0485 | 0.0249 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Dibromomethane | ND | | 0.194 | 0.0177 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.194 | 0.0117 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Bromodichloromethane | ND | | 0.194 | 0.0136 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.194 | 0.0120 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Toluene | ND | | 0.194 | 0.0258 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.94 | 0.0396 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.194 | 0.0128 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Tetrachloroethene | ND | | 0.0777 | 0.0342 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.194 | 0.0120 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Dibromochloromethane | ND | | 0.194 | 0.0117 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.194 | 0.0144 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0194 | 0.0113 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 2-Hexanone | ND | | 1.94 | 0.0903 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Ethylbenzene | ND | | 0.194 | 0.0315 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Chlorobenzene | ND | | 0.194 | 0.0148 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.194 | 0.0198 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| m,p-Xylene | ND | | 0.777 | 0.0330 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| o-Xylene | ND | | 0.388 | 0.0254 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Styrene | ND | | 0.194 | 0.0181 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Bromoform | ND | | 0.194 | 0.0243 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Isopropylbenzene | ND | | 0.194 | 0.0369 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| n-Propylbenzene | ND | | 0.194 | 0.0402 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.194 | 0.0146 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Bromobenzene | ND | | 0.194 | 0.0183 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.194 | 0.0361 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 2-Chlorotoluene | ND | | 0.194 | 0.0317 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.194 | 0.0163 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 4-Chlorotoluene | ND | | 0.194 | 0.0278 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| tert-Butylbenzene | ND | | 0.194 | 0.0419 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-2-3

**Date Collected: 09/04/14 10:03**
**Date Received: 09/04/14 15:50**

## Lab Sample ID: SXI0031-02

**Matrix: Soil**
**Percent Solids: 69.4**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | ND | | 0.194 | 0.0282 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| sec-Butylbenzene | ND | | 0.194 | 0.0456 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| p-Isopropyltoluene | ND | | 0.194 | 0.0464 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.194 | 0.0245 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.194 | 0.0206 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| n-Butylbenzene | ND | | 0.194 | 0.0534 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.194 | 0.0148 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.971 | 0.0551 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Hexachlorobutadiene | ND | | 0.194 | 0.111 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.194 | 0.0386 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| Naphthalene | ND | | 0.388 | 0.0264 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.194 | 0.0689 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *80 - 120* | *09/05/14 11:06* | *09/05/14 13:35* | *1.00* |
| *1,2-dichloroethane-d4* | *88.1* | | *74.7 - 120* | *09/05/14 11:06* | *09/05/14 13:35* | *1.00* |
| *Toluene-d8* | *102* | | *78.5 - 125* | *09/05/14 11:06* | *09/05/14 13:35* | *1.00* |
| *4-bromofluorobenzene* | *105* | | *69.8 - 140* | *09/05/14 11:06* | *09/05/14 13:35* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 9.71 | | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:35 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *105* | | *41.5 - 162* | *09/05/14 11:06* | *09/05/14 13:35* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **718** | **Q6** | 69.3 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 12:33 | 5.00 |
| **Heavy Oil Range Hydrocarbons** | **3430** | | 173 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 12:33 | 5.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *110* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 12:33* | *5.00* |
| *n-Triacontane-d62* | *133* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 12:33* | *5.00* |

## Client Sample ID: EX12-3-2

**Date Collected: 09/04/14 10:20**
**Date Received: 09/04/14 15:50**

## Lab Sample ID: SXI0031-03

**Matrix: Soil**
**Percent Solids: 93.5**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.0982 | 0.00913 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Chloromethane | ND | | 0.491 | 0.00521 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Vinyl chloride | ND | | 0.0589 | 0.00609 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Bromomethane | ND | | 0.491 | 0.0301 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Chloroethane | ND | | 0.0982 | 0.0241 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0295 | 0.00776 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.0982 | 0.0125 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Carbon disulfide | ND | | 0.0982 | 0.0105 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Methylene chloride | ND | | 0.196 | 0.00511 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Acetone | ND | | 2.95 | 0.0854 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-3-2

**Date Collected: 09/04/14 10:20**
**Date Received: 09/04/14 15:50**

## Lab Sample ID: SXI0031-03

**Matrix: Soil**
**Percent Solids: 93.5**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 0.0982 | 0.0101 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0491 | 0.00314 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.0982 | 0.0111 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.0982 | 0.00560 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.0982 | 0.0167 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Bromochloromethane | ND | | 0.0982 | 0.00383 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Chloroform | ND | | 0.0982 | 0.00756 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Carbon tetrachloride | ND | | 0.0982 | 0.0204 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.0982 | 0.0170 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 2-Butanone | ND | | 0.982 | 0.108 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Hexane | ND | | 0.0982 | 0.00795 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.0982 | 0.0171 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Benzene | ND | | 0.0147 | 0.00953 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.0982 | 0.00481 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Trichloroethene | ND | | 0.0246 | 0.0126 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Dibromomethane | ND | | 0.0982 | 0.00894 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.0982 | 0.00589 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Bromodichloromethane | ND | | 0.0982 | 0.00687 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.0982 | 0.00609 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Toluene | ND | | 0.0982 | 0.0131 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 0.982 | 0.0200 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.0982 | 0.00648 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Tetrachloroethene | ND | | 0.0393 | 0.0173 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.0982 | 0.00609 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| **Dibromochloromethane** | **0.0137** | **J** | 0.0982 | 0.00589 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.0982 | 0.00727 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.00982 | 0.00570 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 2-Hexanone | ND | | 0.982 | 0.0457 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Ethylbenzene | ND | | 0.0982 | 0.0159 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Chlorobenzene | ND | | 0.0982 | 0.00746 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.0982 | 0.0100 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| m,p-Xylene | ND | | 0.393 | 0.0167 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| o-Xylene | ND | | 0.196 | 0.0129 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Styrene | ND | | 0.0982 | 0.00913 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Bromoform | ND | | 0.0982 | 0.0123 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Isopropylbenzene | ND | | 0.0982 | 0.0187 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| n-Propylbenzene | ND | | 0.0982 | 0.0203 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0982 | 0.00737 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Bromobenzene | ND | | 0.0982 | 0.00923 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.0982 | 0.0183 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 2-Chlorotoluene | ND | | 0.0982 | 0.0160 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.0982 | 0.00825 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 4-Chlorotoluene | ND | | 0.0982 | 0.0140 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| tert-Butylbenzene | ND | | 0.0982 | 0.0212 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| **1,2,4-Trimethylbenzene** | **0.0334** | **J** | 0.0982 | 0.0142 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| sec-Butylbenzene | ND | | 0.0982 | 0.0231 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| p-Isopropyltoluene | ND | | 0.0982 | 0.0235 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.0982 | 0.0124 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.0982 | 0.0104 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-3-2

**Lab Sample ID: SXI0031-03**
**Date Collected: 09/04/14 10:20**
**Matrix: Soil**
**Date Received: 09/04/14 15:50**
**Percent Solids: 93.5**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| n-Butylbenzene | ND | | 0.0982 | 0.0270 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.0982 | 0.00746 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.491 | 0.0279 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| Hexachlorobutadiene | ND | | 0.0982 | 0.0560 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.0982 | 0.0195 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| **Naphthalene** | **0.0373** | **J** | 0.196 | 0.0134 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.0982 | 0.0349 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *102* | | *80 - 120* | *09/05/14 11:06* | *09/05/14 13:57* | *1.00* |
| *1,2-dichloroethane-d4* | *88.3* | | *74.7 - 120* | *09/05/14 11:06* | *09/05/14 13:57* | *1.00* |
| *Toluene-d8* | *102* | | *78.5 - 125* | *09/05/14 11:06* | *09/05/14 13:57* | *1.00* |
| *4-bromofluorobenzene* | *112* | | *69.8 - 140* | *09/05/14 11:06* | *09/05/14 13:57* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **7.45** | | 4.91 | | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 13:57 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *112* | | *41.5 - 162* | *09/05/14 11:06* | *09/05/14 13:57* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **363** | **Q6** | 99.4 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 12:56 | 10.0 |
| **Heavy Oil Range Hydrocarbons** | **1420** | | 248 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 12:56 | 10.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *127* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 12:56* | *10.0* |
| *n-Triacontane-d62* | *109* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 12:56* | *10.0* |

## Client Sample ID: EX12-4-3

**Lab Sample ID: SXI0031-04**
**Date Collected: 09/04/14 11:15**
**Matrix: Soil**
**Date Received: 09/04/14 15:50**
**Percent Solids: 80.2**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.125 | 0.0116 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Chloromethane | ND | | 0.624 | 0.00661 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Vinyl chloride | ND | | 0.0749 | 0.00774 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Bromomethane | ND | | 0.624 | 0.0382 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Chloroethane | ND | | 0.125 | 0.0306 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0374 | 0.00986 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.125 | 0.0158 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Carbon disulfide | ND | | 0.125 | 0.0133 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Methylene chloride | ND | | 0.250 | 0.00649 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Acetone | ND | | 3.74 | 0.109 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.125 | 0.0129 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0624 | 0.00399 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.125 | 0.0141 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.125 | 0.00711 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.125 | 0.0212 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-4-3

**Date Collected: 09/04/14 11:15**
**Date Received: 09/04/14 15:50**

## Lab Sample ID: SXI0031-04

**Matrix: Soil**
**Percent Solids: 80.2**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromochloromethane | ND | | 0.125 | 0.00487 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Chloroform | ND | | 0.125 | 0.00961 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Carbon tetrachloride | ND | | 0.125 | 0.0259 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.125 | 0.0216 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 2-Butanone | ND | | 1.25 | 0.137 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Hexane | ND | | 0.125 | 0.0101 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.125 | 0.0217 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Benzene | ND | | 0.0187 | 0.0121 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.125 | 0.00611 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Trichloroethene | ND | | 0.0312 | 0.0160 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Dibromomethane | ND | | 0.125 | 0.0114 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.125 | 0.00749 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Bromodichloromethane | ND | | 0.125 | 0.00873 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.125 | 0.00774 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Toluene | ND | | 0.125 | 0.0166 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.25 | 0.0255 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.125 | 0.00823 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Tetrachloroethene | ND | | 0.0499 | 0.0220 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.125 | 0.00774 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| **Dibromochloromethane** | **0.0274** | **J** | 0.125 | 0.00749 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.125 | 0.00923 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0125 | 0.00724 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 2-Hexanone | ND | | 1.25 | 0.0580 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Ethylbenzene | ND | | 0.125 | 0.0202 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Chlorobenzene | ND | | 0.125 | 0.00948 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.125 | 0.0127 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| m,p-Xylene | ND | | 0.499 | 0.0212 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| o-Xylene | ND | | 0.250 | 0.0163 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Styrene | ND | | 0.125 | 0.0116 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Bromoform | ND | | 0.125 | 0.0156 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Isopropylbenzene | ND | | 0.125 | 0.0237 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| n-Propylbenzene | ND | | 0.125 | 0.0258 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.125 | 0.00936 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Bromobenzene | ND | | 0.125 | 0.0117 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.125 | 0.0232 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 2-Chlorotoluene | ND | | 0.125 | 0.0203 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.125 | 0.0105 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 4-Chlorotoluene | ND | | 0.125 | 0.0178 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| tert-Butylbenzene | ND | | 0.125 | 0.0269 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.125 | 0.0181 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| sec-Butylbenzene | ND | | 0.125 | 0.0293 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| p-Isopropyltoluene | ND | | 0.125 | 0.0298 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.125 | 0.0157 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.125 | 0.0132 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| n-Butylbenzene | ND | | 0.125 | 0.0343 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.125 | 0.00948 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.624 | 0.0354 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| Hexachlorobutadiene | ND | | 0.125 | 0.0711 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.125 | 0.0248 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-4-3

**Date Collected: 09/04/14 11:15**
**Date Received: 09/04/14 15:50**

## Lab Sample ID: SXI0031-04

**Matrix: Soil**
**Percent Solids: 80.2**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 0.250 | 0.0170 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.125 | 0.0443 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *105* | | *80 - 120* | *09/05/14 11:06* | *09/05/14 14:20* | *1.00* |
| *1,2-dichloroethane-d4* | *86.5* | | *74.7 - 120* | *09/05/14 11:06* | *09/05/14 14:20* | *1.00* |
| *Toluene-d8* | *103* | | *78.5 - 125* | *09/05/14 11:06* | *09/05/14 14:20* | *1.00* |
| *4-bromofluorobenzene* | *105* | | *69.8 - 140* | *09/05/14 11:06* | *09/05/14 14:20* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 6.24 | | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:20 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *105* | | *41.5 - 162* | *09/05/14 11:06* | *09/05/14 14:20* | *1.00* |

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Bis(2-chloroethyl)ether | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2-Chlorophenol | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 1,3-Dichlorobenzene | ND | | 61 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 1,4-Dichlorobenzene | ND | | 61 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Benzyl alcohol | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 1,2-Dichlorobenzene | ND | | 67 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2-Methylphenol | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 3 & 4 Methylphenol | ND | | 240 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Hexachloroethane | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Nitrobenzene | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Isophorone | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2-Nitrophenol | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2,4-Dimethylphenol | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Benzoic acid | ND | | 3100 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2,4-Dichlorophenol | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 61 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Naphthalene | ND | | 24 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 4-Chloroaniline | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Hexachlorobutadiene | ND | | 61 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 4-Chloro-3-methylphenol | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2-Methylnaphthalene | ND | | 24 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Hexachlorocyclopentadiene | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2,4,6-Trichlorophenol | ND | | 180 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2,4,5-Trichlorophenol | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2-Chloronaphthalene | ND | | 24 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2-Nitroaniline | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Dimethyl phthalate | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Acenaphthylene | ND | | 24 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2,6-Dinitrotoluene | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-4-3

**Date Collected: 09/04/14 11:15**
**Date Received: 09/04/14 15:50**

## Lab Sample ID: SXI0031-04

**Matrix: Soil**
**Percent Solids: 80.3**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 3-Nitroaniline | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Acenaphthene | ND | | 24 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2,4-Dinitrophenol | ND | | 1200 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 4-Nitrophenol | ND | | 1200 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Dibenzofuran | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 2,4-Dinitrotoluene | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Diethyl phthalate | ND | * | 240 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Fluorene | ND | | 24 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 4-Nitroaniline | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1200 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| N-Nitrosodiphenylamine | ND | | 61 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Hexachlorobenzene | ND | | 61 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Pentachlorophenol | ND | | 240 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Phenanthrene | ND | | 24 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Anthracene | ND | | 24 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Di-n-butyl phthalate | ND | | 610 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Fluoranthene | ND | | 24 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Pyrene | ND | | 24 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Butyl benzyl phthalate | ND | | 240 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 240 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Benzo[a]anthracene | ND | | 24 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Chrysene | ND | | 31 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 730 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Di-n-octyl phthalate | ND | | 610 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Benzo[a]pyrene | ND | | 37 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 49 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Dibenz(a,h)anthracene | ND | | 49 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Benzo[g,h,i]perylene | ND | | 31 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Carbazole | ND | | 120 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| 1-Methylnaphthalene | ND | | 37 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Benzo[b]fluoranthene | ND | | 24 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| Benzo[k]fluoranthene | ND | | 31 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |
| bis (2-chloroisopropyl) ether | ND | ^ | 310 | | ug/Kg | ☼ | 09/09/14 09:10 | 09/10/14 13:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol* | *76* | | *36 - 145* | *09/09/14 09:10* | *09/10/14 13:52* | *1* |
| *Phenol-d5* | *83* | | *38 - 149* | *09/09/14 09:10* | *09/10/14 13:52* | *1* |
| *Nitrobenzene-d5* | *86* | | *38 - 141* | *09/09/14 09:10* | *09/10/14 13:52* | *1* |
| *2-Fluorobiphenyl* | *75* | | *42 - 140* | *09/09/14 09:10* | *09/10/14 13:52* | *1* |
| *2,4,6-Tribromophenol* | *82* | | *28 - 143* | *09/09/14 09:10* | *09/10/14 13:52* | *1* |
| *Terphenyl-d14* | *83* | | *42 - 151* | *09/09/14 09:10* | *09/10/14 13:52* | *1* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **12.3** | | 11.2 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 13:19 | 1.00 |
| **Heavy Oil Range Hydrocarbons** | **38.1** | | 28.1 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 13:19 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-4-3

**Lab Sample ID: SXI0031-04**

**Date Collected: 09/04/14 11:15**
**Matrix: Soil**
**Date Received: 09/04/14 15:50**
**Percent Solids: 80.2**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *113* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 13:19* | *1.00* |
| *n-Triacontane-d62* | *112* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 13:19* | *1.00* |

## Client Sample ID: EX12-6-8

**Lab Sample ID: SXI0031-05**

**Date Collected: 09/04/14 11:30**
**Matrix: Soil**
**Date Received: 09/04/14 15:50**
**Percent Solids: 90.5**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.112 | 0.0105 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Chloromethane | ND | | 0.562 | 0.00596 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Vinyl chloride | ND | | 0.0675 | 0.00697 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Bromomethane | ND | | 0.562 | 0.0344 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Chloroethane | ND | | 0.112 | 0.0275 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0337 | 0.00888 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.112 | 0.0143 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Carbon disulfide | ND | | 0.112 | 0.0120 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Methylene chloride | ND | | 0.225 | 0.00585 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Acetone | ND | | 3.37 | 0.0978 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.112 | 0.0116 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0562 | 0.00360 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.112 | 0.0127 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.112 | 0.00641 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.112 | 0.0191 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Bromochloromethane | ND | | 0.112 | 0.00438 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Chloroform | ND | | 0.112 | 0.00866 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Carbon tetrachloride | ND | | 0.112 | 0.0234 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.112 | 0.0195 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 2-Butanone | ND | | 1.12 | 0.124 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Hexane | ND | | 0.112 | 0.00911 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.112 | 0.0196 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Benzene | ND | | 0.0169 | 0.0109 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.112 | 0.00551 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Trichloroethene | ND | | 0.0281 | 0.0144 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Dibromomethane | ND | | 0.112 | 0.0102 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.112 | 0.00675 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Bromodichloromethane | ND | | 0.112 | 0.00787 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.112 | 0.00697 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Toluene | ND | | 0.112 | 0.0150 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.12 | 0.0229 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.112 | 0.00742 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Tetrachloroethene | ND | | 0.0450 | 0.0198 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.112 | 0.00697 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| **Dibromochloromethane** | **0.0157** | **J** | 0.112 | 0.00675 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.112 | 0.00832 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0112 | 0.00652 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 2-Hexanone | ND | | 1.12 | 0.0523 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Ethylbenzene | ND | | 0.112 | 0.0182 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Chlorobenzene | ND | | 0.112 | 0.00854 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.112 | 0.0115 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-6-8

**Date Collected: 09/04/14 11:30**
**Date Received: 09/04/14 15:50**

## Lab Sample ID: SXI0031-05

**Matrix: Soil**
**Percent Solids: 90.5**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **m,p-Xylene** | **0.0410** | **J** | 0.450 | 0.0191 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| o-Xylene | ND | | 0.225 | 0.0147 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Styrene | ND | | 0.112 | 0.0105 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Bromoform | ND | | 0.112 | 0.0141 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Isopropylbenzene | ND | | 0.112 | 0.0214 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| n-Propylbenzene | ND | | 0.112 | 0.0233 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.112 | 0.00843 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Bromobenzene | ND | | 0.112 | 0.0106 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| **1,3,5-Trimethylbenzene** | **0.0433** | **J** | 0.112 | 0.0209 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 2-Chlorotoluene | ND | | 0.112 | 0.0183 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.112 | 0.00944 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 4-Chlorotoluene | ND | | 0.112 | 0.0161 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| tert-Butylbenzene | ND | | 0.112 | 0.0243 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| **1,2,4-Trimethylbenzene** | **0.125** | | 0.112 | 0.0163 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| sec-Butylbenzene | ND | | 0.112 | 0.0264 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| p-Isopropyltoluene | ND | | 0.112 | 0.0269 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.112 | 0.0142 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.112 | 0.0119 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| n-Butylbenzene | ND | | 0.112 | 0.0309 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.112 | 0.00854 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.562 | 0.0319 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| Hexachlorobutadiene | ND | | 0.112 | 0.0641 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.112 | 0.0224 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| **Naphthalene** | **0.0292** | **J** | 0.225 | 0.0153 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.112 | 0.0399 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *102* | | *80 - 120* | *09/05/14 11:06* | *09/05/14 14:42* | *1.00* |
| *1,2-dichloroethane-d4* | *89.2* | | *74.7 - 120* | *09/05/14 11:06* | *09/05/14 14:42* | *1.00* |
| *Toluene-d8* | *101* | | *78.5 - 125* | *09/05/14 11:06* | *09/05/14 14:42* | *1.00* |
| *4-bromofluorobenzene* | *115* | | *69.8 - 140* | *09/05/14 11:06* | *09/05/14 14:42* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Hydrocarbons** | **11.6** | | 5.62 | | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 14:42 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *115* | | *41.5 - 162* | *09/05/14 11:06* | *09/05/14 14:42* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **178** | **Q6** | 110 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 13:39 | 10.0 |
| **Heavy Oil Range Hydrocarbons** | **984** | | 276 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 13:39 | 10.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *112* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 13:39* | *10.0* |
| *n-Triacontane-d62* | *104* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 13:39* | *10.0* |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

**Client Sample ID: EX12-7-6**
**Date Collected: 09/04/14 11:40**
**Date Received: 09/04/14 15:50**

**Lab Sample ID: SXI0031-06**
**Matrix: Soil**
**Percent Solids: 94.6**

**Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.107 | 0.00997 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Chloromethane | ND | | 0.536 | 0.00568 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Vinyl chloride | ND | | 0.0643 | 0.00664 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Bromomethane | ND | | 0.536 | 0.0328 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Chloroethane | ND | | 0.107 | 0.0263 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0321 | 0.00847 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.107 | 0.0136 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Carbon disulfide | ND | | 0.107 | 0.0115 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Methylene chloride | ND | | 0.214 | 0.00557 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Acetone | ND | | 3.21 | 0.0932 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.107 | 0.0110 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0536 | 0.00343 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.107 | 0.0121 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.107 | 0.00611 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.107 | 0.0182 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Bromochloromethane | ND | | 0.107 | 0.00418 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Chloroform | ND | | 0.107 | 0.00825 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Carbon tetrachloride | ND | | 0.107 | 0.0223 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.107 | 0.0185 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 2-Butanone | ND | | 1.07 | 0.118 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Hexane | ND | | 0.107 | 0.00868 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.107 | 0.0186 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Benzene | ND | | 0.0161 | 0.0104 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.107 | 0.00525 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Trichloroethene | ND | | 0.0268 | 0.0137 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Dibromomethane | ND | | 0.107 | 0.00975 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.107 | 0.00643 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Bromodichloromethane | ND | | 0.107 | 0.00750 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.107 | 0.00664 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Toluene | ND | | 0.107 | 0.0143 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.07 | 0.0219 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.107 | 0.00707 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Tetrachloroethene | ND | | 0.0429 | 0.0189 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.107 | 0.00664 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| **Dibromochloromethane** | **0.0129** | **J** | 0.107 | 0.00643 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.107 | 0.00793 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0107 | 0.00622 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 2-Hexanone | ND | | 1.07 | 0.0498 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Ethylbenzene | ND | | 0.107 | 0.0174 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Chlorobenzene | ND | | 0.107 | 0.00814 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.107 | 0.0109 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| m,p-Xylene | ND | | 0.429 | 0.0182 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| o-Xylene | ND | | 0.214 | 0.0140 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Styrene | ND | | 0.107 | 0.00997 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Bromoform | ND | | 0.107 | 0.0134 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Isopropylbenzene | ND | | 0.107 | 0.0204 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| n-Propylbenzene | ND | | 0.107 | 0.0222 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.107 | 0.00804 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Bromobenzene | ND | | 0.107 | 0.0101 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |

## Client Sample ID: EX12-7-6 — Lab Sample ID: SXI0031-06

**Date Collected: 09/04/14 11:40** — **Matrix: Soil**
**Date Received: 09/04/14 15:50** — **Percent Solids: 94.6**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | ND | | 0.107 | 0.0199 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 2-Chlorotoluene | ND | | 0.107 | 0.0175 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.107 | 0.00900 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 4-Chlorotoluene | ND | | 0.107 | 0.0153 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| tert-Butylbenzene | ND | | 0.107 | 0.0231 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.107 | 0.0155 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| sec-Butylbenzene | ND | | 0.107 | 0.0252 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| p-Isopropyltoluene | ND | | 0.107 | 0.0256 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.107 | 0.0135 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.107 | 0.0114 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| n-Butylbenzene | ND | | 0.107 | 0.0295 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.107 | 0.00814 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.536 | 0.0304 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Hexachlorobutadiene | ND | | 0.107 | 0.0611 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.107 | 0.0213 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| Naphthalene | ND | | 0.214 | 0.0146 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.107 | 0.0380 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *99.8* | | *80 - 120* | *09/05/14 11:06* | *09/05/14 15:04* | *1.00* |
| *1,2-dichloroethane-d4* | *90.0* | | *74.7 - 120* | *09/05/14 11:06* | *09/05/14 15:04* | *1.00* |
| *Toluene-d8* | *102* | | *78.5 - 125* | *09/05/14 11:06* | *09/05/14 15:04* | *1.00* |
| *4-bromofluorobenzene* | *105* | | *69.8 - 140* | *09/05/14 11:06* | *09/05/14 15:04* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.36 | | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:04 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *105* | | *41.5 - 162* | *09/05/14 11:06* | *09/05/14 15:04* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **61.7** | | 48.5 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 14:00 | 5.00 |
| **Heavy Oil Range Hydrocarbons** | **213** | | 121 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 14:00 | 5.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *117* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 14:00* | *5.00* |
| *n-Triacontane-d62* | *110* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 14:00* | *5.00* |

## Client Sample ID: EX12-5-3 — Lab Sample ID: SXI0031-07

**Date Collected: 09/04/14 11:00** — **Matrix: Soil**
**Date Received: 09/04/14 15:50** — **Percent Solids: 70.3**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.195 | 0.0181 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Chloromethane | ND | | 0.973 | 0.0103 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Vinyl chloride | ND | | 0.117 | 0.0121 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Bromomethane | ND | | 0.973 | 0.0595 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Chloroethane | ND | | 0.195 | 0.0477 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-5-3

**Date Collected: 09/04/14 11:00**
**Date Received: 09/04/14 15:50**

## Lab Sample ID: SXI0031-07

**Matrix: Soil**
**Percent Solids: 70.3**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | 0.0584 | 0.0154 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.195 | 0.0247 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Carbon disulfide | ND | | 0.195 | 0.0208 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Methylene chloride | ND | | 0.389 | 0.0101 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Acetone | ND | | 5.84 | 0.169 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.195 | 0.0200 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0973 | 0.00623 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.195 | 0.0220 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.195 | 0.0111 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.195 | 0.0331 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Bromochloromethane | ND | | 0.195 | 0.00759 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Chloroform | ND | | 0.195 | 0.0150 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Carbon tetrachloride | ND | | 0.195 | 0.0405 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.195 | 0.0337 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 2-Butanone | ND | | 1.95 | 0.214 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Hexane | ND | | 0.195 | 0.0158 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.195 | 0.0339 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Benzene | ND | | 0.0292 | 0.0189 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.195 | 0.00953 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Trichloroethene | ND | | 0.0486 | 0.0249 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Dibromomethane | ND | | 0.195 | 0.0177 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.195 | 0.0117 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Bromodichloromethane | ND | | 0.195 | 0.0136 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.195 | 0.0121 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Toluene | ND | | 0.195 | 0.0259 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.95 | 0.0397 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.195 | 0.0128 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Tetrachloroethene | ND | | 0.0778 | 0.0342 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.195 | 0.0121 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| **Dibromochloromethane** | **0.0243** | **J** | 0.195 | 0.0117 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.195 | 0.0144 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0195 | 0.0113 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 2-Hexanone | ND | | 1.95 | 0.0905 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Ethylbenzene | ND | | 0.195 | 0.0315 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Chlorobenzene | ND | | 0.195 | 0.0148 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.195 | 0.0198 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| m,p-Xylene | ND | | 0.778 | 0.0331 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| o-Xylene | ND | | 0.389 | 0.0255 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Styrene | ND | | 0.195 | 0.0181 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Bromoform | ND | | 0.195 | 0.0243 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Isopropylbenzene | ND | | 0.195 | 0.0370 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| n-Propylbenzene | ND | | 0.195 | 0.0403 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.195 | 0.0146 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Bromobenzene | ND | | 0.195 | 0.0183 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| **1,3,5-Trimethylbenzene** | **0.0447** | **J** | 0.195 | 0.0362 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 2-Chlorotoluene | ND | | 0.195 | 0.0317 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.195 | 0.0163 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 4-Chlorotoluene | ND | | 0.195 | 0.0278 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| tert-Butylbenzene | ND | | 0.195 | 0.0420 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-5-3

**Date Collected: 09/04/14 11:00**
**Date Received: 09/04/14 15:50**

## Lab Sample ID: SXI0031-07

**Matrix: Soil**
**Percent Solids: 70.3**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,2,4-Trimethylbenzene** | **0.0856** | **J** | 0.195 | 0.0282 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| sec-Butylbenzene | ND | | 0.195 | 0.0457 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| p-Isopropyltoluene | ND | | 0.195 | 0.0465 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.195 | 0.0245 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.195 | 0.0206 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| n-Butylbenzene | ND | | 0.195 | 0.0535 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.195 | 0.0148 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.973 | 0.0553 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Hexachlorobutadiene | ND | | 0.195 | 0.111 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.195 | 0.0387 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| Naphthalene | ND | | 0.389 | 0.0265 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.195 | 0.0691 | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *102* | | *80 - 120* | *09/05/14 11:06* | *09/05/14 15:26* | *1.00* |
| *1,2-dichloroethane-d4* | *89.1* | | *74.7 - 120* | *09/05/14 11:06* | *09/05/14 15:26* | *1.00* |
| *Toluene-d8* | *101* | | *78.5 - 125* | *09/05/14 11:06* | *09/05/14 15:26* | *1.00* |
| *4-bromofluorobenzene* | *106* | | *69.8 - 140* | *09/05/14 11:06* | *09/05/14 15:26* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 9.73 | | mg/kg dry | ☼ | 09/05/14 11:06 | 09/05/14 15:26 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *106* | | *41.5 - 162* | *09/05/14 11:06* | *09/05/14 15:26* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **215** | **Q6** | 140 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 14:23 | 10.0 |
| **Heavy Oil Range Hydrocarbons** | **1390** | | 350 | | mg/kg dry | ☼ | 09/05/14 08:31 | 09/08/14 14:23 | 10.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *108* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 14:23* | *10.0* |
| *n-Triacontane-d62* | *108* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 14:23* | *10.0* |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

**Lab Sample ID: 14I0037-BLK1**
**Matrix: Soil**
**Analysis Batch: 14I0037**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14I0037_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.100 | 0.00930 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Chloromethane | ND | | 0.500 | 0.00530 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Vinyl chloride | ND | | 0.0600 | 0.00620 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Bromomethane | ND | | 0.500 | 0.0306 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Chloroethane | ND | | 0.100 | 0.0245 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0300 | 0.00790 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.100 | 0.0127 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Carbon disulfide | ND | | 0.100 | 0.0107 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Methylene chloride | ND | | 0.200 | 0.00520 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Acetone | ND | | 3.00 | 0.0870 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.100 | 0.0103 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0500 | 0.00320 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.100 | 0.0113 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.100 | 0.00570 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.100 | 0.0170 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Bromochloromethane | ND | | 0.100 | 0.00390 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Chloroform | ND | | 0.100 | 0.00770 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Carbon tetrachloride | ND | | 0.100 | 0.0208 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.100 | 0.0173 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 2-Butanone | ND | | 1.00 | 0.110 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Hexane | ND | | 0.100 | 0.00810 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.100 | 0.0174 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Benzene | ND | | 0.0150 | 0.00970 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.100 | 0.00490 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Trichloroethene | ND | | 0.0250 | 0.0128 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Dibromomethane | ND | | 0.100 | 0.00910 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.100 | 0.00600 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Bromodichloromethane | ND | | 0.100 | 0.00700 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.100 | 0.00620 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Toluene | ND | | 0.100 | 0.0133 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.00 | 0.0204 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.100 | 0.00660 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Tetrachloroethene | ND | | 0.0400 | 0.0176 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.100 | 0.00620 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Dibromochloromethane | ND | | 0.100 | 0.00600 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.100 | 0.00740 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0100 | 0.00580 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 2-Hexanone | ND | | 1.00 | 0.0465 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Ethylbenzene | ND | | 0.100 | 0.0162 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Chlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.100 | 0.0102 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| m,p-Xylene | ND | | 0.400 | 0.0170 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| o-Xylene | ND | | 0.200 | 0.0131 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Styrene | ND | | 0.100 | 0.00930 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Bromoform | ND | | 0.100 | 0.0125 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Isopropylbenzene | ND | | 0.100 | 0.0190 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| n-Propylbenzene | ND | | 0.100 | 0.0207 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.100 | 0.00750 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14I0037-BLK1**
**Matrix: Soil**
**Analysis Batch: 14I0037**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14I0037_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromobenzene | ND | | 0.100 | 0.00940 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.100 | 0.0186 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 2-Chlorotoluene | ND | | 0.100 | 0.0163 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.100 | 0.00840 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 4-Chlorotoluene | ND | | 0.100 | 0.0143 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| tert-Butylbenzene | ND | | 0.100 | 0.0216 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.100 | 0.0145 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| sec-Butylbenzene | ND | | 0.100 | 0.0235 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| p-Isopropyltoluene | ND | | 0.100 | 0.0239 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.100 | 0.0126 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.100 | 0.0106 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| n-Butylbenzene | ND | | 0.100 | 0.0275 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.500 | 0.0284 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Hexachlorobutadiene | ND | | 0.100 | 0.0570 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.100 | 0.0199 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| Naphthalene | ND | | 0.200 | 0.0136 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.100 | 0.0355 | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *106* | | *80 - 120* | *09/05/14 11:06* | *09/05/14 12:06* | *1.00* |
| *1,2-dichloroethane-d4* | *103* | | *74.7 - 120* | *09/05/14 11:06* | *09/05/14 12:06* | *1.00* |
| *Toluene-d8* | *99.7* | | *78.5 - 125* | *09/05/14 11:06* | *09/05/14 12:06* | *1.00* |
| *4-bromofluorobenzene* | *102* | | *69.8 - 140* | *09/05/14 11:06* | *09/05/14 12:06* | *1.00* |

**Lab Sample ID: 14I0037-BS1**
**Matrix: Soil**
**Analysis Batch: 14I0037**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14I0037_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.500 | 0.582 | | mg/kg wet | | 116 | 60.5 - 130 |
| Chloromethane | 0.500 | 0.529 | | mg/kg wet | | 106 | 68.9 - 130 |
| Vinyl chloride | 0.500 | 0.535 | | mg/kg wet | | 107 | 74 - 142 |
| Bromomethane | 0.500 | 0.543 | | mg/kg wet | | 109 | 70.5 - 146 |
| Chloroethane | 0.500 | 0.626 | | mg/kg wet | | 125 | 60 - 140 |
| Trichlorofluoromethane | 0.500 | 0.606 | | mg/kg wet | | 121 | 70.5 - 139 |
| 1,1-Dichloroethene | 0.500 | 0.540 | | mg/kg wet | | 108 | 72.9 - 135 |
| Carbon disulfide | 0.500 | 0.544 | | mg/kg wet | | 109 | 66.8 - 146 |
| Methylene chloride | 0.500 | 0.532 | | mg/kg wet | | 106 | 60 - 140 |
| Acetone | 2.50 | 1.26 | J | mg/kg wet | | 50.5 | 39.2 - 145 |
| trans-1,2-Dichloroethene | 0.500 | 0.506 | | mg/kg wet | | 101 | 60 - 140 |
| Methyl tert-butyl ether | 0.500 | 0.462 | | mg/kg wet | | 92.4 | 60 - 140 |
| 1,1-Dichloroethane | 0.500 | 0.537 | | mg/kg wet | | 107 | 80 - 131 |
| cis-1,2-Dichloroethene | 0.500 | 0.542 | | mg/kg wet | | 108 | 80 - 126 |
| 2,2-Dichloropropane | 0.500 | 0.572 | | mg/kg wet | | 114 | 71.5 - 132 |
| Bromochloromethane | 0.500 | 0.541 | | mg/kg wet | | 108 | 69.1 - 139 |
| Chloroform | 0.500 | 0.548 | | mg/kg wet | | 110 | 80 - 130 |
| Carbon tetrachloride | 0.500 | 0.569 | | mg/kg wet | | 114 | 73.6 - 148 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14I0037-BS1**
**Matrix: Soil**
**Analysis Batch: 14I0037**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14I0037_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.500 | 0.591 | | mg/kg wet | | 118 | 74.3 - 138 |
| 2-Butanone | 2.50 | 1.52 | | mg/kg wet | | 60.9 | 56.1 - 124 |
| Hexane | 0.500 | 0.482 | | mg/kg wet | | 96.4 | 77 - 130 |
| 1,1-Dichloropropene | 0.500 | 0.545 | | mg/kg wet | | 109 | 78.3 - 132 |
| Benzene | 0.500 | 0.518 | | mg/kg wet | | 104 | 75.8 - 123 |
| 1,2-Dichloroethane (EDC) | 0.500 | 0.564 | | mg/kg wet | | 113 | 71.1 - 142 |
| Trichloroethene | 0.500 | 0.557 | | mg/kg wet | | 111 | 78.5 - 134 |
| Dibromomethane | 0.500 | 0.514 | | mg/kg wet | | 103 | 80 - 129 |
| 1,2-Dichloropropane | 0.500 | 0.514 | | mg/kg wet | | 103 | 50.8 - 155 |
| Bromodichloromethane | 0.500 | 0.570 | | mg/kg wet | | 114 | 80 - 128 |
| cis-1,3-Dichloropropene | 0.500 | 0.536 | | mg/kg wet | | 107 | 80 - 126 |
| Toluene | 0.500 | 0.487 | | mg/kg wet | | 97.4 | 76.6 - 125 |
| 4-Methyl-2-pentanone | 2.50 | 1.93 | | mg/kg wet | | 77.3 | 66.4 - 131 |
| trans-1,3-Dichloropropene | 0.500 | 0.497 | | mg/kg wet | | 99.4 | 79 - 124 |
| Tetrachloroethene | 0.500 | 0.544 | | mg/kg wet | | 109 | 80 - 127 |
| 1,1,2-Trichloroethane | 0.500 | 0.490 | | mg/kg wet | | 98.1 | 78.4 - 125 |
| Dibromochloromethane | 0.500 | 0.542 | | mg/kg wet | | 108 | 78.4 - 127 |
| 1,3-Dichloropropane | 0.500 | 0.478 | | mg/kg wet | | 95.5 | 80 - 125 |
| 1,2-Dibromoethane | 0.500 | 0.468 | | mg/kg wet | | 93.7 | 77.1 - 129 |
| 2-Hexanone | 2.50 | 1.74 | | mg/kg wet | | 69.4 | 64.6 - 127 |
| Ethylbenzene | 0.500 | 0.491 | | mg/kg wet | | 98.2 | 77.3 - 121 |
| Chlorobenzene | 0.500 | 0.530 | | mg/kg wet | | 106 | 80 - 120 |
| 1,1,1,2-Tetrachloroethane | 0.500 | 0.547 | | mg/kg wet | | 109 | 80 - 120 |
| m,p-Xylene | 0.500 | 0.496 | | mg/kg wet | | 99.2 | 77.7 - 124 |
| o-Xylene | 0.500 | 0.504 | | mg/kg wet | | 101 | 76.7 - 129 |
| Styrene | 0.500 | 0.527 | | mg/kg wet | | 105 | 80 - 128 |
| Bromoform | 0.500 | 0.526 | | mg/kg wet | | 105 | 76 - 135 |
| Isopropylbenzene | 0.500 | 0.479 | | mg/kg wet | | 95.8 | 78.4 - 131 |
| n-Propylbenzene | 0.500 | 0.452 | | mg/kg wet | | 90.5 | 80 - 120 |
| 1,1,2,2-Tetrachloroethane | 0.500 | 0.420 | | mg/kg wet | | 84.1 | 60.3 - 137 |
| Bromobenzene | 0.500 | 0.484 | | mg/kg wet | | 96.7 | 60 - 140 |
| 1,3,5-Trimethylbenzene | 0.500 | 0.488 | | mg/kg wet | | 97.5 | 80 - 121 |
| 2-Chlorotoluene | 0.500 | 0.508 | | mg/kg wet | | 102 | 80 - 123 |
| 1,2,3-Trichloropropane | 0.500 | 0.438 | | mg/kg wet | | 87.7 | 59.9 - 131 |
| 4-Chlorotoluene | 0.500 | 0.492 | | mg/kg wet | | 98.3 | 80 - 124 |
| tert-Butylbenzene | 0.500 | 0.488 | | mg/kg wet | | 97.6 | 78.8 - 130 |
| 1,2,4-Trimethylbenzene | 0.500 | 0.486 | | mg/kg wet | | 97.3 | 80 - 122 |
| sec-Butylbenzene | 0.500 | 0.474 | | mg/kg wet | | 94.9 | 80 - 120 |
| p-Isopropyltoluene | 0.500 | 0.458 | | mg/kg wet | | 91.7 | 67.2 - 147 |
| 1,3-Dichlorobenzene | 0.500 | 0.501 | | mg/kg wet | | 100 | 80 - 122 |
| 1,4-Dichlorobenzene | 0.500 | 0.502 | | mg/kg wet | | 100 | 80 - 125 |
| n-Butylbenzene | 0.500 | 0.453 | | mg/kg wet | | 90.6 | 80 - 120 |
| 1,2-Dichlorobenzene | 0.500 | 0.478 | | mg/kg wet | | 95.5 | 80 - 124 |
| 1,2-Dibromo-3-chloropropane | 0.500 | 0.390 | J | mg/kg wet | | 77.9 | 60 - 140 |
| Hexachlorobutadiene | 0.500 | 0.464 | | mg/kg wet | | 92.9 | 71.8 - 138 |
| 1,2,4-Trichlorobenzene | 0.500 | 0.429 | | mg/kg wet | | 85.8 | 75.3 - 126 |
| Naphthalene | 0.500 | 0.356 | | mg/kg wet | | 71.1 | 55.1 - 142 |
| 1,2,3-Trichlorobenzene | 0.500 | 0.424 | | mg/kg wet | | 84.7 | 69.6 - 127 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14I0037-BS1**
**Matrix: Soil**
**Analysis Batch: 14I0037**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14I0037_P**

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *105* | | *80 - 120* |
| *1,2-dichloroethane-d4* | *105* | | *74.7 - 120* |
| *Toluene-d8* | *96.3* | | *78.5 - 125* |
| *4-bromofluorobenzene* | *97.6* | | *69.8 - 140* |

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

**Lab Sample ID: 14I0037-BLK1**
**Matrix: Soil**
**Analysis Batch: 14I0037**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14I0037_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.00 | | mg/kg wet | | 09/05/14 11:06 | 09/05/14 12:06 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *102* | | *41.5 - 162* | *09/05/14 11:06* | *09/05/14 12:06* | *1.00* |

**Lab Sample ID: 14I0037-BS2**
**Matrix: Soil**
**Analysis Batch: 14I0037**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14I0037_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | | | 50.0 | 44.0 | | mg/kg wet | | 88.1 | 74.4 - 124 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-bromofluorobenzene* | *90.8* | | *41.5 - 162* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 580-169185/1-A**
**Matrix: Solid**
**Analysis Batch: 169302**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 169185**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Bis(2-chloroethyl)ether | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 2-Chlorophenol | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 1,3-Dichlorobenzene | ND | | 50 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 1,4-Dichlorobenzene | ND | | 50 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Benzyl alcohol | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 1,2-Dichlorobenzene | ND | | 55 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 2-Methylphenol | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 3 & 4 Methylphenol | ND | | 200 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Hexachloroethane | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Nitrobenzene | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Isophorone | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 580-169185/1-A**
**Matrix: Solid**
**Analysis Batch: 169302**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 169185**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Nitrophenol | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 2,4-Dimethylphenol | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Benzoic acid | ND | | 2500 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 2,4-Dichlorophenol | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 50 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Naphthalene | ND | | 20 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 4-Chloroaniline | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Hexachlorobutadiene | ND | | 50 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 4-Chloro-3-methylphenol | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 2-Methylnaphthalene | ND | | 20 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Hexachlorocyclopentadiene | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 2,4,6-Trichlorophenol | ND | | 150 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 2,4,5-Trichlorophenol | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 2-Chloronaphthalene | ND | | 20 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 2-Nitroaniline | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Dimethyl phthalate | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Acenaphthylene | ND | | 20 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 2,6-Dinitrotoluene | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 3-Nitroaniline | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Acenaphthene | ND | | 20 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 2,4-Dinitrophenol | ND | | 1000 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 4-Nitrophenol | ND | | 1000 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Dibenzofuran | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 2,4-Dinitrotoluene | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Diethyl phthalate | ND | | 200 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Fluorene | ND | | 20 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 4-Nitroaniline | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1000 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| N-Nitrosodiphenylamine | ND | | 50 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Hexachlorobenzene | ND | | 50 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Pentachlorophenol | ND | | 200 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Phenanthrene | ND | | 20 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Anthracene | ND | | 20 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Di-n-butyl phthalate | ND | | 500 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Fluoranthene | ND | | 20 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Pyrene | ND | | 20 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Butyl benzyl phthalate | ND | | 200 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 200 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Benzo[a]anthracene | ND | | 20 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Chrysene | ND | | 25 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 600 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Di-n-octyl phthalate | ND | | 500 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Benzo[a]pyrene | ND | | 30 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 40 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Dibenz(a,h)anthracene | ND | | 40 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 580-169185/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 169302** — **Prep Batch: 169185**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[g,h,i]perylene | ND | | 25 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Carbazole | ND | | 100 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| 1-Methylnaphthalene | ND | | 30 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Benzo[b]fluoranthene | ND | | 20 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| Benzo[k]fluoranthene | ND | | 25 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |
| bis (2-chloroisopropyl) ether | ND | ^ | 250 | | ug/Kg | | 09/09/14 09:10 | 09/10/14 12:41 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol* | *75* | | *36 - 145* | *09/09/14 09:10* | *09/10/14 12:41* | *1* |
| *Phenol-d5* | *82* | | *38 - 149* | *09/09/14 09:10* | *09/10/14 12:41* | *1* |
| *Nitrobenzene-d5* | *93* | | *38 - 141* | *09/09/14 09:10* | *09/10/14 12:41* | *1* |
| *2-Fluorobiphenyl* | *86* | | *42 - 140* | *09/09/14 09:10* | *09/10/14 12:41* | *1* |
| *2,4,6-Tribromophenol* | *82* | | *28 - 143* | *09/09/14 09:10* | *09/10/14 12:41* | *1* |
| *Terphenyl-d14* | *89* | | *42 - 151* | *09/09/14 09:10* | *09/10/14 12:41* | *1* |

**Lab Sample ID: LCS 580-169185/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 169302** — **Prep Batch: 169185**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Phenol | 1000 | 863 | | ug/Kg | | 86 | 63 - 111 |
| Bis(2-chloroethyl)ether | 1000 | 766 | | ug/Kg | | 77 | 62 - 110 |
| 2-Chlorophenol | 1000 | 869 | | ug/Kg | | 87 | 68 - 117 |
| 1,3-Dichlorobenzene | 1000 | 806 | | ug/Kg | | 81 | 64 - 111 |
| 1,4-Dichlorobenzene | 1000 | 769 | | ug/Kg | | 77 | 65 - 110 |
| Benzyl alcohol | 1000 | 863 | | ug/Kg | | 86 | 55 - 123 |
| 1,2-Dichlorobenzene | 1000 | 808 | | ug/Kg | | 81 | 64 - 112 |
| 2-Methylphenol | 1000 | 814 | | ug/Kg | | 81 | 71 - 116 |
| 3 & 4 Methylphenol | 1000 | 883 | | ug/Kg | | 88 | 70 - 116 |
| N-Nitrosodi-n-propylamine | 1000 | 828 | | ug/Kg | | 83 | 62 - 116 |
| Hexachloroethane | 1000 | 819 | | ug/Kg | | 82 | 62 - 120 |
| Nitrobenzene | 1000 | 962 | | ug/Kg | | 96 | 64 - 118 |
| Isophorone | 1000 | 895 | | ug/Kg | | 89 | 67 - 119 |
| 2-Nitrophenol | 1000 | 858 | | ug/Kg | | 86 | 67 - 127 |
| 2,4-Dimethylphenol | 1000 | 907 | | ug/Kg | | 91 | 54 - 139 |
| Benzoic acid | 2000 | 816 | J | ug/Kg | | 41 | 29 - 158 |
| Bis(2-chloroethoxy)methane | 1000 | 844 | | ug/Kg | | 84 | 69 - 107 |
| 2,4-Dichlorophenol | 1000 | 871 | | ug/Kg | | 87 | 68 - 125 |
| 1,2,4-Trichlorobenzene | 1000 | 800 | | ug/Kg | | 80 | 66 - 115 |
| Naphthalene | 1000 | 840 | | ug/Kg | | 84 | 62 - 112 |
| 4-Chloroaniline | 1000 | 247 | | ug/Kg | | 25 | 20 - 103 |
| Hexachlorobutadiene | 1000 | 760 | | ug/Kg | | 76 | 65 - 116 |
| 4-Chloro-3-methylphenol | 1000 | 914 | | ug/Kg | | 91 | 69 - 121 |
| 2-Methylnaphthalene | 1000 | 848 | | ug/Kg | | 85 | 64 - 119 |
| Hexachlorocyclopentadiene | 1000 | 794 | | ug/Kg | | 79 | 46 - 131 |
| 2,4,6-Trichlorophenol | 1000 | 886 | | ug/Kg | | 89 | 62 - 133 |
| 2,4,5-Trichlorophenol | 1000 | 676 | | ug/Kg | | 68 | 57 - 133 |
| 2-Chloronaphthalene | 1000 | 816 | | ug/Kg | | 82 | 68 - 112 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 580-169185/2-A**
**Matrix: Solid**
**Analysis Batch: 169302**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 169185**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 2-Nitroaniline | 1000 | 987 | | ug/Kg | | 99 | 64 - 112 |
| Dimethyl phthalate | 1000 | 823 | | ug/Kg | | 82 | 78 - 117 |
| Acenaphthylene | 1000 | 856 | | ug/Kg | | 86 | 68 - 120 |
| 2,6-Dinitrotoluene | 1000 | 803 | | ug/Kg | | 80 | 66 - 123 |
| 3-Nitroaniline | 1000 | 393 | | ug/Kg | | 39 | 27 - 103 |
| Acenaphthene | 1000 | 888 | | ug/Kg | | 89 | 68 - 116 |
| 2,4-Dinitrophenol | 2000 | 1090 | | ug/Kg | | 55 | 20 - 141 |
| 4-Nitrophenol | 2000 | 1650 | | ug/Kg | | 83 | 20 - 165 |
| Dibenzofuran | 1000 | 824 | | ug/Kg | | 82 | 72 - 109 |
| 2,4-Dinitrotoluene | 1000 | 810 | | ug/Kg | | 81 | 68 - 121 |
| Diethyl phthalate | 1000 | 653 | * | ug/Kg | | 65 | 73 - 116 |
| 4-Chlorophenyl phenyl ether | 1000 | 857 | | ug/Kg | | 86 | 75 - 108 |
| Fluorene | 1000 | 865 | | ug/Kg | | 87 | 70 - 121 |
| 4-Nitroaniline | 1000 | 649 | | ug/Kg | | 65 | 58 - 108 |
| 4,6-Dinitro-2-methylphenol | 2000 | 1480 | | ug/Kg | | 74 | 48 - 130 |
| N-Nitrosodiphenylamine | 1000 | 878 | | ug/Kg | | 88 | 73 - 115 |
| 4-Bromophenyl phenyl ether | 1000 | 899 | | ug/Kg | | 90 | 68 - 122 |
| Hexachlorobenzene | 1000 | 835 | | ug/Kg | | 84 | 66 - 117 |
| Pentachlorophenol | 2000 | 1230 | | ug/Kg | | 62 | 45 - 117 |
| Phenanthrene | 1000 | 837 | | ug/Kg | | 84 | 73 - 106 |
| Anthracene | 1000 | 860 | | ug/Kg | | 86 | 73 - 116 |
| Di-n-butyl phthalate | 1000 | 864 | | ug/Kg | | 86 | 66 - 140 |
| Fluoranthene | 1000 | 841 | | ug/Kg | | 84 | 73 - 125 |
| Pyrene | 1000 | 806 | | ug/Kg | | 81 | 70 - 120 |
| Butyl benzyl phthalate | 1000 | 1070 | | ug/Kg | | 107 | 69 - 142 |
| 3,3'-Dichlorobenzidine | 2000 | 1070 | | ug/Kg | | 53 | 20 - 103 |
| Benzo[a]anthracene | 1000 | 863 | | ug/Kg | | 86 | 76 - 119 |
| Chrysene | 1000 | 887 | | ug/Kg | | 89 | 75 - 114 |
| Bis(2-ethylhexyl) phthalate | 1000 | 940 | | ug/Kg | | 94 | 62 - 144 |
| Di-n-octyl phthalate | 1000 | 926 | | ug/Kg | | 93 | 65 - 141 |
| Benzo[a]pyrene | 1000 | 827 | | ug/Kg | | 83 | 72 - 117 |
| Indeno[1,2,3-cd]pyrene | 1000 | 1020 | | ug/Kg | | 102 | 56 - 127 |
| Dibenz(a,h)anthracene | 1000 | 845 | | ug/Kg | | 85 | 56 - 134 |
| Benzo[g,h,i]perylene | 1000 | 838 | | ug/Kg | | 84 | 55 - 139 |
| Carbazole | 1000 | 939 | | ug/Kg | | 94 | 76 - 135 |
| 1-Methylnaphthalene | 1000 | 838 | | ug/Kg | | 84 | 62 - 118 |
| Benzo[b]fluoranthene | 1000 | 808 | | ug/Kg | | 81 | 63 - 132 |
| Benzo[k]fluoranthene | 1000 | 878 | | ug/Kg | | 88 | 63 - 119 |
| bis (2-chloroisopropyl) ether | 1000 | 974 | ^ | ug/Kg | | 97 | 41 - 126 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol* | *72* | | *36 - 145* |
| *Phenol-d5* | *77* | | *38 - 149* |
| *Nitrobenzene-d5* | *94* | | *38 - 141* |
| *2-Fluorobiphenyl* | *74* | | *42 - 140* |
| *2,4,6-Tribromophenol* | *85* | | *28 - 143* |
| *Terphenyl-d14* | *86* | | *42 - 151* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 580-169185/3-A**
**Matrix: Solid**
**Analysis Batch: 169302**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 169185**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | 1000 | 880 | | ug/Kg | | 88 | 63 - 111 | 2 | 26 |
| Bis(2-chloroethyl)ether | 1000 | 769 | | ug/Kg | | 77 | 62 - 110 | 0 | 22 |
| 2-Chlorophenol | 1000 | 893 | | ug/Kg | | 89 | 68 - 117 | 3 | 27 |
| 1,3-Dichlorobenzene | 1000 | 806 | | ug/Kg | | 81 | 64 - 111 | 0 | 30 |
| 1,4-Dichlorobenzene | 1000 | 819 | | ug/Kg | | 82 | 65 - 110 | 6 | 30 |
| Benzyl alcohol | 1000 | 835 | | ug/Kg | | 84 | 55 - 123 | 3 | 60 |
| 1,2-Dichlorobenzene | 1000 | 838 | | ug/Kg | | 84 | 64 - 112 | 4 | 30 |
| 2-Methylphenol | 1000 | 842 | | ug/Kg | | 84 | 71 - 116 | 3 | 25 |
| 3 & 4 Methylphenol | 1000 | 915 | | ug/Kg | | 92 | 70 - 116 | 4 | 27 |
| N-Nitrosodi-n-propylamine | 1000 | 824 | | ug/Kg | | 82 | 62 - 116 | 1 | 28 |
| Hexachloroethane | 1000 | 895 | | ug/Kg | | 89 | 62 - 120 | 9 | 30 |
| Nitrobenzene | 1000 | 921 | | ug/Kg | | 92 | 64 - 118 | 4 | 30 |
| Isophorone | 1000 | 878 | | ug/Kg | | 88 | 67 - 119 | 2 | 30 |
| 2-Nitrophenol | 1000 | 881 | | ug/Kg | | 88 | 67 - 127 | 3 | 30 |
| 2,4-Dimethylphenol | 1000 | 901 | | ug/Kg | | 90 | 54 - 139 | 1 | 30 |
| Benzoic acid | 2000 | ND | | ug/Kg | | 37 | 29 - 158 | 10 | 28 |
| Bis(2-chloroethoxy)methane | 1000 | 828 | | ug/Kg | | 83 | 69 - 107 | 2 | 30 |
| 2,4-Dichlorophenol | 1000 | 903 | | ug/Kg | | 90 | 68 - 125 | 4 | 30 |
| 1,2,4-Trichlorobenzene | 1000 | 800 | | ug/Kg | | 80 | 66 - 115 | 0 | 28 |
| Naphthalene | 1000 | 828 | | ug/Kg | | 83 | 62 - 112 | 1 | 26 |
| 4-Chloroaniline | 1000 | 291 | | ug/Kg | | 29 | 20 - 103 | 16 | 60 |
| Hexachlorobutadiene | 1000 | 775 | | ug/Kg | | 78 | 65 - 116 | 2 | 30 |
| 4-Chloro-3-methylphenol | 1000 | 923 | | ug/Kg | | 92 | 69 - 121 | 1 | 27 |
| 2-Methylnaphthalene | 1000 | 839 | | ug/Kg | | 84 | 64 - 119 | 1 | 27 |
| Hexachlorocyclopentadiene | 1000 | 860 | | ug/Kg | | 86 | 46 - 131 | 8 | 29 |
| 2,4,6-Trichlorophenol | 1000 | 835 | | ug/Kg | | 83 | 62 - 133 | 6 | 30 |
| 2,4,5-Trichlorophenol | 1000 | 740 | | ug/Kg | | 74 | 57 - 133 | 9 | 30 |
| 2-Chloronaphthalene | 1000 | 882 | | ug/Kg | | 88 | 68 - 112 | 8 | 25 |
| 2-Nitroaniline | 1000 | 1060 | | ug/Kg | | 106 | 64 - 112 | 8 | 22 |
| Dimethyl phthalate | 1000 | 865 | | ug/Kg | | 87 | 78 - 117 | 5 | 30 |
| Acenaphthylene | 1000 | 870 | | ug/Kg | | 87 | 68 - 120 | 2 | 28 |
| 2,6-Dinitrotoluene | 1000 | 885 | | ug/Kg | | 88 | 66 - 123 | 10 | 30 |
| 3-Nitroaniline | 1000 | 418 | | ug/Kg | | 42 | 27 - 103 | 6 | 33 |
| Acenaphthene | 1000 | 898 | | ug/Kg | | 90 | 68 - 116 | 1 | 27 |
| 2,4-Dinitrophenol | 2000 | 887 | J | ug/Kg | | 44 | 20 - 141 | 21 | 36 |
| 4-Nitrophenol | 2000 | 1570 | | ug/Kg | | 78 | 20 - 165 | 5 | 30 |
| Dibenzofuran | 1000 | 816 | | ug/Kg | | 82 | 72 - 109 | 1 | 30 |
| 2,4-Dinitrotoluene | 1000 | 887 | | ug/Kg | | 89 | 68 - 121 | 9 | 30 |
| Diethyl phthalate | 1000 | 668 | * | ug/Kg | | 67 | 73 - 116 | 2 | 26 |
| 4-Chlorophenyl phenyl ether | 1000 | 850 | | ug/Kg | | 85 | 75 - 108 | 1 | 30 |
| Fluorene | 1000 | 884 | | ug/Kg | | 88 | 70 - 121 | 2 | 30 |
| 4-Nitroaniline | 1000 | 797 | | ug/Kg | | 80 | 58 - 108 | 20 | 32 |
| 4,6-Dinitro-2-methylphenol | 2000 | 1480 | | ug/Kg | | 74 | 48 - 130 | 0 | 22 |
| N-Nitrosodiphenylamine | 1000 | 888 | | ug/Kg | | 89 | 73 - 115 | 1 | 30 |
| 4-Bromophenyl phenyl ether | 1000 | 920 | | ug/Kg | | 92 | 68 - 122 | 2 | 30 |
| Hexachlorobenzene | 1000 | 825 | | ug/Kg | | 82 | 66 - 117 | 1 | 30 |
| Pentachlorophenol | 2000 | 1290 | | ug/Kg | | 64 | 45 - 117 | 4 | 23 |
| Phenanthrene | 1000 | 832 | | ug/Kg | | 83 | 73 - 106 | 1 | 28 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 580-169185/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 169302** — **Prep Batch: 169185**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Anthracene | | | 1000 | 823 | | ug/Kg | | 82 | 73 - 116 | 4 | 27 |
| Di-n-butyl phthalate | | | 1000 | 778 | | ug/Kg | | 78 | 66 - 140 | 10 | 30 |
| Fluoranthene | | | 1000 | 764 | | ug/Kg | | 76 | 73 - 125 | 10 | 30 |
| Pyrene | | | 1000 | 747 | | ug/Kg | | 75 | 70 - 120 | 8 | 30 |
| Butyl benzyl phthalate | | | 1000 | 1040 | | ug/Kg | | 104 | 69 - 142 | 3 | 30 |
| 3,3'-Dichlorobenzidine | | | 2000 | 1110 | | ug/Kg | | 56 | 20 - 103 | 4 | 60 |
| Benzo[a]anthracene | | | 1000 | 877 | | ug/Kg | | 88 | 76 - 119 | 2 | 27 |
| Chrysene | | | 1000 | 877 | | ug/Kg | | 88 | 75 - 114 | 1 | 26 |
| Bis(2-ethylhexyl) phthalate | | | 1000 | 950 | | ug/Kg | | 95 | 62 - 144 | 1 | 30 |
| Di-n-octyl phthalate | | | 1000 | 884 | | ug/Kg | | 88 | 65 - 141 | 5 | 30 |
| Benzo[a]pyrene | | | 1000 | 831 | | ug/Kg | | 83 | 72 - 117 | 1 | 30 |
| Indeno[1,2,3-cd]pyrene | | | 1000 | 924 | | ug/Kg | | 92 | 56 - 127 | 10 | 29 |
| Dibenz(a,h)anthracene | | | 1000 | 846 | | ug/Kg | | 85 | 56 - 134 | 0 | 30 |
| Benzo[g,h,i]perylene | | | 1000 | 806 | | ug/Kg | | 81 | 55 - 139 | 4 | 28 |
| Carbazole | | | 1000 | 851 | | ug/Kg | | 85 | 76 - 135 | 10 | 30 |
| 1-Methylnaphthalene | | | 1000 | 843 | | ug/Kg | | 84 | 62 - 118 | 1 | 30 |
| Benzo[b]fluoranthene | | | 1000 | 774 | | ug/Kg | | 77 | 63 - 132 | 4 | 30 |
| Benzo[k]fluoranthene | | | 1000 | 840 | | ug/Kg | | 84 | 63 - 119 | 4 | 30 |
| bis (2-chloroisopropyl) ether | | | 1000 | 1020 | ^ | ug/Kg | | 102 | 41 - 126 | 4 | 57 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol* | *81* | | *36 - 145* |
| *Phenol-d5* | *81* | | *38 - 149* |
| *Nitrobenzene-d5* | *90* | | *38 - 141* |
| *2-Fluorobiphenyl* | *78* | | *42 - 140* |
| *2,4,6-Tribromophenol* | *84* | | *28 - 143* |
| *Terphenyl-d14* | *76* | | *42 - 151* |

**Lab Sample ID: 580-45261-1 MS** — **Client Sample ID: SXI0031-04**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 169302** — **Prep Batch: 169185**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Phenol | ND | | 1220 | 1180 | | ug/Kg | ☼ | 97 | 63 - 111 | | |
| Bis(2-chloroethyl)ether | ND | | 1220 | 1070 | | ug/Kg | ☼ | 88 | 62 - 110 | | |
| 2-Chlorophenol | ND | | 1220 | 1160 | | ug/Kg | ☼ | 95 | 68 - 117 | | |
| 1,3-Dichlorobenzene | ND | | 1220 | 954 | | ug/Kg | ☼ | 78 | 64 - 111 | | |
| 1,4-Dichlorobenzene | ND | | 1220 | 953 | | ug/Kg | ☼ | 78 | 65 - 110 | | |
| Benzyl alcohol | ND | | 1220 | 1060 | | ug/Kg | ☼ | 87 | 55 - 123 | | |
| 1,2-Dichlorobenzene | ND | | 1220 | 1000 | | ug/Kg | ☼ | 82 | 64 - 112 | | |
| 2-Methylphenol | ND | | 1220 | 1030 | | ug/Kg | ☼ | 84 | 71 - 116 | | |
| 3 & 4 Methylphenol | ND | | 1220 | 1080 | | ug/Kg | ☼ | 89 | 70 - 116 | | |
| N-Nitrosodi-n-propylamine | ND | | 1220 | 1060 | | ug/Kg | ☼ | 87 | 62 - 116 | | |
| Hexachloroethane | ND | | 1220 | 976 | | ug/Kg | ☼ | 80 | 62 - 120 | | |
| Nitrobenzene | ND | | 1220 | 1110 | | ug/Kg | ☼ | 91 | 64 - 118 | | |
| Isophorone | ND | | 1220 | 1090 | | ug/Kg | ☼ | 89 | 67 - 119 | | |
| 2-Nitrophenol | ND | | 1220 | 1110 | | ug/Kg | ☼ | 91 | 67 - 127 | | |
| 2,4-Dimethylphenol | ND | | 1220 | 1190 | | ug/Kg | ☼ | 98 | 54 - 139 | | |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 580-45261-1 MS**
**Matrix: Solid**
**Analysis Batch: 169302**

**Client Sample ID: SXI0031-04**
**Prep Type: Total/NA**
**Prep Batch: 169185**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Benzoic acid | ND | | 2430 | ND | | ug/Kg | ☼ | 115 | 29 - 158 |
| Bis(2-chloroethoxy)methane | ND | | 1220 | 999 | | ug/Kg | ☼ | 82 | 69 - 107 |
| 2,4-Dichlorophenol | ND | | 1220 | 1130 | | ug/Kg | ☼ | 93 | 68 - 125 |
| 1,2,4-Trichlorobenzene | ND | | 1220 | 988 | | ug/Kg | ☼ | 81 | 66 - 115 |
| Naphthalene | ND | | 1220 | 1010 | | ug/Kg | ☼ | 83 | 62 - 112 |
| 4-Chloroaniline | ND | | 1220 | 556 | | ug/Kg | ☼ | 46 | 20 - 103 |
| Hexachlorobutadiene | ND | | 1220 | 876 | | ug/Kg | ☼ | 72 | 65 - 116 |
| 4-Chloro-3-methylphenol | ND | | 1220 | 1080 | | ug/Kg | ☼ | 89 | 69 - 121 |
| 2-Methylnaphthalene | ND | | 1220 | 1050 | | ug/Kg | ☼ | 86 | 64 - 119 |
| Hexachlorocyclopentadiene | ND | | 1220 | 882 | | ug/Kg | ☼ | 73 | 46 - 131 |
| 2,4,6-Trichlorophenol | ND | | 1220 | 1120 | | ug/Kg | ☼ | 92 | 62 - 133 |
| 2,4,5-Trichlorophenol | ND | | 1220 | 898 | | ug/Kg | ☼ | 74 | 57 - 133 |
| 2-Chloronaphthalene | ND | | 1220 | 1050 | | ug/Kg | ☼ | 86 | 68 - 112 |
| 2-Nitroaniline | ND | | 1220 | 1210 | | ug/Kg | ☼ | 99 | 64 - 112 |
| Dimethyl phthalate | ND | | 1220 | 1080 | | ug/Kg | ☼ | 89 | 78 - 117 |
| Acenaphthylene | ND | | 1220 | 1060 | | ug/Kg | ☼ | 87 | 68 - 120 |
| 2,6-Dinitrotoluene | ND | | 1220 | 1090 | | ug/Kg | ☼ | 90 | 66 - 123 |
| 3-Nitroaniline | ND | | 1220 | 652 | | ug/Kg | ☼ | 54 | 27 - 103 |
| Acenaphthene | ND | | 1220 | 1090 | | ug/Kg | ☼ | 90 | 68 - 116 |
| 2,4-Dinitrophenol | ND | | 2430 | 2410 | | ug/Kg | ☼ | 99 | 20 - 141 |
| 4-Nitrophenol | ND | | 2430 | 2110 | | ug/Kg | ☼ | 87 | 20 - 165 |
| Dibenzofuran | ND | | 1220 | 1060 | | ug/Kg | ☼ | 87 | 72 - 109 |
| 2,4-Dinitrotoluene | ND | | 1220 | 1070 | | ug/Kg | ☼ | 88 | 68 - 121 |
| Diethyl phthalate | ND | * | 1220 | 921 | | ug/Kg | ☼ | 76 | 73 - 116 |
| 4-Chlorophenyl phenyl ether | ND | | 1220 | 1110 | | ug/Kg | ☼ | 91 | 75 - 108 |
| Fluorene | ND | | 1220 | 1210 | | ug/Kg | ☼ | 100 | 70 - 121 |
| 4-Nitroaniline | ND | | 1220 | 993 | | ug/Kg | ☼ | 82 | 58 - 108 |
| 4,6-Dinitro-2-methylphenol | ND | | 2430 | 2360 | | ug/Kg | ☼ | 97 | 48 - 130 |
| N-Nitrosodiphenylamine | ND | | 1220 | 1120 | | ug/Kg | ☼ | 92 | 73 - 115 |
| 4-Bromophenyl phenyl ether | ND | | 1220 | 1130 | | ug/Kg | ☼ | 93 | 68 - 122 |
| Hexachlorobenzene | ND | | 1220 | 1030 | | ug/Kg | ☼ | 84 | 66 - 117 |
| Pentachlorophenol | ND | | 2430 | 1950 | | ug/Kg | ☼ | 80 | 45 - 117 |
| Phenanthrene | ND | | 1220 | 1040 | | ug/Kg | ☼ | 86 | 73 - 106 |
| Anthracene | ND | | 1220 | 1050 | | ug/Kg | ☼ | 86 | 73 - 116 |
| Di-n-butyl phthalate | ND | | 1220 | 1080 | | ug/Kg | ☼ | 89 | 66 - 140 |
| Fluoranthene | ND | | 1220 | 1050 | | ug/Kg | ☼ | 86 | 73 - 125 |
| Pyrene | ND | | 1220 | 959 | | ug/Kg | ☼ | 79 | 70 - 120 |
| Butyl benzyl phthalate | ND | | 1220 | 1310 | | ug/Kg | ☼ | 107 | 69 - 142 |
| 3,3'-Dichlorobenzidine | ND | | 2430 | 1540 | | ug/Kg | ☼ | 63 | 20 - 103 |
| Benzo[a]anthracene | ND | | 1220 | 1050 | | ug/Kg | ☼ | 86 | 76 - 119 |
| Chrysene | ND | | 1220 | 1040 | | ug/Kg | ☼ | 86 | 75 - 114 |
| Bis(2-ethylhexyl) phthalate | ND | | 1220 | 1200 | | ug/Kg | ☼ | 99 | 62 - 144 |
| Di-n-octyl phthalate | ND | | 1220 | 1250 | | ug/Kg | ☼ | 103 | 65 - 141 |
| Benzo[a]pyrene | ND | | 1220 | 1090 | | ug/Kg | ☼ | 89 | 72 - 117 |
| Indeno[1,2,3-cd]pyrene | ND | | 1220 | 1360 | | ug/Kg | ☼ | 112 | 56 - 127 |
| Dibenz(a,h)anthracene | ND | | 1220 | 1080 | | ug/Kg | ☼ | 88 | 56 - 134 |
| Benzo[g,h,i]perylene | ND | | 1220 | 1030 | | ug/Kg | ☼ | 85 | 55 - 139 |
| Carbazole | ND | | 1220 | 1160 | | ug/Kg | ☼ | 95 | 76 - 135 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 580-45261-1 MS** — **Client Sample ID: SXI0031-04**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 169302** — **Prep Batch: 169185**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1-Methylnaphthalene | ND | | 1220 | 1030 | | ug/Kg | ☼ | 84 | 62 - 118 |
| Benzo[b]fluoranthene | ND | | 1220 | 1050 | | ug/Kg | ☼ | 85 | 63 - 132 |
| Benzo[k]fluoranthene | ND | | 1220 | 1100 | | ug/Kg | ☼ | 89 | 63 - 119 |
| bis (2-chloroisopropyl) ether | ND | ^ | 1220 | 1200 | ^ | ug/Kg | ☼ | 98 | 41 - 126 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol* | *81* | | *36 - 145* |
| *Phenol-d5* | *88* | | *38 - 149* |
| *Nitrobenzene-d5* | *90* | | *38 - 141* |
| *2-Fluorobiphenyl* | *77* | | *42 - 140* |
| *2,4,6-Tribromophenol* | *89* | | *28 - 143* |
| *Terphenyl-d14* | *78* | | *42 - 151* |

**Lab Sample ID: 580-45261-1 MSD** — **Client Sample ID: SXI0031-04**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 169302** — **Prep Batch: 169185**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Phenol | ND | | 1220 | 1040 | | ug/Kg | ☼ | 85 | 63 - 111 | 13 | 26 |
| Bis(2-chloroethyl)ether | ND | | 1220 | 954 | | ug/Kg | ☼ | 78 | 62 - 110 | 11 | 60 |
| 2-Chlorophenol | ND | | 1220 | 1130 | | ug/Kg | ☼ | 92 | 68 - 117 | 3 | 27 |
| 1,3-Dichlorobenzene | ND | | 1220 | 933 | | ug/Kg | ☼ | 76 | 64 - 111 | 2 | 60 |
| 1,4-Dichlorobenzene | ND | | 1220 | 955 | | ug/Kg | ☼ | 78 | 65 - 110 | 0 | 32 |
| Benzyl alcohol | ND | | 1220 | 1030 | | ug/Kg | ☼ | 84 | 55 - 123 | 2 | 60 |
| 1,2-Dichlorobenzene | ND | | 1220 | 984 | | ug/Kg | ☼ | 80 | 64 - 112 | 2 | 60 |
| 2-Methylphenol | ND | | 1220 | 1020 | | ug/Kg | ☼ | 83 | 71 - 116 | 0 | 25 |
| 3 & 4 Methylphenol | ND | | 1220 | 1070 | | ug/Kg | ☼ | 87 | 70 - 116 | 1 | 27 |
| N-Nitrosodi-n-propylamine | ND | | 1220 | 1020 | | ug/Kg | ☼ | 83 | 62 - 116 | 4 | 28 |
| Hexachloroethane | ND | | 1220 | 961 | | ug/Kg | ☼ | 79 | 62 - 120 | 1 | 60 |
| Nitrobenzene | ND | | 1220 | 1110 | | ug/Kg | ☼ | 90 | 64 - 118 | 0 | 60 |
| Isophorone | ND | | 1220 | 1040 | | ug/Kg | ☼ | 85 | 67 - 119 | 4 | 60 |
| 2-Nitrophenol | ND | | 1220 | 1050 | | ug/Kg | ☼ | 86 | 67 - 127 | 5 | 60 |
| 2,4-Dimethylphenol | ND | | 1220 | 1090 | | ug/Kg | ☼ | 89 | 54 - 139 | 9 | 60 |
| Benzoic acid | ND | | 2450 | ND | | ug/Kg | ☼ | 105 | 29 - 158 | 8 | 60 |
| Bis(2-chloroethoxy)methane | ND | | 1220 | 970 | | ug/Kg | ☼ | 79 | 69 - 107 | 3 | 60 |
| 2,4-Dichlorophenol | ND | | 1220 | 1090 | | ug/Kg | ☼ | 89 | 68 - 125 | 4 | 60 |
| 1,2,4-Trichlorobenzene | ND | | 1220 | 975 | | ug/Kg | ☼ | 80 | 66 - 115 | 1 | 28 |
| Naphthalene | ND | | 1220 | 980 | | ug/Kg | ☼ | 80 | 62 - 112 | 3 | 26 |
| 4-Chloroaniline | ND | | 1220 | 531 | | ug/Kg | ☼ | 43 | 20 - 103 | 4 | 60 |
| Hexachlorobutadiene | ND | | 1220 | 923 | | ug/Kg | ☼ | 75 | 65 - 116 | 5 | 60 |
| 4-Chloro-3-methylphenol | ND | | 1220 | 1110 | | ug/Kg | ☼ | 91 | 69 - 121 | 3 | 27 |
| 2-Methylnaphthalene | ND | | 1220 | 1010 | | ug/Kg | ☼ | 82 | 64 - 119 | 4 | 27 |
| Hexachlorocyclopentadiene | ND | | 1220 | 792 | | ug/Kg | ☼ | 65 | 46 - 131 | 11 | 60 |
| 2,4,6-Trichlorophenol | ND | | 1220 | 954 | | ug/Kg | ☼ | 78 | 62 - 133 | 16 | 60 |
| 2,4,5-Trichlorophenol | ND | | 1220 | 807 | | ug/Kg | ☼ | 66 | 57 - 133 | 11 | 60 |
| 2-Chloronaphthalene | ND | | 1220 | 949 | | ug/Kg | ☼ | 78 | 68 - 112 | 10 | 25 |
| 2-Nitroaniline | ND | | 1220 | 1100 | | ug/Kg | ☼ | 90 | 64 - 112 | 9 | 60 |
| Dimethyl phthalate | ND | | 1220 | 1030 | | ug/Kg | ☼ | 84 | 78 - 117 | 5 | 60 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 580-45261-1 MSD**
**Matrix: Solid**
**Analysis Batch: 169302**

**Client Sample ID: SXI0031-04**
**Prep Type: Total/NA**
**Prep Batch: 169185**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthylene | ND | | 1220 | 1050 | | ug/Kg | ☼ | 86 | 68 - 120 | 1 | 28 |
| 2,6-Dinitrotoluene | ND | | 1220 | 1010 | | ug/Kg | ☼ | 82 | 66 - 123 | 8 | 60 |
| 3-Nitroaniline | ND | | 1220 | 689 | | ug/Kg | ☼ | 56 | 27 - 103 | 5 | 60 |
| Acenaphthene | ND | | 1220 | 1040 | | ug/Kg | ☼ | 85 | 68 - 116 | 5 | 27 |
| 2,4-Dinitrophenol | ND | | 2450 | 2250 | | ug/Kg | ☼ | 92 | 20 - 141 | 7 | 60 |
| 4-Nitrophenol | ND | | 2450 | 2020 | | ug/Kg | ☼ | 82 | 20 - 165 | 4 | 33 |
| Dibenzofuran | ND | | 1220 | 977 | | ug/Kg | ☼ | 80 | 72 - 109 | 8 | 60 |
| 2,4-Dinitrotoluene | ND | | 1220 | 1090 | | ug/Kg | ☼ | 89 | 68 - 121 | 1 | 31 |
| Diethyl phthalate | ND | * | 1220 | 785 | F1 | ug/Kg | ☼ | 64 | 73 - 116 | 16 | 26 |
| 4-Chlorophenyl phenyl ether | ND | | 1220 | 994 | | ug/Kg | ☼ | 81 | 75 - 108 | 11 | 60 |
| Fluorene | ND | | 1220 | 1070 | | ug/Kg | ☼ | 88 | 70 - 121 | 12 | 31 |
| 4-Nitroaniline | ND | | 1220 | 929 | | ug/Kg | ☼ | 76 | 58 - 108 | 7 | 60 |
| 4,6-Dinitro-2-methylphenol | ND | | 2450 | 2150 | | ug/Kg | ☼ | 88 | 48 - 130 | 9 | 60 |
| N-Nitrosodiphenylamine | ND | | 1220 | 1060 | | ug/Kg | ☼ | 87 | 73 - 115 | 5 | 60 |
| 4-Bromophenyl phenyl ether | ND | | 1220 | 1120 | | ug/Kg | ☼ | 91 | 68 - 122 | 1 | 60 |
| Hexachlorobenzene | ND | | 1220 | 959 | | ug/Kg | ☼ | 78 | 66 - 117 | 7 | 60 |
| Pentachlorophenol | ND | | 2450 | 1910 | | ug/Kg | ☼ | 78 | 45 - 117 | 2 | 68 |
| Phenanthrene | ND | | 1220 | 978 | | ug/Kg | ☼ | 80 | 73 - 106 | 6 | 28 |
| Anthracene | ND | | 1220 | 995 | | ug/Kg | ☼ | 81 | 73 - 116 | 5 | 27 |
| Di-n-butyl phthalate | ND | | 1220 | 1060 | | ug/Kg | ☼ | 86 | 66 - 140 | 2 | 60 |
| Fluoranthene | ND | | 1220 | 935 | | ug/Kg | ☼ | 76 | 73 - 125 | 12 | 36 |
| Pyrene | ND | | 1220 | 903 | | ug/Kg | ☼ | 74 | 70 - 120 | 6 | 31 |
| Butyl benzyl phthalate | ND | | 1220 | 1290 | | ug/Kg | ☼ | 105 | 69 - 142 | 1 | 60 |
| 3,3'-Dichlorobenzidine | ND | | 2450 | 1600 | | ug/Kg | ☼ | 65 | 20 - 103 | 4 | 60 |
| Benzo[a]anthracene | ND | | 1220 | 1050 | | ug/Kg | ☼ | 86 | 76 - 119 | 0 | 27 |
| Chrysene | ND | | 1220 | 1040 | | ug/Kg | ☼ | 85 | 75 - 114 | 0 | 26 |
| Bis(2-ethylhexyl) phthalate | ND | | 1220 | 1200 | | ug/Kg | ☼ | 98 | 62 - 144 | 0 | 60 |
| Di-n-octyl phthalate | ND | | 1220 | 1210 | | ug/Kg | ☼ | 99 | 65 - 141 | 3 | 31 |
| Benzo[a]pyrene | ND | | 1220 | 1040 | | ug/Kg | ☼ | 85 | 72 - 117 | 4 | 30 |
| Indeno[1,2,3-cd]pyrene | ND | | 1220 | 1240 | | ug/Kg | ☼ | 101 | 56 - 127 | 10 | 29 |
| Dibenz(a,h)anthracene | ND | | 1220 | 1070 | | ug/Kg | ☼ | 88 | 56 - 134 | 0 | 30 |
| Benzo[g,h,i]perylene | ND | | 1220 | 971 | | ug/Kg | ☼ | 79 | 55 - 139 | 6 | 28 |
| Carbazole | ND | | 1220 | 1120 | | ug/Kg | ☼ | 91 | 76 - 135 | 4 | 60 |
| 1-Methylnaphthalene | ND | | 1220 | 1040 | | ug/Kg | ☼ | 85 | 62 - 118 | 1 | 30 |
| Benzo[b]fluoranthene | ND | | 1220 | 1000 | | ug/Kg | ☼ | 80 | 63 - 132 | 4 | 31 |
| Benzo[k]fluoranthene | ND | | 1220 | 1020 | | ug/Kg | ☼ | 82 | 63 - 119 | 7 | 31 |
| bis (2-chloroisopropyl) ether | ND | ^ | 1220 | 1230 | ^ | ug/Kg | ☼ | 100 | 41 - 126 | 2 | 60 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol* | *80* | | *36 - 145* |
| *Phenol-d5* | *76* | | *38 - 149* |
| *Nitrobenzene-d5* | *86* | | *38 - 141* |
| *2-Fluorobiphenyl* | *69* | | *42 - 140* |
| *2,4,6-Tribromophenol* | *82* | | *28 - 143* |
| *Terphenyl-d14* | *74* | | *42 - 151* |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

**Lab Sample ID: 14I0033-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0033** — **Prep Batch: 14I0033_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.0 | | mg/kg wet | | 09/05/14 08:31 | 09/08/14 11:04 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.0 | | mg/kg wet | | 09/05/14 08:31 | 09/08/14 11:04 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *107* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 11:04* | *1.00* |
| *n-Triacontane-d62* | *107* | | *50 - 150* | *09/05/14 08:31* | *09/08/14 11:04* | *1.00* |

**Lab Sample ID: 14I0033-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0033** — **Prep Batch: 14I0033_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | | | 66.7 | 63.7 | | mg/kg wet | | 95.6 | 50 - 150 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *114* | | *50 - 150* |
| *n-Triacontane-d62* | *108* | | *50 - 150* |

**Lab Sample ID: 14I0033-DUP1** — **Client Sample ID: EX12-1-2.5**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0033** — **Prep Batch: 14I0033_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 914 | | | 909 | | mg/kg dry | ☼ | | | 0.559 | 40 |
| Heavy Oil Range Hydrocarbons | 2800 | | | 2760 | | mg/kg dry | ☼ | | | 1.51 | 40 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *114* | | *50 - 150* |
| *n-Triacontane-d62* | *85.5* | | *50 - 150* |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-1-2.5 — Lab Sample ID: SXI0031-01

**Date Collected: 09/04/14 09:35** — **Matrix: Soil**
**Date Received: 09/04/14 15:50** — **Percent Solids: 92.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.11 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14I0037 | 09/05/14 13:13 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.11 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0037 | 09/05/14 13:13 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.978 | 14I0033_P | 09/05/14 08:31 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 10.0 | 14I0033 | 09/08/14 12:10 | NMI | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14I0046_P | 09/05/14 11:10 | NI | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14I0046 | 09/08/14 15:24 | NI | TAL SPK |

## Client Sample ID: EX12-2-3 — Lab Sample ID: SXI0031-02

**Date Collected: 09/04/14 10:03** — **Matrix: Soil**
**Date Received: 09/04/14 15:50** — **Percent Solids: 69.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.04 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14I0037 | 09/05/14 13:35 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.04 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0037 | 09/05/14 13:35 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.962 | 14I0033_P | 09/05/14 08:31 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 5.00 | 14I0033 | 09/08/14 12:33 | NMI | TAL SPK |

## Client Sample ID: EX12-3-2 — Lab Sample ID: SXI0031-03

**Date Collected: 09/04/14 10:20** — **Matrix: Soil**
**Date Received: 09/04/14 15:50** — **Percent Solids: 93.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.853 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14I0037 | 09/05/14 13:57 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.853 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0037 | 09/05/14 13:57 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.929 | 14I0033_P | 09/05/14 08:31 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 10.0 | 14I0033 | 09/08/14 12:56 | NMI | TAL SPK |

## Client Sample ID: EX12-4-3 — Lab Sample ID: SXI0031-04

**Date Collected: 09/04/14 11:15** — **Matrix: Soil**
**Date Received: 09/04/14 15:50** — **Percent Solids: 80.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.803 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14I0037 | 09/05/14 14:20 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.803 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0037 | 09/05/14 14:20 | CBW | TAL SPK |
| Total/NA | Prep | 3550B | | | 169185 | 09/09/14 09:10 | ALL | TAL SEA |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Client Sample ID: EX12-4-3 — Lab Sample ID: SXI0031-04

**Date Collected: 09/04/14 11:15** — **Matrix: Soil**
**Date Received: 09/04/14 15:50** — **Percent Solids: 80.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8270C | | 1 | 169302 | 09/10/14 13:52 | ERB | TAL SEA |
| Total | Prep | EPA 3550B | | 0.901 | 14I0033_P | 09/05/14 08:31 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14I0033 | 09/08/14 13:19 | NMI | TAL SPK |
| Total/NA | Analysis | D 2216 | | 1 | 169223 | 09/09/14 12:37 | LHJ | TAL SEA |

## Client Sample ID: EX12-6-8 — Lab Sample ID: SXI0031-05

**Date Collected: 09/04/14 11:30** — **Matrix: Soil**
**Date Received: 09/04/14 15:50** — **Percent Solids: 90.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.923 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14I0037 | 09/05/14 14:42 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.923 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0037 | 09/05/14 14:42 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.999 | 14I0033_P | 09/05/14 08:31 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 10.0 | 14I0033 | 09/08/14 13:39 | NMI | TAL SPK |

## Client Sample ID: EX12-7-6 — Lab Sample ID: SXI0031-06

**Date Collected: 09/04/14 11:40** — **Matrix: Soil**
**Date Received: 09/04/14 15:50** — **Percent Solids: 94.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.960 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14I0037 | 09/05/14 15:04 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.960 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0037 | 09/05/14 15:04 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.919 | 14I0033_P | 09/05/14 08:31 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 5.00 | 14I0033 | 09/08/14 14:00 | NMI | TAL SPK |

## Client Sample ID: EX12-5-3 — Lab Sample ID: SXI0031-07

**Date Collected: 09/04/14 11:00** — **Matrix: Soil**
**Date Received: 09/04/14 15:50** — **Percent Solids: 70.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.07 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14I0037 | 09/05/14 15:26 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.07 | 14I0037_P | 09/05/14 11:06 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0037 | 09/05/14 15:26 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.984 | 14I0033_P | 09/05/14 08:31 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 10.0 | 14I0033 | 09/08/14 14:23 | NMI | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

**Laboratory References:**

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-071 | 10-31-14 |
| Washington | State Program | 10 | C569 | 01-06-15 |

## Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-113 | 07-25-15 |
| California | NELAP | 9 | 01115CA | 01-31-14 * |
| California | State Program | 9 | 2901 | 01-31-15 |
| L-A-B | DoD ELAP | | L2236 | 01-19-16 |
| L-A-B | ISO/IEC 17025 | | L2236 | 01-19-16 |
| Montana (UST) | State Program | 8 | N/A | 04-30-20 |
| Oregon | NELAP | 10 | WA100007 | 11-06-14 |
| USDA | Federal | | P330-11-00222 | 04-08-17 |
| Washington | State Program | 10 | C553 | 02-17-15 |

* Certification renewal pending - certification considered valid.

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0031

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 8260C | Volatile Organic Compounds by EPA Methods 5035/8260C | | TAL SPK |
| NWTPH-Gx | Gasoline Hydrocarbons by NWTPH-Gx | | TAL SPK |
| 8270C | Semivolatile Organic Compounds (GC/MS) | SW846 | TAL SEA |
| NWTPH-Dx | Semivolatile Petroleum Products by NWTPH-Dx | | TAL SPK |
| D 2216 | Percent Moisture | ASTM | TAL SEA |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

ASTM = ASTM International

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

**Laboratory References:**

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 X
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #: SXI1031

CLIENT: GeoEngineers

REPORT TO: Dave Lauder dlauder@geoengineers.com

ADDRESS: 523 E Second Ave
SPOKANE WA 99202

PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO:

P.O. NUMBER:

PROJECT NAME: Cashmere

PROJECT NUMBER: 18593-001-04

SAMPLED BY: JWR

**TURNAROUND REQUEST** in Business Days *

Organic & Inorganic Analyses: 10 (STD.) | 7 | 5 | 4 | 3 | X | 1 | <1

Petroleum Hydrocarbon Analyses: 5 (STD.) | 4 | 3 | X | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NWTPH-Gx | NWTPH-Dx | VOCs | SVOCs | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Ex12-1-2.5 | 9/4/14 0935 | X | X | X | | S | 3 | | |
| 2 | Ex12-2-3 | 9/4/14 1003 | X | X | X | | | 3 | | |
| 3 | Ex12-3-2 | 9/4/14 1020 | X | X | X | | | 3 | | |
| 4 | Ex12-4-3 | 9/4/14 1115 | X | X | X | X | | 4 | | |
| 5 | Ex12-5-3 | 9/4/14 1100 | X | X | X | | | 3 | | |
| 6 | Ex12-6-8 | 9/4/14 1130 | X | X | X | | | 3 | | |
| 7 | Ex12-7-6 | 9/4/14 1140 | X | X | X | | | 3 | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |

RELEASED BY: Justin Rice DATE: 9/4/14
PRINT NAME: JR FIRM: Geo TIME: 1550

RECEIVED BY: Cat Stapleton DATE: 9-4-14
PRINT NAME: Cat Stapleton FIRM: TestAmerica TIME: 1550

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP:

PAGE 1 OF 1

TAL-1000 (0612)

# TestAmerica Spokane
## Sample Receipt Form

| Work Order #: | Client: GeoEngineers | Project: Cashmere |
|---|---|---|
| Date/Time Received: 9-4-14 15:50 | By: CS | |

Samples Delivered By: ☐Shipping Service ☐Courier ☑Client ☐Other:

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | X | | | |
| Custody Seals are present and intact: | | | X | |
| Are CoC documents present: | X | | | |
| Necessary signatures: | X | | | |

Thermal Preservation Type: ☐Blue Ice ☐Gel Ice ☒Real Ice ☐Dry Ice ☐None ☐Other:

Temperature: 9.8 °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐Not enough ice ☐Ice melted ☐w/in 4hrs of collection ☐NA ☐Other:

| Log-in Phase Date/Time: 9-4-14 16:35 By: CS | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | ✓ | | | |
| Samples containers were received intact: | ✓ | | | |
| Do sample IDs match the CoC | ✓ | | | |
| Appropriate sample containers were received for tests requested | ✓ | | | |
| Are sample volumes adequate for tests requested | ✓ | | | |
| Appropriate preservatives were used for the tests requested | ✓ | | | |
| pH of inorganic samples checked and is within method specification | ✓ | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | ✓ | | | |
| Are dissolved parameters field filtered | | | ✓ | |
| Do any samples need to be filtered or preserved by the lab | | | ✓ | |
| Does this project require quick turnaround analysis | ✓ | | | 2days |
| Are there any short hold time tests (see chart below) | | ✓ | | |
| Are any samples within 2 days of or past expiration | | ✓ | | |
| Was the CoC scanned | ✓ | | | |
| Were there Non-conformance issues at login | | ✓ | | |
| If yes, was a CAR generated # | | | ✓ | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

Form No. SP-FORM-SPL-002 12 December 2012

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXI0084
Client Project/Site: 18593-001-04
Client Project Description: Cashmere, WA

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*9/16/2014 4:03:47 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*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: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0084

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXI0084-01 | EX12-8-3 | Soil | 09/12/14 09:10 | 09/12/14 14:50 |
| SXI0084-02 | EX12-9-3 | Soil | 09/12/14 09:20 | 09/12/14 14:50 |
| SXI0084-03 | EX12-10-7 | Soil | 09/12/14 09:30 | 09/12/14 14:50 |
| SXI0084-04 | EX12-11-3 | Soil | 09/12/14 10:00 | 09/12/14 14:50 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0084

## Qualifiers

### Fuels

| Qualifier | Qualifier Description |
|---|---|
| Q6 | Results in the diesel organics range are primarily due to overlap from a heavy oil range product. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0084

## Client Sample ID: EX12-8-3

**Lab Sample ID: SXI0084-01**
**Date Collected: 09/12/14 09:10**
**Matrix: Soil**
**Date Received: 09/12/14 14:50**
**Percent Solids: 94.8**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.58 | | mg/kg dry | ☼ | 09/15/14 08:52 | 09/15/14 11:29 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *88.9* | | *41.5 - 162* | *09/15/14 08:52* | *09/15/14 11:29* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.3 | | mg/kg dry | ☼ | 09/15/14 08:21 | 09/15/14 12:34 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.8 | | mg/kg dry | ☼ | 09/15/14 08:21 | 09/15/14 12:34 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *91.1* | | *50 - 150* | *09/15/14 08:21* | *09/15/14 12:34* | *1.00* |
| *n-Triacontane-d62* | *104* | | *50 - 150* | *09/15/14 08:21* | *09/15/14 12:34* | *1.00* |

## Client Sample ID: EX12-9-3

**Lab Sample ID: SXI0084-02**
**Date Collected: 09/12/14 09:20**
**Matrix: Soil**
**Date Received: 09/12/14 14:50**
**Percent Solids: 95.3**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.17 | | mg/kg dry | ☼ | 09/15/14 08:52 | 09/15/14 11:52 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *89.0* | | *41.5 - 162* | *09/15/14 08:52* | *09/15/14 11:52* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 9.73 | | mg/kg dry | ☼ | 09/15/14 08:21 | 09/15/14 12:59 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 24.3 | | mg/kg dry | ☼ | 09/15/14 08:21 | 09/15/14 12:59 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *93.2* | | *50 - 150* | *09/15/14 08:21* | *09/15/14 12:59* | *1.00* |
| *n-Triacontane-d62* | *112* | | *50 - 150* | *09/15/14 08:21* | *09/15/14 12:59* | *1.00* |

## Client Sample ID: EX12-10-7

**Lab Sample ID: SXI0084-03**
**Date Collected: 09/12/14 09:30**
**Matrix: Soil**
**Date Received: 09/12/14 14:50**
**Percent Solids: 91.5**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 6.56 | | mg/kg dry | ☼ | 09/15/14 08:52 | 09/15/14 12:15 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *89.0* | | *41.5 - 162* | *09/15/14 08:52* | *09/15/14 12:15* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **109** | **Q6** | 55.7 | | mg/kg dry | ☼ | 09/15/14 08:21 | 09/15/14 12:59 | 5.00 |
| **Heavy Oil Range Hydrocarbons** | **657** | | 139 | | mg/kg dry | ☼ | 09/15/14 08:21 | 09/15/14 12:59 | 5.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *100* | | *50 - 150* | *09/15/14 08:21* | *09/15/14 12:59* | *5.00* |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0084

## Client Sample ID: EX12-10-7

**Lab Sample ID: SXI0084-03**
**Date Collected: 09/12/14 09:30**
**Matrix: Soil**
**Date Received: 09/12/14 14:50**
**Percent Solids: 91.5**

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Triacontane-d62* | *131* | | *50 - 150* | *09/15/14 08:21* | *09/15/14 12:59* | *5.00* |

## Client Sample ID: EX12-11-3

**Lab Sample ID: SXI0084-04**
**Date Collected: 09/12/14 10:00**
**Matrix: Soil**
**Date Received: 09/12/14 14:50**
**Percent Solids: 90**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 6.37 | | mg/kg dry | ☼ | 09/15/14 08:52 | 09/15/14 12:37 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *90.3* | | *41.5 - 162* | *09/15/14 08:52* | *09/15/14 12:37* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **112** | **Q6** | 112 | | mg/kg dry | ☼ | 09/15/14 08:21 | 09/15/14 13:23 | 10.0 |
| **Heavy Oil Range Hydrocarbons** | **923** | | 280 | | mg/kg dry | ☼ | 09/15/14 08:21 | 09/15/14 13:23 | 10.0 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *99.0* | | *50 - 150* | *09/15/14 08:21* | *09/15/14 13:23* | *10.0* |
| *n-Triacontane-d62* | *115* | | *50 - 150* | *09/15/14 08:21* | *09/15/14 13:23* | *10.0* |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0084

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

**Lab Sample ID: 14I0082-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0082** — **Prep Batch: 14I0082_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.00 | | mg/kg wet | | 09/15/14 08:52 | 09/15/14 10:39 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *89.5* | | *41.5 - 162* | *09/15/14 08:52* | *09/15/14 10:39* | *1.00* |

**Lab Sample ID: 14I0082-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0082** — **Prep Batch: 14I0082_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 50.0 | 46.6 | | mg/kg wet | | 93.3 | 74.4 - 124 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-bromofluorobenzene* | *87.9* | | *41.5 - 162* |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

**Lab Sample ID: 14I0080-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0080** — **Prep Batch: 14I0080_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.0 | | mg/kg wet | | 09/15/14 08:21 | 09/15/14 12:10 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.0 | | mg/kg wet | | 09/15/14 08:21 | 09/15/14 12:10 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *94.6* | | *50 - 150* | *09/15/14 08:21* | *09/15/14 12:10* | *1.00* |
| *n-Triacontane-d62* | *106* | | *50 - 150* | *09/15/14 08:21* | *09/15/14 12:10* | *1.00* |

**Lab Sample ID: 14I0080-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0080** — **Prep Batch: 14I0080_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 66.7 | 62.3 | | mg/kg wet | | 93.4 | 50 - 150 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *99.0* | | *50 - 150* |
| *n-Triacontane-d62* | *115* | | *50 - 150* |

**Lab Sample ID: 14I0080-DUP1** — **Client Sample ID: EX12-8-3**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14I0080** — **Prep Batch: 14I0080_P**

| Analyte | Sample Result | Sample Qualifier | Duplicate Result | Duplicate Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 3.23 | | 3.31 | | mg/kg dry | ☼ | 2.31 | 40 |
| Heavy Oil Range Hydrocarbons | 5.01 | | 6.12 | | mg/kg dry | ☼ | 19.9 | 40 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0084

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx (Continued)

**Lab Sample ID: 14I0080-DUP1**
**Matrix: Soil**
**Analysis Batch: 14I0080**

**Client Sample ID: EX12-8-3**
**Prep Type: Total**
**Prep Batch: 14I0080_P**

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *95.5* | | *50 - 150* |
| *n-Triacontane-d62* | *113* | | *50 - 150* |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0084

## Client Sample ID: EX12-8-3 — Lab Sample ID: SXI0084-01

**Date Collected: 09/12/14 09:10** — **Matrix: Soil**
**Date Received: 09/12/14 14:50** — **Percent Solids: 94.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.01 | 14I0082_P | 09/15/14 08:52 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0082 | 09/15/14 11:29 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.977 | 14I0080_P | 09/15/14 08:21 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14I0080 | 09/15/14 12:34 | NMI | TAL SPK |

## Client Sample ID: EX12-9-3 — Lab Sample ID: SXI0084-02

**Date Collected: 09/12/14 09:20** — **Matrix: Soil**
**Date Received: 09/12/14 14:50** — **Percent Solids: 95.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.938 | 14I0082_P | 09/15/14 08:52 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0082 | 09/15/14 11:52 | CBW | TAL SPK |

## Client Sample ID: EX12-10-7 — Lab Sample ID: SXI0084-03

**Date Collected: 09/12/14 09:30** — **Matrix: Soil**
**Date Received: 09/12/14 14:50** — **Percent Solids: 91.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.12 | 14I0082_P | 09/15/14 08:52 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0082 | 09/15/14 12:15 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.02 | 14I0080_P | 09/15/14 08:21 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 5.00 | 14I0080 | 09/15/14 12:59 | NMI | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14I0098_P | 09/15/14 10:10 | NI | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14I0098 | 09/16/14 13:03 | NI | TAL SPK |

## Client Sample ID: EX12-11-3 — Lab Sample ID: SXI0084-04

**Date Collected: 09/12/14 10:00** — **Matrix: Soil**
**Date Received: 09/12/14 14:50** — **Percent Solids: 90**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.05 | 14I0082_P | 09/15/14 08:52 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14I0082 | 09/15/14 12:37 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.01 | 14I0080_P | 09/15/14 08:21 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 10.0 | 14I0080 | 09/15/14 13:23 | NMI | TAL SPK |

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0084

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-071 | 10-31-14 |
| Washington | State Program | 10 | C569 | 01-06-15 |

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXI0084

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| NWTPH-Gx | Gasoline Hydrocarbons by NWTPH-Gx | | TAL SPK |
| NWTPH-Dx | Semivolatile Petroleum Products by NWTPH-Dx | | TAL SPK |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 [X]
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210



## CHAIN OF CUSTODY REPORT

Work Order #: SXI0084

CLIENT: GeoEngineers
REPORT TO: DLAUDER@Geoengineers.com
ADDRESS: 523 E Second Ave
Spokane, WA 99202
PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO: Port of Chelan
P.O. NUMBER:

PROJECT NAME: Cashmere
PROJECT NUMBER: 18593-001-04
SAMPLED BY: JML

**TURNAROUND REQUEST** in Business Days *

Organic & Inorganic Analyses: 10 (STD.) | 7 | 5 | 4 | 3 | ~~2~~ | 1 | <1

Petroleum Hydrocarbon Analyses: 5 (STD.) | 4 | 3 | ~~2~~ | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NWTPH-Gx | NWTPH-Dx | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|
| 1 EX12-8-3 | 9/12/2014 0910 | X | X | S | 3 | | |
| 2 EX12-9-3 | 0920 | X | X | | | | |
| 3 EX12-10-7 | 0930 | X | X | | | | |
| 4 EX12-11-3 | 1000 | X | X | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |

| | | | |
|---|---|---|---|
| RELEASED BY: [signature] | DATE: 9/12/2014 | RECEIVED BY: [signature] | DATE: 9/12/14 |
| PRINT NAME: Josh Lee FIRM: GeO | TIME: 1450 | PRINT NAME: Chris William FIRM: TA-Spk | TIME: 14 50 |
| RELEASED BY: | DATE: | RECEIVED BY: | DATE: |
| PRINT NAME: FIRM: | TIME: | PRINT NAME: FIRM: | TIME: |

ADDITIONAL REMARKS:

TEMP: 19.1°C

PAGE 1 OF 1

TAL-1000 (0612)

1 2 3 4 5 6 7 8 9 10

# TestAmerica Spokane
## Sample Receipt Form

| | | |
|---|---|---|
| **Work Order #:** SXI0064 | **Client:** GeoEng. | **Project:** Cashmere |
| Date/Time Received: 9-17-14 1450 | By: LW | |

Samples Delivered By: ☐Shipping Service ☐Courier ☒Client ☐Other:

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | X | | | |
| Custody Seals are present and intact: | 19.1 | | X | |
| Are CoC documents present: | X | | | |
| Necessary signatures: | X | | | |

Thermal Preservation Type: ☐Blue Ice ☐Gel Ice ☒Real Ice ☐Dry Ice ☐None ☐Other:

Temperature: 19.1 °C Thermometer (Circle **one** Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☒Not enough ice ☐Ice melted ☐w/in 4hrs of collection ☐NA ☐Other:

| Log-in Phase Date/Time: 9/12/14 By: [illegible] | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | X | | | |
| Samples containers were received intact: | X | | | |
| Do sample IDs match the CoC | X | | | |
| Appropriate sample containers were received for tests requested | X | | | |
| Are sample volumes adequate for tests requested | X | | | |
| Appropriate preservatives were used for the tests requested | X | | | |
| pH of inorganic samples checked and is within method specification | | | X | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | | | X | |
| Are dissolved parameters field filtered | | | X | |
| Do any samples need to be filtered or preserved by the lab | | X | | |
| Does this project require quick turnaround analysis | X | | | |
| Are there any short hold time tests (see chart below) | | X | | |
| Are any samples within 2 days of or past expiration | | X | | |
| Was the CoC scanned | X | | | |
| Were there Non-conformance issues at login | | X | | |
| If yes, was a CAR generated # | | | X | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

**Form No. SP-FORM-SPL-002 12 December 2012**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXJ0095
Client Project/Site: 18593-001-04
Client Project Description: Cashmere, WA
Revision: 1

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*11/11/2014 1:15:42 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*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: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXJ0095

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXJ0095-01 | EX13-1-3 | Soil | 10/13/14 13:00 | 10/14/14 10:20 |
| SXJ0095-02 | EX13-2-3 | Soil | 10/13/14 13:05 | 10/14/14 10:20 |
| SXJ0095-03 | EX13-3-3 | Soil | 10/13/14 13:10 | 10/14/14 10:20 |
| SXJ0095-04 | EX13-4-3 | Soil | 10/13/14 13:15 | 10/14/14 10:20 |
| SXJ0095-05 | EX13-SP-1 | Soil | 10/13/14 13:40 | 10/14/14 10:20 |
| SXJ0095-06 | EX13-SP-2 | Soil | 10/13/14 13:45 | 10/14/14 10:20 |
| SXJ0095-07 | EX13-SP-3 | Soil | 10/13/14 13:50 | 10/14/14 10:20 |

# Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXJ0095

## Qualifiers

### GCMS Volatiles

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### Fuels

| Qualifier | Qualifier Description |
|---|---|
| Q6 | Results in the diesel organics range are primarily due to overlap from a heavy oil range product. |
| QP | Hydrocarbon result partly due to individual peak(s) in quantitation range. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXJ0095

## Client Sample ID: EX13-1-3

**Lab Sample ID: SXJ0095-01**
**Date Collected: 10/13/14 13:00**
**Matrix: Soil**
**Date Received: 10/14/14 10:20**
**Percent Solids: 92.4**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.35 | | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 18:38 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *96.3* | | *41.5 - 162* | *10/14/14 10:43* | *10/14/14 18:38* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **158** | **Q6** | 39.6 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 11:43 | 1.00 |
| **Heavy Oil Range Hydrocarbons** | **631** | | 99.0 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 11:43 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *107* | | *50 - 150* | *10/14/14 11:19* | *10/15/14 11:43* | *1.00* |
| *n-Triacontane-d62* | *116* | | *50 - 150* | *10/14/14 11:19* | *10/15/14 11:43* | *1.00* |

## Client Sample ID: EX13-2-3

**Lab Sample ID: SXJ0095-02**
**Date Collected: 10/13/14 13:05**
**Matrix: Soil**
**Date Received: 10/14/14 10:20**
**Percent Solids: 92.7**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.0922 | 0.00857 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Chloromethane | ND | | 0.461 | 0.00488 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Vinyl chloride | ND | | 0.0553 | 0.00571 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Bromomethane | ND | | 0.461 | 0.0282 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Chloroethane | ND | | 0.0922 | 0.0226 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0276 | 0.00728 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.0922 | 0.0117 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Carbon disulfide | ND | | 0.0922 | 0.00986 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Methylene chloride | ND | | 0.184 | 0.00479 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Acetone | ND | | 2.76 | 0.0802 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.0922 | 0.00949 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0461 | 0.00295 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.0922 | 0.0104 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.0922 | 0.00525 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.0922 | 0.0157 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Bromochloromethane | ND | | 0.0922 | 0.00359 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Chloroform | ND | | 0.0922 | 0.00710 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Carbon tetrachloride | ND | | 0.0922 | 0.0192 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.0922 | 0.0159 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 2-Butanone | ND | | 0.922 | 0.101 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Hexane | ND | | 0.0922 | 0.00746 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.0922 | 0.0160 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Benzene | ND | | 0.0138 | 0.00894 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.0922 | 0.00452 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Trichloroethene | ND | | 0.0230 | 0.0118 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Dibromomethane | ND | | 0.0922 | 0.00839 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.0922 | 0.00553 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Bromodichloromethane | ND | | 0.0922 | 0.00645 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.0922 | 0.00571 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Toluene | ND | | 0.0922 | 0.0123 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXJ0095

## Client Sample ID: EX13-2-3

**Date Collected: 10/13/14 13:05**
**Date Received: 10/14/14 10:20**

## Lab Sample ID: SXJ0095-02

**Matrix: Soil**
**Percent Solids: 92.7**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Methyl-2-pentanone | ND | | 0.922 | 0.0188 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.0922 | 0.00608 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Tetrachloroethene | ND | | 0.0369 | 0.0162 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.0922 | 0.00571 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Dibromochloromethane | ND | | 0.0922 | 0.00553 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.0922 | 0.00682 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.00922 | 0.00534 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 2-Hexanone | ND | | 0.922 | 0.0429 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Ethylbenzene | ND | | 0.0922 | 0.0149 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Chlorobenzene | ND | | 0.0922 | 0.00700 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.0922 | 0.00940 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| m,p-Xylene | ND | | 0.369 | 0.0157 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| o-Xylene | ND | | 0.184 | 0.0121 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Styrene | ND | | 0.0922 | 0.00857 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| **Bromoform** | **0.0184** | **J** | 0.0922 | 0.0115 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Isopropylbenzene | ND | | 0.0922 | 0.0175 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| n-Propylbenzene | ND | | 0.0922 | 0.0191 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0922 | 0.00691 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Bromobenzene | ND | | 0.0922 | 0.00866 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.0922 | 0.0171 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 2-Chlorotoluene | ND | | 0.0922 | 0.0150 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.0922 | 0.00774 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 4-Chlorotoluene | ND | | 0.0922 | 0.0132 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| tert-Butylbenzene | ND | | 0.0922 | 0.0199 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.0922 | 0.0134 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| sec-Butylbenzene | ND | | 0.0922 | 0.0217 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| p-Isopropyltoluene | ND | | 0.0922 | 0.0220 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.0922 | 0.0116 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.0922 | 0.00977 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| n-Butylbenzene | ND | | 0.0922 | 0.0253 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.0922 | 0.00700 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.461 | 0.0262 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Hexachlorobutadiene | ND | | 0.0922 | 0.0525 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.0922 | 0.0183 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| Naphthalene | ND | | 0.184 | 0.0125 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.0922 | 0.0327 | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *98.9* | | *80 - 120* | *10/14/14 10:43* | *10/14/14 19:01* | *1.00* |
| *1,2-dichloroethane-d4* | *94.5* | | *74.7 - 120* | *10/14/14 10:43* | *10/14/14 19:01* | *1.00* |
| *Toluene-d8* | *103* | | *78.5 - 125* | *10/14/14 10:43* | *10/14/14 19:01* | *1.00* |
| *4-bromofluorobenzene* | *100* | | *69.8 - 140* | *10/14/14 10:43* | *10/14/14 19:01* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 4.61 | | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:01 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *100* | | *41.5 - 162* | *10/14/14 10:43* | *10/14/14 19:01* | *1.00* |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXJ0095

## Client Sample ID: EX13-2-3

**Date Collected: 10/13/14 13:05**
**Date Received: 10/14/14 10:20**

## Lab Sample ID: SXJ0095-02

**Matrix: Soil**
**Percent Solids: 92.4**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Bis(2-chloroethyl)ether | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2-Chlorophenol | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 1,3-Dichlorobenzene | ND | | 53 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 1,4-Dichlorobenzene | ND | | 53 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Benzyl alcohol | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 1,2-Dichlorobenzene | ND | | 59 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2-Methylphenol | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 3 & 4 Methylphenol | ND | | 210 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Hexachloroethane | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Nitrobenzene | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Isophorone | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2-Nitrophenol | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2,4-Dimethylphenol | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Benzoic acid | ND | | 2700 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2,4-Dichlorophenol | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 53 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Naphthalene | ND | | 21 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 4-Chloroaniline | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Hexachlorobutadiene | ND | | 53 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 4-Chloro-3-methylphenol | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2-Methylnaphthalene | ND | | 21 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Hexachlorocyclopentadiene | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2,4,6-Trichlorophenol | ND | | 160 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2,4,5-Trichlorophenol | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2-Chloronaphthalene | ND | | 21 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2-Nitroaniline | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Dimethyl phthalate | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Acenaphthylene | ND | | 21 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2,6-Dinitrotoluene | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 3-Nitroaniline | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Acenaphthene | ND | | 21 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2,4-Dinitrophenol | ND | | 1100 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 4-Nitrophenol | ND | | 1100 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Dibenzofuran | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 2,4-Dinitrotoluene | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Diethyl phthalate | ND | | 210 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Fluorene | ND | | 21 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 4-Nitroaniline | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1100 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| N-Nitrosodiphenylamine | ND | | 53 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Hexachlorobenzene | ND | | 53 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Pentachlorophenol | ND | | 210 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Phenanthrene | ND | | 21 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Anthracene | ND | | 21 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXJ0095

## Client Sample ID: EX13-2-3

**Lab Sample ID: SXJ0095-02**
**Date Collected: 10/13/14 13:05**
**Matrix: Soil**
**Date Received: 10/14/14 10:20**
**Percent Solids: 92.4**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Di-n-butyl phthalate | ND | | 530 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Fluoranthene | ND | | 21 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| **Pyrene** | **39** | | 21 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Butyl benzyl phthalate | ND | | 210 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 210 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Benzo[a]anthracene | ND | | 21 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Chrysene | ND | | 27 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| **Bis(2-ethylhexyl) phthalate** | **740** | | 640 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Di-n-octyl phthalate | ND | | 530 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Benzo[a]pyrene | ND | | 32 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 43 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Dibenz(a,h)anthracene | ND | | 43 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Benzo[g,h,i]perylene | ND | | 27 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Carbazole | ND | | 110 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| 1-Methylnaphthalene | ND | | 32 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Benzo[b]fluoranthene | ND | | 21 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| Benzo[k]fluoranthene | ND | | 27 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 270 | | ug/Kg | ☼ | 10/17/14 10:16 | 10/18/14 23:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol* | *87* | | *36 - 145* | *10/17/14 10:16* | *10/18/14 23:53* | *1* |
| *Phenol-d5* | *86* | | *38 - 149* | *10/17/14 10:16* | *10/18/14 23:53* | *1* |
| *Nitrobenzene-d5* | *85* | | *38 - 141* | *10/17/14 10:16* | *10/18/14 23:53* | *1* |
| *2-Fluorobiphenyl* | *87* | | *42 - 140* | *10/17/14 10:16* | *10/18/14 23:53* | *1* |
| *2,4,6-Tribromophenol* | *94* | | *28 - 143* | *10/17/14 10:16* | *10/18/14 23:53* | *1* |
| *Terphenyl-d14* | *99* | | *42 - 151* | *10/17/14 10:16* | *10/18/14 23:53* | *1* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **85.3** | **Q6** | 10.4 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 12:52 | 1.00 |
| **Heavy Oil Range Hydrocarbons** | **296** | | 26.0 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 12:52 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *104* | | *50 - 150* | *10/14/14 11:19* | *10/15/14 12:52* | *1.00* |
| *n-Triacontane-d62* | *111* | | *50 - 150* | *10/14/14 11:19* | *10/15/14 12:52* | *1.00* |

## Client Sample ID: EX13-3-3

**Lab Sample ID: SXJ0095-03**
**Date Collected: 10/13/14 13:10**
**Matrix: Soil**
**Date Received: 10/14/14 10:20**
**Percent Solids: 94.7**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 4.82 | | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:23 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *97.1* | | *41.5 - 162* | *10/14/14 10:43* | *10/14/14 19:23* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **12.0** | **QP** | 10.4 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 13:16 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 26.1 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 13:16 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXJ0095

## Client Sample ID: EX13-3-3 — Lab Sample ID: SXJ0095-03

**Date Collected: 10/13/14 13:10** — **Matrix: Soil**
**Date Received: 10/14/14 10:20** — **Percent Solids: 94.7**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 115 | | 50 - 150 | 10/14/14 11:19 | 10/15/14 13:16 | 1.00 |
| n-Triacontane-d62 | 118 | | 50 - 150 | 10/14/14 11:19 | 10/15/14 13:16 | 1.00 |

## Client Sample ID: EX13-4-3 — Lab Sample ID: SXJ0095-04

**Date Collected: 10/13/14 13:15** — **Matrix: Soil**
**Date Received: 10/14/14 10:20** — **Percent Solids: 88.1**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.85 | | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 19:46 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 94.9 | | 41.5 - 162 | 10/14/14 10:43 | 10/14/14 19:46 | 1.00 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 267 | Q6 | 54.4 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 13:39 | 5.00 |
| Heavy Oil Range Hydrocarbons | 626 | | 136 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 13:39 | 5.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 110 | | 50 - 150 | 10/14/14 11:19 | 10/15/14 13:39 | 5.00 |
| n-Triacontane-d62 | 117 | | 50 - 150 | 10/14/14 11:19 | 10/15/14 13:39 | 5.00 |

## Client Sample ID: EX13-SP-1 — Lab Sample ID: SXJ0095-05

**Date Collected: 10/13/14 13:40** — **Matrix: Soil**
**Date Received: 10/14/14 10:20** — **Percent Solids: 92.4**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.43 | | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 20:08 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 95.0 | | 41.5 - 162 | 10/14/14 10:43 | 10/14/14 20:08 | 1.00 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 140 | Q6 | 55.0 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 14:03 | 5.00 |
| Heavy Oil Range Hydrocarbons | 565 | | 137 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 14:03 | 5.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 113 | | 50 - 150 | 10/14/14 11:19 | 10/15/14 14:03 | 5.00 |
| n-Triacontane-d62 | 136 | | 50 - 150 | 10/14/14 11:19 | 10/15/14 14:03 | 5.00 |

## Client Sample ID: EX13-SP-2 — Lab Sample ID: SXJ0095-06

**Date Collected: 10/13/14 13:45** — **Matrix: Soil**
**Date Received: 10/14/14 10:20** — **Percent Solids: 93.5**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 7.38 | | 4.98 | | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 20:31 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXJ0095

## Client Sample ID: EX13-SP-2

**Lab Sample ID: SXJ0095-06**
**Date Collected: 10/13/14 13:45**
**Matrix: Soil**
**Date Received: 10/14/14 10:20**
**Percent Solids: 93.5**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 95.0 | | 41.5 - 162 | 10/14/14 10:43 | 10/14/14 20:31 | 1.00 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 659 | | 31.6 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 14:27 | 1.00 |
| Heavy Oil Range Hydrocarbons | 751 | | 79.1 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 14:27 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 149 | | 50 - 150 | 10/14/14 11:19 | 10/15/14 14:27 | 1.00 |
| n-Triacontane-d62 | 126 | | 50 - 150 | 10/14/14 11:19 | 10/15/14 14:27 | 1.00 |

## Client Sample ID: EX13-SP-3

**Lab Sample ID: SXJ0095-07**
**Date Collected: 10/13/14 13:50**
**Matrix: Soil**
**Date Received: 10/14/14 10:20**
**Percent Solids: 94.1**

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 17.2 | | 4.46 | | mg/kg dry | ☼ | 10/14/14 10:43 | 10/14/14 20:53 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 99.3 | | 41.5 - 162 | 10/14/14 10:43 | 10/14/14 20:53 | 1.00 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 623 | | 27.6 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 14:51 | 1.00 |
| Heavy Oil Range Hydrocarbons | 636 | | 69.1 | | mg/kg dry | ☼ | 10/14/14 11:19 | 10/15/14 14:51 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 145 | | 50 - 150 | 10/14/14 11:19 | 10/15/14 14:51 | 1.00 |
| n-Triacontane-d62 | 125 | | 50 - 150 | 10/14/14 11:19 | 10/15/14 14:51 | 1.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

**Lab Sample ID: 14J0083-BLK1**
**Matrix: Soil**
**Analysis Batch: 14J0083**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14J0083_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.100 | 0.00930 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Chloromethane | ND | | 0.500 | 0.00530 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Vinyl chloride | ND | | 0.0600 | 0.00620 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Bromomethane | ND | | 0.500 | 0.0306 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Chloroethane | ND | | 0.100 | 0.0245 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0300 | 0.00790 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.100 | 0.0127 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Carbon disulfide | ND | | 0.100 | 0.0107 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Methylene chloride | 0.0240 | J | 0.200 | 0.00520 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Acetone | ND | | 3.00 | 0.0870 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.100 | 0.0103 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0500 | 0.00320 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.100 | 0.0113 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.100 | 0.00570 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.100 | 0.0170 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Bromochloromethane | ND | | 0.100 | 0.00390 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Chloroform | ND | | 0.100 | 0.00770 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Carbon tetrachloride | ND | | 0.100 | 0.0208 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.100 | 0.0173 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 2-Butanone | ND | | 1.00 | 0.110 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Hexane | ND | | 0.100 | 0.00810 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.100 | 0.0174 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Benzene | ND | | 0.0150 | 0.00970 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.100 | 0.00490 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Trichloroethene | ND | | 0.0250 | 0.0128 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Dibromomethane | ND | | 0.100 | 0.00910 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,2-Dichloropropane | 0.0195 | J | 0.100 | 0.00600 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Bromodichloromethane | 0.0165 | J | 0.100 | 0.00700 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.100 | 0.00620 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Toluene | ND | | 0.100 | 0.0133 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.00 | 0.0204 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.100 | 0.00660 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Tetrachloroethene | ND | | 0.0400 | 0.0176 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.100 | 0.00620 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Dibromochloromethane | 0.0715 | J | 0.100 | 0.00600 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.100 | 0.00740 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0100 | 0.00580 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 2-Hexanone | ND | | 1.00 | 0.0465 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Ethylbenzene | ND | | 0.100 | 0.0162 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Chlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.100 | 0.0102 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| m,p-Xylene | ND | | 0.400 | 0.0170 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| o-Xylene | ND | | 0.200 | 0.0131 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Styrene | ND | | 0.100 | 0.00930 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Bromoform | 0.0715 | J | 0.100 | 0.0125 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Isopropylbenzene | ND | | 0.100 | 0.0190 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| n-Propylbenzene | ND | | 0.100 | 0.0207 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.100 | 0.00750 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14J0083-BLK1** | **Client Sample ID: Method Blank**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14J0083** | **Prep Batch: 14J0083_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromobenzene | ND | | 0.100 | 0.00940 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.100 | 0.0186 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 2-Chlorotoluene | ND | | 0.100 | 0.0163 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.100 | 0.00840 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 4-Chlorotoluene | ND | | 0.100 | 0.0143 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| tert-Butylbenzene | ND | | 0.100 | 0.0216 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.100 | 0.0145 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| sec-Butylbenzene | ND | | 0.100 | 0.0235 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| p-Isopropyltoluene | ND | | 0.100 | 0.0239 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.100 | 0.0126 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.100 | 0.0106 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| n-Butylbenzene | ND | | 0.100 | 0.0275 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.500 | 0.0284 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Hexachlorobutadiene | ND | | 0.100 | 0.0570 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.100 | 0.0199 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| Naphthalene | ND | | 0.200 | 0.0136 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.100 | 0.0355 | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *98.3* | | *80 - 120* | *10/14/14 10:43* | *10/14/14 12:27* | *1.00* |
| *1,2-dichloroethane-d4* | *95.3* | | *74.7 - 120* | *10/14/14 10:43* | *10/14/14 12:27* | *1.00* |
| *Toluene-d8* | *105* | | *78.5 - 125* | *10/14/14 10:43* | *10/14/14 12:27* | *1.00* |
| *4-bromofluorobenzene* | *99.3* | | *69.8 - 140* | *10/14/14 10:43* | *10/14/14 12:27* | *1.00* |

**Lab Sample ID: 14J0083-BS1** | **Client Sample ID: Lab Control Sample**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14J0083** | **Prep Batch: 14J0083_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.500 | 0.443 | | mg/kg wet | | 88.6 | 60.5 - 130 |
| Chloromethane | 0.500 | 0.462 | J | mg/kg wet | | 92.4 | 68.9 - 130 |
| Vinyl chloride | 0.500 | 0.489 | | mg/kg wet | | 97.8 | 74 - 142 |
| Bromomethane | 0.500 | 0.514 | | mg/kg wet | | 103 | 70.5 - 146 |
| Chloroethane | 0.500 | 0.443 | | mg/kg wet | | 88.6 | 60 - 140 |
| Trichlorofluoromethane | 0.500 | 0.490 | | mg/kg wet | | 97.9 | 70.5 - 139 |
| 1,1-Dichloroethene | 0.500 | 0.505 | | mg/kg wet | | 101 | 72.9 - 135 |
| Carbon disulfide | 0.500 | 0.480 | | mg/kg wet | | 96.1 | 66.8 - 146 |
| Methylene chloride | 0.500 | 0.556 | | mg/kg wet | | 111 | 60 - 140 |
| Acetone | 2.50 | 2.48 | J | mg/kg wet | | 99.2 | 39.2 - 145 |
| trans-1,2-Dichloroethene | 0.500 | 0.472 | | mg/kg wet | | 94.3 | 60 - 140 |
| Methyl tert-butyl ether | 0.500 | 0.455 | | mg/kg wet | | 91.0 | 60 - 140 |
| 1,1-Dichloroethane | 0.500 | 0.530 | | mg/kg wet | | 106 | 80 - 131 |
| cis-1,2-Dichloroethene | 0.500 | 0.512 | | mg/kg wet | | 102 | 80 - 126 |
| 2,2-Dichloropropane | 0.500 | 0.504 | | mg/kg wet | | 101 | 71.5 - 132 |
| Bromochloromethane | 0.500 | 0.519 | | mg/kg wet | | 104 | 69.1 - 139 |
| Chloroform | 0.500 | 0.516 | | mg/kg wet | | 103 | 80 - 130 |
| Carbon tetrachloride | 0.500 | 0.515 | | mg/kg wet | | 103 | 73.6 - 148 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14J0083-BS1**
**Matrix: Soil**
**Analysis Batch: 14J0083**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14J0083_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.500 | 0.504 | | mg/kg wet | | 101 | 74.3 - 138 |
| 2-Butanone | 2.50 | 2.27 | | mg/kg wet | | 90.7 | 56.1 - 124 |
| Hexane | 0.500 | 0.464 | | mg/kg wet | | 92.7 | 77 - 130 |
| 1,1-Dichloropropene | 0.500 | 0.517 | | mg/kg wet | | 103 | 78.3 - 132 |
| Benzene | 0.500 | 0.521 | | mg/kg wet | | 104 | 75.8 - 123 |
| 1,2-Dichloroethane (EDC) | 0.500 | 0.504 | | mg/kg wet | | 101 | 71.1 - 142 |
| Trichloroethene | 0.500 | 0.514 | | mg/kg wet | | 103 | 78.5 - 134 |
| Dibromomethane | 0.500 | 0.483 | | mg/kg wet | | 96.6 | 80 - 129 |
| 1,2-Dichloropropane | 0.500 | 0.515 | | mg/kg wet | | 103 | 50.8 - 155 |
| Bromodichloromethane | 0.500 | 0.510 | | mg/kg wet | | 102 | 80 - 128 |
| cis-1,3-Dichloropropene | 0.500 | 0.512 | | mg/kg wet | | 102 | 80 - 126 |
| Toluene | 0.500 | 0.542 | | mg/kg wet | | 108 | 76.6 - 125 |
| 4-Methyl-2-pentanone | 2.50 | 2.42 | | mg/kg wet | | 96.7 | 66.4 - 131 |
| trans-1,3-Dichloropropene | 0.500 | 0.495 | | mg/kg wet | | 99.0 | 79 - 124 |
| Tetrachloroethene | 0.500 | 0.551 | | mg/kg wet | | 110 | 80 - 127 |
| 1,1,2-Trichloroethane | 0.500 | 0.500 | | mg/kg wet | | 100 | 78.4 - 125 |
| Dibromochloromethane | 0.500 | 0.580 | | mg/kg wet | | 116 | 78.4 - 127 |
| 1,3-Dichloropropane | 0.500 | 0.496 | | mg/kg wet | | 99.3 | 80 - 125 |
| 1,2-Dibromoethane | 0.500 | 0.520 | | mg/kg wet | | 104 | 77.1 - 129 |
| 2-Hexanone | 2.50 | 2.42 | | mg/kg wet | | 96.8 | 64.6 - 127 |
| Ethylbenzene | 0.500 | 0.496 | | mg/kg wet | | 99.2 | 77.3 - 121 |
| Chlorobenzene | 0.500 | 0.502 | | mg/kg wet | | 100 | 80 - 120 |
| 1,1,1,2-Tetrachloroethane | 0.500 | 0.514 | | mg/kg wet | | 103 | 80 - 120 |
| m,p-Xylene | 0.500 | 0.520 | | mg/kg wet | | 104 | 77.7 - 124 |
| o-Xylene | 0.500 | 0.507 | | mg/kg wet | | 101 | 76.7 - 129 |
| Styrene | 0.500 | 0.519 | | mg/kg wet | | 104 | 80 - 128 |
| Bromoform | 0.500 | 0.542 | | mg/kg wet | | 108 | 76 - 135 |
| Isopropylbenzene | 0.500 | 0.500 | | mg/kg wet | | 100 | 78.4 - 131 |
| n-Propylbenzene | 0.500 | 0.483 | | mg/kg wet | | 96.6 | 80 - 120 |
| 1,1,2,2-Tetrachloroethane | 0.500 | 0.488 | | mg/kg wet | | 97.6 | 60.3 - 137 |
| Bromobenzene | 0.500 | 0.462 | | mg/kg wet | | 92.3 | 60 - 140 |
| 1,3,5-Trimethylbenzene | 0.500 | 0.491 | | mg/kg wet | | 98.2 | 80 - 121 |
| 2-Chlorotoluene | 0.500 | 0.502 | | mg/kg wet | | 100 | 80 - 123 |
| 1,2,3-Trichloropropane | 0.500 | 0.466 | | mg/kg wet | | 93.3 | 59.9 - 131 |
| 4-Chlorotoluene | 0.500 | 0.492 | | mg/kg wet | | 98.5 | 80 - 124 |
| tert-Butylbenzene | 0.500 | 0.496 | | mg/kg wet | | 99.2 | 78.8 - 130 |
| 1,2,4-Trimethylbenzene | 0.500 | 0.520 | | mg/kg wet | | 104 | 80 - 122 |
| sec-Butylbenzene | 0.500 | 0.498 | | mg/kg wet | | 99.7 | 80 - 120 |
| p-Isopropyltoluene | 0.500 | 0.492 | | mg/kg wet | | 98.5 | 67.2 - 147 |
| 1,3-Dichlorobenzene | 0.500 | 0.499 | | mg/kg wet | | 99.8 | 80 - 122 |
| 1,4-Dichlorobenzene | 0.500 | 0.494 | | mg/kg wet | | 98.8 | 80 - 125 |
| n-Butylbenzene | 0.500 | 0.494 | | mg/kg wet | | 98.9 | 80 - 120 |
| 1,2-Dichlorobenzene | 0.500 | 0.501 | | mg/kg wet | | 100 | 80 - 124 |
| 1,2-Dibromo-3-chloropropane | 0.500 | 0.495 | J | mg/kg wet | | 99.0 | 60 - 140 |
| Hexachlorobutadiene | 0.500 | 0.518 | | mg/kg wet | | 104 | 71.8 - 138 |
| 1,2,4-Trichlorobenzene | 0.500 | 0.487 | | mg/kg wet | | 97.4 | 75.3 - 126 |
| Naphthalene | 0.500 | 0.516 | | mg/kg wet | | 103 | 55.1 - 142 |
| 1,2,3-Trichlorobenzene | 0.500 | 0.493 | | mg/kg wet | | 98.6 | 69.6 - 127 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14J0083-BS1**
**Matrix: Soil**
**Analysis Batch: 14J0083**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14J0083_P**

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *100* | | *80 - 120* |
| *1,2-dichloroethane-d4* | *99.3* | | *74.7 - 120* |
| *Toluene-d8* | *102* | | *78.5 - 125* |
| *4-bromofluorobenzene* | *100* | | *69.8 - 140* |

**Lab Sample ID: 14J0083-BSD1**
**Matrix: Soil**
**Analysis Batch: 14J0083**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total**
**Prep Batch: 14J0083_P**

| Analyte | Spike Added | LCS Dup Result | LCS Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.500 | 0.428 | | mg/kg wet | | 85.7 | 60.5 - 130 | 3.33 | 25 |
| Chloromethane | 0.500 | 0.434 | J | mg/kg wet | | 86.7 | 68.9 - 130 | 6.37 | 25 |
| Vinyl chloride | 0.500 | 0.464 | | mg/kg wet | | 92.9 | 74 - 142 | 5.14 | 25 |
| Bromomethane | 0.500 | 0.466 | J | mg/kg wet | | 93.2 | 70.5 - 146 | 9.80 | 25 |
| Chloroethane | 0.500 | 0.414 | | mg/kg wet | | 82.7 | 60 - 140 | 6.89 | 25 |
| Trichlorofluoromethane | 0.500 | 0.472 | | mg/kg wet | | 94.3 | 70.5 - 139 | 3.75 | 25 |
| 1,1-Dichloroethene | 0.500 | 0.478 | | mg/kg wet | | 95.5 | 72.9 - 135 | 5.60 | 25 |
| Carbon disulfide | 0.500 | 0.466 | | mg/kg wet | | 93.2 | 66.8 - 146 | 3.06 | 25 |
| Methylene chloride | 0.500 | 0.534 | | mg/kg wet | | 107 | 60 - 140 | 3.94 | 25 |
| Acetone | 2.50 | 2.44 | J | mg/kg wet | | 97.4 | 39.2 - 145 | 1.83 | 25 |
| trans-1,2-Dichloroethene | 0.500 | 0.449 | | mg/kg wet | | 89.8 | 60 - 140 | 4.89 | 25 |
| Methyl tert-butyl ether | 0.500 | 0.443 | | mg/kg wet | | 88.6 | 60 - 140 | 2.67 | 25 |
| 1,1-Dichloroethane | 0.500 | 0.508 | | mg/kg wet | | 102 | 80 - 131 | 4.34 | 25 |
| cis-1,2-Dichloroethene | 0.500 | 0.490 | | mg/kg wet | | 98.1 | 80 - 126 | 4.19 | 25 |
| 2,2-Dichloropropane | 0.500 | 0.471 | | mg/kg wet | | 94.2 | 71.5 - 132 | 6.67 | 25 |
| Bromochloromethane | 0.500 | 0.510 | | mg/kg wet | | 102 | 69.1 - 139 | 1.65 | 25 |
| Chloroform | 0.500 | 0.495 | | mg/kg wet | | 99.0 | 80 - 130 | 4.06 | 25 |
| Carbon tetrachloride | 0.500 | 0.489 | | mg/kg wet | | 97.8 | 73.6 - 148 | 5.18 | 25 |
| 1,1,1-Trichloroethane | 0.500 | 0.472 | | mg/kg wet | | 94.5 | 74.3 - 138 | 6.55 | 25 |
| 2-Butanone | 2.50 | 2.20 | | mg/kg wet | | 88.2 | 56.1 - 124 | 2.84 | 25 |
| Hexane | 0.500 | 0.446 | | mg/kg wet | | 89.3 | 77 - 130 | 3.74 | 25 |
| 1,1-Dichloropropene | 0.500 | 0.491 | | mg/kg wet | | 98.2 | 78.3 - 132 | 5.16 | 25 |
| Benzene | 0.500 | 0.499 | | mg/kg wet | | 99.8 | 75.8 - 123 | 4.31 | 25 |
| 1,2-Dichloroethane (EDC) | 0.500 | 0.494 | | mg/kg wet | | 98.7 | 71.1 - 142 | 2.20 | 25 |
| Trichloroethene | 0.500 | 0.495 | | mg/kg wet | | 99.0 | 78.5 - 134 | 3.67 | 25 |
| Dibromomethane | 0.500 | 0.480 | | mg/kg wet | | 96.0 | 80 - 129 | 0.623 | 25 |
| 1,2-Dichloropropane | 0.500 | 0.498 | | mg/kg wet | | 99.5 | 50.8 - 155 | 3.46 | 25 |
| Bromodichloromethane | 0.500 | 0.494 | | mg/kg wet | | 98.7 | 80 - 128 | 3.29 | 25 |
| cis-1,3-Dichloropropene | 0.500 | 0.494 | | mg/kg wet | | 98.8 | 80 - 126 | 3.48 | 25 |
| Toluene | 0.500 | 0.520 | | mg/kg wet | | 104 | 76.6 - 125 | 3.95 | 25 |
| 4-Methyl-2-pentanone | 2.50 | 2.39 | | mg/kg wet | | 95.7 | 66.4 - 131 | 1.06 | 25 |
| trans-1,3-Dichloropropene | 0.500 | 0.492 | | mg/kg wet | | 98.3 | 79 - 124 | 0.710 | 25 |
| Tetrachloroethene | 0.500 | 0.526 | | mg/kg wet | | 105 | 80 - 127 | 4.74 | 25 |
| 1,1,2-Trichloroethane | 0.500 | 0.498 | | mg/kg wet | | 99.7 | 78.4 - 125 | 0.400 | 25 |
| Dibromochloromethane | 0.500 | 0.571 | | mg/kg wet | | 114 | 78.4 - 127 | 1.48 | 25 |
| 1,3-Dichloropropane | 0.500 | 0.500 | | mg/kg wet | | 100 | 80 - 125 | 0.702 | 25 |
| 1,2-Dibromoethane | 0.500 | 0.519 | | mg/kg wet | | 104 | 77.1 - 129 | 0.192 | 25 |
| 2-Hexanone | 2.50 | 2.39 | | mg/kg wet | | 95.4 | 64.6 - 127 | 1.39 | 25 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14J0083-BSD1** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14J0083** — **Prep Batch: 14J0083_P**

| Analyte | Spike Added | LCS Dup Result | LCS Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | 0.500 | 0.484 | | mg/kg wet | | 96.9 | 77.3 - 121 | 2.35 | 25 |
| Chlorobenzene | 0.500 | 0.484 | | mg/kg wet | | 96.9 | 80 - 120 | 3.55 | 25 |
| 1,1,1,2-Tetrachloroethane | 0.500 | 0.495 | | mg/kg wet | | 99.0 | 80 - 120 | 3.67 | 25 |
| m,p-Xylene | 0.500 | 0.502 | | mg/kg wet | | 100 | 77.7 - 124 | 3.52 | 25 |
| o-Xylene | 0.500 | 0.490 | | mg/kg wet | | 97.9 | 76.7 - 129 | 3.51 | 25 |
| Styrene | 0.500 | 0.505 | | mg/kg wet | | 101 | 80 - 128 | 2.73 | 25 |
| Bromoform | 0.500 | 0.548 | | mg/kg wet | | 110 | 76 - 135 | 1.10 | 25 |
| Isopropylbenzene | 0.500 | 0.483 | | mg/kg wet | | 96.6 | 78.4 - 131 | 3.56 | 25 |
| n-Propylbenzene | 0.500 | 0.462 | | mg/kg wet | | 92.5 | 80 - 120 | 4.34 | 25 |
| 1,1,2,2-Tetrachloroethane | 0.500 | 0.484 | | mg/kg wet | | 96.7 | 60.3 - 137 | 0.926 | 25 |
| Bromobenzene | 0.500 | 0.446 | | mg/kg wet | | 89.3 | 60 - 140 | 3.30 | 25 |
| 1,3,5-Trimethylbenzene | 0.500 | 0.468 | | mg/kg wet | | 93.6 | 80 - 121 | 4.80 | 25 |
| 2-Chlorotoluene | 0.500 | 0.483 | | mg/kg wet | | 96.6 | 80 - 123 | 3.76 | 25 |
| 1,2,3-Trichloropropane | 0.500 | 0.474 | | mg/kg wet | | 94.9 | 59.9 - 131 | 1.70 | 25 |
| 4-Chlorotoluene | 0.500 | 0.481 | | mg/kg wet | | 96.2 | 80 - 124 | 2.36 | 25 |
| tert-Butylbenzene | 0.500 | 0.474 | | mg/kg wet | | 94.7 | 78.8 - 130 | 4.64 | 25 |
| 1,2,4-Trimethylbenzene | 0.500 | 0.500 | | mg/kg wet | | 99.9 | 80 - 122 | 4.12 | 25 |
| sec-Butylbenzene | 0.500 | 0.479 | | mg/kg wet | | 95.8 | 80 - 120 | 3.99 | 25 |
| p-Isopropyltoluene | 0.500 | 0.484 | | mg/kg wet | | 96.8 | 67.2 - 147 | 1.74 | 25 |
| 1,3-Dichlorobenzene | 0.500 | 0.485 | | mg/kg wet | | 97.0 | 80 - 122 | 2.85 | 25 |
| 1,4-Dichlorobenzene | 0.500 | 0.487 | | mg/kg wet | | 97.4 | 80 - 125 | 1.43 | 25 |
| n-Butylbenzene | 0.500 | 0.483 | | mg/kg wet | | 96.6 | 80 - 120 | 2.35 | 25 |
| 1,2-Dichlorobenzene | 0.500 | 0.490 | | mg/kg wet | | 98.0 | 80 - 124 | 2.22 | 25 |
| 1,2-Dibromo-3-chloropropane | 0.500 | 0.480 | J | mg/kg wet | | 96.0 | 60 - 140 | 3.08 | 25 |
| Hexachlorobutadiene | 0.500 | 0.512 | | mg/kg wet | | 102 | 71.8 - 138 | 1.26 | 25 |
| 1,2,4-Trichlorobenzene | 0.500 | 0.488 | | mg/kg wet | | 97.5 | 75.3 - 126 | 0.103 | 25 |
| Naphthalene | 0.500 | 0.492 | | mg/kg wet | | 98.3 | 55.1 - 142 | 4.96 | 25 |
| 1,2,3-Trichlorobenzene | 0.500 | 0.480 | | mg/kg wet | | 95.9 | 69.6 - 127 | 2.78 | 25 |

| *Surrogate* | *LCS Dup %Recovery* | *LCS Dup Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *100* | | *80 - 120* |
| *1,2-dichloroethane-d4* | *97.5* | | *74.7 - 120* |
| *Toluene-d8* | *102* | | *78.5 - 125* |
| *4-bromofluorobenzene* | *99.9* | | *69.8 - 140* |

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

**Lab Sample ID: 14J0083-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14J0083** — **Prep Batch: 14J0083_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 5.00 | | mg/kg wet | | 10/14/14 10:43 | 10/14/14 12:27 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *99.3* | | *41.5 - 162* | *10/14/14 10:43* | *10/14/14 12:27* | *1.00* |

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx (Continued)

**Lab Sample ID: 14J0083-BS2**
**Matrix: Soil**
**Analysis Batch: 14J0083**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14J0083_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | | | 50.0 | 47.9 | | mg/kg wet | | 95.8 | 74.4 - 124 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-bromofluorobenzene* | *100* | | *41.5 - 162* |

**Lab Sample ID: 14J0083-BSD2**
**Matrix: Soil**
**Analysis Batch: 14J0083**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total**
**Prep Batch: 14J0083_P**

| Analyte | | | Spike Added | LCS Dup Result | LCS Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | | | 50.0 | 46.9 | | mg/kg wet | | 93.7 | 74.4 - 124 | 2.20 | 20 |

| *Surrogate* | *LCS Dup %Recovery* | *LCS Dup Qualifier* | *Limits* |
|---|---|---|---|
| *4-bromofluorobenzene* | *104* | | *41.5 - 162* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 580-172976/1-A**
**Matrix: Solid**
**Analysis Batch: 173092**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 172976**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Bis(2-chloroethyl)ether | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 2-Chlorophenol | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 1,3-Dichlorobenzene | ND | | 50 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 1,4-Dichlorobenzene | ND | | 50 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Benzyl alcohol | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 1,2-Dichlorobenzene | ND | | 55 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 2-Methylphenol | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 3 & 4 Methylphenol | ND | | 200 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Hexachloroethane | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Nitrobenzene | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Isophorone | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 2-Nitrophenol | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 2,4-Dimethylphenol | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Benzoic acid | ND | | 2500 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 2,4-Dichlorophenol | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 50 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Naphthalene | ND | | 20 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 4-Chloroaniline | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Hexachlorobutadiene | ND | | 50 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 4-Chloro-3-methylphenol | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 2-Methylnaphthalene | ND | | 20 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Hexachlorocyclopentadiene | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 580-172976/1-A**
**Matrix: Solid**
**Analysis Batch: 173092**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 172976**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,6-Trichlorophenol | ND | | 150 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 2,4,5-Trichlorophenol | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 2-Chloronaphthalene | ND | | 20 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 2-Nitroaniline | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Dimethyl phthalate | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Acenaphthylene | ND | | 20 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 2,6-Dinitrotoluene | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 3-Nitroaniline | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Acenaphthene | ND | | 20 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 2,4-Dinitrophenol | ND | | 1000 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 4-Nitrophenol | ND | | 1000 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Dibenzofuran | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 2,4-Dinitrotoluene | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Diethyl phthalate | ND | | 200 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Fluorene | ND | | 20 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 4-Nitroaniline | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1000 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| N-Nitrosodiphenylamine | ND | | 50 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Hexachlorobenzene | ND | | 50 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Pentachlorophenol | ND | | 200 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Phenanthrene | ND | | 20 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Anthracene | ND | | 20 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Di-n-butyl phthalate | ND | | 500 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Fluoranthene | ND | | 20 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Pyrene | ND | | 20 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Butyl benzyl phthalate | ND | | 200 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 200 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Benzo[a]anthracene | ND | | 20 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Chrysene | ND | | 25 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 600 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Di-n-octyl phthalate | ND | | 500 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Benzo[a]pyrene | ND | | 30 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 40 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Dibenz(a,h)anthracene | ND | | 40 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Benzo[g,h,i]perylene | ND | | 25 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Carbazole | ND | | 100 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| 1-Methylnaphthalene | ND | | 30 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Benzo[b]fluoranthene | ND | | 20 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Benzo[k]fluoranthene | ND | | 25 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 250 | | ug/Kg | | 10/17/14 10:16 | 10/18/14 16:23 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol* | *77* | | *36 - 145* | *10/17/14 10:16* | *10/18/14 16:23* | *1* |
| *Phenol-d5* | *79* | | *38 - 149* | *10/17/14 10:16* | *10/18/14 16:23* | *1* |
| *Nitrobenzene-d5* | *82* | | *38 - 141* | *10/17/14 10:16* | *10/18/14 16:23* | *1* |
| *2-Fluorobiphenyl* | *77* | | *42 - 140* | *10/17/14 10:16* | *10/18/14 16:23* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 580-172976/1-A**
**Matrix: Solid**
**Analysis Batch: 173092**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 172976**

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2,4,6-Tribromophenol | 81 | | 28 - 143 | 10/17/14 10:16 | 10/18/14 16:23 | 1 |
| Terphenyl-d14 | 89 | | 42 - 151 | 10/17/14 10:16 | 10/18/14 16:23 | 1 |

**Lab Sample ID: LCS 580-172976/2-A**
**Matrix: Solid**
**Analysis Batch: 173092**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 172976**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Phenol | 1000 | 773 | | ug/Kg | | 77 | 63 - 111 |
| Bis(2-chloroethyl)ether | 1000 | 805 | | ug/Kg | | 80 | 62 - 110 |
| 2-Chlorophenol | 1000 | 777 | | ug/Kg | | 78 | 68 - 117 |
| 1,3-Dichlorobenzene | 1000 | 787 | | ug/Kg | | 79 | 64 - 111 |
| 1,4-Dichlorobenzene | 1000 | 801 | | ug/Kg | | 80 | 65 - 110 |
| Benzyl alcohol | 1000 | 564 | | ug/Kg | | 56 | 55 - 123 |
| 1,2-Dichlorobenzene | 1000 | 777 | | ug/Kg | | 78 | 64 - 112 |
| 2-Methylphenol | 1000 | 805 | | ug/Kg | | 81 | 71 - 116 |
| 3 & 4 Methylphenol | 1000 | 751 | | ug/Kg | | 75 | 70 - 116 |
| N-Nitrosodi-n-propylamine | 1000 | 710 | | ug/Kg | | 71 | 62 - 116 |
| Hexachloroethane | 1000 | 804 | | ug/Kg | | 80 | 62 - 120 |
| Nitrobenzene | 1000 | 781 | | ug/Kg | | 78 | 64 - 118 |
| Isophorone | 1000 | 781 | | ug/Kg | | 78 | 67 - 119 |
| 2-Nitrophenol | 1000 | 785 | | ug/Kg | | 78 | 67 - 127 |
| 2,4-Dimethylphenol | 1000 | 773 | | ug/Kg | | 77 | 54 - 139 |
| Benzoic acid | 2000 | 881 | J | ug/Kg | | 44 | 29 - 158 |
| Bis(2-chloroethoxy)methane | 1000 | 816 | | ug/Kg | | 82 | 69 - 107 |
| 2,4-Dichlorophenol | 1000 | 742 | | ug/Kg | | 74 | 68 - 125 |
| 1,2,4-Trichlorobenzene | 1000 | 833 | | ug/Kg | | 83 | 66 - 115 |
| Naphthalene | 1000 | 798 | | ug/Kg | | 80 | 62 - 112 |
| 4-Chloroaniline | 1000 | 267 | | ug/Kg | | 27 | 20 - 103 |
| Hexachlorobutadiene | 1000 | 834 | | ug/Kg | | 83 | 65 - 116 |
| 4-Chloro-3-methylphenol | 1000 | 859 | | ug/Kg | | 86 | 69 - 121 |
| 2-Methylnaphthalene | 1000 | 772 | | ug/Kg | | 77 | 64 - 119 |
| Hexachlorocyclopentadiene | 1000 | 790 | | ug/Kg | | 79 | 46 - 131 |
| 2,4,6-Trichlorophenol | 1000 | 757 | | ug/Kg | | 76 | 62 - 133 |
| 2,4,5-Trichlorophenol | 1000 | 887 | | ug/Kg | | 89 | 57 - 133 |
| 2-Chloronaphthalene | 1000 | 752 | | ug/Kg | | 75 | 68 - 112 |
| 2-Nitroaniline | 1000 | 765 | | ug/Kg | | 76 | 64 - 112 |
| Dimethyl phthalate | 1000 | 852 | | ug/Kg | | 85 | 78 - 117 |
| Acenaphthylene | 1000 | 828 | | ug/Kg | | 83 | 68 - 120 |
| 2,6-Dinitrotoluene | 1000 | 829 | | ug/Kg | | 83 | 66 - 123 |
| 3-Nitroaniline | 1000 | 447 | | ug/Kg | | 45 | 27 - 103 |
| Acenaphthene | 1000 | 789 | | ug/Kg | | 79 | 68 - 116 |
| 2,4-Dinitrophenol | 2000 | 811 | J | ug/Kg | | 41 | 20 - 141 |
| 4-Nitrophenol | 2000 | 974 | J | ug/Kg | | 49 | 20 - 165 |
| Dibenzofuran | 1000 | 779 | | ug/Kg | | 78 | 72 - 109 |
| 2,4-Dinitrotoluene | 1000 | 764 | | ug/Kg | | 76 | 68 - 121 |
| Diethyl phthalate | 1000 | 806 | | ug/Kg | | 81 | 73 - 116 |
| 4-Chlorophenyl phenyl ether | 1000 | 816 | | ug/Kg | | 82 | 75 - 108 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 580-172976/2-A**
**Matrix: Solid**
**Analysis Batch: 173092**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 172976**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Fluorene | 1000 | 790 | | ug/Kg | | 79 | 70 - 121 |
| 4-Nitroaniline | 1000 | 655 | | ug/Kg | | 65 | 58 - 108 |
| 4,6-Dinitro-2-methylphenol | 2000 | 1010 | | ug/Kg | | 51 | 48 - 130 |
| N-Nitrosodiphenylamine | 997 | 843 | | ug/Kg | | 85 | 73 - 115 |
| 4-Bromophenyl phenyl ether | 1000 | 876 | | ug/Kg | | 88 | 68 - 122 |
| Hexachlorobenzene | 1000 | 851 | | ug/Kg | | 85 | 66 - 117 |
| Pentachlorophenol | 2000 | 1340 | | ug/Kg | | 67 | 45 - 117 |
| Phenanthrene | 1000 | 802 | | ug/Kg | | 80 | 73 - 106 |
| Anthracene | 1000 | 781 | | ug/Kg | | 78 | 73 - 116 |
| Di-n-butyl phthalate | 1000 | 834 | | ug/Kg | | 83 | 66 - 140 |
| Fluoranthene | 1000 | 816 | | ug/Kg | | 82 | 73 - 125 |
| Pyrene | 1000 | 791 | | ug/Kg | | 79 | 70 - 120 |
| Butyl benzyl phthalate | 1000 | 794 | | ug/Kg | | 79 | 69 - 142 |
| 3,3'-Dichlorobenzidine | 2000 | 1140 | | ug/Kg | | 57 | 20 - 103 |
| Benzo[a]anthracene | 1000 | 763 | | ug/Kg | | 76 | 76 - 119 |
| Chrysene | 1000 | 770 | | ug/Kg | | 77 | 75 - 114 |
| Bis(2-ethylhexyl) phthalate | 1000 | 740 | | ug/Kg | | 74 | 62 - 144 |
| Di-n-octyl phthalate | 1000 | 760 | | ug/Kg | | 76 | 65 - 141 |
| Benzo[a]pyrene | 1000 | 763 | | ug/Kg | | 76 | 72 - 117 |
| Indeno[1,2,3-cd]pyrene | 1000 | 915 | | ug/Kg | | 91 | 56 - 127 |
| Dibenz(a,h)anthracene | 1000 | 946 | | ug/Kg | | 95 | 56 - 134 |
| Benzo[g,h,i]perylene | 1000 | 851 | | ug/Kg | | 85 | 55 - 139 |
| Carbazole | 1000 | 795 | | ug/Kg | | 79 | 76 - 135 |
| 1-Methylnaphthalene | 1000 | 782 | | ug/Kg | | 78 | 62 - 118 |
| Benzo[b]fluoranthene | 1000 | 848 | | ug/Kg | | 85 | 63 - 132 |
| Benzo[k]fluoranthene | 1000 | 848 | | ug/Kg | | 85 | 63 - 119 |
| bis (2-chloroisopropyl) ether | 1000 | 666 | | ug/Kg | | 67 | 41 - 126 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol* | *77* | | *36 - 145* |
| *Phenol-d5* | *79* | | *38 - 149* |
| *Nitrobenzene-d5* | *77* | | *38 - 141* |
| *2-Fluorobiphenyl* | *73* | | *42 - 140* |
| *2,4,6-Tribromophenol* | *88* | | *28 - 143* |
| *Terphenyl-d14* | *85* | | *42 - 151* |

**Lab Sample ID: LCSD 580-172976/3-A**
**Matrix: Solid**
**Analysis Batch: 173092**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 172976**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | 1000 | 802 | | ug/Kg | | 80 | 63 - 111 | 4 | 26 |
| Bis(2-chloroethyl)ether | 1000 | 827 | | ug/Kg | | 83 | 62 - 110 | 3 | 22 |
| 2-Chlorophenol | 1000 | 822 | | ug/Kg | | 82 | 68 - 117 | 6 | 27 |
| 1,3-Dichlorobenzene | 1000 | 865 | | ug/Kg | | 87 | 64 - 111 | 9 | 30 |
| 1,4-Dichlorobenzene | 1000 | 845 | | ug/Kg | | 85 | 65 - 110 | 5 | 30 |
| Benzyl alcohol | 1000 | 574 | | ug/Kg | | 57 | 55 - 123 | 2 | 60 |
| 1,2-Dichlorobenzene | 1000 | 826 | | ug/Kg | | 83 | 64 - 112 | 6 | 30 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 580-172976/3-A**
**Matrix: Solid**
**Analysis Batch: 173092**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 172976**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | 1000 | 851 | | ug/Kg | | 85 | 71 - 116 | 5 | 25 |
| 3 & 4 Methylphenol | 1000 | 763 | | ug/Kg | | 76 | 70 - 116 | 2 | 27 |
| N-Nitrosodi-n-propylamine | 1000 | 760 | | ug/Kg | | 76 | 62 - 116 | 7 | 28 |
| Hexachloroethane | 1000 | 847 | | ug/Kg | | 85 | 62 - 120 | 5 | 30 |
| Nitrobenzene | 1000 | 818 | | ug/Kg | | 82 | 64 - 118 | 5 | 30 |
| Isophorone | 1000 | 808 | | ug/Kg | | 81 | 67 - 119 | 3 | 30 |
| 2-Nitrophenol | 1000 | 838 | | ug/Kg | | 84 | 67 - 127 | 7 | 30 |
| 2,4-Dimethylphenol | 1000 | 839 | | ug/Kg | | 84 | 54 - 139 | 8 | 30 |
| Benzoic acid | 2000 | 856 | J | ug/Kg | | 43 | 29 - 158 | 3 | 28 |
| Bis(2-chloroethoxy)methane | 1000 | 825 | | ug/Kg | | 82 | 69 - 107 | 1 | 30 |
| 2,4-Dichlorophenol | 1000 | 858 | | ug/Kg | | 86 | 68 - 125 | 14 | 30 |
| 1,2,4-Trichlorobenzene | 1000 | 894 | | ug/Kg | | 89 | 66 - 115 | 7 | 28 |
| Naphthalene | 1000 | 833 | | ug/Kg | | 83 | 62 - 112 | 4 | 26 |
| 4-Chloroaniline | 1000 | 256 | | ug/Kg | | 26 | 20 - 103 | 4 | 60 |
| Hexachlorobutadiene | 1000 | 931 | | ug/Kg | | 93 | 65 - 116 | 11 | 30 |
| 4-Chloro-3-methylphenol | 1000 | 885 | | ug/Kg | | 89 | 69 - 121 | 3 | 27 |
| 2-Methylnaphthalene | 1000 | 826 | | ug/Kg | | 83 | 64 - 119 | 7 | 27 |
| Hexachlorocyclopentadiene | 1000 | 806 | | ug/Kg | | 81 | 46 - 131 | 2 | 29 |
| 2,4,6-Trichlorophenol | 1000 | 814 | | ug/Kg | | 81 | 62 - 133 | 7 | 30 |
| 2,4,5-Trichlorophenol | 1000 | 882 | | ug/Kg | | 88 | 57 - 133 | 1 | 30 |
| 2-Chloronaphthalene | 1000 | 786 | | ug/Kg | | 79 | 68 - 112 | 5 | 25 |
| 2-Nitroaniline | 1000 | 834 | | ug/Kg | | 83 | 64 - 112 | 9 | 22 |
| Dimethyl phthalate | 1000 | 892 | | ug/Kg | | 89 | 78 - 117 | 5 | 30 |
| Acenaphthylene | 1000 | 894 | | ug/Kg | | 89 | 68 - 120 | 8 | 28 |
| 2,6-Dinitrotoluene | 1000 | 860 | | ug/Kg | | 86 | 66 - 123 | 4 | 30 |
| 3-Nitroaniline | 1000 | 451 | | ug/Kg | | 45 | 27 - 103 | 1 | 33 |
| Acenaphthene | 1000 | 826 | | ug/Kg | | 83 | 68 - 116 | 5 | 27 |
| 2,4-Dinitrophenol | 2000 | 783 | J | ug/Kg | | 39 | 20 - 141 | 4 | 36 |
| 4-Nitrophenol | 2000 | 991 | J | ug/Kg | | 50 | 20 - 165 | 2 | 30 |
| Dibenzofuran | 1000 | 828 | | ug/Kg | | 83 | 72 - 109 | 6 | 30 |
| 2,4-Dinitrotoluene | 1000 | 881 | | ug/Kg | | 88 | 68 - 121 | 14 | 30 |
| Diethyl phthalate | 1000 | 826 | | ug/Kg | | 83 | 73 - 116 | 2 | 26 |
| 4-Chlorophenyl phenyl ether | 1000 | 857 | | ug/Kg | | 86 | 75 - 108 | 5 | 30 |
| Fluorene | 1000 | 835 | | ug/Kg | | 83 | 70 - 121 | 5 | 30 |
| 4-Nitroaniline | 1000 | 692 | | ug/Kg | | 69 | 58 - 108 | 6 | 32 |
| 4,6-Dinitro-2-methylphenol | 2000 | 1070 | | ug/Kg | | 54 | 48 - 130 | 6 | 22 |
| N-Nitrosodiphenylamine | 997 | 887 | | ug/Kg | | 89 | 73 - 115 | 5 | 30 |
| 4-Bromophenyl phenyl ether | 1000 | 867 | | ug/Kg | | 87 | 68 - 122 | 1 | 30 |
| Hexachlorobenzene | 1000 | 931 | | ug/Kg | | 93 | 66 - 117 | 9 | 30 |
| Pentachlorophenol | 2000 | 1570 | | ug/Kg | | 79 | 45 - 117 | 16 | 23 |
| Phenanthrene | 1000 | 858 | | ug/Kg | | 86 | 73 - 106 | 7 | 28 |
| Anthracene | 1000 | 838 | | ug/Kg | | 84 | 73 - 116 | 7 | 27 |
| Di-n-butyl phthalate | 1000 | 887 | | ug/Kg | | 89 | 66 - 140 | 6 | 30 |
| Fluoranthene | 1000 | 835 | | ug/Kg | | 84 | 73 - 125 | 2 | 30 |
| Pyrene | 1000 | 835 | | ug/Kg | | 84 | 70 - 120 | 5 | 30 |
| Butyl benzyl phthalate | 1000 | 866 | | ug/Kg | | 87 | 69 - 142 | 9 | 30 |
| 3,3'-Dichlorobenzidine | 2000 | 1210 | | ug/Kg | | 61 | 20 - 103 | 6 | 60 |
| Benzo[a]anthracene | 1000 | 842 | | ug/Kg | | 84 | 76 - 119 | 10 | 27 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 580-172976/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 173092** — **Prep Batch: 172976**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chrysene | 1000 | 837 | | ug/Kg | | 84 | 75 - 114 | 8 | 26 |
| Bis(2-ethylhexyl) phthalate | 1000 | 801 | | ug/Kg | | 80 | 62 - 144 | 8 | 30 |
| Di-n-octyl phthalate | 1000 | 812 | | ug/Kg | | 81 | 65 - 141 | 7 | 30 |
| Benzo[a]pyrene | 1000 | 820 | | ug/Kg | | 82 | 72 - 117 | 7 | 30 |
| Indeno[1,2,3-cd]pyrene | 1000 | 954 | | ug/Kg | | 95 | 56 - 127 | 4 | 29 |
| Dibenz(a,h)anthracene | 1000 | 953 | | ug/Kg | | 95 | 56 - 134 | 1 | 30 |
| Benzo[g,h,i]perylene | 1000 | 953 | | ug/Kg | | 95 | 55 - 139 | 11 | 28 |
| Carbazole | 1000 | 860 | | ug/Kg | | 86 | 76 - 135 | 8 | 30 |
| 1-Methylnaphthalene | 1000 | 796 | | ug/Kg | | 80 | 62 - 118 | 2 | 30 |
| Benzo[b]fluoranthene | 1000 | 914 | | ug/Kg | | 91 | 63 - 132 | 7 | 30 |
| Benzo[k]fluoranthene | 1000 | 896 | | ug/Kg | | 90 | 63 - 119 | 5 | 30 |
| bis (2-chloroisopropyl) ether | 1000 | 709 | | ug/Kg | | 71 | 41 - 126 | 6 | 57 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol* | *79* | | *36 - 145* |
| *Phenol-d5* | *82* | | *38 - 149* |
| *Nitrobenzene-d5* | *78* | | *38 - 141* |
| *2-Fluorobiphenyl* | *77* | | *42 - 140* |
| *2,4,6-Tribromophenol* | *89* | | *28 - 143* |
| *Terphenyl-d14* | *87* | | *42 - 151* |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

**Lab Sample ID: 14J0085-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14J0085** — **Prep Batch: 14J0085_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 10.0 | | mg/kg wet | | 10/14/14 11:19 | 10/15/14 09:23 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 25.0 | | mg/kg wet | | 10/14/14 11:19 | 10/15/14 09:23 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *104* | | *50 - 150* | *10/14/14 11:19* | *10/15/14 09:23* | *1.00* |
| *n-Triacontane-d62* | *109* | | *50 - 150* | *10/14/14 11:19* | *10/15/14 09:23* | *1.00* |

**Lab Sample ID: 14J0085-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14J0085** — **Prep Batch: 14J0085_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 66.7 | 82.1 | | mg/kg wet | | 123 | 50 - 150 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *108* | | *50 - 150* |
| *n-Triacontane-d62* | *112* | | *50 - 150* |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx (Continued)

**Lab Sample ID: 14J0085-BSD1** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14J0085** — **Prep Batch: 14J0085_P**

| Analyte | | | Spike Added | LCS Dup Result | LCS Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | | | 66.7 | 81.3 | | mg/kg wet | | 122 | 50 - 150 | 0.926 | 25 |

| *Surrogate* | *LCS Dup %Recovery* | *LCS Dup Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *109* | | *50 - 150* |
| *n-Triacontane-d62* | *111* | | *50 - 150* |

**Lab Sample ID: 14J0085-DUP1** — **Client Sample ID: EX13-1-3**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14J0085** — **Prep Batch: 14J0085_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 158 | | | 164 | Q6 | mg/kg dry | ☼ | | | 3.24 | 40 |
| Heavy Oil Range Hydrocarbons | 631 | | | 711 | | mg/kg dry | ☼ | | | 11.9 | 40 |

| *Surrogate* | *Duplicate %Recovery* | *Duplicate Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *111* | | *50 - 150* |
| *n-Triacontane-d62* | *138* | | *50 - 150* |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXJ0095

## Client Sample ID: EX13-1-3 — Lab Sample ID: SXJ0095-01

**Date Collected: 10/13/14 13:00** — **Matrix: Soil**
**Date Received: 10/14/14 10:20** — **Percent Solids: 92.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.912 | 14J0083_P | 10/14/14 10:43 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14J0083 | 10/14/14 18:38 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 3.66 | 14J0085_P | 10/14/14 11:19 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14J0085 | 10/15/14 11:43 | NMI | TAL SPK |
| Total | Prep | Wet Chem | | 1.00 | 14J0104_P | 10/14/14 15:30 | IAB | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14J0104 | 10/16/14 12:24 | NI | TAL SPK |

## Client Sample ID: EX13-2-3 — Lab Sample ID: SXJ0095-02

**Date Collected: 10/13/14 13:05** — **Matrix: Soil**
**Date Received: 10/14/14 10:20** — **Percent Solids: 92.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.781 | 14J0083_P | 10/14/14 10:43 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14J0083 | 10/14/14 19:01 | CBW | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 0.781 | 14J0083_P | 10/14/14 10:43 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14J0083 | 10/14/14 19:01 | CBW | TAL SPK |
| Total/NA | Prep | 3550B | | | 172976 | 10/17/14 10:16 | ALL | TAL SEA |
| Total/NA | Analysis | 8270C | | 1 | 173092 | 10/18/14 23:53 | AHP | TAL SEA |
| Total | Prep | EPA 3550B | | 0.965 | 14J0085_P | 10/14/14 11:19 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14J0085 | 10/15/14 12:52 | NMI | TAL SPK |
| Total/NA | Analysis | D 2216 | | 1 | 172927 | 10/16/14 18:02 | CRH | TAL SEA |

## Client Sample ID: EX13-3-3 — Lab Sample ID: SXJ0095-03

**Date Collected: 10/13/14 13:10** — **Matrix: Soil**
**Date Received: 10/14/14 10:20** — **Percent Solids: 94.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.859 | 14J0083_P | 10/14/14 10:43 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14J0083 | 10/14/14 19:23 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.987 | 14J0085_P | 10/14/14 11:19 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14J0085 | 10/15/14 13:16 | NMI | TAL SPK |

## Client Sample ID: EX13-4-3 — Lab Sample ID: SXJ0095-04

**Date Collected: 10/13/14 13:15** — **Matrix: Soil**
**Date Received: 10/14/14 10:20** — **Percent Solids: 88.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.912 | 14J0083_P | 10/14/14 10:43 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14J0083 | 10/14/14 19:46 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 0.959 | 14J0085_P | 10/14/14 11:19 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 5.00 | 14J0085 | 10/15/14 13:39 | NMI | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXJ0095

## Client Sample ID: EX13-SP-1 — Lab Sample ID: SXJ0095-05

**Date Collected: 10/13/14 13:40** — **Matrix: Soil**
**Date Received: 10/14/14 10:20** — **Percent Solids: 92.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.928 | 14J0083_P | 10/14/14 10:43 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14J0083 | 10/14/14 20:08 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 1.02 | 14J0085_P | 10/14/14 11:19 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 5.00 | 14J0085 | 10/15/14 14:03 | NMI | TAL SPK |

## Client Sample ID: EX13-SP-2 — Lab Sample ID: SXJ0095-06

**Date Collected: 10/13/14 13:45** — **Matrix: Soil**
**Date Received: 10/14/14 10:20** — **Percent Solids: 93.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.867 | 14J0083_P | 10/14/14 10:43 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14J0083 | 10/14/14 20:31 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 2.96 | 14J0085_P | 10/14/14 11:19 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14J0085 | 10/15/14 14:27 | NMI | TAL SPK |

## Client Sample ID: EX13-SP-3 — Lab Sample ID: SXJ0095-07

**Date Collected: 10/13/14 13:50** — **Matrix: Soil**
**Date Received: 10/14/14 10:20** — **Percent Solids: 94.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.781 | 14J0083_P | 10/14/14 10:43 | CBW | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14J0083 | 10/14/14 20:53 | CBW | TAL SPK |
| Total | Prep | EPA 3550B | | 2.60 | 14J0085_P | 10/14/14 11:19 | IAB | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14J0085 | 10/15/14 14:51 | NMI | TAL SPK |

**Laboratory References:**

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXJ0095

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Washington | State Program | 10 | C569 | 01-06-15 |

## Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-022 | 03-04-15 |
| California | State Program | 9 | 2901 | 01-31-15 |
| L-A-B | DoD ELAP | | L2236 | 01-19-16 |
| L-A-B | ISO/IEC 17025 | | L2236 | 01-19-16 |
| Montana (UST) | State Program | 8 | N/A | 04-30-20 |
| Oregon | NELAP | 10 | WA100007 | 11-06-15 |
| USDA | Federal | | P330-11-00222 | 04-08-17 |
| Washington | State Program | 10 | C553 | 02-17-15 |

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXJ0095

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 8260C | Volatile Organic Compounds by EPA Methods 5035/8260C | | TAL SPK |
| NWTPH-Gx | Gasoline Hydrocarbons by NWTPH-Gx | | TAL SPK |
| 8270C | Semivolatile Organic Compounds (GC/MS) | SW846 | TAL SEA |
| NWTPH-Dx | Semivolatile Petroleum Products by NWTPH-Dx | | TAL SPK |
| D 2216 | Percent Moisture | ASTM | TAL SEA |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

ASTM = ASTM International

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

**Laboratory References:**

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 X
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

# CHAIN OF CUSTODY REPORT

Work Order # SXJ0095

CLIENT: GeoEngineers

REPORT TO: Dave Lauder DLauder@geoengineers.com

ADDRESS: 523 E Second Ave
Spokane, WA 99202

PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO: Port of Chelan

P.O. NUMBER:

PROJECT NAME: Cashmere

PROJECT NUMBER: 18593-001-04

SAMPLED BY: JML

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: 10 (STD.) | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 (STD.) | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NWTPH-Gx | NWTPH-Dx | VOCs | SVOCs | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EX13-1-3 | 10/13/2014 1300 | X | X | | | S | 3 | | |
| 2 | EX13-2-3 | 1305 | | | X | X | | 4 | | |
| 3 | EX13-3-3 | 1310 | | | | | | 3 | | |
| 4 | EX13-4-3 | 1315 | | | | | | 3 | | |
| 5 | EX13-SP-1 | 1340 | | | | | | 3 | | |
| 6 | EX13-SP-2 | 1345 | | | | | | 3 | | |
| 7 | EX13-SP-3 | 1350 | | | | | | 3 | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |

RELEASED BY: Justin Rice DATE: 10/14/14
PRINT NAME: JR FIRM: Geo TIME: 1020

RECEIVED BY: Pat Stapleton DATE: 10-14-14
PRINT NAME: FIRM: TA TIME: 10:20

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 4.0 PAGE 1 OF 1

TAL-1000 (0612)

**TestAmerica Spokane**
**Sample Receipt Form**

| | | |
|---|---|---|
| **Work Order #:** SXJ0095 | **Client:** GeoEngineers | **Project:** Cashmere |
| Date/Time Received: 10-14-14 10:20 | By: CS | |

Samples Delivered By: ☐Shipping Service ☒Courier ☐Client ☐Other: _____

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | X | | | |
| Custody Seals are present and intact: | | | X | |
| Are CoC documents present: | X | | | |
| Necessary signatures: | X | | | |

Thermal Preservation Type: ☐Blue Ice ☐Gel Ice ☒Real Ice ☐Dry Ice ☐None ☐Other: _____

Temperature: 4.0 °C Thermometer (Circle **one** Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐Not enough Ice ☐Ice melted ☐w/in 4hrs of collection ☐NA ☐Other: _____

| Log-in Phase Date/Time: 10-14-14 11:15 By: CS | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | X | | | |
| Samples containers were received intact: | X | | | |
| Do sample IDs match the CoC | X | | | |
| Appropriate sample containers were received for tests requested | X | | | |
| Are sample volumes adequate for tests requested | X | | | |
| Appropriate preservatives were used for the tests requested | X | | | |
| pH of inorganic samples checked and is within method specification | X | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | | | X | |
| Are dissolved parameters field filtered | | | X | |
| Do any samples need to be filtered or preserved by the lab | | | X | |
| Does this project require quick turnaround analysis | X | | | 2 days |
| Are there any short hold time tests (see chart below) | | X | | |
| Are any samples within 2 days of or past expiration | | X | | |
| Was the CoC scanned | X | | | |
| Were there Non-conformance issues at login | | X | | |
| If yes, was a CAR generated # _____ | | | X | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

**Form No. SP-FORM-SPL-002 12 December 2012**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXG0084
Client Project/Site: [none]
Client Project Description: Wenatchee Pit

For:
Tommer Construction Company, Inc.
PO Box 1150
Ephrata, WA 98823

Attn: Chris Tommer

*Authorized for release by:*
*7/30/2014 12:59:43 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*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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## Job ID: SXG0084

### Laboratory: TestAmerica Denver

**Narrative**

**CASE NARRATIVE**
**Client: TestAmerica Laboratories, Inc**
**Project: Tommer Construction Company, Inc.**
**Report Number: 280-57770-1**

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.

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.

**RECEIPT**
The samples were received on 07/15/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0.4 C.

**SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS) - METHOD 8270C**
Bis(2-ethylhexyl) phthalate was detected in method blank MB 280-234632/1-A 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. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### Laboratory: TestAmerica Spokane

**Narrative**

**Receipt**
The sample(s) were received on 7/14/2014 11:50:00 AM ; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.5 ºC.

**GC/MS VOA Method 8260C**
Methylene chloride was detected in samples SXG0084-01 (Westside) and SXG0084-02 (Eastside) below the method reporting limit but above the method detection limit. Methylene chloride is a common lab solvent and contaminant. All other analytes were ND.

### Laboratory: TestAmerica St. Louis

**Narrative**

**CASE NARRATIVE**

**Client: TestAmerica Laboratories, Inc**

**Project: Analytical Subcontract**

## Job ID: SXG0084 (Continued)

**Laboratory: TestAmerica St. Louis (Continued)**

### Report Number: 160-7625-1

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 St. Louis 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 described 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 for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

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

**RECEIPT**

The samples were received on 07/25/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.7 C.

**ORGANOCHLORINE PESTICIDES (GC)**

Samples SXG0084-01 (160-7625-1) and SXG0084-02 (160-7625-2) were analyzed for Organochlorine Pesticides (GC) in accordance with EPA SW-846 Method 8081B. The samples were prepared on 07/25/2014 and analyzed on 07/25/2014 and 07/26/2014.

The matrix spike / matrix spike duplicate (MS/MSD) alpha-BHC recoveries for batch 133953 were outside the upper control limits. Samples associated with this MS and MSD was ND for this analyte and the associated laboratory control sample (LCS) recovery was within acceptance limits. Sample data is reported with this narrative. (160-7625-1 MS), (160-7625-1 MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**PERCENT SOLIDS**

Samples SXG0084-01 (160-7625-1) and SXG0084-02 (160-7625-2) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 07/26/2014.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Sample Summary

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXG0084-01 | Westside | Soil | 07/11/14 15:00 | 07/14/14 11:50 |
| SXG0084-02 | Eastside | Soil | 07/11/14 15:00 | 07/14/14 11:50 |

# Definitions/Glossary

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Qualifiers

### GCMS Volatiles

| Qualifier | Qualifier Description |
|---|---|
| S2 | Compound is a common lab solvent and contaminant. |

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD Recovery exceeds the control limits |

### TSLO

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD Recovery exceeds the 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 |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Client Sample ID: Westside

**Date Collected: 07/11/14 15:00**
**Date Received: 07/14/14 11:50**

## Lab Sample ID: SXG0084-01

**Matrix: Soil**
**Percent Solids: 93.5**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Chloromethane | ND | | 0.508 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Vinyl chloride | ND | | 0.0609 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Bromomethane | ND | | 0.508 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Chloroethane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0305 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Carbon disulfide | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| **Methylene chloride** | **0.0203** | **S2** | 0.0203 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Acetone | ND | | 3.05 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0508 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Bromochloromethane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Chloroform | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Carbon tetrachloride | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 2-Butanone | ND | | 1.02 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Hexane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Benzene | ND | | 0.0152 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Trichloroethene | ND | | 0.0254 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Dibromomethane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Bromodichloromethane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Toluene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.02 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Tetrachloroethene | ND | | 0.0406 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Dibromochloromethane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 2-Hexanone | ND | | 1.02 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Ethylbenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Chlorobenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| m,p-Xylene | ND | | 0.406 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| o-Xylene | ND | | 0.203 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Styrene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Bromoform | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Isopropylbenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| n-Propylbenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Bromobenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Client Sample ID: Westside

**Date Collected: 07/11/14 15:00**
**Date Received: 07/14/14 11:50**

## Lab Sample ID: SXG0084-01

**Matrix: Soil**
**Percent Solids: 93.5**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 2-Chlorotoluene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 4-Chlorotoluene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| tert-Butylbenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| sec-Butylbenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| p-Isopropyltoluene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| n-Butylbenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.508 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Hexachlorobutadiene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| Naphthalene | ND | | 0.203 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.102 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 00:43 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *98.3* | | *42.4 - 163* | *07/16/14 07:59* | *07/17/14 00:43* | *1.00* |
| *1,2-dichloroethane-d4* | *92.8* | | *50 - 150* | *07/16/14 07:59* | *07/17/14 00:43* | *1.00* |
| *Toluene-d8* | *104* | | *45.8 - 155* | *07/16/14 07:59* | *07/17/14 00:43* | *1.00* |
| *4-bromofluorobenzene* | *104* | | *41.5 - 162* | *07/16/14 07:59* | *07/17/14 00:43* | *1.00* |

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.30 | 0.0094 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Acenaphthylene | ND | | 0.30 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Acetophenone | ND | | 0.30 | 0.018 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Anthracene | ND | | 0.30 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Atrazine | ND | | 0.30 | 0.034 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Benzidine | ND | | 3.0 | 0.91 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Benzo[a]anthracene | ND | | 0.30 | 0.018 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Benzo[a]pyrene | ND | | 0.30 | 0.018 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Benzo[b]fluoranthene | ND | | 0.30 | 0.024 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.30 | 0.015 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Benzo[k]fluoranthene | ND | | 0.30 | 0.037 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.30 | 0.021 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.30 | 0.015 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.30 | 0.042 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.30 | 0.017 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Butyl benzyl phthalate | ND | | 0.30 | 0.039 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Caprolactam | ND | | 1.5 | 0.097 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Carbazole | ND | | 0.30 | 0.033 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 4-Chloroaniline | ND | | 0.30 | 0.075 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 4-Chloro-3-methylphenol | ND | | 0.30 | 0.060 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2-Chloronaphthalene | ND | | 0.30 | 0.0091 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2-Chlorophenol | ND | | 0.30 | 0.019 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 0.30 | 0.019 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Chrysene | ND | | 0.30 | 0.025 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Client Sample ID: Westside

**Date Collected: 07/11/14 15:00**
**Date Received: 07/14/14 11:50**

## Lab Sample ID: SXG0084-01

**Matrix: Soil**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cresols, Total | ND | | 0.30 | 0.012 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.30 | 0.017 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Dibenzofuran | ND | | 0.30 | 0.018 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.30 | 0.012 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 0.60 | 0.082 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2,4-Dichlorophenol | ND | | 0.30 | 0.0091 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Diethyl phthalate | ND | | 0.60 | 0.024 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2,4-Dimethylphenol | ND | | 0.30 | 0.060 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Dimethyl phthalate | ND | | 0.30 | 0.021 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Di-n-butyl phthalate | ND | | 0.30 | 0.027 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1.5 | 0.30 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2,4-Dinitrophenol | ND | | 1.5 | 0.30 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.30 | 0.060 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2,6-Dinitrotoluene | ND | | 0.30 | 0.026 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Di-n-octyl phthalate | ND | | 0.30 | 0.013 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Fluoranthene | ND | | 0.30 | 0.033 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Fluorene | ND | | 0.30 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Hexachlorobenzene | ND | | 0.30 | 0.027 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Hexachlorobutadiene | ND | | 0.30 | 0.0091 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Hexachlorocyclopentadiene | ND | | 1.5 | 0.046 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Hexachloroethane | ND | | 0.30 | 0.019 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.30 | 0.020 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2-Methylnaphthalene | ND | | 0.30 | 0.017 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2-Methylphenol | ND | | 0.30 | 0.012 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 3 & 4 Methylphenol | ND | | 0.30 | 0.030 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Naphthalene | ND | | 0.30 | 0.028 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2-Nitroaniline | ND | | 1.5 | 0.046 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 3-Nitroaniline | ND | | 1.5 | 0.067 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 4-Nitroaniline | ND | | 1.5 | 0.066 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Nitrobenzene | ND | | 0.30 | 0.020 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2-Nitrophenol | ND | | 0.30 | 0.0091 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 4-Nitrophenol | ND | | 1.5 | 0.089 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.30 | 0.028 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| n-Nitrosodiphenylamine(as diphenylamine) | ND | | 0.30 | 0.019 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.30 | 0.021 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Pentachlorophenol | ND | | 1.5 | 0.30 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Phenanthrene | ND | | 0.30 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Phenol | ND | | 0.30 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| Pyrene | ND | | 0.30 | 0.011 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.30 | 0.026 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2,4,5-Trichlorophenol | ND | | 0.30 | 0.0091 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |
| 2,4,6-Trichlorophenol | ND | | 0.30 | 0.0091 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl* | *78* | | *50 - 120* | *07/16/14 16:41* | *07/17/14 15:54* | *1* |
| *2-Fluorophenol* | *78* | | *53 - 120* | *07/16/14 16:41* | *07/17/14 15:54* | *1* |
| *Nitrobenzene-d5* | *78* | | *50 - 120* | *07/16/14 16:41* | *07/17/14 15:54* | *1* |
| *Phenol-d5* | *77* | | *52 - 120* | *07/16/14 16:41* | *07/17/14 15:54* | *1* |
| *Terphenyl-d14* | *89* | | *55 - 120* | *07/16/14 16:41* | *07/17/14 15:54* | *1* |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Client Sample ID: Westside

**Date Collected: 07/11/14 15:00**
**Date Received: 07/14/14 11:50**

## Lab Sample ID: SXG0084-01

**Matrix: Soil**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2,4,6-Tribromophenol | 79 | | 51 - 120 | 07/16/14 16:41 | 07/17/14 15:54 | 1 |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 1.8 | 0.32 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| alpha-BHC | ND | | 2.1 | 0.19 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| beta-BHC | ND | | 1.8 | 0.31 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| delta-BHC | ND | | 1.8 | 0.25 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| gamma-BHC (Lindane) | ND | | 1.8 | 0.18 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| alpha-Chlordane | ND | | 1.8 | 0.59 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| gamma-Chlordane | ND | | 1.8 | 0.17 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| 4,4'-DDD | ND | | 1.8 | 0.23 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| 4,4'-DDE | ND | | 1.8 | 0.41 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| 4,4'-DDT | ND | | 1.8 | 0.66 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Dieldrin | ND | | 1.8 | 0.23 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Endosulfan I | ND | | 1.8 | 0.60 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Endosulfan II | ND | | 1.8 | 0.25 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Endosulfan sulfate | ND | | 1.8 | 0.36 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Endrin | ND | | 1.8 | 0.17 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Endrin aldehyde | ND | | 1.8 | 0.41 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Endrin ketone | ND | | 1.8 | 0.44 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Heptachlor | ND | | 2.1 | 0.21 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Heptachlor epoxide | ND | | 1.8 | 0.45 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Methoxychlor | ND | | 3.5 | 0.75 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Toxaphene | ND | | 70 | 16 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Technical Chlordane | ND | | 18 | 3.9 | ug/Kg | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl (Surr) | 99 | | 29 - 150 | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Tetrachloro-m-xylene | 85 | | 41 - 125 | 07/25/14 12:19 | 07/25/14 23:46 | 1 |

### Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **3.58** | | 1.32 | | mg/kg dry | ☼ | 07/18/14 14:21 | 07/21/14 16:40 | 1.00 |
| **Chromium** | **12.3** | | 0.529 | | mg/kg dry | ☼ | 07/18/14 14:21 | 07/21/14 15:08 | 1.00 |
| **Copper** | **24.2** | | 4.24 | | mg/kg dry | ☼ | 07/18/14 14:21 | 07/21/14 15:08 | 1.00 |
| **Lead** | **4.04** | | 1.32 | | mg/kg dry | ☼ | 07/18/14 14:21 | 07/21/14 15:08 | 1.00 |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 1.8 | 0.23 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| 4,4'-DDE | ND | | 1.8 | 0.41 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| 4,4'-DDT | ND | | 1.8 | 0.66 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Aldrin | ND | | 1.8 | 0.32 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| alpha-BHC | ND | | 2.1 | 0.19 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| alpha-Chlordane | ND | | 1.8 | 0.59 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| beta-BHC | ND | | 1.8 | 0.31 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| delta-BHC | ND | | 1.8 | 0.25 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Dieldrin | ND | | 1.8 | 0.23 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Endosulfan I | ND | | 1.8 | 0.60 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Client Sample ID: Westside

**Lab Sample ID: SXG0084-01**
**Date Collected: 07/11/14 15:00**
**Matrix: Soil**
**Date Received: 07/14/14 11:50**
**Percent Solids: 95.1**

### Method: 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Endosulfan II | ND | | 1.8 | 0.25 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Endosulfan sulfate | ND | | 1.8 | 0.36 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Endrin | ND | | 1.8 | 0.17 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Endrin aldehyde | ND | | 1.8 | 0.41 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Endrin ketone | ND | | 1.8 | 0.44 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| gamma-BHC (Lindane) | ND | | 1.8 | 0.18 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| gamma-Chlordane | ND | | 1.8 | 0.17 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Heptachlor | ND | | 2.1 | 0.21 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Heptachlor epoxide | ND | | 1.8 | 0.45 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Methoxychlor | ND | | 3.5 | 0.75 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Technical Chlordane | ND | | 18 | 3.9 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |
| Toxaphene | ND | | 70 | 16 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/25/14 23:46 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *99* | | *29 - 150* | *07/25/14 12:19* | *07/25/14 23:46* | *1* |
| *Tetrachloro-m-xylene* | *85* | | *41 - 125* | *07/25/14 12:19* | *07/25/14 23:46* | *1* |

## Client Sample ID: Eastside

**Lab Sample ID: SXG0084-02**
**Date Collected: 07/11/14 15:00**
**Matrix: Soil**
**Date Received: 07/14/14 11:50**
**Percent Solids: 93.7**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Chloromethane | ND | | 0.514 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Vinyl chloride | ND | | 0.0617 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Bromomethane | ND | | 0.514 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Chloroethane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0309 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Carbon disulfide | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| **Methylene chloride** | **0.0206** | **S2** | 0.0206 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Acetone | ND | | 3.09 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0514 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Bromochloromethane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Chloroform | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Carbon tetrachloride | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 2-Butanone | ND | | 1.03 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Hexane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Benzene | ND | | 0.0154 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Trichloroethene | ND | | 0.0257 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Dibromomethane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Client Sample ID: Eastside

**Date Collected: 07/11/14 15:00**
**Date Received: 07/14/14 11:50**

## Lab Sample ID: SXG0084-02

**Matrix: Soil**
**Percent Solids: 93.7**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Toluene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.03 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Tetrachloroethene | ND | | 0.0411 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Dibromochloromethane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 2-Hexanone | ND | | 1.03 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Ethylbenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Chlorobenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| m,p-Xylene | ND | | 0.411 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| o-Xylene | ND | | 0.206 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Styrene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Bromoform | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Isopropylbenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| n-Propylbenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Bromobenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 2-Chlorotoluene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 4-Chlorotoluene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| tert-Butylbenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| sec-Butylbenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| p-Isopropyltoluene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| n-Butylbenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.514 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Hexachlorobutadiene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| Naphthalene | ND | | 0.206 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.103 | | mg/kg dry | ☼ | 07/16/14 07:59 | 07/17/14 01:05 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *98.3* | | *42.4 - 163* | *07/16/14 07:59* | *07/17/14 01:05* | *1.00* |
| *1,2-dichloroethane-d4* | *92.6* | | *50 - 150* | *07/16/14 07:59* | *07/17/14 01:05* | *1.00* |
| *Toluene-d8* | *105* | | *45.8 - 155* | *07/16/14 07:59* | *07/17/14 01:05* | *1.00* |
| *4-bromofluorobenzene* | *101* | | *41.5 - 162* | *07/16/14 07:59* | *07/17/14 01:05* | *1.00* |

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.31 | 0.0097 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Acenaphthylene | ND | | 0.31 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Client Sample ID: Eastside

**Date Collected: 07/11/14 15:00**
**Date Received: 07/14/14 11:50**

## Lab Sample ID: SXG0084-02

**Matrix: Soil**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acetophenone | ND | | 0.31 | 0.019 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Anthracene | ND | | 0.31 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Atrazine | ND | | 0.31 | 0.035 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Benzidine | ND | | 3.1 | 0.93 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Benzo[a]anthracene | ND | | 0.31 | 0.019 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Benzo[a]pyrene | ND | | 0.31 | 0.019 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Benzo[b]fluoranthene | ND | | 0.31 | 0.025 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.31 | 0.015 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Benzo[k]fluoranthene | ND | | 0.31 | 0.038 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.31 | 0.022 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.31 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.31 | 0.043 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.31 | 0.018 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Butyl benzyl phthalate | ND | | 0.31 | 0.041 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Caprolactam | ND | | 1.5 | 0.10 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Carbazole | ND | | 0.31 | 0.034 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 4-Chloroaniline | ND | | 0.31 | 0.077 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 4-Chloro-3-methylphenol | ND | | 0.31 | 0.062 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2-Chloronaphthalene | ND | | 0.31 | 0.0094 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2-Chlorophenol | ND | | 0.31 | 0.020 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 0.31 | 0.020 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Chrysene | ND | | 0.31 | 0.025 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Cresols, Total | ND | | 0.31 | 0.012 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.31 | 0.018 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Dibenzofuran | ND | | 0.31 | 0.019 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.31 | 0.013 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 0.62 | 0.085 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2,4-Dichlorophenol | ND | | 0.31 | 0.0094 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Diethyl phthalate | ND | | 0.62 | 0.025 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2,4-Dimethylphenol | ND | | 0.31 | 0.062 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Dimethyl phthalate | ND | | 0.31 | 0.022 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Di-n-butyl phthalate | ND | | 0.31 | 0.027 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1.5 | 0.31 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2,4-Dinitrophenol | ND | | 1.5 | 0.31 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.31 | 0.062 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2,6-Dinitrotoluene | ND | | 0.31 | 0.026 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Di-n-octyl phthalate | ND | | 0.31 | 0.014 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Fluoranthene | ND | | 0.31 | 0.034 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Fluorene | ND | | 0.31 | 0.017 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Hexachlorobenzene | ND | | 0.31 | 0.027 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Hexachlorobutadiene | ND | | 0.31 | 0.0094 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Hexachlorocyclopentadiene | ND | | 1.5 | 0.047 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Hexachloroethane | ND | | 0.31 | 0.020 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.31 | 0.021 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2-Methylnaphthalene | ND | | 0.31 | 0.018 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2-Methylphenol | ND | | 0.31 | 0.012 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 3 & 4 Methylphenol | ND | | 0.31 | 0.031 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Naphthalene | ND | | 0.31 | 0.029 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2-Nitroaniline | ND | | 1.5 | 0.047 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Client Sample ID: Eastside

**Date Collected: 07/11/14 15:00**
**Date Received: 07/14/14 11:50**

## Lab Sample ID: SXG0084-02

**Matrix: Soil**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 3-Nitroaniline | ND | | 1.5 | 0.069 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 4-Nitroaniline | ND | | 1.5 | 0.068 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Nitrobenzene | ND | | 0.31 | 0.021 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2-Nitrophenol | ND | | 0.31 | 0.0094 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 4-Nitrophenol | ND | | 1.5 | 0.092 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.31 | 0.029 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| n-Nitrosodiphenylamine(as diphenylamine) | ND | | 0.31 | 0.020 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.31 | 0.022 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Pentachlorophenol | ND | | 1.5 | 0.31 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Phenanthrene | ND | | 0.31 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Phenol | ND | | 0.31 | 0.017 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| Pyrene | ND | | 0.31 | 0.011 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.31 | 0.026 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2,4,5-Trichlorophenol | ND | | 0.31 | 0.0094 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |
| 2,4,6-Trichlorophenol | ND | | 0.31 | 0.0094 | mg/Kg | | 07/16/14 16:41 | 07/17/14 17:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl* | *82* | | *50 - 120* | *07/16/14 16:41* | *07/17/14 17:16* | *1* |
| *2-Fluorophenol* | *82* | | *53 - 120* | *07/16/14 16:41* | *07/17/14 17:16* | *1* |
| *Nitrobenzene-d5* | *83* | | *50 - 120* | *07/16/14 16:41* | *07/17/14 17:16* | *1* |
| *Phenol-d5* | *82* | | *52 - 120* | *07/16/14 16:41* | *07/17/14 17:16* | *1* |
| *Terphenyl-d14* | *90* | | *55 - 120* | *07/16/14 16:41* | *07/17/14 17:16* | *1* |
| *2,4,6-Tribromophenol* | *80* | | *51 - 120* | *07/16/14 16:41* | *07/17/14 17:16* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 1.8 | 0.32 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| alpha-BHC | ND | | 2.1 | 0.19 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| beta-BHC | ND | | 1.8 | 0.31 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| delta-BHC | ND | | 1.8 | 0.25 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| gamma-BHC (Lindane) | ND | | 1.8 | 0.18 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| alpha-Chlordane | ND | | 1.8 | 0.59 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| gamma-Chlordane | ND | | 1.8 | 0.17 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| 4,4'-DDD | ND | | 1.8 | 0.23 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| 4,4'-DDE | ND | | 1.8 | 0.41 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| 4,4'-DDT | ND | | 1.8 | 0.66 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Dieldrin | ND | | 1.8 | 0.23 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Endosulfan I | ND | | 1.8 | 0.60 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Endosulfan II | ND | | 1.8 | 0.25 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Endosulfan sulfate | ND | | 1.8 | 0.36 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Endrin | ND | | 1.8 | 0.17 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Endrin aldehyde | ND | | 1.8 | 0.41 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Endrin ketone | ND | | 1.8 | 0.44 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Heptachlor | ND | | 2.1 | 0.21 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Heptachlor epoxide | ND | | 1.8 | 0.45 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Methoxychlor | ND | | 3.5 | 0.75 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Toxaphene | ND | | 70 | 16 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Technical Chlordane | ND | | 18 | 3.9 | ug/Kg | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Client Sample ID: Eastside

**Date Collected: 07/11/14 15:00**
**Date Received: 07/14/14 11:50**

## Lab Sample ID: SXG0084-02

**Matrix: Soil**
**Percent Solids: 94.7**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl (Surr) | 98 | | 29 - 150 | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Tetrachloro-m-xylene | 90 | | 41 - 125 | 07/25/14 12:19 | 07/26/14 00:46 | 1 |

### Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **3.76** | | 1.25 | | mg/kg dry | ☼ | 07/18/14 14:21 | 07/21/14 16:43 | 1.00 |
| **Chromium** | **12.4** | | 0.499 | | mg/kg dry | ☼ | 07/18/14 14:21 | 07/21/14 15:12 | 1.00 |
| **Copper** | **16.1** | | 3.99 | | mg/kg dry | ☼ | 07/18/14 14:21 | 07/21/14 15:12 | 1.00 |
| **Lead** | **4.17** | | 1.25 | | mg/kg dry | ☼ | 07/18/14 14:21 | 07/21/14 15:12 | 1.00 |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 1.8 | 0.23 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| 4,4'-DDE | ND | | 1.8 | 0.41 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| 4,4'-DDT | ND | | 1.8 | 0.66 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Aldrin | ND | | 1.8 | 0.32 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| alpha-BHC | ND | | 2.1 | 0.19 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| alpha-Chlordane | ND | | 1.8 | 0.59 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| beta-BHC | ND | | 1.8 | 0.31 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| delta-BHC | ND | | 1.8 | 0.25 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Dieldrin | ND | | 1.8 | 0.23 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Endosulfan I | ND | | 1.8 | 0.60 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Endosulfan II | ND | | 1.8 | 0.25 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Endosulfan sulfate | ND | | 1.8 | 0.36 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Endrin | ND | | 1.8 | 0.17 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Endrin aldehyde | ND | | 1.8 | 0.41 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Endrin ketone | ND | | 1.8 | 0.44 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| gamma-BHC (Lindane) | ND | | 1.8 | 0.18 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| gamma-Chlordane | ND | | 1.8 | 0.17 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Heptachlor | ND | | 2.1 | 0.21 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Heptachlor epoxide | ND | | 1.8 | 0.45 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Methoxychlor | ND | | 3.5 | 0.75 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Technical Chlordane | ND | | 18 | 3.9 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Toxaphene | ND | | 70 | 16 | ug/Kg dry | ☼ | 07/25/14 12:19 | 07/26/14 00:46 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl (Surr) | 98 | | 29 - 150 | 07/25/14 12:19 | 07/26/14 00:46 | 1 |
| Tetrachloro-m-xylene | 90 | | 41 - 125 | 07/25/14 12:19 | 07/26/14 00:46 | 1 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

**Lab Sample ID: 14G0115-BLK1**
**Matrix: Soil**
**Analysis Batch: 14G0115**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14G0115_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Chloromethane | ND | | 0.500 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Vinyl chloride | ND | | 0.0600 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Bromomethane | ND | | 0.500 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Chloroethane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0300 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Carbon disulfide | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Methylene chloride | ND | | 0.0200 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Acetone | ND | | 3.00 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0500 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Bromochloromethane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Chloroform | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Carbon tetrachloride | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 2-Butanone | ND | | 1.00 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Hexane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Benzene | ND | | 0.0150 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Trichloroethene | ND | | 0.0250 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Dibromomethane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Bromodichloromethane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Toluene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.00 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Tetrachloroethene | ND | | 0.0400 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Dibromochloromethane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 2-Hexanone | ND | | 1.00 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Ethylbenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Chlorobenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| m,p-Xylene | ND | | 0.400 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| o-Xylene | ND | | 0.200 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Styrene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Bromoform | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Isopropylbenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| n-Propylbenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0115-BLK1** | **Client Sample ID: Method Blank**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14G0115** | **Prep Batch: 14G0115_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromobenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 2-Chlorotoluene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 4-Chlorotoluene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| tert-Butylbenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| sec-Butylbenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| p-Isopropyltoluene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| n-Butylbenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.500 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Hexachlorobutadiene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| Naphthalene | ND | | 0.200 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.100 | | mg/kg wet | | 07/16/14 07:59 | 07/16/14 16:06 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *100* | | *42.4 - 163* | *07/16/14 07:59* | *07/16/14 16:06* | *1.00* |
| *1,2-dichloroethane-d4* | *99.3* | | *50 - 150* | *07/16/14 07:59* | *07/16/14 16:06* | *1.00* |
| *Toluene-d8* | *103* | | *45.8 - 155* | *07/16/14 07:59* | *07/16/14 16:06* | *1.00* |
| *4-bromofluorobenzene* | *101* | | *41.5 - 162* | *07/16/14 07:59* | *07/16/14 16:06* | *1.00* |

**Lab Sample ID: 14G0115-BS1** | **Client Sample ID: Lab Control Sample**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14G0115** | **Prep Batch: 14G0115_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.500 | 0.470 | | mg/kg wet | | 93.9 | 60 - 140 |
| Chloromethane | 0.500 | 0.498 | | mg/kg wet | | 99.6 | 60 - 140 |
| Vinyl chloride | 0.500 | 0.506 | | mg/kg wet | | 101 | 60 - 140 |
| Bromomethane | 0.500 | 0.530 | | mg/kg wet | | 106 | 60 - 140 |
| Chloroethane | 0.500 | 0.464 | | mg/kg wet | | 92.8 | 60 - 140 |
| Trichlorofluoromethane | 0.500 | 0.424 | | mg/kg wet | | 84.8 | 60 - 140 |
| 1,1-Dichloroethene | 0.500 | 0.464 | | mg/kg wet | | 92.8 | 76 - 187 |
| Carbon disulfide | 0.500 | 0.498 | | mg/kg wet | | 99.7 | 60 - 140 |
| Methylene chloride | 0.500 | 0.483 | | mg/kg wet | | 96.6 | 60 - 140 |
| Acetone | 2.50 | 2.81 | | mg/kg wet | | 112 | 60 - 140 |
| trans-1,2-Dichloroethene | 0.500 | 0.500 | | mg/kg wet | | 99.9 | 60 - 140 |
| Methyl tert-butyl ether | 0.500 | 0.528 | | mg/kg wet | | 106 | 79 - 127 |
| 1,1-Dichloroethane | 0.500 | 0.512 | | mg/kg wet | | 102 | 60 - 140 |
| cis-1,2-Dichloroethene | 0.500 | 0.476 | | mg/kg wet | | 95.3 | 60 - 140 |
| 2,2-Dichloropropane | 0.500 | 0.422 | | mg/kg wet | | 84.4 | 60 - 140 |
| Bromochloromethane | 0.500 | 0.496 | | mg/kg wet | | 99.2 | 60 - 140 |
| Chloroform | 0.500 | 0.483 | | mg/kg wet | | 96.6 | 60 - 140 |
| Carbon tetrachloride | 0.500 | 0.468 | | mg/kg wet | | 93.7 | 60 - 140 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0115-BS1**
**Matrix: Soil**
**Analysis Batch: 14G0115**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14G0115_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.500 | 0.470 | | mg/kg wet | | 94.0 | 60 - 140 |
| 2-Butanone | 2.50 | 2.71 | | mg/kg wet | | 108 | 60 - 140 |
| Hexane | 0.500 | 0.506 | | mg/kg wet | | 101 | 50 - 150 |
| 1,1-Dichloropropene | 0.500 | 0.502 | | mg/kg wet | | 100 | 60 - 140 |
| Benzene | 0.500 | 0.486 | | mg/kg wet | | 97.3 | 75.9 - 123 |
| 1,2-Dichloroethane (EDC) | 0.500 | 0.514 | | mg/kg wet | | 103 | 60 - 140 |
| Trichloroethene | 0.500 | 0.479 | | mg/kg wet | | 95.8 | 82.7 - 120 |
| Dibromomethane | 0.500 | 0.518 | | mg/kg wet | | 104 | 60 - 140 |
| 1,2-Dichloropropane | 0.500 | 0.481 | | mg/kg wet | | 96.2 | 60 - 140 |
| Bromodichloromethane | 0.500 | 0.478 | | mg/kg wet | | 95.5 | 60 - 140 |
| cis-1,3-Dichloropropene | 0.500 | 0.478 | | mg/kg wet | | 95.6 | 60 - 140 |
| Toluene | 0.500 | 0.494 | | mg/kg wet | | 98.9 | 77.3 - 126 |
| 4-Methyl-2-pentanone | 2.50 | 2.95 | | mg/kg wet | | 118 | 60 - 140 |
| trans-1,3-Dichloropropene | 0.500 | 0.540 | | mg/kg wet | | 108 | 60 - 140 |
| Tetrachloroethene | 0.500 | 0.516 | | mg/kg wet | | 103 | 75 - 130 |
| 1,1,2-Trichloroethane | 0.500 | 0.564 | | mg/kg wet | | 113 | 60 - 140 |
| Dibromochloromethane | 0.500 | 0.508 | | mg/kg wet | | 102 | 60 - 140 |
| 1,3-Dichloropropane | 0.500 | 0.542 | | mg/kg wet | | 108 | 60 - 140 |
| 1,2-Dibromoethane | 0.500 | 0.562 | | mg/kg wet | | 112 | 60 - 140 |
| 2-Hexanone | 2.50 | 3.00 | | mg/kg wet | | 120 | 60 - 140 |
| Ethylbenzene | 0.500 | 0.492 | | mg/kg wet | | 98.3 | 80.7 - 120 |
| Chlorobenzene | 0.500 | 0.524 | | mg/kg wet | | 105 | 80 - 120 |
| 1,1,1,2-Tetrachloroethane | 0.500 | 0.518 | | mg/kg wet | | 104 | 60 - 140 |
| m,p-Xylene | 0.500 | 0.486 | | mg/kg wet | | 97.2 | 86.1 - 120 |
| o-Xylene | 0.500 | 0.515 | | mg/kg wet | | 103 | 85.3 - 120 |
| Styrene | 0.500 | 0.524 | | mg/kg wet | | 105 | 60 - 140 |
| Bromoform | 0.500 | 0.554 | | mg/kg wet | | 111 | 60 - 140 |
| Isopropylbenzene | 0.500 | 0.501 | | mg/kg wet | | 100 | 60 - 140 |
| n-Propylbenzene | 0.500 | 0.500 | | mg/kg wet | | 100 | 60 - 140 |
| 1,1,2,2-Tetrachloroethane | 0.500 | 0.577 | | mg/kg wet | | 115 | 60 - 140 |
| Bromobenzene | 0.500 | 0.498 | | mg/kg wet | | 99.5 | 60 - 140 |
| 1,3,5-Trimethylbenzene | 0.500 | 0.502 | | mg/kg wet | | 100 | 60 - 140 |
| 2-Chlorotoluene | 0.500 | 0.514 | | mg/kg wet | | 103 | 60 - 140 |
| 1,2,3-Trichloropropane | 0.500 | 0.564 | | mg/kg wet | | 113 | 60 - 140 |
| 4-Chlorotoluene | 0.500 | 0.489 | | mg/kg wet | | 97.8 | 60 - 140 |
| tert-Butylbenzene | 0.500 | 0.496 | | mg/kg wet | | 99.2 | 60 - 140 |
| 1,2,4-Trimethylbenzene | 0.500 | 0.503 | | mg/kg wet | | 101 | 60 - 140 |
| sec-Butylbenzene | 0.500 | 0.505 | | mg/kg wet | | 101 | 60 - 140 |
| p-Isopropyltoluene | 0.500 | 0.496 | | mg/kg wet | | 99.3 | 60 - 140 |
| 1,3-Dichlorobenzene | 0.500 | 0.513 | | mg/kg wet | | 103 | 60 - 140 |
| 1,4-Dichlorobenzene | 0.500 | 0.502 | | mg/kg wet | | 100 | 60 - 140 |
| n-Butylbenzene | 0.500 | 0.508 | | mg/kg wet | | 102 | 60 - 140 |
| 1,2-Dichlorobenzene | 0.500 | 0.540 | | mg/kg wet | | 108 | 60 - 140 |
| 1,2-Dibromo-3-chloropropane | 0.500 | 0.610 | | mg/kg wet | | 122 | 60 - 140 |
| Hexachlorobutadiene | 0.500 | 0.494 | | mg/kg wet | | 98.8 | 60 - 140 |
| 1,2,4-Trichlorobenzene | 0.500 | 0.501 | | mg/kg wet | | 100 | 60 - 140 |
| Naphthalene | 0.500 | 0.528 | | mg/kg wet | | 106 | 58.8 - 130 |
| 1,2,3-Trichlorobenzene | 0.500 | 0.520 | | mg/kg wet | | 104 | 60 - 140 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0115-BS1**
**Matrix: Soil**
**Analysis Batch: 14G0115**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14G0115_P**

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| Dibromofluoromethane | 101 | | 42.4 - 163 |
| 1,2-dichloroethane-d4 | 105 | | 50 - 150 |
| Toluene-d8 | 102 | | 45.8 - 155 |
| 4-bromofluorobenzene | 98.7 | | 41.5 - 162 |

**Lab Sample ID: 14G0115-BS2**
**Matrix: Soil**
**Analysis Batch: 14G0115**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14G0115_P**

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| Dibromofluoromethane | 99.3 | | 42.4 - 163 |
| 1,2-dichloroethane-d4 | 97.7 | | 50 - 150 |
| Toluene-d8 | 102 | | 45.8 - 155 |
| 4-bromofluorobenzene | 98.1 | | 41.5 - 162 |

**Lab Sample ID: 14G0115-BSD1**
**Matrix: Soil**
**Analysis Batch: 14G0115**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total**
**Prep Batch: 14G0115_P**

| Analyte | Spike Added | LCS Dup Result | LCS Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.500 | 0.472 | | mg/kg wet | | 94.3 | 60 - 140 | 0.425 | 25 |
| Chloromethane | 0.500 | 0.500 | | mg/kg wet | | 100 | 60 - 140 | 0.501 | 25 |
| Vinyl chloride | 0.500 | 0.510 | | mg/kg wet | | 102 | 60 - 140 | 0.689 | 25 |
| Bromomethane | 0.500 | 0.518 | | mg/kg wet | | 104 | 60 - 140 | 2.29 | 25 |
| Chloroethane | 0.500 | 0.459 | | mg/kg wet | | 91.8 | 60 - 140 | 1.08 | 25 |
| Trichlorofluoromethane | 0.500 | 0.441 | | mg/kg wet | | 88.2 | 60 - 140 | 3.93 | 25 |
| 1,1-Dichloroethene | 0.500 | 0.474 | | mg/kg wet | | 94.8 | 76 - 187 | 2.13 | 25 |
| Carbon disulfide | 0.500 | 0.504 | | mg/kg wet | | 101 | 60 - 140 | 1.10 | 25 |
| Methylene chloride | 0.500 | 0.473 | | mg/kg wet | | 94.6 | 60 - 140 | 2.09 | 25 |
| Acetone | 2.50 | 2.55 | | mg/kg wet | | 102 | 60 - 140 | 9.65 | 25 |
| trans-1,2-Dichloroethene | 0.500 | 0.502 | | mg/kg wet | | 100 | 60 - 140 | 0.499 | 25 |
| Methyl tert-butyl ether | 0.500 | 0.514 | | mg/kg wet | | 103 | 79 - 127 | 2.69 | 25 |
| 1,1-Dichloroethane | 0.500 | 0.503 | | mg/kg wet | | 101 | 60 - 140 | 1.77 | 25 |
| cis-1,2-Dichloroethene | 0.500 | 0.474 | | mg/kg wet | | 94.9 | 60 - 140 | 0.421 | 25 |
| 2,2-Dichloropropane | 0.500 | 0.430 | | mg/kg wet | | 86.1 | 60 - 140 | 1.99 | 25 |
| Bromochloromethane | 0.500 | 0.485 | | mg/kg wet | | 97.0 | 60 - 140 | 2.24 | 25 |
| Chloroform | 0.500 | 0.488 | | mg/kg wet | | 97.5 | 60 - 140 | 0.927 | 25 |
| Carbon tetrachloride | 0.500 | 0.469 | | mg/kg wet | | 93.8 | 60 - 140 | 0.107 | 25 |
| 1,1,1-Trichloroethane | 0.500 | 0.472 | | mg/kg wet | | 94.5 | 60 - 140 | 0.531 | 25 |
| 2-Butanone | 2.50 | 2.63 | | mg/kg wet | | 105 | 60 - 140 | 3.00 | 25 |
| Hexane | 0.500 | 0.503 | | mg/kg wet | | 101 | 50 - 150 | 0.693 | 25 |
| 1,1-Dichloropropene | 0.500 | 0.498 | | mg/kg wet | | 99.6 | 60 - 140 | 0.700 | 25 |
| Benzene | 0.500 | 0.480 | | mg/kg wet | | 96.1 | 75.9 - 123 | 1.24 | 25 |
| 1,2-Dichloroethane (EDC) | 0.500 | 0.508 | | mg/kg wet | | 102 | 60 - 140 | 0.978 | 25 |
| Trichloroethene | 0.500 | 0.485 | | mg/kg wet | | 97.0 | 82.7 - 120 | 1.24 | 25 |
| Dibromomethane | 0.500 | 0.506 | | mg/kg wet | | 101 | 60 - 140 | 2.35 | 25 |
| 1,2-Dichloropropane | 0.500 | 0.476 | | mg/kg wet | | 95.1 | 60 - 140 | 1.15 | 25 |
| Bromodichloromethane | 0.500 | 0.473 | | mg/kg wet | | 94.6 | 60 - 140 | 0.947 | 25 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0115-BSD1** | **Client Sample ID: Lab Control Sample Dup**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14G0115** | **Prep Batch: 14G0115_P**

| Analyte | Spike Added | LCS Dup Result | LCS Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | 0.500 | 0.464 | | mg/kg wet | | 92.8 | 60 - 140 | 2.97 | 25 |
| Toluene | 0.500 | 0.505 | | mg/kg wet | | 101 | 77.3 - 126 | 2.10 | 25 |
| 4-Methyl-2-pentanone | 2.50 | 2.90 | | mg/kg wet | | 116 | 60 - 140 | 1.86 | 25 |
| trans-1,3-Dichloropropene | 0.500 | 0.528 | | mg/kg wet | | 106 | 60 - 140 | 2.25 | 25 |
| Tetrachloroethene | 0.500 | 0.518 | | mg/kg wet | | 104 | 75 - 130 | 0.290 | 25 |
| 1,1,2-Trichloroethane | 0.500 | 0.555 | | mg/kg wet | | 111 | 60 - 140 | 1.61 | 25 |
| Dibromochloromethane | 0.500 | 0.500 | | mg/kg wet | | 100 | 60 - 140 | 1.69 | 25 |
| 1,3-Dichloropropane | 0.500 | 0.530 | | mg/kg wet | | 106 | 60 - 140 | 2.05 | 25 |
| 1,2-Dibromoethane | 0.500 | 0.548 | | mg/kg wet | | 110 | 60 - 140 | 2.61 | 25 |
| 2-Hexanone | 2.50 | 2.92 | | mg/kg wet | | 117 | 60 - 140 | 2.45 | 25 |
| Ethylbenzene | 0.500 | 0.498 | | mg/kg wet | | 99.6 | 80.7 - 120 | 1.31 | 25 |
| Chlorobenzene | 0.500 | 0.545 | | mg/kg wet | | 109 | 80 - 120 | 3.83 | 25 |
| 1,1,1,2-Tetrachloroethane | 0.500 | 0.534 | | mg/kg wet | | 107 | 60 - 140 | 3.14 | 25 |
| m,p-Xylene | 0.500 | 0.490 | | mg/kg wet | | 97.9 | 86.1 - 120 | 0.718 | 25 |
| o-Xylene | 0.500 | 0.515 | | mg/kg wet | | 103 | 85.3 - 120 | 0.00 | 25 |
| Styrene | 0.500 | 0.522 | | mg/kg wet | | 104 | 60 - 140 | 0.191 | 25 |
| Bromoform | 0.500 | 0.544 | | mg/kg wet | | 109 | 60 - 140 | 1.73 | 25 |
| Isopropylbenzene | 0.500 | 0.518 | | mg/kg wet | | 104 | 60 - 140 | 3.43 | 25 |
| n-Propylbenzene | 0.500 | 0.506 | | mg/kg wet | | 101 | 60 - 140 | 1.19 | 25 |
| 1,1,2,2-Tetrachloroethane | 0.500 | 0.540 | | mg/kg wet | | 108 | 60 - 140 | 6.62 | 25 |
| Bromobenzene | 0.500 | 0.483 | | mg/kg wet | | 96.6 | 60 - 140 | 2.96 | 25 |
| 1,3,5-Trimethylbenzene | 0.500 | 0.498 | | mg/kg wet | | 99.5 | 60 - 140 | 0.900 | 25 |
| 2-Chlorotoluene | 0.500 | 0.518 | | mg/kg wet | | 104 | 60 - 140 | 0.678 | 25 |
| 1,2,3-Trichloropropane | 0.500 | 0.506 | | mg/kg wet | | 101 | 60 - 140 | 10.9 | 25 |
| 4-Chlorotoluene | 0.500 | 0.488 | | mg/kg wet | | 97.6 | 60 - 140 | 0.205 | 25 |
| tert-Butylbenzene | 0.500 | 0.494 | | mg/kg wet | | 98.8 | 60 - 140 | 0.404 | 25 |
| 1,2,4-Trimethylbenzene | 0.500 | 0.504 | | mg/kg wet | | 101 | 60 - 140 | 0.0993 | 25 |
| sec-Butylbenzene | 0.500 | 0.499 | | mg/kg wet | | 99.8 | 60 - 140 | 1.20 | 25 |
| p-Isopropyltoluene | 0.500 | 0.500 | | mg/kg wet | | 100 | 60 - 140 | 0.802 | 25 |
| 1,3-Dichlorobenzene | 0.500 | 0.502 | | mg/kg wet | | 100 | 60 - 140 | 2.17 | 25 |
| 1,4-Dichlorobenzene | 0.500 | 0.510 | | mg/kg wet | | 102 | 60 - 140 | 1.58 | 25 |
| n-Butylbenzene | 0.500 | 0.507 | | mg/kg wet | | 101 | 60 - 140 | 0.295 | 25 |
| 1,2-Dichlorobenzene | 0.500 | 0.524 | | mg/kg wet | | 105 | 60 - 140 | 2.91 | 25 |
| 1,2-Dibromo-3-chloropropane | 0.500 | 0.568 | | mg/kg wet | | 114 | 60 - 140 | 7.30 | 25 |
| Hexachlorobutadiene | 0.500 | 0.534 | | mg/kg wet | | 107 | 60 - 140 | 7.88 | 25 |
| 1,2,4-Trichlorobenzene | 0.500 | 0.506 | | mg/kg wet | | 101 | 60 - 140 | 0.894 | 25 |
| Naphthalene | 0.500 | 0.508 | | mg/kg wet | | 102 | 58.8 - 130 | 3.96 | 25 |
| 1,2,3-Trichlorobenzene | 0.500 | 0.517 | | mg/kg wet | | 103 | 60 - 140 | 0.579 | 25 |

| *Surrogate* | *LCS Dup %Recovery* | *LCS Dup Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *99.1* | | *42.4 - 163* |
| *1,2-dichloroethane-d4* | *105* | | *50 - 150* |
| *Toluene-d8* | *103* | | *45.8 - 155* |
| *4-bromofluorobenzene* | *97.6* | | *41.5 - 162* |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14G0115-BSD2**
**Matrix: Soil**
**Analysis Batch: 14G0115**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total**
**Prep Batch: 14G0115_P**

| *Surrogate* | *LCS Dup %Recovery* | *LCS Dup Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *97.1* | | *42.4 - 163* |
| *1,2-dichloroethane-d4* | *98.0* | | *50 - 150* |
| *Toluene-d8* | *105* | | *45.8 - 155* |
| *4-bromofluorobenzene* | *100* | | *41.5 - 162* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 280-234632/1-A**
**Matrix: Solid**
**Analysis Batch: 234757**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 234632**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.32 | 0.0098 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Acenaphthylene | ND | | 0.32 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Acetophenone | ND | | 0.32 | 0.019 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Anthracene | ND | | 0.32 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Atrazine | ND | | 0.32 | 0.035 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Benzidine | ND | | 3.2 | 0.95 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Benzo[a]anthracene | ND | | 0.32 | 0.019 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Benzo[a]pyrene | ND | | 0.32 | 0.019 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Benzo[b]fluoranthene | ND | | 0.32 | 0.025 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.32 | 0.015 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Benzo[k]fluoranthene | ND | | 0.32 | 0.038 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.32 | 0.022 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.32 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Bis(2-ethylhexyl) phthalate | 0.0804 | J | 0.32 | 0.044 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.32 | 0.018 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Butyl benzyl phthalate | ND | | 0.32 | 0.041 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Caprolactam | ND | | 1.5 | 0.10 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Carbazole | ND | | 0.32 | 0.034 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 4-Chloroaniline | ND | | 0.32 | 0.078 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 4-Chloro-3-methylphenol | ND | | 0.32 | 0.063 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2-Chloronaphthalene | ND | | 0.32 | 0.0096 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2-Chlorophenol | ND | | 0.32 | 0.020 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 0.32 | 0.020 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Chrysene | ND | | 0.32 | 0.026 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Cresols, Total | ND | | 0.32 | 0.012 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.32 | 0.018 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Dibenzofuran | ND | | 0.32 | 0.019 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.32 | 0.013 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 0.63 | 0.086 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2,4-Dichlorophenol | ND | | 0.32 | 0.0096 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Diethyl phthalate | ND | | 0.63 | 0.025 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2,4-Dimethylphenol | ND | | 0.32 | 0.063 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Dimethyl phthalate | ND | | 0.32 | 0.022 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Di-n-butyl phthalate | ND | | 0.32 | 0.028 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1.5 | 0.32 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 280-234632/1-A** | **Client Sample ID: Method Blank**
**Matrix: Solid** | **Prep Type: Total/NA**
**Analysis Batch: 234757** | **Prep Batch: 234632**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-Dinitrophenol | ND | | 1.5 | 0.32 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.32 | 0.063 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2,6-Dinitrotoluene | ND | | 0.32 | 0.027 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Di-n-octyl phthalate | ND | | 0.32 | 0.014 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Fluoranthene | ND | | 0.32 | 0.034 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Fluorene | ND | | 0.32 | 0.017 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Hexachlorobenzene | ND | | 0.32 | 0.028 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Hexachlorobutadiene | ND | | 0.32 | 0.0096 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Hexachlorocyclopentadiene | ND | | 1.5 | 0.048 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Hexachloroethane | ND | | 0.32 | 0.020 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.32 | 0.021 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2-Methylnaphthalene | ND | | 0.32 | 0.018 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2-Methylphenol | ND | | 0.32 | 0.012 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 3 & 4 Methylphenol | ND | | 0.32 | 0.032 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Naphthalene | ND | | 0.32 | 0.030 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2-Nitroaniline | ND | | 1.5 | 0.048 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 3-Nitroaniline | ND | | 1.5 | 0.070 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 4-Nitroaniline | ND | | 1.5 | 0.069 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Nitrobenzene | ND | | 0.32 | 0.021 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2-Nitrophenol | ND | | 0.32 | 0.0096 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 4-Nitrophenol | ND | | 1.5 | 0.093 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.32 | 0.030 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| n-Nitrosodiphenylamine(as diphenylamine) | ND | | 0.32 | 0.020 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.32 | 0.022 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Pentachlorophenol | ND | | 1.5 | 0.32 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Phenanthrene | ND | | 0.32 | 0.016 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Phenol | ND | | 0.32 | 0.017 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| Pyrene | ND | | 0.32 | 0.012 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.32 | 0.027 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2,4,5-Trichlorophenol | ND | | 0.32 | 0.0096 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |
| 2,4,6-Trichlorophenol | ND | | 0.32 | 0.0096 | mg/Kg | | 07/16/14 16:41 | 07/17/14 15:00 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl* | *82* | | *50 - 120* | *07/16/14 16:41* | *07/17/14 15:00* | *1* |
| *2-Fluorophenol* | *81* | | *53 - 120* | *07/16/14 16:41* | *07/17/14 15:00* | *1* |
| *Nitrobenzene-d5* | *81* | | *50 - 120* | *07/16/14 16:41* | *07/17/14 15:00* | *1* |
| *Phenol-d5* | *81* | | *52 - 120* | *07/16/14 16:41* | *07/17/14 15:00* | *1* |
| *Terphenyl-d14* | *92* | | *55 - 120* | *07/16/14 16:41* | *07/17/14 15:00* | *1* |
| *2,4,6-Tribromophenol* | *77* | | *51 - 120* | *07/16/14 16:41* | *07/17/14 15:00* | *1* |

**Lab Sample ID: LCS 280-234632/2-A** | **Client Sample ID: Lab Control Sample**
**Matrix: Solid** | **Prep Type: Total/NA**
**Analysis Batch: 234757** | **Prep Batch: 234632**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 2.48 | 2.11 | | mg/Kg | | 85 | 60 - 120 |
| Anthracene | 2.48 | 2.15 | | mg/Kg | | 87 | 63 - 120 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 280-234632/2-A**
**Matrix: Solid**
**Analysis Batch: 234757**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 234632**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Carbazole | 2.48 | 2.20 | | mg/Kg | | 89 | 64 - 120 |
| 4-Chloro-3-methylphenol | 2.48 | 2.30 | | mg/Kg | | 93 | 63 - 120 |
| 2-Chlorophenol | 2.48 | 1.99 | | mg/Kg | | 80 | 57 - 120 |
| 1,4-Dichlorobenzene | 2.48 | 1.90 | | mg/Kg | | 77 | 52 - 120 |
| 2,4-Dinitrotoluene | 2.48 | 2.32 | | mg/Kg | | 94 | 68 - 120 |
| 2-Methylnaphthalene | 2.48 | 2.11 | | mg/Kg | | 85 | 57 - 120 |
| 2-Methylphenol | 2.48 | 1.99 | | mg/Kg | | 80 | 56 - 120 |
| 4-Nitrophenol | 4.95 | 4.29 | | mg/Kg | | 87 | 63 - 121 |
| N-Nitrosodi-n-propylamine | 2.48 | 2.04 | | mg/Kg | | 82 | 51 - 120 |
| Pentachlorophenol | 4.95 | 3.60 | | mg/Kg | | 73 | 56 - 120 |
| Phenol | 2.48 | 1.95 | | mg/Kg | | 79 | 56 - 120 |
| Pyrene | 2.48 | 2.24 | | mg/Kg | | 91 | 64 - 120 |
| 1,2,4-Trichlorobenzene | 2.48 | 2.00 | | mg/Kg | | 81 | 52 - 120 |
| 2,4,5-Trichlorophenol | 2.48 | 2.13 | | mg/Kg | | 86 | 64 - 120 |
| 2,4,6-Trichlorophenol | 2.48 | 2.18 | | mg/Kg | | 88 | 61 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorobiphenyl* | *82* | | *50 - 120* |
| *2-Fluorophenol* | *78* | | *53 - 120* |
| *Nitrobenzene-d5* | *79* | | *50 - 120* |
| *Phenol-d5* | *79* | | *52 - 120* |
| *Terphenyl-d14* | *90* | | *55 - 120* |
| *2,4,6-Tribromophenol* | *82* | | *51 - 120* |

**Lab Sample ID: 280-57770-1 MS**
**Matrix: Solid**
**Analysis Batch: 234757**

**Client Sample ID: SXG0084-01**
**Prep Type: Total/NA**
**Prep Batch: 234632**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 2.60 | 2.25 | | mg/Kg | | 87 | 60 - 120 |
| Anthracene | ND | | 2.60 | 2.30 | | mg/Kg | | 88 | 63 - 120 |
| Carbazole | ND | | 2.60 | 2.32 | | mg/Kg | | 89 | 64 - 120 |
| 4-Chloro-3-methylphenol | ND | | 2.60 | 2.48 | | mg/Kg | | 96 | 63 - 120 |
| 2-Chlorophenol | ND | | 2.60 | 2.20 | | mg/Kg | | 85 | 57 - 120 |
| 1,4-Dichlorobenzene | ND | | 2.60 | 2.07 | | mg/Kg | | 80 | 52 - 120 |
| 2,4-Dinitrotoluene | ND | | 2.60 | 2.46 | | mg/Kg | | 95 | 68 - 120 |
| 2-Methylnaphthalene | ND | | 2.60 | 2.29 | | mg/Kg | | 88 | 57 - 120 |
| 2-Methylphenol | ND | | 2.60 | 2.14 | | mg/Kg | | 82 | 56 - 120 |
| 4-Nitrophenol | ND | | 5.19 | 4.42 | | mg/Kg | | 85 | 63 - 121 |
| N-Nitrosodi-n-propylamine | ND | | 2.60 | 2.19 | | mg/Kg | | 84 | 51 - 120 |
| Pentachlorophenol | ND | | 5.19 | 3.60 | | mg/Kg | | 69 | 56 - 120 |
| Phenol | ND | | 2.60 | 2.14 | | mg/Kg | | 82 | 56 - 120 |
| Pyrene | ND | | 2.60 | 2.34 | | mg/Kg | | 90 | 64 - 120 |
| 1,2,4-Trichlorobenzene | ND | | 2.60 | 2.18 | | mg/Kg | | 84 | 52 - 120 |
| 2,4,5-Trichlorophenol | ND | | 2.60 | 2.26 | | mg/Kg | | 87 | 64 - 120 |
| 2,4,6-Trichlorophenol | ND | | 2.60 | 2.31 | | mg/Kg | | 89 | 61 - 120 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 280-57770-1 MS** — **Client Sample ID: SXG0084-01**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 234757** — **Prep Batch: 234632**

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 2-Fluorobiphenyl | 84 | | 50 - 120 |
| 2-Fluorophenol | 81 | | 53 - 120 |
| Nitrobenzene-d5 | 82 | | 50 - 120 |
| Phenol-d5 | 82 | | 52 - 120 |
| Terphenyl-d14 | 91 | | 55 - 120 |
| 2,4,6-Tribromophenol | 83 | | 51 - 120 |

**Lab Sample ID: 280-57770-1 MSD** — **Client Sample ID: SXG0084-01**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 234757** — **Prep Batch: 234632**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 2.50 | 2.22 | | mg/Kg | | 89 | 60 - 120 | 1 | 30 |
| Anthracene | ND | | 2.50 | 2.25 | | mg/Kg | | 90 | 63 - 120 | 2 | 30 |
| Carbazole | ND | | 2.50 | 2.28 | | mg/Kg | | 91 | 64 - 120 | 2 | 30 |
| 4-Chloro-3-methylphenol | ND | | 2.50 | 2.41 | | mg/Kg | | 96 | 63 - 120 | 3 | 30 |
| 2-Chlorophenol | ND | | 2.50 | 2.09 | | mg/Kg | | 84 | 57 - 120 | 5 | 30 |
| 1,4-Dichlorobenzene | ND | | 2.50 | 1.99 | | mg/Kg | | 79 | 52 - 120 | 4 | 30 |
| 2,4-Dinitrotoluene | ND | | 2.50 | 2.44 | | mg/Kg | | 97 | 68 - 120 | 1 | 30 |
| 2-Methylnaphthalene | ND | | 2.50 | 2.21 | | mg/Kg | | 88 | 57 - 120 | 3 | 30 |
| 2-Methylphenol | ND | | 2.50 | 2.12 | | mg/Kg | | 85 | 56 - 120 | 1 | 30 |
| 4-Nitrophenol | ND | | 5.00 | 4.36 | | mg/Kg | | 87 | 63 - 121 | 1 | 30 |
| N-Nitrosodi-n-propylamine | ND | | 2.50 | 2.18 | | mg/Kg | | 87 | 51 - 120 | 0 | 30 |
| Pentachlorophenol | ND | | 5.00 | 3.61 | | mg/Kg | | 72 | 56 - 120 | 0 | 30 |
| Phenol | ND | | 2.50 | 2.07 | | mg/Kg | | 83 | 56 - 120 | 3 | 30 |
| Pyrene | ND | | 2.50 | 2.31 | | mg/Kg | | 92 | 64 - 120 | 1 | 38 |
| 1,2,4-Trichlorobenzene | ND | | 2.50 | 2.07 | | mg/Kg | | 83 | 52 - 120 | 5 | 30 |
| 2,4,5-Trichlorophenol | ND | | 2.50 | 2.20 | | mg/Kg | | 88 | 64 - 120 | 3 | 30 |
| 2,4,6-Trichlorophenol | ND | | 2.50 | 2.30 | | mg/Kg | | 92 | 61 - 120 | 0 | 30 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 2-Fluorobiphenyl | 85 | | 50 - 120 |
| 2-Fluorophenol | 80 | | 53 - 120 |
| Nitrobenzene-d5 | 81 | | 50 - 120 |
| Phenol-d5 | 81 | | 52 - 120 |
| Terphenyl-d14 | 91 | | 55 - 120 |
| 2,4,6-Tribromophenol | 83 | | 51 - 120 |

## Method: 8081B - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 160-133953/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 133957** — **Prep Batch: 133953**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 1.7 | 0.31 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| alpha-BHC | ND | | 2.0 | 0.19 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: MB 160-133953/1-A**
**Matrix: Solid**
**Analysis Batch: 133957**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 133953**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| beta-BHC | ND | | 1.7 | 0.30 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| delta-BHC | ND | | 1.7 | 0.24 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| gamma-BHC (Lindane) | ND | | 1.7 | 0.17 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| alpha-Chlordane | ND | | 1.7 | 0.57 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| gamma-Chlordane | ND | | 1.7 | 0.16 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| 4,4'-DDD | ND | | 1.7 | 0.22 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| 4,4'-DDE | ND | | 1.7 | 0.39 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| 4,4'-DDT | ND | | 1.7 | 0.63 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Dieldrin | ND | | 1.7 | 0.22 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Endosulfan I | ND | | 1.7 | 0.57 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Endosulfan II | ND | | 1.7 | 0.24 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Endosulfan sulfate | ND | | 1.7 | 0.34 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Endrin | ND | | 1.7 | 0.16 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Endrin aldehyde | ND | | 1.7 | 0.39 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Endrin ketone | ND | | 1.7 | 0.42 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Heptachlor | ND | | 2.0 | 0.20 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Heptachlor epoxide | ND | | 1.7 | 0.43 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Methoxychlor | ND | | 3.3 | 0.72 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Toxaphene | ND | | 67 | 15 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Technical Chlordane | ND | | 17 | 3.7 | ug/Kg | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *99* | | *29 - 150* | *07/25/14 12:19* | *07/25/14 23:06* | *1* |
| *Tetrachloro-m-xylene* | *98* | | *41 - 125* | *07/25/14 12:19* | *07/25/14 23:06* | *1* |

**Lab Sample ID: LCS 160-133953/2-A**
**Matrix: Solid**
**Analysis Batch: 133957**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 133953**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Aldrin | 16.7 | 16.3 | | ug/Kg | | 98 | 51 - 116 |
| alpha-BHC | 16.7 | 17.6 | | ug/Kg | | 106 | 50 - 117 |
| beta-BHC | 16.7 | 15.7 | | ug/Kg | | 94 | 50 - 113 |
| delta-BHC | 16.7 | 18.0 | | ug/Kg | | 108 | 53 - 121 |
| gamma-BHC (Lindane) | 16.7 | 15.5 | | ug/Kg | | 93 | 50 - 114 |
| alpha-Chlordane | 16.7 | 16.6 | | ug/Kg | | 100 | 55 - 119 |
| gamma-Chlordane | 16.7 | 16.4 | | ug/Kg | | 98 | 52 - 120 |
| 4,4'-DDD | 16.7 | 17.5 | | ug/Kg | | 105 | 53 - 134 |
| 4,4'-DDE | 16.7 | 16.2 | | ug/Kg | | 97 | 55 - 123 |
| 4,4'-DDT | 16.7 | 17.5 | | ug/Kg | | 105 | 57 - 138 |
| Dieldrin | 16.7 | 16.9 | | ug/Kg | | 101 | 54 - 124 |
| Endosulfan I | 16.7 | 11.4 | | ug/Kg | | 68 | 38 - 99 |
| Endosulfan II | 16.7 | 13.0 | | ug/Kg | | 78 | 42 - 105 |
| Endosulfan sulfate | 16.7 | 17.0 | | ug/Kg | | 102 | 54 - 126 |
| Endrin | 16.7 | 17.5 | | ug/Kg | | 105 | 55 - 124 |
| Endrin aldehyde | 16.7 | 16.1 | | ug/Kg | | 96 | 50 - 116 |
| Endrin ketone | 16.7 | 17.5 | | ug/Kg | | 105 | 53 - 129 |
| Heptachlor | 16.7 | 14.8 | | ug/Kg | | 89 | 40 - 140 |

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCS 160-133953/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 133957** — **Prep Batch: 133953**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Heptachlor epoxide | 16.7 | 17.2 | | ug/Kg | | 103 | 53 - 118 |
| Methoxychlor | 16.7 | 17.3 | | ug/Kg | | 104 | 54 - 140 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *97* | | *29 - 150* |
| *Tetrachloro-m-xylene* | *94* | | *41 - 125* |

**Lab Sample ID: 160-7625-A-1-B MS** — **Client Sample ID: Matrix Spike**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 133957** — **Prep Batch: 133953**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 17.4 | 17.1 | | ug/Kg | ☼ | 98 | 46 - 101 |
| alpha-BHC | ND | | 17.4 | 18.6 | F1 | ug/Kg | ☼ | 107 | 52 - 100 |
| beta-BHC | ND | | 17.4 | 16.5 | | ug/Kg | ☼ | 94 | 26 - 114 |
| delta-BHC | ND | | 17.4 | 18.2 | | ug/Kg | ☼ | 104 | 39 - 115 |
| gamma-BHC (Lindane) | ND | | 17.5 | 16.8 | | ug/Kg | ☼ | 96 | 44 - 101 |
| alpha-Chlordane | ND | | 17.4 | 17.3 | | ug/Kg | ☼ | 99 | 37 - 111 |
| gamma-Chlordane | ND | | 17.4 | 17.2 | | ug/Kg | ☼ | 99 | 46 - 117 |
| 4,4'-DDD | ND | | 17.4 | 17.9 | | ug/Kg | ☼ | 102 | 53 - 134 |
| 4,4'-DDE | ND | | 17.5 | 16.7 | | ug/Kg | ☼ | 95 | 55 - 123 |
| 4,4'-DDT | ND | | 17.4 | 17.7 | | ug/Kg | ☼ | 101 | 57 - 138 |
| Dieldrin | ND | | 17.5 | 17.7 | | ug/Kg | ☼ | 101 | 54 - 124 |
| Endosulfan I | ND | | 17.4 | 11.6 | | ug/Kg | ☼ | 66 | 38 - 99 |
| Endosulfan II | ND | | 17.4 | 13.0 | | ug/Kg | ☼ | 75 | 42 - 105 |
| Endosulfan sulfate | ND | | 17.4 | 17.4 | | ug/Kg | ☼ | 100 | 54 - 126 |
| Endrin | ND | | 17.5 | 18.3 | | ug/Kg | ☼ | 105 | 36 - 125 |
| Endrin aldehyde | ND | | 17.5 | 16.1 | | ug/Kg | ☼ | 92 | 37 - 121 |
| Endrin ketone | ND | | 17.5 | 17.6 | | ug/Kg | ☼ | 101 | 47 - 120 |
| Heptachlor | ND | | 17.4 | 16.5 | | ug/Kg | ☼ | 94 | 28 - 128 |
| Heptachlor epoxide | ND | | 17.4 | 17.3 | | ug/Kg | ☼ | 99 | 44 - 107 |
| Methoxychlor | ND | | 17.4 | 17.8 | | ug/Kg | ☼ | 102 | 24 - 131 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *101* | | *29 - 150* |
| *Tetrachloro-m-xylene* | *92* | | *41 - 125* |

**Lab Sample ID: 160-7625-A-1-C MSD** — **Client Sample ID: Matrix Spike Duplicate**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 133957** — **Prep Batch: 133953**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 17.4 | 16.4 | | ug/Kg | ☼ | 94 | 46 - 101 | 4 | 30 |
| alpha-BHC | ND | | 17.4 | 17.8 | F1 | ug/Kg | ☼ | 102 | 52 - 100 | 5 | 30 |
| beta-BHC | ND | | 17.4 | 15.6 | | ug/Kg | ☼ | 89 | 26 - 114 | 6 | 30 |
| delta-BHC | ND | | 17.4 | 17.0 | | ug/Kg | ☼ | 98 | 39 - 115 | 7 | 30 |
| gamma-BHC (Lindane) | ND | | 17.5 | 15.6 | | ug/Kg | ☼ | 89 | 44 - 101 | 8 | 30 |
| alpha-Chlordane | ND | | 17.4 | 16.5 | | ug/Kg | ☼ | 95 | 37 - 111 | 5 | 30 |

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 160-7625-A-1-C MSD** — **Client Sample ID: Matrix Spike Duplicate**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 133957** — **Prep Batch: 133953**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| gamma-Chlordane | ND | | 17.4 | 16.3 | | ug/Kg | ☼ | 93 | 46 - 117 | 5 | 30 |
| 4,4'-DDD | ND | | 17.4 | 17.2 | | ug/Kg | ☼ | 98 | 53 - 134 | 4 | 30 |
| 4,4'-DDE | ND | | 17.5 | 16.0 | | ug/Kg | ☼ | 92 | 55 - 123 | 4 | 30 |
| 4,4'-DDT | ND | | 17.4 | 16.9 | | ug/Kg | ☼ | 97 | 57 - 138 | 5 | 30 |
| Dieldrin | ND | | 17.5 | 16.8 | | ug/Kg | ☼ | 96 | 54 - 124 | 5 | 30 |
| Endosulfan I | ND | | 17.4 | 11.0 | | ug/Kg | ☼ | 63 | 38 - 99 | 5 | 30 |
| Endosulfan II | ND | | 17.4 | 12.5 | | ug/Kg | ☼ | 72 | 42 - 105 | 4 | 30 |
| Endosulfan sulfate | ND | | 17.4 | 16.5 | | ug/Kg | ☼ | 95 | 54 - 126 | 5 | 30 |
| Endrin | ND | | 17.5 | 17.4 | | ug/Kg | ☼ | 100 | 36 - 125 | 5 | 30 |
| Endrin aldehyde | ND | | 17.4 | 15.2 | | ug/Kg | ☼ | 87 | 37 - 121 | 6 | 30 |
| Endrin ketone | ND | | 17.5 | 16.7 | | ug/Kg | ☼ | 96 | 47 - 120 | 5 | 30 |
| Heptachlor | ND | | 17.4 | 15.0 | | ug/Kg | ☼ | 86 | 28 - 128 | 9 | 30 |
| Heptachlor epoxide | ND | | 17.4 | 16.4 | | ug/Kg | ☼ | 94 | 44 - 107 | 5 | 30 |
| Methoxychlor | ND | | 17.4 | 16.6 | | ug/Kg | ☼ | 95 | 24 - 131 | 7 | 30 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *93* | | *29 - 150* |
| *Tetrachloro-m-xylene* | *84* | | *41 - 125* |

## Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B

**Lab Sample ID: 14G0143-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0143** — **Prep Batch: 14G0143_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 1.25 | | mg/kg wet | | 07/18/14 14:21 | 07/21/14 14:20 | 1.00 |
| Chromium | ND | | 0.500 | | mg/kg wet | | 07/18/14 14:21 | 07/21/14 14:20 | 1.00 |
| Copper | ND | | 4.00 | | mg/kg wet | | 07/18/14 14:21 | 07/21/14 14:20 | 1.00 |
| Lead | ND | | 1.25 | | mg/kg wet | | 07/18/14 14:21 | 07/21/14 14:20 | 1.00 |

**Lab Sample ID: 14G0143-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0143** — **Prep Batch: 14G0143_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Arsenic | 50.0 | 51.7 | | mg/kg wet | | 103 | 80 - 120 |
| Chromium | 50.0 | 50.5 | | mg/kg wet | | 101 | 80 - 120 |
| Copper | 50.0 | 50.9 | | mg/kg wet | | 102 | 80 - 120 |
| Lead | 50.0 | 50.7 | | mg/kg wet | | 101 | 80 - 120 |

**Lab Sample ID: 14G0143-MS1** — **Client Sample ID: Matrix Spike**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0143** — **Prep Batch: 14G0143_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 8.74 | | 63.8 | 65.1 | | mg/kg dry | ☼ | 88.3 | 75 - 125 |
| Chromium | 10.8 | | 63.8 | 63.6 | | mg/kg dry | ☼ | 82.8 | 75 - 125 |

# QC Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B (Continued)

**Lab Sample ID: 14G0143-MS1** — **Client Sample ID: Matrix Spike**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0143** — **Prep Batch: 14G0143_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | 20.4 | | 63.8 | 84.1 | | mg/kg dry | ☼ | 99.8 | 75 - 125 | | |
| Lead | 14.1 | | 63.8 | 65.8 | | mg/kg dry | ☼ | 81.1 | 75 - 125 | | |

**Lab Sample ID: 14G0143-MSD1** — **Client Sample ID: Matrix Spike Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0143** — **Prep Batch: 14G0143_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | trix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 8.74 | | 59.6 | 61.1 | | mg/kg dry | ☼ | 87.9 | 75 - 125 | 6.29 | 20 |
| Chromium | 10.8 | | 59.6 | 60.0 | | mg/kg dry | ☼ | 82.6 | 75 - 125 | 5.76 | 20 |
| Copper | 20.4 | | 59.6 | 77.3 | | mg/kg dry | ☼ | 95.5 | 75 - 125 | 8.38 | 20 |
| Lead | 14.1 | | 59.6 | 62.4 | | mg/kg dry | ☼ | 81.1 | 75 - 125 | 5.32 | 20 |

**Lab Sample ID: 14G0143-DUP1** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0143** — **Prep Batch: 14G0143_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chromium | 10.8 | | | 10.9 | | mg/kg dry | ☼ | | | 1.05 | 20 |
| Copper | 20.4 | | | 19.9 | | mg/kg dry | ☼ | | | 2.67 | 20 |
| Lead | 14.1 | | | 12.2 | | mg/kg dry | ☼ | | | 14.5 | 20 |

**Lab Sample ID: 14G0143-DUP1** — **Client Sample ID: Duplicate**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14G0143** — **Prep Batch: 14G0143_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 8.74 | | | 9.52 | | mg/kg dry | ☼ | | | 8.53 | 20 |

## Method: 8081B - Organochlorine Pesticides (GC)

**Lab Sample ID: 133957-25** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 133953** — **Prep Batch: 133953_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 1.7 | 0.22 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| 4,4'-DDE | ND | | 1.7 | 0.39 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| 4,4'-DDT | ND | | 1.7 | 0.63 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Aldrin | ND | | 1.7 | 0.31 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| alpha-BHC | ND | | 2.0 | 0.19 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| alpha-Chlordane | ND | | 1.7 | 0.57 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| beta-BHC | ND | | 1.7 | 0.30 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| delta-BHC | ND | | 1.7 | 0.24 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Dieldrin | ND | | 1.7 | 0.22 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Endosulfan I | ND | | 1.7 | 0.57 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Endosulfan II | ND | | 1.7 | 0.24 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Endosulfan sulfate | ND | | 1.7 | 0.34 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 133957-25**
**Matrix: Soil**
**Analysis Batch: 133953**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 133953_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Endrin | ND | | 1.7 | 0.16 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Endrin aldehyde | ND | | 1.7 | 0.39 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Endrin ketone | ND | | 1.7 | 0.42 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| gamma-BHC (Lindane) | ND | | 1.7 | 0.17 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| gamma-Chlordane | ND | | 1.7 | 0.16 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Heptachlor | ND | | 2.0 | 0.20 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Heptachlor epoxide | ND | | 1.7 | 0.43 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Methoxychlor | ND | | 3.3 | 0.72 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Technical Chlordane | ND | | 17 | 3.7 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |
| Toxaphene | ND | | 67 | 15 | ug/Kg dry | | 07/25/14 12:19 | 07/25/14 23:06 | 1 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *99* | | *29 - 150* | *07/25/14 12:19* | *07/25/14 23:06* | *1* |
| *Tetrachloro-m-xylene* | *98* | | *41 - 125* | *07/25/14 12:19* | *07/25/14 23:06* | *1* |

**Lab Sample ID: 133957-26**
**Matrix: Soil**
**Analysis Batch: 133953**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 133953_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 16.7 | 17.5 | | ug/Kg dry | | 105 | 53 - 134 |
| 4,4'-DDE | 16.7 | 16.2 | | ug/Kg dry | | 97 | 55 - 123 |
| 4,4'-DDT | 16.7 | 17.5 | | ug/Kg dry | | 105 | 57 - 138 |
| Aldrin | 16.7 | 16.3 | | ug/Kg dry | | 98 | 51 - 116 |
| alpha-BHC | 16.7 | 17.6 | | ug/Kg dry | | 106 | 50 - 117 |
| alpha-Chlordane | 16.7 | 16.6 | | ug/Kg dry | | 100 | 55 - 119 |
| beta-BHC | 16.7 | 15.7 | | ug/Kg dry | | 94 | 50 - 113 |
| delta-BHC | 16.7 | 18.0 | | ug/Kg dry | | 108 | 53 - 121 |
| Dieldrin | 16.7 | 16.9 | | ug/Kg dry | | 101 | 54 - 124 |
| Endosulfan I | 16.7 | 11.4 | | ug/Kg dry | | 68 | 38 - 99 |
| Endosulfan II | 16.7 | 13.0 | | ug/Kg dry | | 78 | 42 - 105 |
| Endosulfan sulfate | 16.7 | 17.0 | | ug/Kg dry | | 102 | 54 - 126 |
| Endrin | 16.7 | 17.5 | | ug/Kg dry | | 105 | 55 - 124 |
| Endrin aldehyde | 16.7 | 16.1 | | ug/Kg dry | | 96 | 50 - 116 |
| Endrin ketone | 16.7 | 17.5 | | ug/Kg dry | | 105 | 53 - 129 |
| gamma-BHC (Lindane) | 16.7 | 15.5 | | ug/Kg dry | | 93 | 50 - 114 |
| gamma-Chlordane | 16.7 | 16.4 | | ug/Kg dry | | 98 | 52 - 120 |
| Heptachlor | 16.7 | 14.8 | | ug/Kg dry | | 89 | 40 - 140 |
| Heptachlor epoxide | 16.7 | 17.2 | | ug/Kg dry | | 103 | 53 - 118 |
| Methoxychlor | 16.7 | 17.3 | | ug/Kg dry | | 104 | 54 - 140 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *97* | | *29 - 150* |
| *Tetrachloro-m-xylene* | *94* | | *41 - 125* |

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 133957-28** | **Client Sample ID: Matrix Spike**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 133953** | **Prep Batch: 133953_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 17.4 | 17.9 | | ug/Kg dry | ☼ | 102 | 53 - 134 |
| 4,4'-DDE | ND | | 17.5 | 16.7 | | ug/Kg dry | ☼ | 95 | 55 - 123 |
| 4,4'-DDT | ND | | 17.4 | 17.7 | | ug/Kg dry | ☼ | 101 | 57 - 138 |
| Aldrin | ND | | 17.4 | 17.1 | | ug/Kg dry | ☼ | 98 | 46 - 101 |
| alpha-BHC | ND | | 17.4 | 18.6 | F1 | ug/Kg dry | ☼ | 107 | 52 - 100 |
| alpha-Chlordane | ND | | 17.4 | 17.3 | | ug/Kg dry | ☼ | 99 | 37 - 111 |
| beta-BHC | ND | | 17.4 | 16.5 | | ug/Kg dry | ☼ | 94 | 26 - 114 |
| delta-BHC | ND | | 17.4 | 18.2 | | ug/Kg dry | ☼ | 104 | 39 - 115 |
| Dieldrin | ND | | 17.5 | 17.7 | | ug/Kg dry | ☼ | 101 | 54 - 124 |
| Endosulfan I | ND | | 17.4 | 11.6 | | ug/Kg dry | ☼ | 66 | 38 - 99 |
| Endosulfan II | ND | | 17.4 | 13.0 | | ug/Kg dry | ☼ | 75 | 42 - 105 |
| Endosulfan sulfate | ND | | 17.4 | 17.4 | | ug/Kg dry | ☼ | 100 | 54 - 126 |
| Endrin | ND | | 17.5 | 18.3 | | ug/Kg dry | ☼ | 105 | 36 - 125 |
| Endrin aldehyde | ND | | 17.5 | 16.1 | | ug/Kg dry | ☼ | 92 | 37 - 121 |
| Endrin ketone | ND | | 17.5 | 17.6 | | ug/Kg dry | ☼ | 101 | 47 - 120 |
| gamma-BHC (Lindane) | ND | | 17.5 | 16.8 | | ug/Kg dry | ☼ | 96 | 44 - 101 |
| gamma-Chlordane | ND | | 17.4 | 17.2 | | ug/Kg dry | ☼ | 99 | 46 - 117 |
| Heptachlor | ND | | 17.4 | 16.5 | | ug/Kg dry | ☼ | 94 | 28 - 128 |
| Heptachlor epoxide | ND | | 17.4 | 17.3 | | ug/Kg dry | ☼ | 99 | 44 - 107 |
| Methoxychlor | ND | | 17.4 | 17.8 | | ug/Kg dry | ☼ | 102 | 24 - 131 |

| *Surrogate* | *Matrix Spike %Recovery* | *Matrix Spike Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *101* | | *29 - 150* |
| *Tetrachloro-m-xylene* | *92* | | *41 - 125* |

**Lab Sample ID: 133957-29** | **Client Sample ID: Matrix Spike Duplicate**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 133953** | **Prep Batch: 133953_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 17.4 | 17.2 | | ug/Kg dry | ☼ | 98 | 53 - 134 | 4 | 30 |
| 4,4'-DDE | ND | | 17.5 | 16.0 | | ug/Kg dry | ☼ | 92 | 55 - 123 | 4 | 30 |
| 4,4'-DDT | ND | | 17.4 | 16.9 | | ug/Kg dry | ☼ | 97 | 57 - 138 | 5 | 30 |
| Aldrin | ND | | 17.4 | 16.4 | | ug/Kg dry | ☼ | 94 | 46 - 101 | 4 | 30 |
| alpha-BHC | ND | | 17.4 | 17.8 | F1 | ug/Kg dry | ☼ | 102 | 52 - 100 | 5 | 30 |
| alpha-Chlordane | ND | | 17.4 | 16.5 | | ug/Kg dry | ☼ | 95 | 37 - 111 | 5 | 30 |
| beta-BHC | ND | | 17.4 | 15.6 | | ug/Kg dry | ☼ | 89 | 26 - 114 | 6 | 30 |
| delta-BHC | ND | | 17.4 | 17.0 | | ug/Kg dry | ☼ | 98 | 39 - 115 | 7 | 30 |
| Dieldrin | ND | | 17.5 | 16.8 | | ug/Kg dry | ☼ | 96 | 54 - 124 | 5 | 30 |
| Endosulfan I | ND | | 17.4 | 11.0 | | ug/Kg dry | ☼ | 63 | 38 - 99 | 5 | 30 |
| Endosulfan II | ND | | 17.4 | 12.5 | | ug/Kg dry | ☼ | 72 | 42 - 105 | 4 | 30 |
| Endosulfan sulfate | ND | | 17.4 | 16.5 | | ug/Kg dry | ☼ | 95 | 54 - 126 | 5 | 30 |
| Endrin | ND | | 17.5 | 17.4 | | ug/Kg dry | ☼ | 100 | 36 - 125 | 5 | 30 |
| Endrin aldehyde | ND | | 17.4 | 15.2 | | ug/Kg dry | ☼ | 87 | 37 - 121 | 6 | 30 |
| Endrin ketone | ND | | 17.5 | 16.7 | | ug/Kg dry | ☼ | 96 | 47 - 120 | 5 | 30 |
| gamma-BHC (Lindane) | ND | | 17.5 | 15.6 | | ug/Kg dry | ☼ | 89 | 44 - 101 | 8 | 30 |
| gamma-Chlordane | ND | | 17.4 | 16.3 | | ug/Kg dry | ☼ | 93 | 46 - 117 | 5 | 30 |
| Heptachlor | ND | | 17.4 | 15.0 | | ug/Kg dry | ☼ | 86 | 28 - 128 | 9 | 30 |

# QC Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 133957-29**
**Matrix: Soil**
**Analysis Batch: 133953**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total**
**Prep Batch: 133953_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Heptachlor epoxide | ND | | 17.4 | 16.4 | | ug/Kg dry | ☼ | 94 | 44 - 107 | 5 | 30 |
| Methoxychlor | ND | | 17.4 | 16.6 | | ug/Kg dry | ☼ | 95 | 24 - 131 | 7 | 30 |

| *Surrogate* | *Matrix Spike Dup %Recovery* | *Matrix Spike Dup Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *93* | | *29 - 150* |
| *Tetrachloro-m-xylene* | *84* | | *41 - 125* |

# Lab Chronicle

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Client Sample ID: Westside

**Lab Sample ID: SXG0084-01**

**Date Collected: 07/11/14 15:00**
**Matrix: Soil**
**Date Received: 07/14/14 11:50**
**Percent Solids: 93.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.884 | 14G0115_P | 07/16/14 07:59 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14G0115 | 07/17/14 00:43 | CBW | TAL SPK |
| Total/NA | Prep | 3550C | | | 234632 | 07/16/14 16:41 | EJP | TAL DEN |
| Total/NA | Analysis | 8270C | | 1 | 234757 | 07/17/14 15:54 | MGH | TAL DEN |
| Total/NA | Prep | 3550C | | | 133953 | 07/25/14 12:19 | KKA | TAL SL |
| Total/NA | Analysis | 8081B | | 1 | 133957 | 07/25/14 23:46 | CEH | TAL SL |
| Total | Prep | EPA 3050B | | 0.990 | 14G0143_P | 07/18/14 14:21 | JSP | TAL SPK |
| Total | Analysis | EPA 6010C | | 1.00 | 14G0143 | 07/21/14 15:08 | ICP | TAL SPK |
| Total | Prep | EPA 3050B | | 0.990 | 14G0143_P | 07/18/14 14:21 | JSP | TAL SPK |
| Total | Analysis | EPA 6010C | | 1.00 | 14G0143 | 07/21/14 16:40 | ICP | TAL SPK |
| Total/NA | Analysis | Moisture | | 1 | 133981 | 07/26/14 08:18 | SDB | TAL SL |
| Total | Prep | 3550C | | | 133953_P | 07/25/14 12:19 | | TAL SL |
| Total | Analysis | 8081B | | 1 | 133953 | 07/25/14 23:46 | CEH | TAL SL |

## Client Sample ID: Eastside

**Lab Sample ID: SXG0084-02**

**Date Collected: 07/11/14 15:00**
**Matrix: Soil**
**Date Received: 07/14/14 11:50**
**Percent Solids: 93.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.901 | 14G0115_P | 07/16/14 07:59 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14G0115 | 07/17/14 01:05 | CBW | TAL SPK |
| Total/NA | Prep | 3550C | | | 234632 | 07/16/14 16:41 | EJP | TAL DEN |
| Total/NA | Analysis | 8270C | | 1 | 234757 | 07/17/14 17:16 | MGH | TAL DEN |
| Total/NA | Prep | 3550C | | | 133953 | 07/25/14 12:19 | KKA | TAL SL |
| Total/NA | Analysis | 8081B | | 1 | 133957 | 07/26/14 00:46 | CEH | TAL SL |
| Total | Prep | EPA 3050B | | 0.935 | 14G0143_P | 07/18/14 14:21 | JSP | TAL SPK |
| Total | Analysis | EPA 6010C | | 1.00 | 14G0143 | 07/21/14 15:12 | ICP | TAL SPK |
| Total | Prep | EPA 3050B | | 0.935 | 14G0143_P | 07/18/14 14:21 | JSP | TAL SPK |
| Total | Analysis | EPA 6010C | | 1.00 | 14G0143 | 07/21/14 16:43 | ICP | TAL SPK |
| Total/NA | Analysis | Moisture | | 1 | 133981 | 07/26/14 08:18 | SDB | TAL SL |
| Total | Prep | Wet Chem | | 1.00 | 14G0155_P | 07/22/14 09:43 | JSP | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14G0155 | 07/22/14 09:44 | JSP | TAL SPK |
| Total | Prep | 3550C | | | 133953_P | 07/25/14 12:19 | | TAL SL |
| Total | Analysis | 8081B | | 1 | 133953 | 07/26/14 00:46 | CEH | TAL SL |
| Total | Analysis | Moisture | | 1 | 133981 | 07/26/14 08:18 | SDB | TAL SL |
| Total | Prep | NA | | | 133981_P | 07/26/14 08:18 | | TAL SL |

**Laboratory References:**

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL 314.298.8566
TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-071 | 10-31-14 |
| Washington | State Program | 10 | C569 | 01-06-15 |

## Laboratory: TestAmerica Denver

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| A2LA | DoD ELAP | | 2907.01 | 10-31-15 |
| A2LA | ISO/IEC 17025 | | 2907.01 | 10-31-15 |
| Alabama | State Program | 4 | 40730 | 09-30-12 * |
| Alaska (UST) | State Program | 10 | UST-30 | 07-31-14 |
| Arizona | State Program | 9 | AZ0713 | 12-19-14 |
| Arkansas DEQ | State Program | 6 | 88-0687 | 06-01-14 * |
| California | State Program | 9 | 2513 | 08-31-14 |
| Colorado | State Program | 8 | N/A | 09-30-14 |
| Connecticut | State Program | 1 | PH-0686 | 09-30-14 |
| Florida | NELAP | 4 | E87667 | 06-30-15 |
| Georgia | State Program | 4 | N/A | 01-09-15 |
| Illinois | NELAP | 5 | 200017 | 04-30-15 |
| Iowa | State Program | 7 | 370 | 12-01-14 |
| Kansas | NELAP | 7 | E-10166 | 04-30-15 |
| Louisiana | NELAP | 6 | 30785 | 06-30-14 * |
| Maine | State Program | 1 | CO0002 | 03-03-15 |
| Minnesota | NELAP | 5 | 8-999-405 | 12-31-14 |
| Nevada | State Program | 9 | CO0026 | 07-31-14 |
| New Hampshire | NELAP | 1 | 205310 | 04-28-15 |
| New Jersey | NELAP | 2 | CO004 | 06-30-15 |
| New Mexico | State Program | 6 | CO00026 | 01-09-15 |
| New York | NELAP | 2 | 11964 | 03-31-15 |
| North Carolina (WW/SW) | State Program | 4 | 358 | 12-31-14 |
| North Dakota | State Program | 8 | R-034 | 06-30-14 * |
| Oklahoma | State Program | 6 | 8614 | 08-31-14 |
| Oregon | NELAP | 10 | 4025 | 01-09-15 |
| Pennsylvania | NELAP | 3 | 68-00664 | 07-30-14 * |
| South Carolina | State Program | 4 | 72002001 | 06-30-14 * |
| Texas | NELAP | 6 | T104704183-13-8 | 10-01-14 |
| USDA | Federal | | P330-13-00202 | 07-02-16 |
| Utah | NELAP | 8 | CO00026 | 07-31-14 |
| Virginia | NELAP | 3 | 460232 | 06-14-15 |
| Washington | State Program | 10 | C583 | 08-03-14 |
| West Virginia DEP | State Program | 3 | 354 | 11-30-14 |
| Wisconsin | State Program | 5 | 999615430 | 08-31-14 |
| Wyoming (UST) | A2LA | 8 | 2907.01 | 10-31-15 |

## Laboratory: TestAmerica St. Louis

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | MO00054 | 06-30-15 |
| California | NELAP | 9 | 2886 | 03-31-15 |
| Connecticut | State Program | 1 | PH-0241 | 03-31-15 |

* Certification renewal pending - certification considered valid.

# Certification Summary

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

## Laboratory: TestAmerica St. Louis (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Florida | NELAP | 4 | E87689 | 06-30-15 |
| Illinois | NELAP | 5 | 200023 | 11-30-14 |
| Iowa | State Program | 7 | 373 | 12-01-14 |
| Kansas | NELAP | 7 | E-10236 | 10-31-14 |
| Kentucky (DW) | State Program | 4 | 90125 | 12-31-14 |
| L-A-B | DoD ELAP | | L2305 | 01-10-16 |
| Louisiana | NELAP | 6 | 04080 | 06-30-15 |
| Louisiana | NELAP | 6 | LA140007 | 12-31-14 |
| Maryland | State Program | 3 | 310 | 09-30-14 |
| Missouri | State Program | 7 | 780 | 06-30-14 |
| Nevada | State Program | 9 | MO000542013-1 | 07-31-14 |
| New Jersey | NELAP | 2 | MO002 | 06-30-15 |
| New Mexico | State Program | 6 | | 06-30-10 * |
| New York | NELAP | 2 | 11616 | 03-31-15 |
| North Dakota | State Program | 8 | R207 | 06-30-14 |
| NRC | NRC | | 24-24817-01 | 12-31-22 |
| Oklahoma | State Program | 6 | 2013-049 | 08-31-14 |
| Pennsylvania | NELAP | 3 | 68-00540 | 02-28-15 |
| South Carolina | State Program | 4 | 85002001 | 06-30-14 |
| Texas | NELAP | 6 | T104704193-13-6 | 07-31-14 |
| USDA | Federal | | P330-07-00122 | 01-09-17 |
| USEPA Reg V SDWA | Federal | 1 | WG-15J | 08-30-14 |
| Utah | NELAP | 8 | MO000542013-5 | 07-31-14 |
| Virginia | NELAP | 3 | 460230 | 06-14-15 |
| Washington | State Program | 10 | C592 | 08-30-14 |
| West Virginia DEP | State Program | 3 | 381 | 08-30-14 |

* Certification renewal pending - certification considered valid.

# Method Summary

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXG0084

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 8260C | Volatile Organic Compounds by EPA Methods 5035/8260C | | TAL SPK |
| 8270C | Semivolatile Organic Compounds (GC/MS) | SW846 | TAL DEN |
| 8081B | Organochlorine Pesticides (GC) | SW846 | TAL SL |
| EPA 6010C | Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B | | TAL SPK |
| Moisture | Percent Moisture | EPA | TAL SL |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL 314.298.8566

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.testamericainc.com

☐ Rush

☐ Short Hold

# Chain of Custody Record

SXG0084

| | | | |
|---|---|---|---|
| Client: Tommer Const Co. Inc. | Client Contact: Chris Tommer | Date: 6-11-14 | Chain of Custody Number: 25688 |
| Address: P.O. Box 1150 | Telephone Number (Area Code)/Fax Number: (509) 750-8954 509-787-3632 | Lab Number | Page ____ of ____ |
| City: Ephrata; State: Wa.; Zip Code: 98823 | Sampler: Chris Tommer | Lab Contact | |
| Project Name and Location (State): Wenatchee Pit Wa. | Billing Contact: Chris Tommer | | |
| Contract/Purchase Order/Quote No.: 58007647 | | | |

| Sample I.D. and Location/Description (Containers for each sample may be combined on one line) | Date | Time | Matrix: Air | Aqueous | Sed. | Soil | | Containers & Preservatives: Unpres. | H2SO4 | HNO3 | HCl | NaOH | ZnAc/NaOH | | Volatiles | Semi Volatiles | Pesticides | | | AS | NZ | CS | CPB | | | | Special Instructions/ Conditions of Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| West Side | 6-11-14 | 3:00pm | | | | | | | | | | | | | X | X | | | | X | X | X | X | | | | |
| East Side | 6-11-14 | 3:00pm | | | | | | | | | | | | | X | X | | | | X | X | X | X | | | | |

Analysis (Attach list if more space is needed)

Cooler: ☒ Yes ☐ No Cooler Temp: 1

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

Turn Around Time Required (business days): ☐ 24 Hours ☐ 48 Hours ☒ 5 Days ☐ 10 Days ☐ 15 Days ☐ Other ____

QC Requirements (Specify)

| | | | | | |
|---|---|---|---|---|---|
| 1. Relinquished By Sign/Print: Chris Tommer | Date: 6-14 | Time: 9:00 | 1. Received By Sign/Print: Pat Dhapilton | Date: 7-14-14 | Time: 11:50 |
| 2. Relinquished By Sign/Print | Date | Time | 2. Received By Sign/Print | Date | Time |
| 3. Relinquished By Sign/Print | Date | Time | 3. Received By Sign/Print | Date | Time |

Comments

**DISTRIBUTION:** WHITE – Stays with the Samples; CANARY – Returned to Client with Report; PINK – Field Copy

TAL-8274-580 (0210)

**TestAmerica Spokane**
**Sample Receipt Form**

| | | |
|---|---|---|
| **Work Order #** SXG0084 | **Client:** Tommer Const. | **Project:** Wenatchee Pit |
| Date/Time Received: 7-14-14 11:50 | By: CS | |
| Samples Delivered By: ☐Shipping Service ☐Courier ☑Client ☐Other: | | |
| List Air Bill Number(s) or Attach a photocopy of the Air Bill: | | |

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | X | | | |
| Custody Seals are present and intact: | | | X | |
| Are CoC documents present: | X | | | |
| Necessary signatures: | X | | | |

Thermal Preservation Type: ☐Blue Ice ☐Gel Ice ☑Real Ice ☐Dry Ice ☐None ☐Other:

Temperature: 5.5 °C Thermometer (Circle **one** Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐Not enough ice ☐Ice melted ☐w/in 4hrs of collection ☐NA ☐Other:

| Log-in Phase Date/Time: 7-14-14 13:25 By: CS | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | X | | | |
| Samples containers were received intact: | X | | | |
| Do sample IDs match the CoC | X | | | |
| Appropriate sample containers were received for tests requested | X | | | |
| Are sample volumes adequate for tests requested | X | | | |
| Appropriate preservatives were used for the tests requested | X | | | |
| pH of inorganic samples checked and is within method specification | X | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | | | X | |
| Are dissolved parameters field filtered | | | X | |
| Do any samples need to be filtered or preserved by the lab | | X | | |
| Does this project require quick turnaround analysis | X | | | 5days |
| Are there any short hold time tests (see chart below) | | X | | |
| Are any samples within 2 days of or past expiration | | X | | |
| Was the CoC scanned | X | | | |
| Were there Non-conformance issues at login | | X | | |
| If yes, was a CAR generated # | | | X | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

**Form No. SP-FORM-SPL-002 12 December 2012**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXH0010
Client Project/Site: [none]
Client Project Description: Wenatchee Pit

For:
Tommer Construction Company, Inc.
PO Box 1150
Ephrata, WA 98823

Attn: Chris Tommer

*Authorized for release by:*
*8/18/2014 4:00:40 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*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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# Case Narrative

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Job ID: SXH0010

### Laboratory: TestAmerica St. Louis

**Narrative**

**Job Narrative**
**160-7748-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 8/5/2014 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.6º C.

**GC/MS Semi VOA**
Method(s) 8270D: Surrogate recoveries for the following samples were outside the upper control limit: (LCS 160-137750/2-A), (LCSD 160-137750/3-A), (MB 160-137750/1-A), SXH0010-02 (Southside - Soil) (160-7748-2), SXH0010-03 (Eastside - Soil) (160-7748-3). These samples did not contain any target analytes >RL (except for QC); therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 138228 recovered outside the upper control limits. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. (LCS 160-137750/2-A), (LCSD 160-137750/3-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Organic Prep**
Method(s) 3550C: 3550 8270
Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch <<137750>>. An LCS/LCSD was performed to demonstrate accuracy and replicate precision. SXH0010-01 (Northside - Soil) (160-7748-1), SXH0010-02 (Southside - Soil) (160-7748-2), SXH0010-03 (Eastside - Soil) (160-7748-3), SXH0010-04 (Westside - Soil) (160-7748-4)

Method(s) 3550C: 3550 8081
Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch <<137746>>. An LCS/LCSD was performed to demonstrate accuracy and replicate precision. SXH0010-01 (Northside - Soil) (160-7748-1), SXH0010-02 (Southside - Soil) (160-7748-2), SXH0010-03 (Eastside - Soil) (160-7748-3), SXH0010-04 (Westside - Soil) (160-7748-4)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Sample Summary

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXH0010-01 | Northside | Soil | 07/31/14 11:05 | 08/04/14 14:30 |
| SXH0010-02 | Southside | Soil | 07/31/14 11:10 | 08/04/14 14:30 |
| SXH0010-03 | Eastside | Soil | 07/31/14 11:15 | 08/04/14 14:30 |
| SXH0010-04 | Westside | Soil | 07/31/14 11:20 | 08/04/14 14:30 |

# Definitions/Glossary

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Qualifiers

### GCMS Volatiles

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD exceeds the control limits |
| 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 |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Northside

**Date Collected: 07/31/14 11:05**
**Date Received: 08/04/14 14:30**

## Lab Sample ID: SXH0010-01

**Matrix: Soil**
**Percent Solids: 93.9**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.111 | 0.0103 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Chloromethane | ND | | 0.555 | 0.00588 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Vinyl chloride | ND | | 0.0665 | 0.00688 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Bromomethane | ND | | 0.555 | 0.0339 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Chloroethane | ND | | 0.111 | 0.0272 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0333 | 0.00876 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.111 | 0.0141 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Carbon disulfide | ND | | 0.111 | 0.0119 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Methylene chloride | ND | | 0.222 | 0.00577 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| **Acetone** | **0.769** | **J** | 3.33 | 0.0965 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.111 | 0.0114 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0555 | 0.00355 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.111 | 0.0125 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.111 | 0.00632 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.111 | 0.0189 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Bromochloromethane | ND | | 0.111 | 0.00433 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Chloroform | ND | | 0.111 | 0.00854 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Carbon tetrachloride | ND | | 0.111 | 0.0231 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.111 | 0.0192 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 2-Butanone | ND | | 1.11 | 0.122 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Hexane | ND | | 0.111 | 0.00898 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.111 | 0.0193 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Benzene | ND | | 0.0166 | 0.0108 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.111 | 0.00543 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Trichloroethene | ND | | 0.0277 | 0.0142 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Dibromomethane | ND | | 0.111 | 0.0101 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.111 | 0.00665 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Bromodichloromethane | ND | | 0.111 | 0.00776 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.111 | 0.00688 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Toluene | ND | | 0.111 | 0.0148 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.11 | 0.0226 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.111 | 0.00732 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Tetrachloroethene | ND | | 0.0444 | 0.0195 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.111 | 0.00688 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| **Dibromochloromethane** | **0.0139** | **J** | 0.111 | 0.00665 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.111 | 0.00821 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0111 | 0.00643 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 2-Hexanone | ND | | 1.11 | 0.0516 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Ethylbenzene | ND | | 0.111 | 0.0180 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Chlorobenzene | ND | | 0.111 | 0.00843 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.111 | 0.0113 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| m,p-Xylene | ND | | 0.444 | 0.0189 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| o-Xylene | ND | | 0.222 | 0.0145 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Styrene | ND | | 0.111 | 0.0103 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Bromoform | ND | | 0.111 | 0.0139 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Isopropylbenzene | ND | | 0.111 | 0.0211 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| n-Propylbenzene | ND | | 0.111 | 0.0230 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.111 | 0.00832 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Bromobenzene | ND | | 0.111 | 0.0104 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Northside

**Date Collected: 07/31/14 11:05**
**Date Received: 08/04/14 14:30**

## Lab Sample ID: SXH0010-01

**Matrix: Soil**
**Percent Solids: 93.9**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | ND | | 0.111 | 0.0206 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 2-Chlorotoluene | ND | | 0.111 | 0.0181 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.111 | 0.00932 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 4-Chlorotoluene | ND | | 0.111 | 0.0159 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| tert-Butylbenzene | ND | | 0.111 | 0.0240 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.111 | 0.0161 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| sec-Butylbenzene | ND | | 0.111 | 0.0261 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| p-Isopropyltoluene | ND | | 0.111 | 0.0265 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.111 | 0.0140 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.111 | 0.0118 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| n-Butylbenzene | ND | | 0.111 | 0.0305 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.111 | 0.00843 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.555 | 0.0315 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Hexachlorobutadiene | ND | | 0.111 | 0.0632 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.111 | 0.0221 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| Naphthalene | ND | | 0.222 | 0.0151 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.111 | 0.0394 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 10:42 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *80 - 120* | *08/06/14 07:41* | *08/06/14 10:42* | *1.00* |
| *1,2-dichloroethane-d4* | *102* | | *74.7 - 120* | *08/06/14 07:41* | *08/06/14 10:42* | *1.00* |
| *Toluene-d8* | *103* | | *78.5 - 125* | *08/06/14 07:41* | *08/06/14 10:42* | *1.00* |
| *4-bromofluorobenzene* | *99.7* | | *69.8 - 140* | *08/06/14 07:41* | *08/06/14 10:42* | *1.00* |

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Acenaphthylene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Anthracene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Benzo[a]anthracene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Benzo[b]fluoranthene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Benzo[k]fluoranthene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Benzo[a]pyrene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Bis(2-chloroethoxy)methane | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Bis(2-chloroethyl)ether | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.35 | 0.048 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Butyl benzyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Carbazole | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 4-Chloroaniline | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 4-Chloro-3-methylphenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2-Chloronaphthalene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2-Chlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 4-Chlorophenyl phenyl ether | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Chrysene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Dibenzofuran | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Di-n-butyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 1,2-Dichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Northside

**Date Collected: 07/31/14 11:05**
**Date Received: 08/04/14 14:30**

## Lab Sample ID: SXH0010-01

**Matrix: Soil**
**Percent Solids: 94.1**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 1,4-Dichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2,4-Dichlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Diethyl phthalate | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2,4-Dimethylphenol | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Dimethyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2,4-Dinitrophenol | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2,6-Dinitrotoluene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Di-n-octyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Fluoranthene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Fluorene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Hexachlorobenzene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Hexachlorobutadiene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Hexachlorocyclopentadiene | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Hexachloroethane | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Isophorone | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2-Methylnaphthalene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2-Methylphenol | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 3 & 4 Methylphenol | ND | | 0.70 | 0.071 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Naphthalene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2-Nitroaniline | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 3-Nitroaniline | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 4-Nitroaniline | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Nitrobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2-Nitrophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 4-Nitrophenol | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Pentachlorophenol | ND | | 0.70 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Phenanthrene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Phenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Pyrene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 1,2,4-Trichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2,4,5-Trichlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 2,4,6-Trichlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Aniline | ND | | 0.35 | 0.063 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| 1,4-Dioxane | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Benzyl alcohol | ND | | 0.35 | 0.055 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |
| Pyridine | ND | | 0.70 | 0.071 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *91* | | *53 - 97* | *08/13/14 08:44* | *08/14/14 22:07* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *93* | | *46 - 111* | *08/13/14 08:44* | *08/14/14 22:07* | *1* |
| *Nitrobenzene-d5 (Surr)* | *93* | | *55 - 98* | *08/13/14 08:44* | *08/14/14 22:07* | *1* |
| *Phenol-d5 (Surr)* | *91* | | *54 - 101* | *08/13/14 08:44* | *08/14/14 22:07* | *1* |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Northside

**Lab Sample ID: SXH0010-01**
**Date Collected: 07/31/14 11:05**
**Matrix: Soil**
**Date Received: 08/04/14 14:30**
**Percent Solids: 94.1**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Terphenyl-d14 (Surr)* | *94* | | *58 - 123* | *08/13/14 08:44* | *08/14/14 22:07* | *1* |
| *2-Fluorobiphenyl (Surr)* | *94* | | *56 - 97* | *08/13/14 08:44* | *08/14/14 22:07* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 1.8 | 0.33 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| alpha-BHC | ND | | 2.1 | 0.20 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| beta-BHC | ND | | 1.8 | 0.32 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| delta-BHC | ND | | 1.8 | 0.26 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| gamma-BHC (Lindane) | ND | | 1.8 | 0.18 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| alpha-Chlordane | ND | | 1.8 | 0.60 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| gamma-Chlordane | ND | | 1.8 | 0.17 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| 4,4'-DDD | ND | | 1.8 | 0.23 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| 4,4'-DDE | ND | | 1.8 | 0.41 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| 4,4'-DDT | ND | | 1.8 | 0.67 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| Dieldrin | ND | | 1.8 | 0.23 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| Endosulfan I | ND | | 1.8 | 0.61 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| Endosulfan II | ND | | 1.8 | 0.25 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| Endosulfan sulfate | ND | | 1.8 | 0.36 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| Endrin | ND | | 1.8 | 0.17 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| Endrin aldehyde | ND | | 1.8 | 0.41 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| Endrin ketone | ND | | 1.8 | 0.44 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| Heptachlor | ND | | 2.1 | 0.22 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| Heptachlor epoxide | ND | | 1.8 | 0.46 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| Methoxychlor | ND | | 3.5 | 0.76 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| Toxaphene | ND | | 71 | 16 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |
| Technical Chlordane | ND | | 18 | 4.0 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 18:45 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *106* | | *29 - 150* | *08/13/14 09:30* | *08/13/14 18:45* | *1* |
| *Tetrachloro-m-xylene* | *88* | | *41 - 125* | *08/13/14 09:30* | *08/13/14 18:45* | *1* |

### Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **4.19** | | 2.32 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/12/14 11:04 | 2.00 |
| **Chromium** | **15.1** | | 0.926 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/12/14 11:04 | 2.00 |
| **Copper** | **19.1** | | 7.41 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/12/14 11:04 | 2.00 |
| **Lead** | **3.15** | | 2.32 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/12/14 11:04 | 2.00 |

## Client Sample ID: Southside

**Lab Sample ID: SXH0010-02**
**Date Collected: 07/31/14 11:10**
**Matrix: Soil**
**Date Received: 08/04/14 14:30**
**Percent Solids: 93.9**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.115 | 0.0106 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Chloromethane | ND | | 0.573 | 0.00607 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Vinyl chloride | ND | | 0.0687 | 0.00710 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Bromomethane | ND | | 0.573 | 0.0350 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Chloroethane | ND | | 0.115 | 0.0281 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Southside

**Date Collected: 07/31/14 11:10**
**Date Received: 08/04/14 14:30**

## Lab Sample ID: SXH0010-02

**Matrix: Soil**
**Percent Solids: 93.9**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | 0.0344 | 0.00905 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.115 | 0.0145 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Carbon disulfide | ND | | 0.115 | 0.0123 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| **Methylene chloride** | **0.0155** | **J** | 0.229 | 0.00595 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| **Acetone** | **1.33** | **J** | 3.44 | 0.0996 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.115 | 0.0118 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0573 | 0.00366 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.115 | 0.0129 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.115 | 0.00653 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.115 | 0.0195 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Bromochloromethane | ND | | 0.115 | 0.00447 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Chloroform | ND | | 0.115 | 0.00882 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Carbon tetrachloride | ND | | 0.115 | 0.0238 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.115 | 0.0198 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 2-Butanone | ND | | 1.15 | 0.126 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Hexane | ND | | 0.115 | 0.00927 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.115 | 0.0199 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Benzene | ND | | 0.0172 | 0.0111 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.115 | 0.00561 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Trichloroethene | ND | | 0.0286 | 0.0147 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Dibromomethane | ND | | 0.115 | 0.0104 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.115 | 0.00687 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Bromodichloromethane | ND | | 0.115 | 0.00802 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.115 | 0.00710 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Toluene | ND | | 0.115 | 0.0152 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.15 | 0.0234 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.115 | 0.00756 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Tetrachloroethene | ND | | 0.0458 | 0.0202 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.115 | 0.00710 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Dibromochloromethane | ND | | 0.115 | 0.00687 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.115 | 0.00847 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0115 | 0.00664 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 2-Hexanone | ND | | 1.15 | 0.0532 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Ethylbenzene | ND | | 0.115 | 0.0185 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Chlorobenzene | ND | | 0.115 | 0.00870 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.115 | 0.0117 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| m,p-Xylene | ND | | 0.458 | 0.0195 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| o-Xylene | ND | | 0.229 | 0.0150 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Styrene | ND | | 0.115 | 0.0106 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Bromoform | ND | | 0.115 | 0.0143 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Isopropylbenzene | ND | | 0.115 | 0.0218 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| n-Propylbenzene | ND | | 0.115 | 0.0237 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.115 | 0.00859 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Bromobenzene | ND | | 0.115 | 0.0108 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.115 | 0.0213 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 2-Chlorotoluene | ND | | 0.115 | 0.0187 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.115 | 0.00962 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 4-Chlorotoluene | ND | | 0.115 | 0.0164 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| tert-Butylbenzene | ND | | 0.115 | 0.0247 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Southside

**Date Collected: 07/31/14 11:10**
**Date Received: 08/04/14 14:30**

## Lab Sample ID: SXH0010-02

**Matrix: Soil**
**Percent Solids: 93.9**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | ND | | 0.115 | 0.0166 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| sec-Butylbenzene | ND | | 0.115 | 0.0269 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| p-Isopropyltoluene | ND | | 0.115 | 0.0274 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.115 | 0.0144 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.115 | 0.0121 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| n-Butylbenzene | ND | | 0.115 | 0.0315 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.115 | 0.00870 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.573 | 0.0325 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Hexachlorobutadiene | ND | | 0.115 | 0.0653 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.115 | 0.0228 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| Naphthalene | ND | | 0.229 | 0.0156 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.115 | 0.0406 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:04 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *99.5* | | *80 - 120* | *08/06/14 07:41* | *08/06/14 11:04* | *1.00* |
| *1,2-dichloroethane-d4* | *99.1* | | *74.7 - 120* | *08/06/14 07:41* | *08/06/14 11:04* | *1.00* |
| *Toluene-d8* | *103* | | *78.5 - 125* | *08/06/14 07:41* | *08/06/14 11:04* | *1.00* |
| *4-bromofluorobenzene* | *97.5* | | *69.8 - 140* | *08/06/14 07:41* | *08/06/14 11:04* | *1.00* |

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Acenaphthylene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Anthracene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Benzo[a]anthracene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Benzo[b]fluoranthene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Benzo[k]fluoranthene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Benzo[a]pyrene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Bis(2-chloroethoxy)methane | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Bis(2-chloroethyl)ether | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.35 | 0.048 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Butyl benzyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Carbazole | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 4-Chloroaniline | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 4-Chloro-3-methylphenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 2-Chloronaphthalene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 2-Chlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 4-Chlorophenyl phenyl ether | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Chrysene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Dibenzofuran | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Di-n-butyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 1,2-Dichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 1,3-Dichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 1,4-Dichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 2,4-Dichlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Diethyl phthalate | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Southside

**Date Collected: 07/31/14 11:10**
**Date Received: 08/04/14 14:30**

## Lab Sample ID: SXH0010-02

**Matrix: Soil**
**Percent Solids: 94.5**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-Dimethylphenol | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Dimethyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 2,4-Dinitrophenol | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 2,6-Dinitrotoluene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Di-n-octyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Fluoranthene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Fluorene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Hexachlorobenzene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Hexachlorobutadiene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Hexachlorocyclopentadiene | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Hexachloroethane | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Isophorone | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 2-Methylnaphthalene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 2-Methylphenol | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 3 & 4 Methylphenol | ND | | 0.70 | 0.070 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Naphthalene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 2-Nitroaniline | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 3-Nitroaniline | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 4-Nitroaniline | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Nitrobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 2-Nitrophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 4-Nitrophenol | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Pentachlorophenol | ND | | 0.70 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Phenanthrene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Phenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Pyrene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 1,2,4-Trichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 2,4,5-Trichlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 2,4,6-Trichlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Aniline | ND | | 0.35 | 0.063 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| 1,4-Dioxane | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Benzyl alcohol | ND | | 0.35 | 0.055 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |
| Pyridine | ND | | 0.70 | 0.070 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 22:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *98* | *X* | *53 - 97* | *08/13/14 08:44* | *08/14/14 22:41* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *100* | | *46 - 111* | *08/13/14 08:44* | *08/14/14 22:41* | *1* |
| *Nitrobenzene-d5 (Surr)* | *101* | *X* | *55 - 98* | *08/13/14 08:44* | *08/14/14 22:41* | *1* |
| *Phenol-d5 (Surr)* | *98* | | *54 - 101* | *08/13/14 08:44* | *08/14/14 22:41* | *1* |
| *Terphenyl-d14 (Surr)* | *104* | | *58 - 123* | *08/13/14 08:44* | *08/14/14 22:41* | *1* |
| *2-Fluorobiphenyl (Surr)* | *102* | *X* | *56 - 97* | *08/13/14 08:44* | *08/14/14 22:41* | *1* |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Southside

**Lab Sample ID: SXH0010-02**

**Date Collected: 07/31/14 11:10**
**Matrix: Soil**
**Date Received: 08/04/14 14:30**
**Percent Solids: 94.5**

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 1.8 | 0.32 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| alpha-BHC | ND | | 2.1 | 0.20 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| beta-BHC | ND | | 1.8 | 0.32 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| delta-BHC | ND | | 1.8 | 0.26 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| gamma-BHC (Lindane) | ND | | 1.8 | 0.18 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| alpha-Chlordane | ND | | 1.8 | 0.60 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| gamma-Chlordane | ND | | 1.8 | 0.17 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| 4,4'-DDD | ND | | 1.8 | 0.23 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| 4,4'-DDE | ND | | 1.8 | 0.41 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| 4,4'-DDT | ND | | 1.8 | 0.66 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| Dieldrin | ND | | 1.8 | 0.23 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| Endosulfan I | ND | | 1.8 | 0.60 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| Endosulfan II | ND | | 1.8 | 0.25 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| Endosulfan sulfate | ND | | 1.8 | 0.36 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| Endrin | ND | | 1.8 | 0.17 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| Endrin aldehyde | ND | | 1.8 | 0.41 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| Endrin ketone | ND | | 1.8 | 0.44 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| Heptachlor | ND | | 2.1 | 0.22 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| Heptachlor epoxide | ND | | 1.8 | 0.45 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| Methoxychlor | ND | | 3.5 | 0.76 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| Toxaphene | ND | | 71 | 16 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |
| Technical Chlordane | ND | | 18 | 3.9 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *101* | | *29 - 150* | *08/13/14 09:30* | *08/13/14 19:05* | *1* |
| *Tetrachloro-m-xylene* | *95* | | *41 - 125* | *08/13/14 09:30* | *08/13/14 19:05* | *1* |

### Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **3.22** | | 1.28 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/12/14 11:34 | 1.00 |
| **Chromium** | **14.1** | | 0.512 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/11/14 19:06 | 1.00 |
| **Copper** | **18.2** | | 4.10 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/11/14 19:06 | 1.00 |
| **Lead** | **3.98** | | 1.28 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/12/14 11:34 | 1.00 |

## Client Sample ID: Eastside

**Lab Sample ID: SXH0010-03**

**Date Collected: 07/31/14 11:15**
**Matrix: Soil**
**Date Received: 08/04/14 14:30**
**Percent Solids: 94**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.112 | 0.0104 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Chloromethane | ND | | 0.560 | 0.00593 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Vinyl chloride | ND | | 0.0672 | 0.00694 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Bromomethane | ND | | 0.560 | 0.0342 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Chloroethane | ND | | 0.112 | 0.0274 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0336 | 0.00884 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.112 | 0.0142 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Carbon disulfide | ND | | 0.112 | 0.0120 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Methylene chloride | ND | | 0.224 | 0.00582 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| **Acetone** | **0.589** | **J** | 3.36 | 0.0974 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Eastside

**Date Collected: 07/31/14 11:15**
**Date Received: 08/04/14 14:30**

## Lab Sample ID: SXH0010-03

**Matrix: Soil**
**Percent Solids: 94**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 0.112 | 0.0115 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0560 | 0.00358 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.112 | 0.0126 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.112 | 0.00638 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.112 | 0.0190 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Bromochloromethane | ND | | 0.112 | 0.00436 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Chloroform | ND | | 0.112 | 0.00862 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Carbon tetrachloride | ND | | 0.112 | 0.0233 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.112 | 0.0194 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 2-Butanone | ND | | 1.12 | 0.123 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Hexane | ND | | 0.112 | 0.00907 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.112 | 0.0195 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Benzene | ND | | 0.0168 | 0.0109 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.112 | 0.00548 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Trichloroethene | ND | | 0.0280 | 0.0143 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Dibromomethane | ND | | 0.112 | 0.0102 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.112 | 0.00672 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Bromodichloromethane | ND | | 0.112 | 0.00783 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.112 | 0.00694 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Toluene | ND | | 0.112 | 0.0149 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.12 | 0.0228 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.112 | 0.00739 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Tetrachloroethene | ND | | 0.0448 | 0.0197 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.112 | 0.00694 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Dibromochloromethane | ND | | 0.112 | 0.00672 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.112 | 0.00828 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0112 | 0.00649 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 2-Hexanone | ND | | 1.12 | 0.0520 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Ethylbenzene | ND | | 0.112 | 0.0181 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Chlorobenzene | ND | | 0.112 | 0.00851 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.112 | 0.0114 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| m,p-Xylene | ND | | 0.448 | 0.0190 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| o-Xylene | ND | | 0.224 | 0.0147 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Styrene | ND | | 0.112 | 0.0104 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Bromoform | ND | | 0.112 | 0.0140 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Isopropylbenzene | ND | | 0.112 | 0.0213 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| n-Propylbenzene | ND | | 0.112 | 0.0232 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.112 | 0.00839 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Bromobenzene | ND | | 0.112 | 0.0105 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.112 | 0.0208 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 2-Chlorotoluene | ND | | 0.112 | 0.0182 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.112 | 0.00940 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 4-Chlorotoluene | ND | | 0.112 | 0.0160 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| tert-Butylbenzene | ND | | 0.112 | 0.0242 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.112 | 0.0162 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| sec-Butylbenzene | ND | | 0.112 | 0.0263 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| p-Isopropyltoluene | ND | | 0.112 | 0.0267 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.112 | 0.0141 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.112 | 0.0119 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Eastside

**Date Collected: 07/31/14 11:15**
**Date Received: 08/04/14 14:30**

## Lab Sample ID: SXH0010-03

**Matrix: Soil**
**Percent Solids: 94**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| n-Butylbenzene | ND | | 0.112 | 0.0308 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.112 | 0.00851 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.560 | 0.0318 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Hexachlorobutadiene | ND | | 0.112 | 0.0638 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.112 | 0.0223 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| Naphthalene | ND | | 0.224 | 0.0152 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.112 | 0.0397 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:27 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *102* | | *80 - 120* | *08/06/14 07:41* | *08/06/14 11:27* | *1.00* |
| *1,2-dichloroethane-d4* | *102* | | *74.7 - 120* | *08/06/14 07:41* | *08/06/14 11:27* | *1.00* |
| *Toluene-d8* | *100* | | *78.5 - 125* | *08/06/14 07:41* | *08/06/14 11:27* | *1.00* |
| *4-bromofluorobenzene* | *98.0* | | *69.8 - 140* | *08/06/14 07:41* | *08/06/14 11:27* | *1.00* |

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Acenaphthylene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Anthracene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Benzo[a]anthracene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Benzo[b]fluoranthene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Benzo[k]fluoranthene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Benzo[a]pyrene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Bis(2-chloroethoxy)methane | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Bis(2-chloroethyl)ether | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.35 | 0.048 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Butyl benzyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Carbazole | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 4-Chloroaniline | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 4-Chloro-3-methylphenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 2-Chloronaphthalene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 2-Chlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 4-Chlorophenyl phenyl ether | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Chrysene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Dibenzofuran | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Di-n-butyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 1,2-Dichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 1,3-Dichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 1,4-Dichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 2,4-Dichlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Diethyl phthalate | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 2,4-Dimethylphenol | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Dimethyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 2,4-Dinitrophenol | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Eastside

**Date Collected: 07/31/14 11:15**
**Date Received: 08/04/14 14:30**

## Lab Sample ID: SXH0010-03

**Matrix: Soil**
**Percent Solids: 94.2**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,6-Dinitrotoluene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Di-n-octyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Fluoranthene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Fluorene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Hexachlorobenzene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Hexachlorobutadiene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Hexachlorocyclopentadiene | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Hexachloroethane | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Isophorone | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 2-Methylnaphthalene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 2-Methylphenol | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 3 & 4 Methylphenol | ND | | 0.70 | 0.070 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Naphthalene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 2-Nitroaniline | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 3-Nitroaniline | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 4-Nitroaniline | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Nitrobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 2-Nitrophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 4-Nitrophenol | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Pentachlorophenol | ND | | 0.70 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Phenanthrene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Phenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Pyrene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 1,2,4-Trichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 2,4,5-Trichlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 2,4,6-Trichlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Aniline | ND | | 0.35 | 0.063 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| 1,4-Dioxane | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Benzyl alcohol | ND | | 0.35 | 0.055 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |
| Pyridine | ND | | 0.70 | 0.070 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *95* | | *53 - 97* | *08/13/14 08:44* | *08/14/14 23:14* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *95* | | *46 - 111* | *08/13/14 08:44* | *08/14/14 23:14* | *1* |
| *Nitrobenzene-d5 (Surr)* | *97* | | *55 - 98* | *08/13/14 08:44* | *08/14/14 23:14* | *1* |
| *Phenol-d5 (Surr)* | *94* | | *54 - 101* | *08/13/14 08:44* | *08/14/14 23:14* | *1* |
| *Terphenyl-d14 (Surr)* | *98* | | *58 - 123* | *08/13/14 08:44* | *08/14/14 23:14* | *1* |
| *2-Fluorobiphenyl (Surr)* | *98* | *X* | *56 - 97* | *08/13/14 08:44* | *08/14/14 23:14* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 1.8 | 0.32 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| alpha-BHC | ND | | 2.1 | 0.20 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| beta-BHC | ND | | 1.8 | 0.32 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| delta-BHC | ND | | 1.8 | 0.26 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| gamma-BHC (Lindane) | ND | | 1.8 | 0.18 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Eastside

**Lab Sample ID: SXH0010-03**
**Date Collected: 07/31/14 11:15**
**Matrix: Soil**
**Date Received: 08/04/14 14:30**
**Percent Solids: 94.2**

### Method: 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| alpha-Chlordane | ND | | 1.8 | 0.60 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| gamma-Chlordane | ND | | 1.8 | 0.17 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| 4,4'-DDD | ND | | 1.8 | 0.23 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| 4,4'-DDE | ND | | 1.8 | 0.41 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| 4,4'-DDT | ND | | 1.8 | 0.66 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| Dieldrin | ND | | 1.8 | 0.23 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| Endosulfan I | ND | | 1.8 | 0.60 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| Endosulfan II | ND | | 1.8 | 0.25 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| Endosulfan sulfate | ND | | 1.8 | 0.36 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| Endrin | ND | | 1.8 | 0.17 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| Endrin aldehyde | ND | | 1.8 | 0.41 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| Endrin ketone | ND | | 1.8 | 0.44 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| Heptachlor | ND | | 2.1 | 0.22 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| Heptachlor epoxide | ND | | 1.8 | 0.45 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| Methoxychlor | ND | | 3.5 | 0.76 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| Toxaphene | ND | | 71 | 16 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |
| Technical Chlordane | ND | | 18 | 3.9 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *92* | | *29 - 150* | *08/13/14 09:30* | *08/13/14 19:26* | *1* |
| *Tetrachloro-m-xylene* | *87* | | *41 - 125* | *08/13/14 09:30* | *08/13/14 19:26* | *1* |

### Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **3.36** | | 1.21 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/12/14 11:37 | 1.00 |
| **Chromium** | **13.4** | | 0.484 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/11/14 19:09 | 1.00 |
| **Copper** | **17.9** | | 3.87 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/11/14 19:09 | 1.00 |
| **Lead** | **3.07** | | 1.21 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/12/14 11:37 | 1.00 |

## Client Sample ID: Westside

**Lab Sample ID: SXH0010-04**
**Date Collected: 07/31/14 11:20**
**Matrix: Soil**
**Date Received: 08/04/14 14:30**
**Percent Solids: 93.6**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.109 | 0.0102 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Chloromethane | ND | | 0.547 | 0.00580 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Vinyl chloride | ND | | 0.0656 | 0.00678 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Bromomethane | ND | | 0.547 | 0.0335 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Chloroethane | ND | | 0.109 | 0.0268 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0328 | 0.00864 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.109 | 0.0139 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Carbon disulfide | ND | | 0.109 | 0.0117 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Methylene chloride | ND | | 0.219 | 0.00569 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| **Acetone** | **0.833** | **J** | 3.28 | 0.0952 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.109 | 0.0113 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0547 | 0.00350 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.109 | 0.0124 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.109 | 0.00623 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.109 | 0.0186 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

**Client Sample ID: Westside**
**Date Collected: 07/31/14 11:20**
**Date Received: 08/04/14 14:30**

**Lab Sample ID: SXH0010-04**
**Matrix: Soil**
**Percent Solids: 93.6**

**Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromochloromethane | ND | | 0.109 | 0.00427 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Chloroform | ND | | 0.109 | 0.00842 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Carbon tetrachloride | ND | | 0.109 | 0.0227 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.109 | 0.0189 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 2-Butanone | ND | | 1.09 | 0.120 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Hexane | ND | | 0.109 | 0.00886 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.109 | 0.0190 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Benzene | ND | | 0.0164 | 0.0106 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.109 | 0.00536 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Trichloroethene | ND | | 0.0273 | 0.0140 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Dibromomethane | ND | | 0.109 | 0.00995 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.109 | 0.00656 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Bromodichloromethane | ND | | 0.109 | 0.00766 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.109 | 0.00678 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Toluene | ND | | 0.109 | 0.0145 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.09 | 0.0223 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.109 | 0.00722 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Tetrachloroethene | ND | | 0.0437 | 0.0192 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.109 | 0.00678 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| **Dibromochloromethane** | **0.0131** | **J** | 0.109 | 0.00656 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.109 | 0.00809 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0109 | 0.00634 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 2-Hexanone | ND | | 1.09 | 0.0509 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Ethylbenzene | ND | | 0.109 | 0.0177 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Chlorobenzene | ND | | 0.109 | 0.00831 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.109 | 0.0112 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| m,p-Xylene | ND | | 0.437 | 0.0186 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| o-Xylene | ND | | 0.219 | 0.0143 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Styrene | ND | | 0.109 | 0.0102 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Bromoform | ND | | 0.109 | 0.0137 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| **Isopropylbenzene** | **0.0219** | **J** | 0.109 | 0.0208 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| n-Propylbenzene | ND | | 0.109 | 0.0226 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.109 | 0.00820 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Bromobenzene | ND | | 0.109 | 0.0103 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.109 | 0.0203 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 2-Chlorotoluene | ND | | 0.109 | 0.0178 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.109 | 0.00919 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 4-Chlorotoluene | ND | | 0.109 | 0.0156 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| tert-Butylbenzene | ND | | 0.109 | 0.0236 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.109 | 0.0159 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| sec-Butylbenzene | ND | | 0.109 | 0.0257 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| p-Isopropyltoluene | ND | | 0.109 | 0.0261 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.109 | 0.0138 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.109 | 0.0116 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| n-Butylbenzene | ND | | 0.109 | 0.0301 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.109 | 0.00831 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.547 | 0.0311 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| Hexachlorobutadiene | ND | | 0.109 | 0.0623 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.109 | 0.0218 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Westside

**Date Collected: 07/31/14 11:20**
**Date Received: 08/04/14 14:30**

## Lab Sample ID: SXH0010-04

**Matrix: Soil**
**Percent Solids: 93.6**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 0.219 | 0.0149 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.109 | 0.0388 | mg/kg dry | ☼ | 08/06/14 07:41 | 08/06/14 11:50 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *98.2* | | *80 - 120* | *08/06/14 07:41* | *08/06/14 11:50* | *1.00* |
| *1,2-dichloroethane-d4* | *102* | | *74.7 - 120* | *08/06/14 07:41* | *08/06/14 11:50* | *1.00* |
| *Toluene-d8* | *102* | | *78.5 - 125* | *08/06/14 07:41* | *08/06/14 11:50* | *1.00* |
| *4-bromofluorobenzene* | *97.9* | | *69.8 - 140* | *08/06/14 07:41* | *08/06/14 11:50* | *1.00* |

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Acenaphthylene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Anthracene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Benzo[a]anthracene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Benzo[b]fluoranthene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Benzo[k]fluoranthene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Benzo[a]pyrene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Bis(2-chloroethoxy)methane | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Bis(2-chloroethyl)ether | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.35 | 0.048 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Butyl benzyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Carbazole | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 4-Chloroaniline | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 4-Chloro-3-methylphenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2-Chloronaphthalene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2-Chlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 4-Chlorophenyl phenyl ether | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Chrysene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Dibenzofuran | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Di-n-butyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 1,2-Dichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 1,3-Dichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 1,4-Dichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2,4-Dichlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Diethyl phthalate | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2,4-Dimethylphenol | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Dimethyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2,4-Dinitrophenol | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2,6-Dinitrotoluene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Di-n-octyl phthalate | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Fluoranthene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Fluorene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Hexachlorobenzene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Westside

**Date Collected: 07/31/14 11:20**
**Date Received: 08/04/14 14:30**

## Lab Sample ID: SXH0010-04

**Matrix: Soil**
**Percent Solids: 94.4**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachlorobutadiene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Hexachlorocyclopentadiene | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Hexachloroethane | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Isophorone | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2-Methylnaphthalene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2-Methylphenol | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 3 & 4 Methylphenol | ND | | 0.70 | 0.070 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Naphthalene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2-Nitroaniline | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 3-Nitroaniline | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 4-Nitroaniline | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Nitrobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2-Nitrophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 4-Nitrophenol | ND | | 1.7 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Pentachlorophenol | ND | | 0.70 | 0.35 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Phenanthrene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Phenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Pyrene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 1,2,4-Trichlorobenzene | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2,4,5-Trichlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 2,4,6-Trichlorophenol | ND | * | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Aniline | ND | | 0.35 | 0.063 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| 1,4-Dioxane | ND | | 0.35 | 0.035 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Benzyl alcohol | ND | | 0.35 | 0.055 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |
| Pyridine | ND | | 0.70 | 0.070 | mg/Kg | ☼ | 08/13/14 08:44 | 08/14/14 23:48 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *91* | | *53 - 97* | *08/13/14 08:44* | *08/14/14 23:48* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *92* | | *46 - 111* | *08/13/14 08:44* | *08/14/14 23:48* | *1* |
| *Nitrobenzene-d5 (Surr)* | *94* | | *55 - 98* | *08/13/14 08:44* | *08/14/14 23:48* | *1* |
| *Phenol-d5 (Surr)* | *90* | | *54 - 101* | *08/13/14 08:44* | *08/14/14 23:48* | *1* |
| *Terphenyl-d14 (Surr)* | *95* | | *58 - 123* | *08/13/14 08:44* | *08/14/14 23:48* | *1* |
| *2-Fluorobiphenyl (Surr)* | *95* | | *56 - 97* | *08/13/14 08:44* | *08/14/14 23:48* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 1.8 | 0.32 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| alpha-BHC | ND | | 2.1 | 0.19 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| beta-BHC | ND | | 1.8 | 0.32 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| delta-BHC | ND | | 1.8 | 0.25 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| gamma-BHC (Lindane) | ND | | 1.8 | 0.18 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| alpha-Chlordane | ND | | 1.8 | 0.60 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| gamma-Chlordane | ND | | 1.8 | 0.17 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| 4,4'-DDD | ND | | 1.8 | 0.23 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| 4,4'-DDE | ND | | 1.8 | 0.41 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| 4,4'-DDT | ND | | 1.8 | 0.66 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |

# Client Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Westside

**Date Collected: 07/31/14 11:20**
**Date Received: 08/04/14 14:30**

## Lab Sample ID: SXH0010-04

**Matrix: Soil**
**Percent Solids: 94.4**

### Method: 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dieldrin | ND | | 1.8 | 0.23 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| Endosulfan I | ND | | 1.8 | 0.60 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| Endosulfan II | ND | | 1.8 | 0.25 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| Endosulfan sulfate | ND | | 1.8 | 0.36 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| Endrin | ND | | 1.8 | 0.17 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| Endrin aldehyde | ND | | 1.8 | 0.41 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| Endrin ketone | ND | | 1.8 | 0.44 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| Heptachlor | ND | | 2.1 | 0.21 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| Heptachlor epoxide | ND | | 1.8 | 0.45 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| Methoxychlor | ND | | 3.5 | 0.76 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| Toxaphene | ND | | 70 | 16 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |
| Technical Chlordane | ND | | 18 | 3.9 | ug/Kg | ☼ | 08/13/14 09:30 | 08/13/14 19:46 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *98* | | *29 - 150* | *08/13/14 09:30* | *08/13/14 19:46* | *1* |
| *Tetrachloro-m-xylene* | *99* | | *41 - 125* | *08/13/14 09:30* | *08/13/14 19:46* | *1* |

### Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **3.92** | | 2.15 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/12/14 11:41 | 2.00 |
| **Chromium** | **14.8** | | 0.862 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/12/14 11:41 | 2.00 |
| **Copper** | **19.1** | | 6.89 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/12/14 11:41 | 2.00 |
| **Lead** | **3.06** | | 2.15 | | mg/kg dry | ☼ | 08/08/14 11:53 | 08/12/14 11:41 | 2.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C

**Lab Sample ID: 14H0013-BLK1**
**Matrix: Soil**
**Analysis Batch: 14H0013**

**Client Sample ID: Method Blank**
**Prep Type: Total**
**Prep Batch: 14H0013_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 0.100 | 0.00930 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Chloromethane | ND | | 0.500 | 0.00530 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Vinyl chloride | ND | | 0.0600 | 0.00620 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Bromomethane | ND | | 0.500 | 0.0306 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Chloroethane | ND | | 0.100 | 0.0245 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Trichlorofluoromethane | ND | | 0.0300 | 0.00790 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,1-Dichloroethene | ND | | 0.100 | 0.0127 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Carbon disulfide | ND | | 0.100 | 0.0107 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Methylene chloride | ND | | 0.200 | 0.00520 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Acetone | ND | | 3.00 | 0.0870 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| trans-1,2-Dichloroethene | ND | | 0.100 | 0.0103 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Methyl tert-butyl ether | ND | | 0.0500 | 0.00320 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,1-Dichloroethane | ND | | 0.100 | 0.0113 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| cis-1,2-Dichloroethene | ND | | 0.100 | 0.00570 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 2,2-Dichloropropane | ND | | 0.100 | 0.0170 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Bromochloromethane | ND | | 0.100 | 0.00390 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Chloroform | ND | | 0.100 | 0.00770 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Carbon tetrachloride | ND | | 0.100 | 0.0208 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,1,1-Trichloroethane | ND | | 0.100 | 0.0173 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 2-Butanone | ND | | 1.00 | 0.110 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Hexane | ND | | 0.100 | 0.00810 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,1-Dichloropropene | ND | | 0.100 | 0.0174 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Benzene | ND | | 0.0150 | 0.00970 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.100 | 0.00490 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Trichloroethene | ND | | 0.0250 | 0.0128 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Dibromomethane | ND | | 0.100 | 0.00910 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,2-Dichloropropane | ND | | 0.100 | 0.00600 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Bromodichloromethane | ND | | 0.100 | 0.00700 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| cis-1,3-Dichloropropene | ND | | 0.100 | 0.00620 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Toluene | ND | | 0.100 | 0.0133 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 4-Methyl-2-pentanone | ND | | 1.00 | 0.0204 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| trans-1,3-Dichloropropene | ND | | 0.100 | 0.00660 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Tetrachloroethene | ND | | 0.0400 | 0.0176 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,1,2-Trichloroethane | ND | | 0.100 | 0.00620 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Dibromochloromethane | ND | | 0.100 | 0.00600 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,3-Dichloropropane | ND | | 0.100 | 0.00740 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,2-Dibromoethane | ND | | 0.0100 | 0.00580 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 2-Hexanone | ND | | 1.00 | 0.0465 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Ethylbenzene | ND | | 0.100 | 0.0162 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Chlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,1,1,2-Tetrachloroethane | ND | | 0.100 | 0.0102 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| m,p-Xylene | ND | | 0.400 | 0.0170 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| o-Xylene | ND | | 0.200 | 0.0131 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Styrene | ND | | 0.100 | 0.00930 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Bromoform | ND | | 0.100 | 0.0125 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Isopropylbenzene | ND | | 0.100 | 0.0190 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| n-Propylbenzene | ND | | 0.100 | 0.0207 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.100 | 0.00750 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14H0013-BLK1** | **Client Sample ID: Method Blank**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14H0013** | **Prep Batch: 14H0013_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromobenzene | ND | | 0.100 | 0.00940 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,3,5-Trimethylbenzene | ND | | 0.100 | 0.0186 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 2-Chlorotoluene | ND | | 0.100 | 0.0163 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,2,3-Trichloropropane | ND | | 0.100 | 0.00840 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 4-Chlorotoluene | ND | | 0.100 | 0.0143 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| tert-Butylbenzene | ND | | 0.100 | 0.0216 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,2,4-Trimethylbenzene | ND | | 0.100 | 0.0145 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| sec-Butylbenzene | ND | | 0.100 | 0.0235 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| p-Isopropyltoluene | ND | | 0.100 | 0.0239 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,3-Dichlorobenzene | ND | | 0.100 | 0.0126 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,4-Dichlorobenzene | ND | | 0.100 | 0.0106 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| n-Butylbenzene | ND | | 0.100 | 0.0275 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,2-Dichlorobenzene | ND | | 0.100 | 0.00760 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,2-Dibromo-3-chloropropane | ND | | 0.500 | 0.0284 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Hexachlorobutadiene | ND | | 0.100 | 0.0570 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,2,4-Trichlorobenzene | ND | | 0.100 | 0.0199 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| Naphthalene | ND | | 0.200 | 0.0136 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |
| 1,2,3-Trichlorobenzene | ND | | 0.100 | 0.0355 | mg/kg wet | | 08/06/14 07:41 | 08/06/14 09:33 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *80 - 120* | *08/06/14 07:41* | *08/06/14 09:33* | *1.00* |
| *1,2-dichloroethane-d4* | *104* | | *74.7 - 120* | *08/06/14 07:41* | *08/06/14 09:33* | *1.00* |
| *Toluene-d8* | *100* | | *78.5 - 125* | *08/06/14 07:41* | *08/06/14 09:33* | *1.00* |
| *4-bromofluorobenzene* | *98.1* | | *69.8 - 140* | *08/06/14 07:41* | *08/06/14 09:33* | *1.00* |

**Lab Sample ID: 14H0013-BS1** | **Client Sample ID: Lab Control Sample**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14H0013** | **Prep Batch: 14H0013_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.500 | 0.447 | | mg/kg wet | | 89.4 | 60.5 - 130 |
| Chloromethane | 0.500 | 0.451 | J | mg/kg wet | | 90.2 | 68.9 - 130 |
| Vinyl chloride | 0.500 | 0.466 | | mg/kg wet | | 93.3 | 74 - 142 |
| Bromomethane | 0.500 | 0.643 | | mg/kg wet | | 129 | 70.5 - 146 |
| Chloroethane | 0.500 | 0.460 | | mg/kg wet | | 91.9 | 60 - 140 |
| Trichlorofluoromethane | 0.500 | 0.438 | | mg/kg wet | | 87.6 | 70.5 - 139 |
| 1,1-Dichloroethene | 0.500 | 0.470 | | mg/kg wet | | 94.0 | 72.9 - 135 |
| Carbon disulfide | 0.500 | 0.478 | | mg/kg wet | | 95.7 | 66.8 - 146 |
| Methylene chloride | 0.500 | 0.429 | | mg/kg wet | | 85.8 | 60 - 140 |
| Acetone | 2.50 | 1.80 | J | mg/kg wet | | 72.1 | 39.2 - 145 |
| trans-1,2-Dichloroethene | 0.500 | 0.484 | | mg/kg wet | | 96.9 | 60 - 140 |
| Methyl tert-butyl ether | 0.500 | 0.557 | | mg/kg wet | | 111 | 60 - 140 |
| 1,1-Dichloroethane | 0.500 | 0.502 | | mg/kg wet | | 100 | 80 - 131 |
| cis-1,2-Dichloroethene | 0.500 | 0.478 | | mg/kg wet | | 95.7 | 80 - 126 |
| 2,2-Dichloropropane | 0.500 | 0.472 | | mg/kg wet | | 94.4 | 71.5 - 132 |
| Bromochloromethane | 0.500 | 0.490 | | mg/kg wet | | 98.0 | 69.1 - 139 |
| Chloroform | 0.500 | 0.500 | | mg/kg wet | | 99.9 | 80 - 130 |
| Carbon tetrachloride | 0.500 | 0.498 | | mg/kg wet | | 99.6 | 73.6 - 148 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14H0013-BS1**
**Matrix: Soil**
**Analysis Batch: 14H0013**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14H0013_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.500 | 0.500 | | mg/kg wet | | 99.9 | 74.3 - 138 |
| 2-Butanone | 2.50 | 2.34 | | mg/kg wet | | 93.5 | 56.1 - 124 |
| Hexane | 0.500 | 0.516 | | mg/kg wet | | 103 | 77 - 130 |
| 1,1-Dichloropropene | 0.500 | 0.499 | | mg/kg wet | | 99.8 | 78.3 - 132 |
| Benzene | 0.500 | 0.492 | | mg/kg wet | | 98.3 | 75.8 - 123 |
| 1,2-Dichloroethane (EDC) | 0.500 | 0.528 | | mg/kg wet | | 106 | 71.1 - 142 |
| Trichloroethene | 0.500 | 0.479 | | mg/kg wet | | 95.8 | 78.5 - 134 |
| Dibromomethane | 0.500 | 0.522 | | mg/kg wet | | 104 | 80 - 129 |
| 1,2-Dichloropropane | 0.500 | 0.480 | | mg/kg wet | | 96.0 | 50.8 - 155 |
| Bromodichloromethane | 0.500 | 0.496 | | mg/kg wet | | 99.3 | 80 - 128 |
| cis-1,3-Dichloropropene | 0.500 | 0.469 | | mg/kg wet | | 93.8 | 80 - 126 |
| Toluene | 0.500 | 0.487 | | mg/kg wet | | 97.4 | 76.6 - 125 |
| 4-Methyl-2-pentanone | 2.50 | 3.05 | | mg/kg wet | | 122 | 66.4 - 131 |
| trans-1,3-Dichloropropene | 0.500 | 0.550 | | mg/kg wet | | 110 | 79 - 124 |
| Tetrachloroethene | 0.500 | 0.531 | | mg/kg wet | | 106 | 80 - 127 |
| 1,1,2-Trichloroethane | 0.500 | 0.562 | | mg/kg wet | | 112 | 78.4 - 125 |
| Dibromochloromethane | 0.500 | 0.521 | | mg/kg wet | | 104 | 78.4 - 127 |
| 1,3-Dichloropropane | 0.500 | 0.538 | | mg/kg wet | | 108 | 80 - 125 |
| 1,2-Dibromoethane | 0.500 | 0.564 | | mg/kg wet | | 113 | 77.1 - 129 |
| 2-Hexanone | 2.50 | 2.51 | | mg/kg wet | | 100 | 64.6 - 127 |
| Ethylbenzene | 0.500 | 0.483 | | mg/kg wet | | 96.6 | 77.3 - 121 |
| Chlorobenzene | 0.500 | 0.530 | | mg/kg wet | | 106 | 80 - 120 |
| 1,1,1,2-Tetrachloroethane | 0.500 | 0.544 | | mg/kg wet | | 109 | 80 - 120 |
| m,p-Xylene | 0.500 | 0.480 | | mg/kg wet | | 95.9 | 77.7 - 124 |
| o-Xylene | 0.500 | 0.519 | | mg/kg wet | | 104 | 76.7 - 129 |
| Styrene | 0.500 | 0.511 | | mg/kg wet | | 102 | 80 - 128 |
| Bromoform | 0.500 | 0.566 | | mg/kg wet | | 113 | 76 - 135 |
| Isopropylbenzene | 0.500 | 0.505 | | mg/kg wet | | 101 | 78.4 - 131 |
| n-Propylbenzene | 0.500 | 0.476 | | mg/kg wet | | 95.1 | 80 - 120 |
| 1,1,2,2-Tetrachloroethane | 0.500 | 0.567 | | mg/kg wet | | 113 | 60.3 - 137 |
| Bromobenzene | 0.500 | 0.464 | | mg/kg wet | | 92.8 | 60 - 140 |
| 1,3,5-Trimethylbenzene | 0.500 | 0.482 | | mg/kg wet | | 96.3 | 80 - 121 |
| 2-Chlorotoluene | 0.500 | 0.498 | | mg/kg wet | | 99.6 | 80 - 123 |
| 1,2,3-Trichloropropane | 0.500 | 0.555 | | mg/kg wet | | 111 | 59.9 - 131 |
| 4-Chlorotoluene | 0.500 | 0.477 | | mg/kg wet | | 95.4 | 80 - 124 |
| tert-Butylbenzene | 0.500 | 0.486 | | mg/kg wet | | 97.1 | 78.8 - 130 |
| 1,2,4-Trimethylbenzene | 0.500 | 0.492 | | mg/kg wet | | 98.4 | 80 - 122 |
| sec-Butylbenzene | 0.500 | 0.484 | | mg/kg wet | | 96.7 | 80 - 120 |
| p-Isopropyltoluene | 0.500 | 0.492 | | mg/kg wet | | 98.3 | 67.2 - 147 |
| 1,3-Dichlorobenzene | 0.500 | 0.503 | | mg/kg wet | | 101 | 80 - 122 |
| 1,4-Dichlorobenzene | 0.500 | 0.504 | | mg/kg wet | | 101 | 80 - 125 |
| n-Butylbenzene | 0.500 | 0.498 | | mg/kg wet | | 99.5 | 80 - 120 |
| 1,2-Dichlorobenzene | 0.500 | 0.536 | | mg/kg wet | | 107 | 80 - 124 |
| 1,2-Dibromo-3-chloropropane | 0.500 | 0.544 | | mg/kg wet | | 109 | 60 - 140 |
| Hexachlorobutadiene | 0.500 | 0.511 | | mg/kg wet | | 102 | 71.8 - 138 |
| 1,2,4-Trichlorobenzene | 0.500 | 0.480 | | mg/kg wet | | 96.1 | 75.3 - 126 |
| Naphthalene | 0.500 | 0.495 | | mg/kg wet | | 99.0 | 55.1 - 142 |
| 1,2,3-Trichlorobenzene | 0.500 | 0.480 | | mg/kg wet | | 96.0 | 69.6 - 127 |

## Method: EPA 8260C - Volatile Organic Compounds by EPA Methods 5035/8260C (Continued)

**Lab Sample ID: 14H0013-BS1**
**Matrix: Soil**
**Analysis Batch: 14H0013**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total**
**Prep Batch: 14H0013_P**

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *80 - 120* |
| *1,2-dichloroethane-d4* | *108* | | *74.7 - 120* |
| *Toluene-d8* | *99.7* | | *78.5 - 125* |
| *4-bromofluorobenzene* | *95.1* | | *69.8 - 140* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 160-137750/1-A**
**Matrix: Solid**
**Analysis Batch: 138228**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 137750**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Acenaphthylene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Anthracene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Benzo[a]anthracene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Benzo[b]fluoranthene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Benzo[k]fluoranthene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Benzo[a]pyrene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 0.33 | 0.045 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Butyl benzyl phthalate | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Carbazole | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 4-Chloroaniline | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 4-Chloro-3-methylphenol | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2-Chloronaphthalene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2-Chlorophenol | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Chrysene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Dibenzofuran | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Di-n-butyl phthalate | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 1.6 | 0.33 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2,4-Dichlorophenol | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Diethyl phthalate | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2,4-Dimethylphenol | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Dimethyl phthalate | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 1.6 | 0.33 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2,4-Dinitrophenol | ND | | 1.6 | 0.33 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2,4-Dinitrotoluene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2,6-Dinitrotoluene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Di-n-octyl phthalate | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 160-137750/1-A**
**Matrix: Solid**
**Analysis Batch: 138228**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 137750**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Fluoranthene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Fluorene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Hexachlorobenzene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Hexachlorobutadiene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Hexachlorocyclopentadiene | ND | | 1.6 | 0.33 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Hexachloroethane | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Isophorone | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2-Methylnaphthalene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2-Methylphenol | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 3 & 4 Methylphenol | ND | | 0.66 | 0.067 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Naphthalene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2-Nitroaniline | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 3-Nitroaniline | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 4-Nitroaniline | ND | | 1.6 | 0.33 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Nitrobenzene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2-Nitrophenol | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 4-Nitrophenol | ND | | 1.6 | 0.33 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| bis (2-chloroisopropyl) ether | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Pentachlorophenol | ND | | 0.66 | 0.33 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Phenanthrene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Phenol | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Pyrene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2,4,5-Trichlorophenol | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 2,4,6-Trichlorophenol | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Aniline | ND | | 0.33 | 0.060 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| 1,4-Dioxane | ND | | 0.33 | 0.033 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Benzyl alcohol | ND | | 0.33 | 0.052 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |
| Pyridine | ND | | 0.66 | 0.067 | mg/Kg | | 08/13/14 08:44 | 08/14/14 17:38 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *99* | *X* | *53 - 97* | *08/13/14 08:44* | *08/14/14 17:38* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *99* | | *46 - 111* | *08/13/14 08:44* | *08/14/14 17:38* | *1* |
| *Nitrobenzene-d5 (Surr)* | *101* | *X* | *55 - 98* | *08/13/14 08:44* | *08/14/14 17:38* | *1* |
| *Phenol-d5 (Surr)* | *99* | | *54 - 101* | *08/13/14 08:44* | *08/14/14 17:38* | *1* |
| *Terphenyl-d14 (Surr)* | *105* | | *58 - 123* | *08/13/14 08:44* | *08/14/14 17:38* | *1* |
| *2-Fluorobiphenyl (Surr)* | *103* | *X* | *56 - 97* | *08/13/14 08:44* | *08/14/14 17:38* | *1* |

**Lab Sample ID: LCS 160-137750/2-A**
**Matrix: Solid**
**Analysis Batch: 138228**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 137750**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.67 | 6.63 | * | mg/Kg | | 99 | 63 - 95 |
| Acenaphthylene | 6.67 | 6.89 | * | mg/Kg | | 103 | 62 - 98 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 160-137750/2-A**
**Matrix: Solid**
**Analysis Batch: 138228**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 137750**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Anthracene | 6.68 | 6.48 | | mg/Kg | | 97 | 63 - 100 |
| Benzo[a]anthracene | 6.67 | 6.72 | | mg/Kg | | 101 | 74 - 114 |
| Benzo[b]fluoranthene | 6.67 | 7.13 | | mg/Kg | | 107 | 68 - 109 |
| Benzo[k]fluoranthene | 6.68 | 6.87 | | mg/Kg | | 103 | 69 - 111 |
| Benzo[g,h,i]perylene | 6.67 | 7.30 | | mg/Kg | | 109 | 67 - 121 |
| Benzo[a]pyrene | 6.67 | 6.87 | | mg/Kg | | 103 | 63 - 103 |
| Bis(2-chloroethoxy)methane | 6.68 | 6.45 | * | mg/Kg | | 96 | 62 - 91 |
| Bis(2-chloroethyl)ether | 6.67 | 6.37 | * | mg/Kg | | 96 | 58 - 92 |
| Bis(2-ethylhexyl) phthalate | 6.67 | 7.29 | | mg/Kg | | 109 | 63 - 112 |
| 4-Bromophenyl phenyl ether | 6.67 | 6.82 | | mg/Kg | | 102 | 63 - 106 |
| Butyl benzyl phthalate | 6.67 | 7.23 | | mg/Kg | | 108 | 59 - 111 |
| Carbazole | 6.69 | 6.45 | | mg/Kg | | 96 | 64 - 101 |
| 4-Chloroaniline | 6.67 | 4.41 | | mg/Kg | | 66 | 43 - 70 |
| 4-Chloro-3-methylphenol | 6.67 | 6.45 | * | mg/Kg | | 97 | 58 - 95 |
| 2-Chloronaphthalene | 6.67 | 6.78 | * | mg/Kg | | 102 | 61 - 94 |
| 2-Chlorophenol | 6.67 | 6.31 | * | mg/Kg | | 95 | 60 - 91 |
| 4-Chlorophenyl phenyl ether | 6.68 | 6.50 | * | mg/Kg | | 97 | 61 - 96 |
| Chrysene | 6.67 | 6.53 | | mg/Kg | | 98 | 66 - 100 |
| Dibenz(a,h)anthracene | 6.67 | 7.52 | | mg/Kg | | 113 | 67 - 114 |
| Dibenzofuran | 6.67 | 6.49 | * | mg/Kg | | 97 | 58 - 95 |
| Di-n-butyl phthalate | 6.67 | 6.71 | | mg/Kg | | 101 | 62 - 104 |
| 1,2-Dichlorobenzene | 6.67 | 6.41 | * | mg/Kg | | 96 | 59 - 90 |
| 1,3-Dichlorobenzene | 6.67 | 6.27 | * | mg/Kg | | 94 | 57 - 88 |
| 1,4-Dichlorobenzene | 6.67 | 6.33 | * | mg/Kg | | 95 | 58 - 88 |
| 3,3'-Dichlorobenzidine | 6.67 | 5.70 | | mg/Kg | | 85 | 50 - 90 |
| 2,4-Dichlorophenol | 6.67 | 6.41 | * | mg/Kg | | 96 | 59 - 90 |
| Diethyl phthalate | 6.67 | 6.55 | * | mg/Kg | | 98 | 62 - 97 |
| 2,4-Dimethylphenol | 6.67 | 6.29 | | mg/Kg | | 94 | 54 - 108 |
| Dimethyl phthalate | 6.67 | 6.56 | | mg/Kg | | 98 | 63 - 98 |
| 4,6-Dinitro-2-methylphenol | 6.67 | 6.27 | | mg/Kg | | 94 | 31 - 112 |
| 2,4-Dinitrophenol | 6.67 | 4.96 | | mg/Kg | | 74 | 20 - 100 |
| 2,4-Dinitrotoluene | 6.68 | 6.59 | | mg/Kg | | 99 | 61 - 103 |
| 2,6-Dinitrotoluene | 6.67 | 6.75 | * | mg/Kg | | 101 | 63 - 99 |
| Di-n-octyl phthalate | 6.67 | 7.32 | | mg/Kg | | 110 | 61 - 111 |
| Fluoranthene | 6.67 | 6.45 | | mg/Kg | | 97 | 63 - 101 |
| Fluorene | 6.67 | 6.84 | * | mg/Kg | | 103 | 62 - 96 |
| Hexachlorobenzene | 6.67 | 6.70 | | mg/Kg | | 100 | 62 - 106 |
| Hexachlorobutadiene | 6.67 | 6.75 | * | mg/Kg | | 101 | 57 - 94 |
| Hexachlorocyclopentadiene | 6.67 | 7.03 | | mg/Kg | | 105 | 40 - 115 |
| Hexachloroethane | 6.67 | 6.53 | * | mg/Kg | | 98 | 59 - 93 |
| Indeno[1,2,3-cd]pyrene | 6.67 | 7.39 | | mg/Kg | | 111 | 65 - 120 |
| Isophorone | 6.67 | 5.27 | | mg/Kg | | 79 | 57 - 86 |
| 2-Methylnaphthalene | 6.65 | 6.40 | * | mg/Kg | | 96 | 59 - 90 |
| 2-Methylphenol | 6.68 | 6.20 | | mg/Kg | | 93 | 58 - 96 |
| 3 & 4 Methylphenol | 6.67 | 6.86 | | mg/Kg | | 103 | 47 - 113 |
| Naphthalene | 6.67 | 6.53 | * | mg/Kg | | 98 | 60 - 90 |
| 2-Nitroaniline | 6.69 | 6.84 | | mg/Kg | | 102 | 58 - 105 |
| 3-Nitroaniline | 6.67 | 5.95 | | mg/Kg | | 89 | 55 - 91 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 160-137750/2-A**
**Matrix: Solid**
**Analysis Batch: 138228**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 137750**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 4-Nitroaniline | 6.69 | 6.28 | | mg/Kg | | 94 | 57 - 94 |
| Nitrobenzene | 6.67 | 6.64 | * | mg/Kg | | 100 | 58 - 95 |
| 2-Nitrophenol | 6.68 | 6.65 | * | mg/Kg | | 100 | 60 - 93 |
| 4-Nitrophenol | 6.68 | 6.67 | | mg/Kg | | 100 | 54 - 101 |
| N-Nitrosodiphenylamine | 6.67 | 7.77 | | mg/Kg | | 117 | 78 - 133 |
| N-Nitrosodi-n-propylamine | 6.67 | 6.34 | | mg/Kg | | 95 | 60 - 104 |
| bis (2-chloroisopropyl) ether | 6.67 | 6.41 | | mg/Kg | | 96 | 47 - 105 |
| Pentachlorophenol | 6.67 | 6.55 | | mg/Kg | | 98 | 50 - 100 |
| Phenanthrene | 6.68 | 6.74 | * | mg/Kg | | 101 | 63 - 99 |
| Phenol | 6.67 | 6.06 | * | mg/Kg | | 91 | 53 - 89 |
| Pyrene | 6.67 | 7.09 | * | mg/Kg | | 106 | 64 - 102 |
| 1,2,4-Trichlorobenzene | 6.71 | 6.55 | * | mg/Kg | | 98 | 60 - 91 |
| 2,4,5-Trichlorophenol | 6.67 | 6.74 | * | mg/Kg | | 101 | 59 - 94 |
| 2,4,6-Trichlorophenol | 6.67 | 6.73 | * | mg/Kg | | 101 | 59 - 95 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol (Surr)* | *97* | | *53 - 97* |
| *2,4,6-Tribromophenol (Surr)* | *102* | | *46 - 111* |
| *Nitrobenzene-d5 (Surr)* | *101* | *X* | *55 - 98* |
| *Phenol-d5 (Surr)* | *96* | | *54 - 101* |
| *Terphenyl-d14 (Surr)* | *102* | | *58 - 123* |
| *2-Fluorobiphenyl (Surr)* | *103* | *X* | *56 - 97* |

**Lab Sample ID: LCSD 160-137750/3-A**
**Matrix: Solid**
**Analysis Batch: 138228**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 137750**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.67 | 6.42 | * | mg/Kg | | 96 | 63 - 95 | 3 | 20 |
| Acenaphthylene | 6.67 | 6.65 | * | mg/Kg | | 100 | 62 - 98 | 4 | 20 |
| Anthracene | 6.68 | 6.32 | | mg/Kg | | 95 | 63 - 100 | 3 | 20 |
| Benzo[a]anthracene | 6.67 | 6.49 | | mg/Kg | | 97 | 74 - 114 | 4 | 20 |
| Benzo[b]fluoranthene | 6.67 | 6.91 | | mg/Kg | | 104 | 68 - 109 | 3 | 20 |
| Benzo[k]fluoranthene | 6.68 | 6.59 | | mg/Kg | | 99 | 69 - 111 | 4 | 20 |
| Benzo[g,h,i]perylene | 6.67 | 7.03 | | mg/Kg | | 105 | 67 - 121 | 4 | 20 |
| Benzo[a]pyrene | 6.67 | 6.64 | | mg/Kg | | 100 | 63 - 103 | 3 | 20 |
| Bis(2-chloroethoxy)methane | 6.68 | 6.30 | * | mg/Kg | | 94 | 62 - 91 | 2 | 20 |
| Bis(2-chloroethyl)ether | 6.67 | 6.23 | * | mg/Kg | | 93 | 58 - 92 | 2 | 20 |
| Bis(2-ethylhexyl) phthalate | 6.67 | 7.06 | | mg/Kg | | 106 | 63 - 112 | 3 | 20 |
| 4-Bromophenyl phenyl ether | 6.67 | 6.67 | | mg/Kg | | 100 | 63 - 106 | 2 | 20 |
| Butyl benzyl phthalate | 6.67 | 7.04 | | mg/Kg | | 105 | 59 - 111 | 3 | 20 |
| Carbazole | 6.69 | 6.31 | | mg/Kg | | 94 | 64 - 101 | 2 | 20 |
| 4-Chloroaniline | 6.67 | 3.80 | | mg/Kg | | 57 | 43 - 70 | 15 | 20 |
| 4-Chloro-3-methylphenol | 6.67 | 6.20 | | mg/Kg | | 93 | 58 - 95 | 4 | 20 |
| 2-Chloronaphthalene | 6.67 | 6.56 | * | mg/Kg | | 98 | 61 - 94 | 3 | 20 |
| 2-Chlorophenol | 6.67 | 6.15 | * | mg/Kg | | 92 | 60 - 91 | 2 | 20 |
| 4-Chlorophenyl phenyl ether | 6.68 | 6.27 | | mg/Kg | | 94 | 61 - 96 | 4 | 20 |
| Chrysene | 6.67 | 6.32 | | mg/Kg | | 95 | 66 - 100 | 3 | 20 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 160-137750/3-A**
**Matrix: Solid**
**Analysis Batch: 138228**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 137750**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Dibenz(a,h)anthracene | 6.67 | 7.28 | | mg/Kg | | 109 | 67 - 114 | 3 | 20 |
| Dibenzofuran | 6.67 | 6.26 | | mg/Kg | | 94 | 58 - 95 | 4 | 20 |
| Di-n-butyl phthalate | 6.67 | 6.61 | | mg/Kg | | 99 | 62 - 104 | 1 | 20 |
| 1,2-Dichlorobenzene | 6.67 | 6.20 | * | mg/Kg | | 93 | 59 - 90 | 3 | 20 |
| 1,3-Dichlorobenzene | 6.67 | 6.13 | * | mg/Kg | | 92 | 57 - 88 | 2 | 20 |
| 1,4-Dichlorobenzene | 6.67 | 6.17 | * | mg/Kg | | 92 | 58 - 88 | 3 | 20 |
| 3,3'-Dichlorobenzidine | 6.67 | 5.23 | | mg/Kg | | 78 | 50 - 90 | 9 | 20 |
| 2,4-Dichlorophenol | 6.67 | 6.21 | * | mg/Kg | | 93 | 59 - 90 | 3 | 20 |
| Diethyl phthalate | 6.67 | 6.26 | | mg/Kg | | 94 | 62 - 97 | 5 | 20 |
| 2,4-Dimethylphenol | 6.67 | 6.09 | | mg/Kg | | 91 | 54 - 108 | 3 | 20 |
| Dimethyl phthalate | 6.67 | 6.36 | | mg/Kg | | 95 | 63 - 98 | 3 | 20 |
| 4,6-Dinitro-2-methylphenol | 6.67 | 6.59 | | mg/Kg | | 99 | 31 - 112 | 5 | 20 |
| 2,4-Dinitrophenol | 6.67 | 5.61 | | mg/Kg | | 84 | 20 - 100 | 12 | 20 |
| 2,4-Dinitrotoluene | 6.68 | 6.36 | | mg/Kg | | 95 | 61 - 103 | 3 | 20 |
| 2,6-Dinitrotoluene | 6.67 | 6.50 | | mg/Kg | | 97 | 63 - 99 | 4 | 20 |
| Di-n-octyl phthalate | 6.67 | 7.09 | | mg/Kg | | 106 | 61 - 111 | 3 | 20 |
| Fluoranthene | 6.67 | 6.37 | | mg/Kg | | 96 | 63 - 101 | 1 | 20 |
| Fluorene | 6.67 | 6.61 | * | mg/Kg | | 99 | 62 - 96 | 3 | 20 |
| Hexachlorobenzene | 6.67 | 6.57 | | mg/Kg | | 99 | 62 - 106 | 2 | 20 |
| Hexachlorobutadiene | 6.67 | 6.52 | * | mg/Kg | | 98 | 57 - 94 | 3 | 20 |
| Hexachlorocyclopentadiene | 6.67 | 6.94 | | mg/Kg | | 104 | 40 - 115 | 1 | 20 |
| Hexachloroethane | 6.67 | 6.40 | * | mg/Kg | | 96 | 59 - 93 | 2 | 20 |
| Indeno[1,2,3-cd]pyrene | 6.67 | 7.19 | | mg/Kg | | 108 | 65 - 120 | 3 | 20 |
| Isophorone | 6.67 | 5.16 | | mg/Kg | | 77 | 57 - 86 | 2 | 20 |
| 2-Methylnaphthalene | 6.65 | 6.19 | * | mg/Kg | | 93 | 59 - 90 | 3 | 20 |
| 2-Methylphenol | 6.68 | 5.98 | | mg/Kg | | 90 | 58 - 96 | 4 | 20 |
| 3 & 4 Methylphenol | 6.67 | 6.63 | | mg/Kg | | 99 | 47 - 113 | 3 | 20 |
| Naphthalene | 6.67 | 6.40 | * | mg/Kg | | 96 | 60 - 90 | 2 | 20 |
| 2-Nitroaniline | 6.69 | 6.62 | | mg/Kg | | 99 | 58 - 105 | 3 | 20 |
| 3-Nitroaniline | 6.67 | 5.36 | | mg/Kg | | 80 | 55 - 91 | 10 | 20 |
| 4-Nitroaniline | 6.69 | 6.01 | | mg/Kg | | 90 | 57 - 94 | 4 | 20 |
| Nitrobenzene | 6.67 | 6.53 | * | mg/Kg | | 98 | 58 - 95 | 2 | 20 |
| 2-Nitrophenol | 6.68 | 6.49 | * | mg/Kg | | 97 | 60 - 93 | 2 | 20 |
| 4-Nitrophenol | 6.68 | 6.36 | | mg/Kg | | 95 | 54 - 101 | 5 | 20 |
| N-Nitrosodiphenylamine | 6.67 | 7.65 | | mg/Kg | | 115 | 78 - 133 | 2 | 20 |
| N-Nitrosodi-n-propylamine | 6.67 | 6.14 | | mg/Kg | | 92 | 60 - 104 | 3 | 20 |
| bis (2-chloroisopropyl) ether | 6.67 | 6.23 | | mg/Kg | | 93 | 47 - 105 | 3 | 20 |
| Pentachlorophenol | 6.67 | 6.50 | | mg/Kg | | 97 | 50 - 100 | 1 | 20 |
| Phenanthrene | 6.68 | 6.65 | | mg/Kg | | 99 | 63 - 99 | 1 | 20 |
| Phenol | 6.67 | 5.90 | | mg/Kg | | 88 | 53 - 89 | 3 | 20 |
| Pyrene | 6.67 | 6.83 | | mg/Kg | | 102 | 64 - 102 | 4 | 20 |
| 1,2,4-Trichlorobenzene | 6.71 | 6.43 | * | mg/Kg | | 96 | 60 - 91 | 2 | 20 |
| 2,4,5-Trichlorophenol | 6.67 | 6.52 | * | mg/Kg | | 98 | 59 - 94 | 3 | 20 |
| 2,4,6-Trichlorophenol | 6.67 | 6.44 | * | mg/Kg | | 97 | 59 - 95 | 4 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol (Surr)* | *95* | | *53 - 97* |
| *2,4,6-Tribromophenol (Surr)* | *99* | | *46 - 111* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 160-137750/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 138228** — **Prep Batch: 137750**

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| Nitrobenzene-d5 (Surr) | 99 | X | 55 - 98 |
| Phenol-d5 (Surr) | 93 | | 54 - 101 |
| Terphenyl-d14 (Surr) | 100 | | 58 - 123 |
| 2-Fluorobiphenyl (Surr) | 100 | X | 56 - 97 |

## Method: 8081B - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 160-137746/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 137792** — **Prep Batch: 137746**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 1.7 | 0.31 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| alpha-BHC | ND | | 2.0 | 0.19 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| beta-BHC | ND | | 1.7 | 0.30 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| delta-BHC | ND | | 1.7 | 0.24 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| gamma-BHC (Lindane) | ND | | 1.7 | 0.17 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| alpha-Chlordane | ND | | 1.7 | 0.57 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| gamma-Chlordane | ND | | 1.7 | 0.16 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| 4,4'-DDD | ND | | 1.7 | 0.22 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| 4,4'-DDE | ND | | 1.7 | 0.39 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| 4,4'-DDT | ND | | 1.7 | 0.63 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Dieldrin | ND | | 1.7 | 0.22 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Endosulfan I | ND | | 1.7 | 0.57 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Endosulfan II | ND | | 1.7 | 0.24 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Endosulfan sulfate | ND | | 1.7 | 0.34 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Endrin | ND | | 1.7 | 0.16 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Endrin aldehyde | ND | | 1.7 | 0.39 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Endrin ketone | ND | | 1.7 | 0.42 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Heptachlor | ND | | 2.0 | 0.20 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Heptachlor epoxide | ND | | 1.7 | 0.43 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Methoxychlor | ND | | 3.3 | 0.72 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Toxaphene | ND | | 67 | 15 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Technical Chlordane | ND | | 17 | 3.7 | ug/Kg | | 08/13/14 09:30 | 08/13/14 17:44 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl (Surr) | 110 | | 29 - 150 | 08/13/14 09:30 | 08/13/14 17:44 | 1 |
| Tetrachloro-m-xylene | 91 | | 41 - 125 | 08/13/14 09:30 | 08/13/14 17:44 | 1 |

**Lab Sample ID: LCS 160-137746/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 137792** — **Prep Batch: 137746**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Aldrin | 16.7 | 17.1 | | ug/Kg | | 102 | 51 - 116 |
| alpha-BHC | 16.7 | 17.0 | | ug/Kg | | 102 | 50 - 117 |
| beta-BHC | 16.7 | 15.4 | | ug/Kg | | 92 | 50 - 113 |

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCS 160-137746/2-A**
**Matrix: Solid**
**Analysis Batch: 137792**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 137746**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| delta-BHC | 16.7 | 16.6 | | ug/Kg | | 100 | 53 - 121 |
| gamma-BHC (Lindane) | 16.7 | 15.7 | | ug/Kg | | 94 | 50 - 114 |
| alpha-Chlordane | 16.7 | 16.6 | | ug/Kg | | 100 | 55 - 119 |
| gamma-Chlordane | 16.7 | 16.5 | | ug/Kg | | 99 | 52 - 120 |
| 4,4'-DDD | 16.7 | 17.7 | | ug/Kg | | 106 | 53 - 134 |
| 4,4'-DDE | 16.7 | 17.0 | | ug/Kg | | 102 | 55 - 123 |
| 4,4'-DDT | 16.7 | 17.8 | | ug/Kg | | 107 | 57 - 138 |
| Dieldrin | 16.7 | 16.5 | | ug/Kg | | 99 | 54 - 124 |
| Endosulfan I | 16.7 | 10.9 | | ug/Kg | | 65 | 38 - 99 |
| Endosulfan II | 16.7 | 12.2 | | ug/Kg | | 73 | 42 - 105 |
| Endosulfan sulfate | 16.7 | 16.8 | | ug/Kg | | 101 | 54 - 126 |
| Endrin | 16.7 | 15.3 | | ug/Kg | | 92 | 55 - 124 |
| Endrin aldehyde | 16.7 | 16.7 | | ug/Kg | | 100 | 50 - 116 |
| Endrin ketone | 16.7 | 17.7 | | ug/Kg | | 106 | 53 - 129 |
| Heptachlor | 16.7 | 15.8 | | ug/Kg | | 95 | 40 - 140 |
| Heptachlor epoxide | 16.7 | 16.4 | | ug/Kg | | 99 | 53 - 118 |
| Methoxychlor | 16.7 | 17.5 | | ug/Kg | | 105 | 54 - 140 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *111* | | *29 - 150* |
| *Tetrachloro-m-xylene* | *102* | | *41 - 125* |

**Lab Sample ID: LCSD 160-137746/3-A**
**Matrix: Solid**
**Analysis Batch: 137792**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 137746**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | 16.7 | 16.6 | | ug/Kg | | 100 | 51 - 116 | 3 | 30 |
| alpha-BHC | 16.7 | 16.3 | | ug/Kg | | 98 | 50 - 117 | 4 | 30 |
| beta-BHC | 16.7 | 14.8 | | ug/Kg | | 89 | 50 - 113 | 4 | 30 |
| delta-BHC | 16.7 | 15.9 | | ug/Kg | | 96 | 53 - 121 | 4 | 30 |
| gamma-BHC (Lindane) | 16.7 | 14.9 | | ug/Kg | | 89 | 50 - 114 | 5 | 30 |
| alpha-Chlordane | 16.7 | 16.2 | | ug/Kg | | 97 | 55 - 119 | 3 | 30 |
| gamma-Chlordane | 16.7 | 16.0 | | ug/Kg | | 96 | 52 - 120 | 3 | 30 |
| 4,4'-DDD | 16.7 | 16.7 | | ug/Kg | | 100 | 53 - 134 | 6 | 30 |
| 4,4'-DDE | 16.7 | 16.4 | | ug/Kg | | 98 | 55 - 123 | 3 | 30 |
| 4,4'-DDT | 16.7 | 17.6 | | ug/Kg | | 105 | 57 - 138 | 1 | 30 |
| Dieldrin | 16.7 | 16.1 | | ug/Kg | | 97 | 54 - 124 | 2 | 30 |
| Endosulfan I | 16.7 | 10.5 | | ug/Kg | | 63 | 38 - 99 | 4 | 30 |
| Endosulfan II | 16.7 | 11.9 | | ug/Kg | | 72 | 42 - 105 | 2 | 30 |
| Endosulfan sulfate | 16.7 | 16.4 | | ug/Kg | | 98 | 54 - 126 | 3 | 30 |
| Endrin | 16.7 | 15.1 | | ug/Kg | | 91 | 55 - 124 | 1 | 30 |
| Endrin aldehyde | 16.7 | 16.3 | | ug/Kg | | 98 | 50 - 116 | 2 | 30 |
| Endrin ketone | 16.7 | 17.3 | | ug/Kg | | 103 | 53 - 129 | 2 | 30 |
| Heptachlor | 16.7 | 15.3 | | ug/Kg | | 92 | 40 - 140 | 3 | 30 |
| Heptachlor epoxide | 16.7 | 15.9 | | ug/Kg | | 95 | 53 - 118 | 3 | 30 |
| Methoxychlor | 16.7 | 17.2 | | ug/Kg | | 103 | 54 - 140 | 1 | 30 |

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCSD 160-137746/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 137792** — **Prep Batch: 137746**

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *113* | | *29 - 150* |
| *Tetrachloro-m-xylene* | *93* | | *41 - 125* |

## Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B

**Lab Sample ID: 14H0029-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0029** — **Prep Batch: 14H0029_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 1.25 | | mg/kg wet | | 08/08/14 11:53 | 08/11/14 18:43 | 1.00 |
| Chromium | ND | | 0.500 | | mg/kg wet | | 08/08/14 11:53 | 08/11/14 18:43 | 1.00 |
| Copper | ND | | 4.00 | | mg/kg wet | | 08/08/14 11:53 | 08/11/14 18:43 | 1.00 |
| Lead | ND | | 1.25 | | mg/kg wet | | 08/08/14 11:53 | 08/11/14 18:43 | 1.00 |

**Lab Sample ID: 14H0029-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0029** — **Prep Batch: 14H0029_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Arsenic | 50.0 | 52.6 | | mg/kg wet | | 105 | 80 - 120 |
| Chromium | 50.0 | 53.3 | | mg/kg wet | | 107 | 80 - 120 |
| Copper | 50.0 | 53.8 | | mg/kg wet | | 108 | 80 - 120 |
| Lead | 50.0 | 51.5 | | mg/kg wet | | 103 | 80 - 120 |

**Lab Sample ID: 14H0029-MS1** — **Client Sample ID: Northside**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0029** — **Prep Batch: 14H0029_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.19 | | 51.7 | 56.1 | | mg/kg dry | ☼ | 100 | 75 - 125 |
| Chromium | 15.1 | | 51.7 | 68.6 | | mg/kg dry | ☼ | 104 | 75 - 125 |
| Copper | 19.1 | | 51.7 | 74.9 | | mg/kg dry | ☼ | 108 | 75 - 125 |
| Lead | 3.15 | | 51.7 | 54.7 | | mg/kg dry | ☼ | 99.6 | 75 - 125 |

**Lab Sample ID: 14H0029-MSD1** — **Client Sample ID: Northside**
**Matrix: Soil** — **Prep Type: Total**
**Analysis Batch: 14H0029** — **Prep Batch: 14H0029_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | trix Spike Dup Result | Matrix Spike Dup Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.19 | | 55.5 | 62.5 | | mg/kg dry | ☼ | 105 | 75 - 125 | 10.8 | 20 |
| Chromium | 15.1 | | 55.5 | 75.0 | | mg/kg dry | ☼ | 108 | 75 - 125 | 8.84 | 20 |
| Copper | 19.1 | | 55.5 | 83.5 | | mg/kg dry | ☼ | 116 | 75 - 125 | 10.9 | 20 |
| Lead | 3.15 | | 55.5 | 60.0 | | mg/kg dry | ☼ | 102 | 75 - 125 | 9.25 | 20 |

# QC Sample Results

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B (Continued)

**Lab Sample ID: 14H0029-DUP1** | **Client Sample ID: Northside**
**Matrix: Soil** | **Prep Type: Total**
**Analysis Batch: 14H0029** | **Prep Batch: 14H0029_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.19 | | | 4.95 | | mg/kg dry | ☼ | | | 16.5 | 20 |
| Chromium | 15.1 | | | 14.5 | | mg/kg dry | ☼ | | | 3.73 | 20 |
| Copper | 19.1 | | | 20.8 | | mg/kg dry | ☼ | | | 8.47 | 20 |
| Lead | 3.15 | | | 3.53 | | mg/kg dry | ☼ | | | 11.3 | 20 |

# Lab Chronicle

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Northside — Lab Sample ID: SXH0010-01

**Date Collected: 07/31/14 11:05** — **Matrix: Soil**
**Date Received: 08/04/14 14:30** — **Percent Solids: 93.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.980 | 14H0013_P | 08/06/14 07:41 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14H0013 | 08/06/14 10:42 | CBW | TAL SPK |
| Total/NA | Prep | 3550C | | | 137750 | 08/13/14 08:44 | KKA | TAL SL |
| Total/NA | Analysis | 8270D | | 1 | 138228 | 08/14/14 22:07 | JSW | TAL SL |
| Total/NA | Prep | 3550C | | | 137746 | 08/13/14 09:30 | KKA | TAL SL |
| Total/NA | Analysis | 8081B | | 1 | 137792 | 08/13/14 18:45 | CEH | TAL SL |
| Total | Prep | EPA 3050B | | 0.870 | 14H0029_P | 08/08/14 11:53 | MS | TAL SPK |
| Total | Analysis | EPA 6010C | | 2.00 | 14H0029 | 08/12/14 11:04 | ICP | TAL SPK |
| Total/NA | Analysis | Moisture | | 1 | 136026 | 08/06/14 08:33 | SDB | TAL SL |

## Client Sample ID: Southside — Lab Sample ID: SXH0010-02

**Date Collected: 07/31/14 11:10** — **Matrix: Soil**
**Date Received: 08/04/14 14:30** — **Percent Solids: 93.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.01 | 14H0013_P | 08/06/14 07:41 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14H0013 | 08/06/14 11:04 | CBW | TAL SPK |
| Total/NA | Prep | 3550C | | | 137750 | 08/13/14 08:44 | KKA | TAL SL |
| Total/NA | Analysis | 8270D | | 1 | 138228 | 08/14/14 22:41 | JSW | TAL SL |
| Total/NA | Prep | 3550C | | | 137746 | 08/13/14 09:30 | KKA | TAL SL |
| Total/NA | Analysis | 8081B | | 1 | 137792 | 08/13/14 19:05 | CEH | TAL SL |
| Total | Prep | EPA 3050B | | 0.962 | 14H0029_P | 08/08/14 11:53 | MS | TAL SPK |
| Total | Analysis | EPA 6010C | | 1.00 | 14H0029 | 08/11/14 19:06 | ICP | TAL SPK |
| Total | Prep | EPA 3050B | | 0.962 | 14H0029_P | 08/08/14 11:53 | MS | TAL SPK |
| Total | Analysis | EPA 6010C | | 1.00 | 14H0029 | 08/12/14 11:34 | ICP | TAL SPK |
| Total/NA | Analysis | Moisture | | 1 | 136026 | 08/06/14 08:33 | SDB | TAL SL |

## Client Sample ID: Eastside — Lab Sample ID: SXH0010-03

**Date Collected: 07/31/14 11:15** — **Matrix: Soil**
**Date Received: 08/04/14 14:30** — **Percent Solids: 94**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.992 | 14H0013_P | 08/06/14 07:41 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14H0013 | 08/06/14 11:27 | CBW | TAL SPK |
| Total/NA | Prep | 3550C | | | 137750 | 08/13/14 08:44 | KKA | TAL SL |
| Total/NA | Analysis | 8270D | | 1 | 138228 | 08/14/14 23:14 | JSW | TAL SL |
| Total/NA | Prep | 3550C | | | 137746 | 08/13/14 09:30 | KKA | TAL SL |
| Total/NA | Analysis | 8081B | | 1 | 137792 | 08/13/14 19:26 | CEH | TAL SL |
| Total | Prep | EPA 3050B | | 0.909 | 14H0029_P | 08/08/14 11:53 | MS | TAL SPK |
| Total | Analysis | EPA 6010C | | 1.00 | 14H0029 | 08/11/14 19:09 | ICP | TAL SPK |
| Total | Prep | EPA 3050B | | 0.909 | 14H0029_P | 08/08/14 11:53 | MS | TAL SPK |
| Total | Analysis | EPA 6010C | | 1.00 | 14H0029 | 08/12/14 11:37 | ICP | TAL SPK |
| Total/NA | Analysis | Moisture | | 1 | 136026 | 08/06/14 08:33 | SDB | TAL SL |

# Lab Chronicle

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Client Sample ID: Eastside

**Lab Sample ID: SXH0010-03**

**Date Collected: 07/31/14 11:15**
**Matrix: Soil**
**Date Received: 08/04/14 14:30**
**Percent Solids: 94**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | Wet Chem | | 1.00 | 14H0047_P | 08/12/14 16:19 | JSP | TAL SPK |
| Total | Analysis | TA SOP | | 1.00 | 14H0047 | 08/12/14 16:41 | JSP | TAL SPK |

## Client Sample ID: Westside

**Lab Sample ID: SXH0010-04**

**Date Collected: 07/31/14 11:20**
**Matrix: Soil**
**Date Received: 08/04/14 14:30**
**Percent Solids: 93.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 0.960 | 14H0013_P | 08/06/14 07:41 | CBW | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14H0013 | 08/06/14 11:50 | CBW | TAL SPK |
| Total/NA | Prep | 3550C | | | 137750 | 08/13/14 08:44 | KKA | TAL SL |
| Total/NA | Analysis | 8270D | | 1 | 138228 | 08/14/14 23:48 | JSW | TAL SL |
| Total/NA | Prep | 3550C | | | 137746 | 08/13/14 09:30 | KKA | TAL SL |
| Total/NA | Analysis | 8081B | | 1 | 137792 | 08/13/14 19:46 | CEH | TAL SL |
| Total | Prep | EPA 3050B | | 0.806 | 14H0029_P | 08/08/14 11:53 | MS | TAL SPK |
| Total | Analysis | EPA 6010C | | 2.00 | 14H0029 | 08/12/14 11:41 | ICP | TAL SPK |
| Total/NA | Analysis | Moisture | | 1 | 136026 | 08/06/14 08:33 | SDB | TAL SL |

**Laboratory References:**

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-071 | 10-31-14 |
| Washington | State Program | 10 | C569 | 01-06-15 |

## Laboratory: TestAmerica St. Louis

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | MO00054 | 06-30-15 |
| California | NELAP | 9 | 2886 | 03-31-15 |
| Connecticut | State Program | 1 | PH-0241 | 03-31-15 |
| Florida | NELAP | 4 | E87689 | 06-30-15 |
| Illinois | NELAP | 5 | 200023 | 11-30-14 |
| Iowa | State Program | 7 | 373 | 12-01-14 |
| Kansas | NELAP | 7 | E-10236 | 10-31-14 * |
| Kentucky (DW) | State Program | 4 | 90125 | 12-31-14 |
| L-A-B | DoD ELAP | | L2305 | 01-10-16 |
| Louisiana | NELAP | 6 | 04080 | 06-30-15 |
| Maryland | State Program | 3 | 310 | 09-30-15 |
| Missouri | State Program | 7 | 780 | 06-30-14 * |
| Nevada | State Program | 9 | MO000542013-1 | 07-31-14 * |
| New Jersey | NELAP | 2 | MO002 | 06-30-15 |
| New Mexico | State Program | 6 | | 06-30-10 * |
| New York | NELAP | 2 | 11616 | 03-31-15 |
| North Dakota | State Program | 8 | R207 | 06-30-14 * |
| NRC | NRC | | 24-24817-01 | 12-31-22 |
| Oklahoma | State Program | 6 | 2013-049 | 08-31-14 * |
| Pennsylvania | NELAP | 3 | 68-00540 | 02-28-15 |
| South Carolina | State Program | 4 | 85002001 | 06-30-14 * |
| Texas | NELAP | 6 | T104704193-13-6 | 07-31-15 |
| USDA | Federal | | P330-07-00122 | 01-09-17 |
| USEPA Reg V SDWA | Federal | 1 | WG-15J | 08-30-14 |
| Utah | NELAP | 8 | MO000542013-5 | 07-31-14 * |
| Virginia | NELAP | 3 | 460230 | 06-14-15 |
| Washington | State Program | 10 | C592 | 08-30-14 * |
| West Virginia DEP | State Program | 3 | 381 | 12-31-14 * |

* Certification renewal pending - certification considered valid.

# Method Summary

Client: Tommer Construction Company, Inc.
Project/Site: [none]

TestAmerica Job ID: SXH0010

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 8260C | Volatile Organic Compounds by EPA Methods 5035/8260C | | TAL SPK |
| 8270D | Semivolatile Organic Compounds (GC/MS) | SW846 | TAL SL |
| 8081B | Organochlorine Pesticides (GC) | SW846 | TAL SL |
| EPA 6010C | Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B | | TAL SPK |
| Moisture | Percent Moisture | EPA | TAL SL |
| TA SOP | Conventional Chemistry Parameters by APHA/EPA Methods | | TAL SPK |

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

# CHAIN OF CUSTODY REPORT

Work Order #: SXH0010

CLIENT: Tommer Construction Co. Inc.

REPORT TO: ADDRESS: P.O. Box 1150 Ephrata Wa. 98823

PHONE: 509-750-8954 FAX: 509-787-3632

INVOICE TO: Chris Tommer

Same.

P.O. NUMBER:

PROJECT NAME: Wenatchee Pit

PROJECT NUMBER:

SAMPLED BY: Chris Tommer

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: 10 (STD.) 7 5 4 3 2 1 <1

Petroleum Hydrocarbon Analyses: 5 (STD.) 4 3 2 1 <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | Volatiles VOC | S.V.O.C. | Pesticides | AS | CR | CU | PB | | | | | | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | North side | 11:05 7-31 | X | X | X | X | X | X | X | | | | | | | | North side | |
| 2 | South side | 11:10 7-31 | X | X | X | X | X | X | X | | | | | | | | South side | |
| 3 | East side | 11:15 7-31 | X | X | X | X | X | X | X | | | | | | | | East side | |
| 4 | West Side | 11:20 7-31 | X | X | X | X | X | X | X | | | | | | | | West side | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |

RELEASED BY: PRINT NAME Chris Tommer FIRM: Tommer Const. DATE: 8-4-14 TIME: 10:00 AM

RECEIVED BY: PRINT NAME: FIRM: TA-Spk DATE: 8-4-14 TIME: 14:30

RELEASED BY: PRINT NAME: FIRM: DATE: TIME:

RECEIVED BY: PRINT NAME: FIRM: DATE: TIME:

ADDITIONAL REMARKS:

TEMP: 4.3

PAGE 1 OF 1

TAL-1000 (0612)

**TestAmerica Spokane**
**Sample Receipt Form**

| Work Order #: SXH0010 | Client: Tommer Const. | Project: Wenatchee Pit |
|---|---|---|
| Date/Time Received: 8-4-14 14:30 | By: LW | |

Samples Delivered By: ☐Shipping Service ☐Courier ☒Client ☐Other:

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | X | | | |
| Custody Seals are present and intact: | X | | X LW 8-4-14 | |
| Are CoC documents present: | X | | | |
| Necessary signatures: | X | | | |

Thermal Preservation Type: ☐Blue Ice ☒Gel Ice ☐Real Ice ☐Dry Ice ☐None ☐Other:

Temperature: 4.3 °C Thermometer (Circle **one** Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐Not enough ice ☐Ice melted ☐w/in 4hrs of collection ☐NA ☐Other:

| Log-In Phase Date/Time: 8-4-14 15:17 By: LB | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | X | | | |
| Samples containers were received intact: | X | | | |
| Do sample IDs match the CoC | X | | | |
| Appropriate sample containers were received for tests requested | X | | | |
| Are sample volumes adequate for tests requested | X | | | |
| Appropriate preservatives were used for the tests requested | X | | | |
| pH of inorganic samples checked and is within method specification | X | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | | | X | |
| Are dissolved parameters field filtered | | | X | |
| Do any samples need to be filtered or preserved by the lab | | | X | |
| Does this project require quick turnaround analysis | | X | | |
| Are there any short hold time tests (see chart below) | | X | | |
| Are any samples within 2 days of or past expiration | | X | | |
| Was the CoC scanned | X | | | |
| Were there Non-conformance issues at login | | X | | |
| If yes, was a CAR generated # | | | X | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

Form No. SP-FORM-SPL-002 12 December 2012

**Analytical Resources, Incorporated**
Analytical Chemists and Consultants

May 5, 2014

Adam Neff
RH2 Engineering, Inc.
300 Simon Street SE
Suite #5
East Wenatchee, WA 98802-7720

**Client Project: CMS-Landfill, 208.020.01.129**
**ARI Job No.: YH76**

Dear Adam:
Please find enclosed the original Chain of Custody record (COC), sample receipt documentation, and the final results for the project referenced above. Analytical Resources, Inc. (ARI) accepted seven soil samples and a trip blank on April 23, 2014. For further details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for volatiles, semivolatiles, pesticides, and metals, as requested.

The volatile continuing calibration on April 25th was outside the 20% control limit high for Bromomethane and n-Butylbenzene. All detected results associated with this calibration have been flagged with a "Q" qualifier. No further corrective action was taken.

The volatile continuing calibration on April 29th fell outside the 20% control limit low for Chloromethane, Iodomethane, Carbon Disulfide, 1,2-Dichloroethane, 4-Methyl-2-pentanone, and trans-1,3-Dichloropropene. The calibration was also outside the control limit high for Bromomethane. All detected results associated with this calibration have been flagged with a "Q" qualifier. No further corrective action was taken.

The volatile internal standard area of d4-1,4-Dichlorobenzene fell outside the control limits low for sample **WM-6**. The sample was re-analyzed the internal standard area was comparable to the initial analysis. Both sets of data have been reported for review. No further corrective action was taken.

The volatile LCS and LCSD percent recoveries of Acetone were outside the control limits high for **LCS-042914A**. All other percent recoveries were within control limits. No corrective action was taken.

The semivolatile continuing calibration fell outside the 20% control limit low for Benzoic Acid, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, and Pentachlorophenol. The calibration was also outside the control limit high for N-Nitrosodiphenylamine, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, and Benzo(g,h,i)perylene. All detected results for these compounds were flagged with a "Q" qualifier. No further corrective action was taken.



4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

**Analytical Resources, Incorporated**
Analytical Chemists and Consultants

The duplicate RPD of copper was outside the control imit for sample **WM-1**. All relevant data have been flagged with a "*" qualifier on the Form VI. No further corrective action was taken.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Cheronne Oreiro
Project Manager
(206) 695-6214
cheronneo@arilabs.com
www.arilabs.com

cc: eFile YH76

Enclosures



4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

# Chain of Custody Record & Laboratory Analysis Request

| | | | |
|---|---|---|---|
| ARI Assigned Number: YH76 | Turn-around Requested: Standard | Page: 1 of 1 | |
| ARI Client Company: RHZ Engineering | Phone: (509) 886-6774 | Date: 4-22-14 | Ice Present? Y |
| Client Contact: Adam Neff | | No. of Coolers: 1 | Cooler Temps: 4.9 |
| Client Project Name: CMS - landfill | | | |
| Client Project #: 208 020 01.129 | Samplers: AN | | |


**Analytical Resources, Incorporated**
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com


| Sample ID | Date | Time | Matrix | No Containers | TPH-Gx | TPH-Dx | BETX | SVOCs | Pesticides | Metals | | | | | Notes/Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WM-1 | 4-22 | 1342 | soil | 6 | | | | | | | | | | | See email to Cheronne for exact Analyses |
| WM-2 | ↓ | 1353 | ↓ | ↓ | | | | | | | | | | | |
| WM-3 | ↓ | 1402 | ↓ | ↓ | | | | | | | | | | | |
| WM-4 | ↓ | 1414 | ↓ | ↓ | | | | | | | | | | | |
| WM-5 | ↓ | 1425 | ↓ | ↓ | | | | | | | | | | | |
| WM-6 | ↓ | 1435 | ↓ | ↓ | | | | | | | | | | | |
| WM-7 | ✓ | 1445 | ✓ | ✓ | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| Comments/Special Instructions | Relinquished by. (Signature) | Received by (Signature) | Relinquished by: (Signature) | Received by (Signature) |
|---|---|---|---|---|
| ARI PM Cheronne | Printed Name: Adam Neff | Printed Name: Jennifer Millsap | Printed Name. | Printed Name. |
| | Company: RHZ | Company: ARI | Company | Company |
| | Date & Time: 4-22-14 1504 | Date & Time: 4/23/14 945 | Date & Time: | Date & Time |

**Limits of Liability:** *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

**Sample Retention Policy:** All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

# Cooler Receipt Form

ARI Client RH2

COC No(s) _____ (NA)

Assigned ARI Job No YH76

Project Name CMS-Landfill

Delivered by (Fed-Ex) UPS Courier Hand Delivered Other: _____

Tracking No. 8022888 8491 NA

**Preliminary Examination Phase:**

| | | |
|---|---|---|
| Were intact, properly signed and dated custody seals attached to the outside of to cooler? | YES | (NO) |
| Were custody papers included with the cooler? | (YES) | NO |
| Were custody papers properly filled out (ink, signed, etc.) | (YES) | NO |

Temperature of Cooler(s) (°C) (recommended 2 0-6.0 °C for chemistry) 4.9

Time 945

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID# 12241222

Cooler Accepted by: JM Date 4/23/14 Time: 945

***Complete custody forms and attach all shipping documents***

## Log-In Phase:

| | | | |
|---|---|---|---|
| Was a temperature blank included in the cooler? | | YES | (NO) |
| What kind of packing material was used? (Bubble Wrap) (Wet Ice) Gel Packs (Baggies) (Foam Block) Paper Other: _____ | | | |
| Was sufficient ice used (if appropriate)? | NA | (YES) | NO |
| Were all bottles sealed in individual plastic bags? | | YES | (NO) |
| Did all bottles arrive in good condition (unbroken)? | | (YES) | NO |
| Were all bottle labels complete and legible? | | (YES) | NO |
| Did the number of containers listed on COC match with the number of containers received? | | (YES) | NO |
| Did all bottle labels and tags agree with custody papers? | | (YES) | NO |
| Were all bottles used correct for the requested analyses? | | (YES) | NO |
| Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... | (NA) | YES | NO |
| Were all VOC vials free of air bubbles? | NA | YES | (NO) |
| Was sufficient amount of sample sent in each bottle? | | (YES) | NO |
| Date VOC Trip Blank was made at ARI | NA | 4/18/14 | |

Was Sample Split by ARI : (NA) YES Date/Time _____ Equipment _____ Split by _____

Samples Logged by: JM Date: 4/23/14 Time 1041

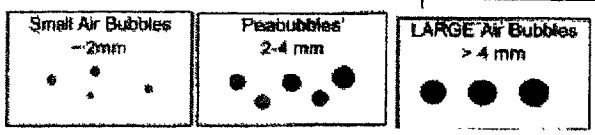
***** Notify Project Manager of discrepancies or concerns *****

| Sample ID on Bottle | Sample ID on COC | Sample ID on Bottle | Sample ID on COC |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

***Additional Notes, Discrepancies, & Resolutions:***

Trip Blank = sm in 2 of 2

By JM Date: 4/23/14




| |
|---|
| **Small → "sm" ( < 2 mm )** |
| **Peabubbles → "pb" ( 2 to < 4 mm )** |
| **Large → "lg" ( 4 to < 6 mm )** |
| **Headspace → "hs" ( > 6 mm )** |

# Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YH76
Client: RH2 Engineering
Project Event: 208.020.01.129
Project Name: CMS - Landfill

| | Sample ID | ARI Lab ID | ARI LIMS ID | Matrix | Sample Date/Time | VTSR |
|---|---|---|---|---|---|---|
| 1. | WM-1 | YH76A | 14-7698 | Soil | 04/22/14 13:42 | 04/23/14 09:45 |
| 2. | WM-2 | YH76B | 14-7699 | Soil | 04/22/14 13:53 | 04/23/14 09:45 |
| 3. | WM-3 | YH76C | 14-7700 | Soil | 04/22/14 14:02 | 04/23/14 09:45 |
| 4. | WM-4 | YH76D | 14-7701 | Soil | 04/22/14 14:14 | 04/23/14 09:45 |
| 5. | WM-5 | YH76E | 14-7702 | Soil | 04/22/14 14:25 | 04/23/14 09:45 |
| 6. | WM-6 | YH76F | 14-7703 | Soil | 04/22/14 14:35 | 04/23/14 09:45 |
| 7. | WM-7 | YH76G | 14-7704 | Soil | 04/22/14 14:45 | 04/23/14 09:45 |
| 8. | Trip Blank | YH76H | 14-7705 | Water | 04/22/14 | 04/23/14 09:45 |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-1**
 **SAMPLE**

Lab Sample ID: YH76A
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Instrument/Analyst: NT5/PAB
Date Analyzed: 04/25/14 15:48

Sample Amount: 4.97 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 4.6%

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | < 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | < 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | < 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | < 1.0 | U |
| 75-09-2 | Methylene Chloride | 2.0 | < 2.0 | U |
| 67-64-1 | Acetone | 800 | < 800 | Y |
| 75-15-0 | Carbon Disulfide | 1.0 | < 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | < 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | < 1.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | < 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | < 1.0 | U |
| 78-93-3 | 2-Butanone | 5.0 | < 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | < 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | < 1.0 | U |
| 108-05-4 | Vinyl Acetate | 5.0 | < 5.0 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | < 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | < 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | < 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | < 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | < 1.0 | U |
| 71-43-2 | Benzene | 1.0 | < 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 110-75-8 | 2-Chloroethylvinylether | 5.0 | < 5.0 | U |
| 75-25-2 | Bromoform | 1.0 | < 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone (MIBK) | 5.0 | < 5.0 | U |
| 591-78-6 | 2-Hexanone | 5.0 | < 5.0 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | < 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 108-88-3 | Toluene | 1.0 | < 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | < 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | < 1.0 | U |
| 100-42-5 | Styrene | 1.0 | < 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | < 1.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2.0 | < 2.0 | U |
| 179601-23-1 | m,p-Xylene | 1.0 | < 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | < 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | < 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | < 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | < 1.0 | U |
| 107-02-8 | Acrolein | 50 | < 50 | U |
| 74-88-4 | Iodomethane | 1.0 | < 1.0 | U |
| 74-96-4 | Bromoethane | 2.0 | < 2.0 | U |
| 107-13-1 | Acrylonitrile | 5.0 | < 5.0 | U |
| 563-58-6 | 1,1-Dichloropropene | 1.0 | < 1.0 | U |
| 74-95-3 | Dibromomethane | 1.0 | < 1.0 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | < 5.0 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 2.0 | < 2.0 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 5.0 | < 5.0 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.0 | < 1.0 | U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-1**
 **SAMPLE**

Lab Sample ID: YH76A
LIMS ID: 14-7698
Matrix: Soil
Date Analyzed: 04/25/14 15:48

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 95-63-6 | 1,2,4-Trimethylbenzene | 1.0 | < 1.0 | U |
| 87-68-3 | Hexachlorobutadiene | 5.0 | < 5.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1.0 | < 1.0 | U |
| 74-97-5 | Bromochloromethane | 1.0 | < 1.0 | U |
| 594-20-7 | 2,2-Dichloropropane | 1.0 | < 1.0 | U |
| 142-28-9 | 1,3-Dichloropropane | 1.0 | < 1.0 | U |
| 98-82-8 | Isopropylbenzene | 1.0 | < 1.0 | U |
| 103-65-1 | n-Propylbenzene | 1.0 | < 1.0 | U |
| 108-86-1 | Bromobenzene | 1.0 | < 1.0 | U |
| 95-49-8 | 2-Chlorotoluene | 1.0 | < 1.0 | U |
| 106-43-4 | 4-Chlorotoluene | 1.0 | < 1.0 | U |
| 98-06-6 | tert-Butylbenzene | 1.0 | < 1.0 | U |
| 135-98-8 | sec-Butylbenzene | 1.0 | < 1.0 | U |
| 99-87-6 | 4-Isopropyltoluene | 1.0 | < 1.0 | U |
| 104-51-8 | n-Butylbenzene | 1.0 | < 1.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | < 5.0 | U |
| 91-20-3 | Naphthalene | 5.0 | < 5.0 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.0 | < 5.0 | U |

Reported in µg/kg (ppb)

**Volatile Surrogate Recovery**

| | |
|---|---|
| d4-1,2-Dichloroethane | 101% |
| d8-Toluene | 100% |
| Bromofluorobenzene | 108% |
| d4-1,2-Dichlorobenzene | 100% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-2**
 **SAMPLE**

Lab Sample ID: YH76B
LIMS ID: 14-7699
Matrix: Soil
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Instrument/Analyst: NT5/PAB
Date Analyzed: 04/25/14 16:12

Sample Amount: 5.08 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 4.6%

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | < 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | < 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | < 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | < 1.0 | U |
| **75-09-2** | **Methylene Chloride** | **2.0** | **2.3** | |
| 67-64-1 | Acetone | 710 | < 710 | Y |
| 75-15-0 | Carbon Disulfide | 1.0 | < 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | < 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | < 1.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | < 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | < 1.0 | U |
| 78-93-3 | 2-Butanone | 4.9 | < 4.9 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | < 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | < 1.0 | U |
| 108-05-4 | Vinyl Acetate | 4.9 | < 4.9 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | < 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | < 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | < 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | < 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | < 1.0 | U |
| 71-43-2 | Benzene | 1.0 | < 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 110-75-8 | 2-Chloroethylvinylether | 4.9 | < 4.9 | U |
| 75-25-2 | Bromoform | 1.0 | < 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone (MIBK) | 4.9 | < 4.9 | U |
| 591-78-6 | 2-Hexanone | 4.9 | < 4.9 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | < 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 108-88-3 | Toluene | 1.0 | < 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | < 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | < 1.0 | U |
| 100-42-5 | Styrene | 1.0 | < 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | < 1.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2.0 | < 2.0 | U |
| 179601-23-1 | m,p-Xylene | 1.0 | < 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | < 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | < 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | < 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | < 1.0 | U |
| 107-02-8 | Acrolein | 49 | < 49 | U |
| 74-88-4 | Iodomethane | 1.0 | < 1.0 | U |
| 74-96-4 | Bromoethane | 2.0 | < 2.0 | U |
| 107-13-1 | Acrylonitrile | 4.9 | < 4.9 | U |
| 563-58-6 | 1,1-Dichloropropene | 1.0 | < 1.0 | U |
| 74-95-3 | Dibromomethane | 1.0 | < 1.0 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 4.9 | < 4.9 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 2.0 | < 2.0 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 4.9 | < 4.9 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.0 | < 1.0 | U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-2**
 **SAMPLE**

Lab Sample ID: YH76B
LIMS ID: 14-7699
Matrix: Soil
Date Analyzed: 04/25/14 16:12

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 95-63-6 | 1,2,4-Trimethylbenzene | 1.0 | < 1.0 | U |
| 87-68-3 | Hexachlorobutadiene | 4.9 | < 4.9 | U |
| 106-93-4 | 1,2-Dibromoethane | 1.0 | < 1.0 | U |
| 74-97-5 | Bromochloromethane | 1.0 | < 1.0 | U |
| 594-20-7 | 2,2-Dichloropropane | 1.0 | < 1.0 | U |
| 142-28-9 | 1,3-Dichloropropane | 1.0 | < 1.0 | U |
| 98-82-8 | Isopropylbenzene | 1.0 | < 1.0 | U |
| 103-65-1 | n-Propylbenzene | 1.0 | < 1.0 | U |
| 108-86-1 | Bromobenzene | 1.0 | < 1.0 | U |
| 95-49-8 | 2-Chlorotoluene | 1.0 | < 1.0 | U |
| 106-43-4 | 4-Chlorotoluene | 1.0 | < 1.0 | U |
| 98-06-6 | tert-Butylbenzene | 1.0 | < 1.0 | U |
| 135-98-8 | sec-Butylbenzene | 1.0 | < 1.0 | U |
| 99-87-6 | 4-Isopropyltoluene | 1.0 | < 1.0 | U |
| 104-51-8 | n-Butylbenzene | 1.0 | < 1.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4.9 | < 4.9 | U |
| 91-20-3 | Naphthalene | 4.9 | < 4.9 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 4.9 | < 4.9 | U |

Reported in µg/kg (ppb)

**Volatile Surrogate Recovery**

| | |
|---|---|
| d4-1,2-Dichloroethane | 104% |
| d8-Toluene | 100% |
| Bromofluorobenzene | 109% |
| d4-1,2-Dichlorobenzene | 101% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-3**
 **SAMPLE**

Lab Sample ID: YH76C
LIMS ID: 14-7700
Matrix: Soil
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Instrument/Analyst: NT5/PAB
Date Analyzed: 04/25/14 16:36

Sample Amount: 5.14 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 7.5%

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | < 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | < 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | < 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | < 1.0 | U |
| **75-09-2** | **Methylene Chloride** | **1.9** | **3.0** | |
| 67-64-1 | Acetone | 670 | < 670 | Y |
| 75-15-0 | Carbon Disulfide | 1.0 | < 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | < 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | < 1.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | < 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | < 1.0 | U |
| 78-93-3 | 2-Butanone | 4.9 | < 4.9 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | < 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | < 1.0 | U |
| 108-05-4 | Vinyl Acetate | 4.9 | < 4.9 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | < 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | < 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | < 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | < 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | < 1.0 | U |
| 71-43-2 | Benzene | 1.0 | < 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 110-75-8 | 2-Chloroethylvinylether | 4.9 | < 4.9 | U |
| 75-25-2 | Bromoform | 1.0 | < 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone (MIBK) | 4.9 | < 4.9 | U |
| 591-78-6 | 2-Hexanone | 4.9 | < 4.9 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | < 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 108-88-3 | Toluene | 1.0 | < 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | < 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | < 1.0 | U |
| 100-42-5 | Styrene | 1.0 | < 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | < 1.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1.9 | < 1.9 | U |
| 179601-23-1 | m,p-Xylene | 1.0 | < 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | < 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | < 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | < 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | < 1.0 | U |
| 107-02-8 | Acrolein | 49 | < 49 | U |
| 74-88-4 | Iodomethane | 1.0 | < 1.0 | U |
| 74-96-4 | Bromoethane | 1.9 | < 1.9 | U |
| 107-13-1 | Acrylonitrile | 4.9 | < 4.9 | U |
| 563-58-6 | 1,1-Dichloropropene | 1.0 | < 1.0 | U |
| 74-95-3 | Dibromomethane | 1.0 | < 1.0 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 4.9 | < 4.9 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1.9 | < 1.9 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 4.9 | < 4.9 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.0 | < 1.0 | U |

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-3**
 **SAMPLE**

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: YH76C
LIMS ID: 14-7700
Matrix: Soil
Date Analyzed: 04/25/14 16:36

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 95-63-6 | 1,2,4-Trimethylbenzene | 1.0 | < 1.0 | U |
| 87-68-3 | Hexachlorobutadiene | 4.9 | < 4.9 | U |
| 106-93-4 | 1,2-Dibromoethane | 1.0 | < 1.0 | U |
| 74-97-5 | Bromochloromethane | 1.0 | < 1.0 | U |
| 594-20-7 | 2,2-Dichloropropane | 1.0 | < 1.0 | U |
| 142-28-9 | 1,3-Dichloropropane | 1.0 | < 1.0 | U |
| 98-82-8 | Isopropylbenzene | 1.0 | < 1.0 | U |
| 103-65-1 | n-Propylbenzene | 1.0 | < 1.0 | U |
| 108-86-1 | Bromobenzene | 1.0 | < 1.0 | U |
| 95-49-8 | 2-Chlorotoluene | 1.0 | < 1.0 | U |
| 106-43-4 | 4-Chlorotoluene | 1.0 | < 1.0 | U |
| 98-06-6 | tert-Butylbenzene | 1.0 | < 1.0 | U |
| 135-98-8 | sec-Butylbenzene | 1.0 | < 1.0 | U |
| 99-87-6 | 4-Isopropyltoluene | 1.0 | < 1.0 | U |
| 104-51-8 | n-Butylbenzene | 1.0 | < 1.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4.9 | < 4.9 | U |
| 91-20-3 | Naphthalene | 4.9 | < 4.9 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 4.9 | < 4.9 | U |

Reported in µg/kg (ppb)

**Volatile Surrogate Recovery**

| | |
|---|---|
| d4-1,2-Dichloroethane | 104% |
| d8-Toluene | 100% |
| Bromofluorobenzene | 108% |
| d4-1,2-Dichlorobenzene | 102% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-4**
 **SAMPLE**

Lab Sample ID: YH76D
LIMS ID: 14-7701
Matrix: Soil
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Instrument/Analyst: NT5/PAB
Date Analyzed: 04/25/14 17:00

Sample Amount: 5.21 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 4.4%

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | < 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | < 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | < 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | < 1.0 | U |
| **75-09-2** | **Methylene Chloride** | **1.9** | **2.6** | |
| 67-64-1 | Acetone | 670 | < 670 | Y |
| 75-15-0 | Carbon Disulfide | 1.0 | < 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | < 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | < 1.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | < 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | < 1.0 | U |
| 78-93-3 | 2-Butanone | 4.8 | < 4.8 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | < 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | < 1.0 | U |
| 108-05-4 | Vinyl Acetate | 4.8 | < 4.8 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | < 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | < 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | < 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | < 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | < 1.0 | U |
| 71-43-2 | Benzene | 1.0 | < 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 110-75-8 | 2-Chloroethylvinylether | 4.8 | < 4.8 | U |
| 75-25-2 | Bromoform | 1.0 | < 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone (MIBK) | 4.8 | < 4.8 | U |
| 591-78-6 | 2-Hexanone | 4.8 | < 4.8 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | < 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 108-88-3 | Toluene | 1.0 | < 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | < 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | < 1.0 | U |
| 100-42-5 | Styrene | 1.0 | < 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | < 1.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1.9 | < 1.9 | U |
| 179601-23-1 | m,p-Xylene | 1.0 | < 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | < 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | < 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | < 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | < 1.0 | U |
| 107-02-8 | Acrolein | 48 | < 48 | U |
| 74-88-4 | Iodomethane | 1.0 | < 1.0 | U |
| 74-96-4 | Bromoethane | 1.9 | < 1.9 | U |
| 107-13-1 | Acrylonitrile | 4.8 | < 4.8 | U |
| 563-58-6 | 1,1-Dichloropropene | 1.0 | < 1.0 | U |
| 74-95-3 | Dibromomethane | 1.0 | < 1.0 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 4.8 | < 4.8 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1.9 | < 1.9 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 4.8 | < 4.8 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.0 | < 1.0 | U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-4**
 **SAMPLE**

Lab Sample ID: YH76D
LIMS ID: 14-7701
Matrix: Soil
Date Analyzed: 04/25/14 17:00

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 95-63-6 | 1,2,4-Trimethylbenzene | 1.0 | < 1.0 | U |
| 87-68-3 | Hexachlorobutadiene | 4.8 | < 4.8 | U |
| 106-93-4 | 1,2-Dibromoethane | 1.0 | < 1.0 | U |
| 74-97-5 | Bromochloromethane | 1.0 | < 1.0 | U |
| 594-20-7 | 2,2-Dichloropropane | 1.0 | < 1.0 | U |
| 142-28-9 | 1,3-Dichloropropane | 1.0 | < 1.0 | U |
| 98-82-8 | Isopropylbenzene | 1.0 | < 1.0 | U |
| 103-65-1 | n-Propylbenzene | 1.0 | < 1.0 | U |
| 108-86-1 | Bromobenzene | 1.0 | < 1.0 | U |
| 95-49-8 | 2-Chlorotoluene | 1.0 | < 1.0 | U |
| 106-43-4 | 4-Chlorotoluene | 1.0 | < 1.0 | U |
| 98-06-6 | tert-Butylbenzene | 1.0 | < 1.0 | U |
| 135-98-8 | sec-Butylbenzene | 1.0 | < 1.0 | U |
| 99-87-6 | 4-Isopropyltoluene | 1.0 | < 1.0 | U |
| 104-51-8 | n-Butylbenzene | 1.0 | < 1.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4.8 | < 4.8 | U |
| 91-20-3 | Naphthalene | 4.8 | < 4.8 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 4.8 | < 4.8 | U |

Reported in µg/kg (ppb)

**Volatile Surrogate Recovery**

| | |
|---|---|
| d4-1,2-Dichloroethane | 102% |
| d8-Toluene | 101% |
| Bromofluorobenzene | 107% |
| d4-1,2-Dichlorobenzene | 101% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-5**
 **SAMPLE**

Lab Sample ID: YH76E
LIMS ID: 14-7702
Matrix: Soil
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Instrument/Analyst: NT5/PAB
Date Analyzed: 04/25/14 17:24

Sample Amount: 4.84 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 7.6%

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | < 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | < 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | < 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | < 1.0 | U |
| 75-09-2 | Methylene Chloride | 2.1 | < 2.1 | U |
| 67-64-1 | Acetone | 760 | < 760 | Y |
| 75-15-0 | Carbon Disulfide | 1.0 | < 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | < 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | < 1.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | < 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | < 1.0 | U |
| 78-93-3 | 2-Butanone | 5.2 | < 5.2 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | < 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | < 1.0 | U |
| 108-05-4 | Vinyl Acetate | 5.2 | < 5.2 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | < 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | < 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | < 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | < 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | < 1.0 | U |
| 71-43-2 | Benzene | 1.0 | < 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 110-75-8 | 2-Chloroethylvinylether | 5.2 | < 5.2 | U |
| 75-25-2 | Bromoform | 1.0 | < 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone (MIBK) | 5.2 | < 5.2 | U |
| 591-78-6 | 2-Hexanone | 5.2 | < 5.2 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | < 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 108-88-3 | Toluene | 1.0 | < 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | < 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | < 1.0 | U |
| 100-42-5 | Styrene | 1.0 | < 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | < 1.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2.1 | < 2.1 | U |
| 179601-23-1 | m,p-Xylene | 1.0 | < 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | < 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | < 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | < 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | < 1.0 | U |
| 107-02-8 | Acrolein | 52 | < 52 | U |
| 74-88-4 | Iodomethane | 1.0 | < 1.0 | U |
| 74-96-4 | Bromoethane | 2.1 | < 2.1 | U |
| 107-13-1 | Acrylonitrile | 5.2 | < 5.2 | U |
| 563-58-6 | 1,1-Dichloropropene | 1.0 | < 1.0 | U |
| 74-95-3 | Dibromomethane | 1.0 | < 1.0 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.2 | < 5.2 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 2.1 | < 2.1 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 5.2 | < 5.2 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.0 | < 1.0 | U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-5**
 **SAMPLE**

Lab Sample ID: YH76E
LIMS ID: 14-7702
Matrix: Soil
Date Analyzed: 04/25/14 17:24

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 95-63-6 | 1,2,4-Trimethylbenzene | 1.0 | < 1.0 | U |
| 87-68-3 | Hexachlorobutadiene | 5.2 | < 5.2 | U |
| 106-93-4 | 1,2-Dibromoethane | 1.0 | < 1.0 | U |
| 74-97-5 | Bromochloromethane | 1.0 | < 1.0 | U |
| 594-20-7 | 2,2-Dichloropropane | 1.0 | < 1.0 | U |
| 142-28-9 | 1,3-Dichloropropane | 1.0 | < 1.0 | U |
| 98-82-8 | Isopropylbenzene | 1.0 | < 1.0 | U |
| 103-65-1 | n-Propylbenzene | 1.0 | < 1.0 | U |
| 108-86-1 | Bromobenzene | 1.0 | < 1.0 | U |
| 95-49-8 | 2-Chlorotoluene | 1.0 | < 1.0 | U |
| 106-43-4 | 4-Chlorotoluene | 1.0 | < 1.0 | U |
| 98-06-6 | tert-Butylbenzene | 1.0 | < 1.0 | U |
| 135-98-8 | sec-Butylbenzene | 1.0 | < 1.0 | U |
| 99-87-6 | 4-Isopropyltoluene | 1.0 | < 1.0 | U |
| 104-51-8 | n-Butylbenzene | 1.0 | < 1.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.2 | < 5.2 | U |
| 91-20-3 | Naphthalene | 5.2 | < 5.2 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.2 | < 5.2 | U |

Reported in µg/kg (ppb)

**Volatile Surrogate Recovery**

| | |
|---|---|
| d4-1,2-Dichloroethane | 103% |
| d8-Toluene | 101% |
| Bromofluorobenzene | 106% |
| d4-1,2-Dichlorobenzene | 102% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-6**
 **SAMPLE**

Lab Sample ID: YH76F
LIMS ID: 14-7703
Matrix: Soil
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Instrument/Analyst: NT5/PAB
Date Analyzed: 04/25/14 17:48

Sample Amount: 5.31 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 8.1%

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | 0.9 | < 0.9 | U |
| 74-83-9 | Bromomethane | 0.9 | < 0.9 | U |
| 75-01-4 | Vinyl Chloride | 0.9 | < 0.9 | U |
| 75-00-3 | Chloroethane | 0.9 | < 0.9 | U |
| **75-09-2** | **Methylene Chloride** | **1.9** | **2.1** | |
| 67-64-1 | Acetone | 640 | < 640 | Y |
| 75-15-0 | Carbon Disulfide | 0.9 | < 0.9 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.9 | < 0.9 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.9 | < 0.9 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.9 | < 0.9 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.9 | < 0.9 | U |
| 67-66-3 | Chloroform | 0.9 | < 0.9 | U |
| 107-06-2 | 1,2-Dichloroethane | 0.9 | < 0.9 | U |
| 78-93-3 | 2-Butanone | 4.7 | < 4.7 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 0.9 | < 0.9 | U |
| 56-23-5 | Carbon Tetrachloride | 0.9 | < 0.9 | U |
| 108-05-4 | Vinyl Acetate | 4.7 | < 4.7 | U |
| 75-27-4 | Bromodichloromethane | 0.9 | < 0.9 | U |
| 78-87-5 | 1,2-Dichloropropane | 0.9 | < 0.9 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.9 | < 0.9 | U |
| 79-01-6 | Trichloroethene | 0.9 | < 0.9 | U |
| 124-48-1 | Dibromochloromethane | 0.9 | < 0.9 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 0.9 | < 0.9 | U |
| 71-43-2 | Benzene | 0.9 | < 0.9 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.9 | < 0.9 | U |
| 110-75-8 | 2-Chloroethylvinylether | 4.7 | < 4.7 | U |
| 75-25-2 | Bromoform | 0.9 | < 0.9 | U |
| 108-10-1 | 4-Methyl-2-Pentanone (MIBK) | 4.7 | < 4.7 | U |
| 591-78-6 | 2-Hexanone | 4.7 | < 4.7 | U |
| 127-18-4 | Tetrachloroethene | 0.9 | < 0.9 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.9 | < 0.9 | U |
| 108-88-3 | Toluene | 0.9 | < 0.9 | U |
| 108-90-7 | Chlorobenzene | 0.9 | < 0.9 | U |
| 100-41-4 | Ethylbenzene | 0.9 | < 0.9 | U |
| 100-42-5 | Styrene | 0.9 | < 0.9 | U |
| 75-69-4 | Trichlorofluoromethane | 0.9 | < 0.9 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1.9 | < 1.9 | U |
| 179601-23-1 | m,p-Xylene | 0.9 | < 0.9 | U |
| 95-47-6 | o-Xylene | 0.9 | < 0.9 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 0.9 | < 0.9 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 0.9 | < 0.9 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 0.9 | < 0.9 | U |
| 107-02-8 | Acrolein | 47 | < 47 | U |
| 74-88-4 | Iodomethane | 0.9 | < 0.9 | U |
| 74-96-4 | Bromoethane | 1.9 | < 1.9 | U |
| 107-13-1 | Acrylonitrile | 4.7 | < 4.7 | U |
| 563-58-6 | 1,1-Dichloropropene | 0.9 | < 0.9 | U |
| 74-95-3 | Dibromomethane | 0.9 | < 0.9 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.9 | < 0.9 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 4.7 | < 4.7 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1.9 | < 1.9 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 4.7 | < 4.7 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 0.9 | < 0.9 | U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-6**
 **SAMPLE**

Lab Sample ID: YH76F
LIMS ID: 14-7703
Matrix: Soil
Date Analyzed: 04/25/14 17:48

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.9 | < 0.9 | U |
| 87-68-3 | Hexachlorobutadiene | 4.7 | < 4.7 | U |
| 106-93-4 | 1,2-Dibromoethane | 0.9 | < 0.9 | U |
| 74-97-5 | Bromochloromethane | 0.9 | < 0.9 | U |
| 594-20-7 | 2,2-Dichloropropane | 0.9 | < 0.9 | U |
| 142-28-9 | 1,3-Dichloropropane | 0.9 | < 0.9 | U |
| 98-82-8 | Isopropylbenzene | 0.9 | < 0.9 | U |
| 103-65-1 | n-Propylbenzene | 0.9 | < 0.9 | U |
| 108-86-1 | Bromobenzene | 0.9 | < 0.9 | U |
| 95-49-8 | 2-Chlorotoluene | 0.9 | < 0.9 | U |
| 106-43-4 | 4-Chlorotoluene | 0.9 | < 0.9 | U |
| 98-06-6 | tert-Butylbenzene | 0.9 | < 0.9 | U |
| 135-98-8 | sec-Butylbenzene | 0.9 | < 0.9 | U |
| 99-87-6 | 4-Isopropyltoluene | 0.9 | < 0.9 | U |
| 104-51-8 | n-Butylbenzene | 0.9 | < 0.9 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4.7 | < 4.7 | U |
| 91-20-3 | Naphthalene | 4.7 | < 4.7 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 4.7 | < 4.7 | U |

Reported in µg/kg (ppb)

**Volatile Surrogate Recovery**

| | |
|---|---|
| d4-1,2-Dichloroethane | 93.4% |
| d8-Toluene | 98.7% |
| Bromofluorobenzene | 104% |
| d4-1,2-Dichlorobenzene | 101% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-6**
 **REANALYSIS**

Lab Sample ID: YH76F
LIMS ID: 14-7703
Matrix: Soil
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Instrument/Analyst: NT5/PAB
Date Analyzed: 04/29/14 12:22

Sample Amount: 4.95 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 8.1%

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | < 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | < 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | < 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | < 1.0 | U |
| **75-09-2** | **Methylene Chloride** | **2.0** | **2.3** | |
| 67-64-1 | Acetone | 260 | < 260 | Y |
| 75-15-0 | Carbon Disulfide | 1.0 | < 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | < 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | < 1.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | < 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | < 1.0 | U |
| 78-93-3 | 2-Butanone | 5.0 | < 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | < 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | < 1.0 | U |
| 108-05-4 | Vinyl Acetate | 5.0 | < 5.0 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | < 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | < 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | < 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | < 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | < 1.0 | U |
| 71-43-2 | Benzene | 1.0 | < 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 110-75-8 | 2-Chloroethylvinylether | 5.0 | < 5.0 | U |
| 75-25-2 | Bromoform | 1.0 | < 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone (MIBK) | 5.0 | < 5.0 | U |
| 591-78-6 | 2-Hexanone | 5.0 | < 5.0 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | < 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 108-88-3 | Toluene | 1.0 | < 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | < 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | < 1.0 | U |
| 100-42-5 | Styrene | 1.0 | < 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | < 1.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2.0 | < 2.0 | U |
| 179601-23-1 | m,p-Xylene | 1.0 | < 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | < 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | < 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | < 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | < 1.0 | U |
| 107-02-8 | Acrolein | 50 | < 50 | U |
| 74-88-4 | Iodomethane | 1.0 | < 1.0 | U |
| 74-96-4 | Bromoethane | 2.0 | < 2.0 | U |
| 107-13-1 | Acrylonitrile | 5.0 | < 5.0 | U |
| 563-58-6 | 1,1-Dichloropropene | 1.0 | < 1.0 | U |
| 74-95-3 | Dibromomethane | 1.0 | < 1.0 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | < 5.0 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 2.0 | < 2.0 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 5.0 | < 5.0 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.0 | < 1.0 | U |

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-6**

**REANALYSIS**

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: YH76F
LIMS ID: 14-7703
Matrix: Soil
Date Analyzed: 04/29/14 12:22

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 95-63-6 | 1,2,4-Trimethylbenzene | 1.0 | < 1.0 | U |
| 87-68-3 | Hexachlorobutadiene | 5.0 | < 5.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1.0 | < 1.0 | U |
| 74-97-5 | Bromochloromethane | 1.0 | < 1.0 | U |
| 594-20-7 | 2,2-Dichloropropane | 1.0 | < 1.0 | U |
| 142-28-9 | 1,3-Dichloropropane | 1.0 | < 1.0 | U |
| 98-82-8 | Isopropylbenzene | 1.0 | < 1.0 | U |
| 103-65-1 | n-Propylbenzene | 1.0 | < 1.0 | U |
| 108-86-1 | Bromobenzene | 1.0 | < 1.0 | U |
| 95-49-8 | 2-Chlorotoluene | 1.0 | < 1.0 | U |
| 106-43-4 | 4-Chlorotoluene | 1.0 | < 1.0 | U |
| 98-06-6 | tert-Butylbenzene | 1.0 | < 1.0 | U |
| 135-98-8 | sec-Butylbenzene | 1.0 | < 1.0 | U |
| 99-87-6 | 4-Isopropyltoluene | 1.0 | < 1.0 | U |
| 104-51-8 | n-Butylbenzene | 1.0 | < 1.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | < 5.0 | U |
| 91-20-3 | Naphthalene | 5.0 | < 5.0 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.0 | < 5.0 | U |

Reported in µg/kg (ppb)

**Volatile Surrogate Recovery**

| | |
|---|---|
| d4-1,2-Dichloroethane | 97.1% |
| d8-Toluene | 99.5% |
| Bromofluorobenzene | 103% |
| d4-1,2-Dichlorobenzene | 102% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-7**
 **SAMPLE**

Lab Sample ID: YH76G
LIMS ID: 14-7704
Matrix: Soil
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Instrument/Analyst: NT5/PAB
Date Analyzed: 04/25/14 18:12

Sample Amount: 4.89 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 2.9%

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | < 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | < 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | < 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | < 1.0 | U |
| **75-09-2** | **Methylene Chloride** | **2.0** | **2.9** | |
| 67-64-1 | Acetone | 590 | < 590 | Y |
| 75-15-0 | Carbon Disulfide | 1.0 | < 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | < 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | < 1.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | < 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | < 1.0 | U |
| 78-93-3 | 2-Butanone | 5.1 | < 5.1 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | < 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | < 1.0 | U |
| 108-05-4 | Vinyl Acetate | 5.1 | < 5.1 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | < 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | < 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | < 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | < 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | < 1.0 | U |
| 71-43-2 | Benzene | 1.0 | < 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 110-75-8 | 2-Chloroethylvinylether | 5.1 | < 5.1 | U |
| 75-25-2 | Bromoform | 1.0 | < 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone (MIBK) | 5.1 | < 5.1 | U |
| 591-78-6 | 2-Hexanone | 5.1 | < 5.1 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | < 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 108-88-3 | Toluene | 1.0 | < 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | < 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | < 1.0 | U |
| 100-42-5 | Styrene | 1.0 | < 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | < 1.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2.0 | < 2.0 | U |
| 179601-23-1 | m,p-Xylene | 1.0 | < 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | < 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | < 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | < 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | < 1.0 | U |
| 107-02-8 | Acrolein | 51 | < 51 | U |
| 74-88-4 | Iodomethane | 1.0 | < 1.0 | U |
| 74-96-4 | Bromoethane | 2.0 | < 2.0 | U |
| 107-13-1 | Acrylonitrile | 5.1 | < 5.1 | U |
| 563-58-6 | 1,1-Dichloropropene | 1.0 | < 1.0 | U |
| 74-95-3 | Dibromomethane | 1.0 | < 1.0 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.1 | < 5.1 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 2.0 | < 2.0 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 5.1 | < 5.1 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.0 | < 1.0 | U |

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: WM-7**
 **SAMPLE**

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: YH76G
LIMS ID: 14-7704
Matrix: Soil
Date Analyzed: 04/25/14 18:12

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 95-63-6 | 1,2,4-Trimethylbenzene | 1.0 | < 1.0 | U |
| 87-68-3 | Hexachlorobutadiene | 5.1 | < 5.1 | U |
| 106-93-4 | 1,2-Dibromoethane | 1.0 | < 1.0 | U |
| 74-97-5 | Bromochloromethane | 1.0 | < 1.0 | U |
| 594-20-7 | 2,2-Dichloropropane | 1.0 | < 1.0 | U |
| 142-28-9 | 1,3-Dichloropropane | 1.0 | < 1.0 | U |
| 98-82-8 | Isopropylbenzene | 1.0 | < 1.0 | U |
| 103-65-1 | n-Propylbenzene | 1.0 | < 1.0 | U |
| 108-86-1 | Bromobenzene | 1.0 | < 1.0 | U |
| 95-49-8 | 2-Chlorotoluene | 1.0 | < 1.0 | U |
| 106-43-4 | 4-Chlorotoluene | 1.0 | < 1.0 | U |
| 98-06-6 | tert-Butylbenzene | 1.0 | < 1.0 | U |
| 135-98-8 | sec-Butylbenzene | 1.0 | < 1.0 | U |
| 99-87-6 | 4-Isopropyltoluene | 1.0 | < 1.0 | U |
| 104-51-8 | n-Butylbenzene | 1.0 | < 1.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.1 | < 5.1 | U |
| 91-20-3 | Naphthalene | 5.1 | < 5.1 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.1 | < 5.1 | U |

Reported in µg/kg (ppb)

**Volatile Surrogate Recovery**

| | |
|---|---|
| d4-1,2-Dichloroethane | 102% |
| d8-Toluene | 101% |
| Bromofluorobenzene | 109% |
| d4-1,2-Dichlorobenzene | 101% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: Trip Blank**
 **SAMPLE**

Lab Sample ID: YH76H
LIMS ID: 14-7705
Matrix: Water
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Instrument/Analyst: NT5/PAB
Date Analyzed: 04/25/14 18:36

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

| CAS Number | Analyte | LOQ | Result | Q |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | < 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | < 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | < 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | < 1.0 | U |
| 75-09-2 | Methylene Chloride | 2.0 | < 2.0 | U |
| 67-64-1 | Acetone | 10 | < 10 | U |
| 75-15-0 | Carbon Disulfide | 1.0 | < 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | < 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | < 1.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | < 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | < 1.0 | U |
| 78-93-3 | 2-Butanone | 5.0 | < 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | < 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | < 1.0 | U |
| 108-05-4 | Vinyl Acetate | 5.0 | < 5.0 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | < 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | < 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | < 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | < 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | < 1.0 | U |
| 71-43-2 | Benzene | 1.0 | < 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 110-75-8 | 2-Chloroethylvinylether | 5.0 | < 5.0 | U |
| 75-25-2 | Bromoform | 1.0 | < 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone (MIBK) | 5.0 | < 5.0 | U |
| 591-78-6 | 2-Hexanone | 5.0 | < 5.0 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | < 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 108-88-3 | Toluene | 1.0 | < 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | < 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | < 1.0 | U |
| 100-42-5 | Styrene | 1.0 | < 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | < 1.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2.0 | < 2.0 | U |
| 179601-23-1 | m,p-Xylene | 2.0 | < 2.0 | U |
| 95-47-6 | o-Xylene | 1.0 | < 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | < 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | < 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | < 1.0 | U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: Trip Blank**
 **SAMPLE**

Lab Sample ID: YH76H
LIMS ID: 14-7705
Matrix: Water
Date Analyzed: 04/25/14 18:36

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | LOQ | Result | Q |
|---|---|---|---|---|
| 107-02-8 | Acrolein | 10 | < 10 | U |
| 74-88-4 | Iodomethane | 1.0 | < 1.0 | U |
| 74-96-4 | Bromoethane | 2.0 | < 2.0 | U |
| 107-13-1 | Acrylonitrile | 5.0 | < 5.0 | U |
| 563-58-6 | 1,1-Dichloropropene | 1.0 | < 1.0 | U |
| 74-95-3 | Dibromomethane | 1.0 | < 1.0 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | < 5.0 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 2.0 | < 2.0 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 5.0 | < 5.0 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.0 | < 1.0 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1.0 | < 1.0 | U |
| 87-68-3 | Hexachlorobutadiene | 5.0 | < 5.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1.0 | < 1.0 | U |
| 74-97-5 | Bromochloromethane | 1.0 | < 1.0 | U |
| 594-20-7 | 2,2-Dichloropropane | 1.0 | < 1.0 | U |
| 142-28-9 | 1,3-Dichloropropane | 5.0 | < 5.0 | U |
| 98-82-8 | Isopropylbenzene | 1.0 | < 1.0 | U |
| 103-65-1 | n-Propylbenzene | 1.0 | < 1.0 | U |
| 108-86-1 | Bromobenzene | 1.0 | < 1.0 | U |
| 95-49-8 | 2-Chlorotoluene | 1.0 | < 1.0 | U |
| 106-43-4 | 4-Chlorotoluene | 1.0 | < 1.0 | U |
| 98-06-6 | tert-Butylbenzene | 1.0 | < 1.0 | U |
| 135-98-8 | sec-Butylbenzene | 1.0 | < 1.0 | U |
| 99-87-6 | 4-Isopropyltoluene | 1.0 | < 1.0 | U |
| 104-51-8 | n-Butylbenzene | 1.0 | < 1.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | < 5.0 | U |
| 91-20-3 | Naphthalene | 5.0 | < 5.0 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.0 | < 5.0 | U |

Reported in µg/L (ppb)

**Volatile Surrogate Recovery**

| | |
|---|---|
| d4-1,2-Dichloroethane | 97.3% |
| d8-Toluene | 100% |
| Bromofluorobenzene | 104% |
| d4-1,2-Dichlorobenzene | 99.6% |

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

## VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| ARI ID | Client ID | Level | DCE | TOL | BFB | DCB | TOT OUT |
|---|---|---|---|---|---|---|---|
| MB-042514A | Method Blank | Low | 96.8% | 99.8% | 103% | 102% | 0 |
| LCS-042514A | Lab Control | Low | 95.3% | 99.9% | 104% | 100% | 0 |
| LCSD-042514A | Lab Control Dup | Low | 94.9% | 100% | 104% | 99.9% | 0 |
| YH76A | WM-1 | Low | 101% | 100% | 108% | 100% | 0 |
| YH76B | WM-2 | Low | 104% | 100% | 109% | 101% | 0 |
| YH76C | WM-3 | Low | 104% | 100% | 108% | 102% | 0 |
| YH76D | WM-4 | Low | 102% | 101% | 107% | 101% | 0 |
| YH76E | WM-5 | Low | 103% | 101% | 106% | 102% | 0 |
| MB-042914A | Method Blank | Low | 94.3% | 98.7% | 103% | 101% | 0 |
| LCS-042914A | Lab Control | Low | 89.7% | 100% | 104% | 101% | 0 |
| LCSD-042914A | Lab Control Dup | Low | 90.4% | 99.8% | 103% | 101% | 0 |
| YH76F | WM-6 | Low | 93.4% | 98.7% | 104% | 101% | 0 |
| YH76FRE | WM-6 | Low | 97.1% | 99.5% | 103% | 102% | 0 |
| YH76G | WM-7 | Low | 102% | 101% | 109% | 101% | 0 |

| | LCS/MB LIMITS | | QC LIMITS | |
|---|---|---|---|---|
| **SW8260C** | Low | Med | Low | Med |
| (DCE) = d4-1,2-Dichloroethane | 80-149 | 80-124 | 80-149 | 80-124 |
| (TOL) = d8-Toluene | 77-120 | 80-120 | 77-120 | 80-120 |
| (BFB) = Bromofluorobenzene | 80-120 | 80-120 | 80-120 | 80-120 |
| (DCB) = d4-1,2-Dichlorobenzene | 80-120 | 80-120 | 80-120 | 80-120 |

Log Number Range: 14-7698 to 14-7704



YH76:00824

ANALYTICAL RESOURCES INCORPORATED

# VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| ARI ID | Client ID | PV | DCE | TOL | BFB | DCB | TOT OUT |
|---|---|---|---|---|---|---|---|
| YH76H | Trip Blank | 5 | 97.3% | 100% | 104% | 99.6% | 0 |

| SW8260C | LCS/MB LIMITS | QC LIMITS |
|---|---|---|
| (DCE) = d4-1,2-Dichloroethane | 80-149 | 80-125 |
| (TOL) = d8-Toluene | 77-120 | 80-120 |
| (BFB) = Bromofluorobenzene | 80-120 | 80-120 |
| (DCB) = d4-1,2-Dichlorobenzene | 80-120 | 80-120 |

Prep Method: SW5030B
Log Number Range: 14-7705 to 14-7705

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: LCS-042514A**
 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-042514A
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT5/PAB
LCSD: NT5/PAB
Date Analyzed LCS: 04/25/14 11:27
LCSD: 04/25/14 11:51

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

| Analyte | LCS | Spike Added-LCS | LCS Recovery | LCSD | Spike Added-LCSD | LCSD Recovery | RPD |
|---|---|---|---|---|---|---|---|
| Chloromethane | 49.3 | 50.0 | 98.6% | 47.0 | 50.0 | 94.0% | 4.8% |
| Bromomethane | 71.7 Q | 50.0 | 143% | 65.5 Q | 50.0 | 131% | 9.0% |
| Vinyl Chloride | 55.7 | 50.0 | 111% | 54.9 | 50.0 | 110% | 1.4% |
| Chloroethane | 53.9 | 50.0 | 108% | 51.3 | 50.0 | 103% | 4.9% |
| Methylene Chloride | 57.8 | 50.0 | 116% | 49.0 | 50.0 | 98.0% | 16.5% |
| Acetone | 321 | 250 | 128% | 324 | 250 | 130% | 0.9% |
| Carbon Disulfide | 48.0 | 50.0 | 96.0% | 47.7 | 50.0 | 95.4% | 0.6% |
| 1,1-Dichloroethene | 49.3 | 50.0 | 98.6% | 49.3 | 50.0 | 98.6% | 0.0% |
| 1,1-Dichloroethane | 52.3 | 50.0 | 105% | 44.6 | 50.0 | 89.2% | 15.9% |
| trans-1,2-Dichloroethene | 49.3 | 50.0 | 98.6% | 46.0 | 50.0 | 92.0% | 6.9% |
| cis-1,2-Dichloroethene | 46.6 | 50.0 | 93.2% | 45.4 | 50.0 | 90.8% | 2.6% |
| Chloroform | 46.6 | 50.0 | 93.2% | 45.6 | 50.0 | 91.2% | 2.2% |
| 1,2-Dichloroethane | 45.0 | 50.0 | 90.0% | 44.8 | 50.0 | 89.6% | 0.4% |
| 2-Butanone | 280 | 250 | 112% | 239 | 250 | 95.6% | 15.8% |
| 1,1,1-Trichloroethane | 49.9 | 50.0 | 99.8% | 49.1 | 50.0 | 98.2% | 1.6% |
| Carbon Tetrachloride | 49.9 | 50.0 | 99.8% | 51.1 | 50.0 | 102% | 2.4% |
| Vinyl Acetate | 44.3 | 50.0 | 88.6% | 42.9 | 50.0 | 85.8% | 3.2% |
| Bromodichloromethane | 48.9 | 50.0 | 97.8% | 47.9 | 50.0 | 95.8% | 2.1% |
| 1,2-Dichloropropane | 47.4 | 50.0 | 94.8% | 46.8 | 50.0 | 93.6% | 1.3% |
| cis-1,3-Dichloropropene | 49.5 | 50.0 | 99.0% | 47.6 | 50.0 | 95.2% | 3.9% |
| Trichloroethene | 47.6 | 50.0 | 95.2% | 47.3 | 50.0 | 94.6% | 0.6% |
| Dibromochloromethane | 50.7 | 50.0 | 101% | 50.3 | 50.0 | 101% | 0.8% |
| 1,1,2-Trichloroethane | 46.4 | 50.0 | 92.8% | 45.7 | 50.0 | 91.4% | 1.5% |
| Benzene | 46.0 | 50.0 | 92.0% | 45.8 | 50.0 | 91.6% | 0.4% |
| trans-1,3-Dichloropropene | 40.3 | 50.0 | 80.6% | 44.0 | 50.0 | 88.0% | 8.8% |
| 2-Chloroethylvinylether | 52.5 | 50.0 | 105% | 53.1 | 50.0 | 106% | 1.1% |
| Bromoform | 51.0 | 50.0 | 102% | 49.1 | 50.0 | 98.2% | 3.8% |
| 4-Methyl-2-Pentanone (MIBK) | 184 | 250 | 73.6% | 201 | 250 | 80.4% | 8.8% |
| 2-Hexanone | 316 | 250 | 126% | 272 | 250 | 109% | 15.0% |
| Tetrachloroethene | 52.9 | 50.0 | 106% | 51.7 | 50.0 | 103% | 2.3% |
| 1,1,2,2-Tetrachloroethane | 51.0 | 50.0 | 102% | 49.5 | 50.0 | 99.0% | 3.0% |
| Toluene | 47.7 | 50.0 | 95.4% | 46.7 | 50.0 | 93.4% | 2.1% |
| Chlorobenzene | 49.6 | 50.0 | 99.2% | 47.9 | 50.0 | 95.8% | 3.5% |
| Ethylbenzene | 52.5 | 50.0 | 105% | 51.6 | 50.0 | 103% | 1.7% |
| Styrene | 54.0 | 50.0 | 108% | 53.0 | 50.0 | 106% | 1.9% |
| Trichlorofluoromethane | 54.0 | 50.0 | 108% | 51.6 | 50.0 | 103% | 4.5% |
| 1,1,2-Trichloro-1,2,2-trifluoroetha | 49.9 | 50.0 | 99.8% | 52.9 | 50.0 | 106% | 5.8% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: LCS-042514A**
 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-042514A
LIMS ID: 14-7698
Matrix: Soil

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| Analyte | LCS | Spike Added-LCS | LCS Recovery | LCSD | Spike Added-LCSD | LCSD Recovery | RPD |
|---|---|---|---|---|---|---|---|
| m,p-Xylene | 114 | 100 | 114% | 119 | 100 | 119% | 4.3% |
| o-Xylene | 54.0 | 50.0 | 108% | 52.9 | 50.0 | 106% | 2.1% |
| 1,2-Dichlorobenzene | 50.1 | 50.0 | 100% | 48.4 | 50.0 | 96.8% | 3.5% |
| 1,3-Dichlorobenzene | 53.9 | 50.0 | 108% | 50.7 | 50.0 | 101% | 6.1% |
| 1,4-Dichlorobenzene | 51.1 | 50.0 | 102% | 48.4 | 50.0 | 96.8% | 5.4% |
| Acrolein | 278 | 250 | 111% | 260 | 250 | 104% | 6.7% |
| Iodomethane | 51.4 | 50.0 | 103% | 58.1 | 50.0 | 116% | 12.2% |
| Bromoethane | 51.0 | 50.0 | 102% | 50.2 | 50.0 | 100% | 1.6% |
| Acrylonitrile | 43.8 | 50.0 | 87.6% | 41.2 | 50.0 | 82.4% | 6.1% |
| 1,1-Dichloropropene | 50.8 | 50.0 | 102% | 50.9 | 50.0 | 102% | 0.2% |
| Dibromomethane | 46.8 | 50.0 | 93.6% | 46.2 | 50.0 | 92.4% | 1.3% |
| 1,1,1,2-Tetrachloroethane | 49.1 | 50.0 | 98.2% | 48.4 | 50.0 | 96.8% | 1.4% |
| 1,2-Dibromo-3-chloropropane | 47.3 | 50.0 | 94.6% | 46.6 | 50.0 | 93.2% | 1.5% |
| 1,2,3-Trichloropropane | 49.2 | 50.0 | 98.4% | 48.6 | 50.0 | 97.2% | 1.2% |
| trans-1,4-Dichloro-2-butene | 53.3 | 50.0 | 107% | 52.2 | 50.0 | 104% | 2.1% |
| 1,3,5-Trimethylbenzene | 58.0 | 50.0 | 116% | 54.6 | 50.0 | 109% | 6.0% |
| 1,2,4-Trimethylbenzene | 57.9 | 50.0 | 116% | 54.8 | 50.0 | 110% | 5.5% |
| Hexachlorobutadiene | 53.7 | 50.0 | 107% | 49.7 | 50.0 | 99.4% | 7.7% |
| 1,2-Dibromoethane | 47.7 | 50.0 | 95.4% | 47.3 | 50.0 | 94.6% | 0.8% |
| Bromochloromethane | 47.0 | 50.0 | 94.0% | 45.4 | 50.0 | 90.8% | 3.5% |
| 2,2-Dichloropropane | 48.0 | 50.0 | 96.0% | 48.3 | 50.0 | 96.6% | 0.6% |
| 1,3-Dichloropropane | 52.1 | 50.0 | 104% | 51.4 | 50.0 | 103% | 1.4% |
| Isopropylbenzene | 58.6 | 50.0 | 117% | 55.5 | 50.0 | 111% | 5.4% |
| n-Propylbenzene | 59.5 | 50.0 | 119% | 55.8 | 50.0 | 112% | 6.4% |
| Bromobenzene | 52.2 | 50.0 | 104% | 48.5 | 50.0 | 97.0% | 7.3% |
| 2-Chlorotoluene | 55.4 | 50.0 | 111% | 51.5 | 50.0 | 103% | 7.3% |
| 4-Chlorotoluene | 56.9 | 50.0 | 114% | 52.9 | 50.0 | 106% | 7.3% |
| tert-Butylbenzene | 56.7 | 50.0 | 113% | 54.4 | 50.0 | 109% | 4.1% |
| sec-Butylbenzene | 58.7 | 50.0 | 117% | 56.5 | 50.0 | 113% | 3.8% |
| 4-Isopropyltoluene | 60.1 | 50.0 | 120% | 56.7 | 50.0 | 113% | 5.8% |
| n-Butylbenzene | 61.4 Q | 50.0 | 123% | 57.7 Q | 50.0 | 115% | 6.2% |
| 1,2,4-Trichlorobenzene | 57.6 | 50.0 | 115% | 53.3 | 50.0 | 107% | 7.8% |
| Naphthalene | 55.5 | 50.0 | 111% | 53.0 | 50.0 | 106% | 4.6% |
| 1,2,3-Trichlorobenzene | 53.7 | 50.0 | 107% | 49.1 | 50.0 | 98.2% | 8.9% |

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

**Volatile Surrogate Recovery**

| | LCS | LCSD |
|---|---|---|
| d4-1,2-Dichloroethane | 95.3% | 94.9% |
| d8-Toluene | 99.9% | 100% |
| Bromofluorobenzene | 104% | 104% |
| d4-1,2-Dichlorobenzene | 100% | 99.9% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: LCS-042914A**
 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-042914A
LIMS ID: 14-7703
Matrix: Soil
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT5/PAB
LCSD: NT5/PAB
Date Analyzed LCS: 04/29/14 10:24
LCSD: 04/29/14 10:48

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

| Analyte | LCS | Spike Added-LCS | LCS Recovery | LCSD | Spike Added-LCSD | LCSD Recovery | RPD |
|---|---|---|---|---|---|---|---|
| Chloromethane | 44.9 Q | 50.0 | 89.8% | 43.7 Q | 50.0 | 87.4% | 2.7% |
| Bromomethane | 73.9 Q | 50.0 | 148% | 66.9 Q | 50.0 | 134% | 9.9% |
| Vinyl Chloride | 54.7 | 50.0 | 109% | 52.6 | 50.0 | 105% | 3.9% |
| Chloroethane | 51.5 | 50.0 | 103% | 47.2 | 50.0 | 94.4% | 8.7% |
| Methylene Chloride | 53.5 | 50.0 | 107% | 46.5 | 50.0 | 93.0% | 14.0% |
| Acetone | 417 | 250 | 167% | 472 | 250 | 189% | 12.4% |
| Carbon Disulfide | 47.9 Q | 50.0 | 95.8% | 52.3 Q | 50.0 | 105% | 8.8% |
| 1,1-Dichloroethene | 49.5 | 50.0 | 99.0% | 53.2 | 50.0 | 106% | 7.2% |
| 1,1-Dichloroethane | 48.9 | 50.0 | 97.8% | 39.7 | 50.0 | 79.4% | 20.8% |
| trans-1,2-Dichloroethene | 48.6 | 50.0 | 97.2% | 47.2 | 50.0 | 94.4% | 2.9% |
| cis-1,2-Dichloroethene | 45.8 | 50.0 | 91.6% | 43.6 | 50.0 | 87.2% | 4.9% |
| Chloroform | 46.0 | 50.0 | 92.0% | 44.1 | 50.0 | 88.2% | 4.2% |
| 1,2-Dichloroethane | 45.1 Q | 50.0 | 90.2% | 42.9 Q | 50.0 | 85.8% | 5.0% |
| 2-Butanone | 255 | 250 | 102% | 223 | 250 | 89.2% | 13.4% |
| 1,1,1-Trichloroethane | 50.4 | 50.0 | 101% | 47.9 | 50.0 | 95.8% | 5.1% |
| Carbon Tetrachloride | 53.2 | 50.0 | 106% | 50.7 | 50.0 | 101% | 4.8% |
| Vinyl Acetate | 42.0 | 50.0 | 84.0% | 40.3 | 50.0 | 80.6% | 4.1% |
| Bromodichloromethane | 48.8 | 50.0 | 97.6% | 46.2 | 50.0 | 92.4% | 5.5% |
| 1,2-Dichloropropane | 47.2 | 50.0 | 94.4% | 45.2 | 50.0 | 90.4% | 4.3% |
| cis-1,3-Dichloropropene | 49.7 | 50.0 | 99.4% | 46.5 | 50.0 | 93.0% | 6.7% |
| Trichloroethene | 48.9 | 50.0 | 97.8% | 45.8 | 50.0 | 91.6% | 6.5% |
| Dibromochloromethane | 50.9 | 50.0 | 102% | 49.4 | 50.0 | 98.8% | 3.0% |
| 1,1,2-Trichloroethane | 46.8 | 50.0 | 93.6% | 45.0 | 50.0 | 90.0% | 3.9% |
| Benzene | 48.2 | 50.0 | 96.4% | 44.2 | 50.0 | 88.4% | 8.7% |
| trans-1,3-Dichloropropene | 40.7 Q | 50.0 | 81.4% | 38.0 Q | 50.0 | 76.0% | 6.9% |
| 2-Chloroethylvinylether | 50.6 | 50.0 | 101% | 50.7 | 50.0 | 101% | 0.2% |
| Bromoform | 52.9 | 50.0 | 106% | 50.0 | 50.0 | 100% | 5.6% |
| 4-Methyl-2-Pentanone (MIBK) | 179 Q | 250 | 71.6% | 177 Q | 250 | 70.8% | 1.1% |
| 2-Hexanone | 294 | 250 | 118% | 261 | 250 | 104% | 11.9% |
| Tetrachloroethene | 54.2 | 50.0 | 108% | 50.6 | 50.0 | 101% | 6.9% |
| 1,1,2,2-Tetrachloroethane | 50.6 | 50.0 | 101% | 49.6 | 50.0 | 99.2% | 2.0% |
| Toluene | 50.2 | 50.0 | 100% | 46.0 | 50.0 | 92.0% | 8.7% |
| Chlorobenzene | 51.4 | 50.0 | 103% | 47.5 | 50.0 | 95.0% | 7.9% |
| Ethylbenzene | 56.2 | 50.0 | 112% | 51.5 | 50.0 | 103% | 8.7% |
| Styrene | 56.8 | 50.0 | 114% | 52.5 | 50.0 | 105% | 7.9% |
| Trichlorofluoromethane | 53.8 | 50.0 | 108% | 50.5 | 50.0 | 101% | 6.3% |
| 1,1,2-Trichloro-1,2,2-trifluoroetha | 51.3 | 50.0 | 103% | 56.3 | 50.0 | 113% | 9.3% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: LCS-042914A**
 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-042914A
LIMS ID: 14-7703
Matrix: Soil

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| Analyte | LCS | Spike Added-LCS | LCS Recovery | LCSD | Spike Added-LCSD | LCSD Recovery | RPD |
|---|---|---|---|---|---|---|---|
| m,p-Xylene | 119 | 100 | 119% | 110 | 100 | 110% | 7.9% |
| o-Xylene | 56.4 | 50.0 | 113% | 52.1 | 50.0 | 104% | 7.9% |
| 1,2-Dichlorobenzene | 53.0 | 50.0 | 106% | 48.8 | 50.0 | 97.6% | 8.3% |
| 1,3-Dichlorobenzene | 56.4 | 50.0 | 113% | 51.7 | 50.0 | 103% | 8.7% |
| 1,4-Dichlorobenzene | 53.4 | 50.0 | 107% | 47.9 | 50.0 | 95.8% | 10.9% |
| Acrolein | 268 | 250 | 107% | 241 | 250 | 96.4% | 10.6% |
| Iodomethane | 52.8 Q | 50.0 | 106% | 56.6 Q | 50.0 | 113% | 6.9% |
| Bromoethane | 54.1 | 50.0 | 108% | 49.5 | 50.0 | 99.0% | 8.9% |
| Acrylonitrile | 38.8 | 50.0 | 77.6% | 38.1 | 50.0 | 76.2% | 1.8% |
| 1,1-Dichloropropene | 52.1 | 50.0 | 104% | 50.7 | 50.0 | 101% | 2.7% |
| Dibromomethane | 46.0 | 50.0 | 92.0% | 44.4 | 50.0 | 88.8% | 3.5% |
| 1,1,1,2-Tetrachloroethane | 52.8 | 50.0 | 106% | 49.0 | 50.0 | 98.0% | 7.5% |
| 1,2-Dibromo-3-chloropropane | 45.8 | 50.0 | 91.6% | 46.9 | 50.0 | 93.8% | 2.4% |
| 1,2,3-Trichloropropane | 49.8 | 50.0 | 99.6% | 48.9 | 50.0 | 97.8% | 1.8% |
| trans-1,4-Dichloro-2-butene | 55.6 | 50.0 | 111% | 52.8 | 50.0 | 106% | 5.2% |
| 1,3,5-Trimethylbenzene | 60.3 | 50.0 | 121% | 55.0 | 50.0 | 110% | 9.2% |
| 1,2,4-Trimethylbenzene | 60.8 | 50.0 | 122% | 56.3 | 50.0 | 113% | 7.7% |
| Hexachlorobutadiene | 52.4 | 50.0 | 105% | 49.9 | 50.0 | 99.8% | 4.9% |
| 1,2-Dibromoethane | 46.8 | 50.0 | 93.6% | 45.6 | 50.0 | 91.2% | 2.6% |
| Bromochloromethane | 46.2 | 50.0 | 92.4% | 45.0 | 50.0 | 90.0% | 2.6% |
| 2,2-Dichloropropane | 47.7 | 50.0 | 95.4% | 44.6 | 50.0 | 89.2% | 6.7% |
| 1,3-Dichloropropane | 52.3 | 50.0 | 105% | 49.9 | 50.0 | 99.8% | 4.7% |
| Isopropylbenzene | 62.7 | 50.0 | 125% | 57.3 | 50.0 | 115% | 9.0% |
| n-Propylbenzene | 62.2 | 50.0 | 124% | 56.7 | 50.0 | 113% | 9.3% |
| Bromobenzene | 54.3 | 50.0 | 109% | 49.8 | 50.0 | 99.6% | 8.6% |
| 2-Chlorotoluene | 57.7 | 50.0 | 115% | 53.2 | 50.0 | 106% | 8.1% |
| 4-Chlorotoluene | 59.0 | 50.0 | 118% | 53.8 | 50.0 | 108% | 9.2% |
| tert-Butylbenzene | 59.8 | 50.0 | 120% | 55.2 | 50.0 | 110% | 8.0% |
| sec-Butylbenzene | 61.5 | 50.0 | 123% | 56.7 | 50.0 | 113% | 8.1% |
| 4-Isopropyltoluene | 61.5 | 50.0 | 123% | 56.7 | 50.0 | 113% | 8.1% |
| n-Butylbenzene | 64.3 | 50.0 | 129% | 57.5 | 50.0 | 115% | 11.2% |
| 1,2,4-Trichlorobenzene | 57.4 | 50.0 | 115% | 52.7 | 50.0 | 105% | 8.5% |
| Naphthalene | 54.0 | 50.0 | 108% | 52.9 | 50.0 | 106% | 2.1% |
| 1,2,3-Trichlorobenzene | 52.9 | 50.0 | 106% | 49.5 | 50.0 | 99.0% | 6.6% |

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

**Volatile Surrogate Recovery**

| | LCS | LCSD |
|---|---|---|
| d4-1,2-Dichloroethane | 89.7% | 90.4% |
| d8-Toluene | 100% | 99.8% |
| Bromofluorobenzene | 104% | 103% |
| d4-1,2-Dichlorobenzene | 101% | 101% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: MB-042514A**
 **METHOD BLANK**

Lab Sample ID: MB-042514A
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT5/PAB
Date Analyzed: 04/25/14 12:15

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | < 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | < 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | < 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | < 1.0 | U |
| 75-09-2 | Methylene Chloride | 2.0 | < 2.0 | U |
| 67-64-1 | Acetone | 5.0 | < 5.0 | U |
| 75-15-0 | Carbon Disulfide | 1.0 | < 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | < 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | < 1.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | < 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | < 1.0 | U |
| 78-93-3 | 2-Butanone | 5.0 | < 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | < 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | < 1.0 | U |
| 108-05-4 | Vinyl Acetate | 5.0 | < 5.0 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | < 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | < 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | < 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | < 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | < 1.0 | U |
| 71-43-2 | Benzene | 1.0 | < 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 110-75-8 | 2-Chloroethylvinylether | 5.0 | < 5.0 | U |
| 75-25-2 | Bromoform | 1.0 | < 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone (MIBK) | 5.0 | < 5.0 | U |
| 591-78-6 | 2-Hexanone | 5.0 | < 5.0 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | < 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 108-88-3 | Toluene | 1.0 | < 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | < 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | < 1.0 | U |
| 100-42-5 | Styrene | 1.0 | < 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | < 1.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2.0 | < 2.0 | U |
| 179601-23-1 | m,p-Xylene | 1.0 | < 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | < 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | < 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | < 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | < 1.0 | U |
| 107-02-8 | Acrolein | 50 | < 50 | U |
| 74-88-4 | Iodomethane | 1.0 | < 1.0 | U |
| 74-96-4 | Bromoethane | 2.0 | < 2.0 | U |
| 107-13-1 | Acrylonitrile | 5.0 | < 5.0 | U |
| 563-58-6 | 1,1-Dichloropropene | 1.0 | < 1.0 | U |
| 74-95-3 | Dibromomethane | 1.0 | < 1.0 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | < 5.0 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 2.0 | < 2.0 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 5.0 | < 5.0 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.0 | < 1.0 | U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: MB-042514A**
 **METHOD BLANK**

Lab Sample ID: MB-042514A
LIMS ID: 14-7698
Matrix: Soil
Date Analyzed: 04/25/14 12:15

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 95-63-6 | 1,2,4-Trimethylbenzene | 1.0 | < 1.0 | U |
| 87-68-3 | Hexachlorobutadiene | 5.0 | < 5.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1.0 | < 1.0 | U |
| 74-97-5 | Bromochloromethane | 1.0 | < 1.0 | U |
| 594-20-7 | 2,2-Dichloropropane | 1.0 | < 1.0 | U |
| 142-28-9 | 1,3-Dichloropropane | 1.0 | < 1.0 | U |
| 98-82-8 | Isopropylbenzene | 1.0 | < 1.0 | U |
| 103-65-1 | n-Propylbenzene | 1.0 | < 1.0 | U |
| 108-86-1 | Bromobenzene | 1.0 | < 1.0 | U |
| 95-49-8 | 2-Chlorotoluene | 1.0 | < 1.0 | U |
| 106-43-4 | 4-Chlorotoluene | 1.0 | < 1.0 | U |
| 98-06-6 | tert-Butylbenzene | 1.0 | < 1.0 | U |
| 135-98-8 | sec-Butylbenzene | 1.0 | < 1.0 | U |
| 99-87-6 | 4-Isopropyltoluene | 1.0 | < 1.0 | U |
| 104-51-8 | n-Butylbenzene | 1.0 | < 1.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | < 5.0 | U |
| 91-20-3 | Naphthalene | 5.0 | < 5.0 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.0 | < 5.0 | U |

Reported in µg/kg (ppb)

**Volatile Surrogate Recovery**

| | |
|---|---|
| d4-1,2-Dichloroethane | 96.8% |
| d8-Toluene | 99.8% |
| Bromofluorobenzene | 103% |
| d4-1,2-Dichlorobenzene | 102% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: MB-042914A**
 **METHOD BLANK**

Lab Sample ID: MB-042914A
LIMS ID: 14-7703
Matrix: Soil
Data Release Authorized:
Reported: 05/01/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT5/PAB
Date Analyzed: 04/29/14 11:12

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | < 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | < 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | < 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | < 1.0 | U |
| 75-09-2 | Methylene Chloride | 2.0 | < 2.0 | U |
| 67-64-1 | Acetone | 5.0 | < 5.0 | U |
| 75-15-0 | Carbon Disulfide | 1.0 | < 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | < 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | < 1.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1.0 | < 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | < 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | < 1.0 | U |
| 78-93-3 | 2-Butanone | 5.0 | < 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | < 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | < 1.0 | U |
| 108-05-4 | Vinyl Acetate | 5.0 | < 5.0 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | < 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | < 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | < 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | < 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | < 1.0 | U |
| 71-43-2 | Benzene | 1.0 | < 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | < 1.0 | U |
| 110-75-8 | 2-Chloroethylvinylether | 5.0 | < 5.0 | U |
| 75-25-2 | Bromoform | 1.0 | < 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone (MIBK) | 5.0 | < 5.0 | U |
| 591-78-6 | 2-Hexanone | 5.0 | < 5.0 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | < 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 108-88-3 | Toluene | 1.0 | < 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | < 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | < 1.0 | U |
| 100-42-5 | Styrene | 1.0 | < 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | < 1.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2.0 | < 2.0 | U |
| 179601-23-1 | m,p-Xylene | 1.0 | < 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | < 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | < 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | < 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | < 1.0 | U |
| 107-02-8 | Acrolein | 50 | < 50 | U |
| 74-88-4 | Iodomethane | 1.0 | < 1.0 | U |
| 74-96-4 | Bromoethane | 2.0 | < 2.0 | U |
| 107-13-1 | Acrylonitrile | 5.0 | < 5.0 | U |
| 563-58-6 | 1,1-Dichloropropene | 1.0 | < 1.0 | U |
| 74-95-3 | Dibromomethane | 1.0 | < 1.0 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1.0 | < 1.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | < 5.0 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 2.0 | < 2.0 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 5.0 | < 5.0 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.0 | < 1.0 | U |

**ORGANICS ANALYSIS DATA SHEET**
**Volatiles by Purge & Trap GC/MS-Method SW8260C** **Sample ID: MB-042914A**
 **METHOD BLANK**

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: MB-042914A
LIMS ID: 14-7703
Matrix: Soil
Date Analyzed: 04/29/14 11:12

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result | Q |
|---|---|---|---|---|
| 95-63-6 | 1,2,4-Trimethylbenzene | 1.0 | < 1.0 | U |
| 87-68-3 | Hexachlorobutadiene | 5.0 | < 5.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1.0 | < 1.0 | U |
| 74-97-5 | Bromochloromethane | 1.0 | < 1.0 | U |
| 594-20-7 | 2,2-Dichloropropane | 1.0 | < 1.0 | U |
| 142-28-9 | 1,3-Dichloropropane | 1.0 | < 1.0 | U |
| 98-82-8 | Isopropylbenzene | 1.0 | < 1.0 | U |
| 103-65-1 | n-Propylbenzene | 1.0 | < 1.0 | U |
| 108-86-1 | Bromobenzene | 1.0 | < 1.0 | U |
| 95-49-8 | 2-Chlorotoluene | 1.0 | < 1.0 | U |
| 106-43-4 | 4-Chlorotoluene | 1.0 | < 1.0 | U |
| 98-06-6 | tert-Butylbenzene | 1.0 | < 1.0 | U |
| 135-98-8 | sec-Butylbenzene | 1.0 | < 1.0 | U |
| 99-87-6 | 4-Isopropyltoluene | 1.0 | < 1.0 | U |
| 104-51-8 | n-Butylbenzene | 1.0 | < 1.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | < 5.0 | U |
| 91-20-3 | Naphthalene | 5.0 | < 5.0 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.0 | < 5.0 | U |

Reported in µg/kg (ppb)

**Volatile Surrogate Recovery**

| | |
|---|---|
| d4-1,2-Dichloroethane | 94.3% |
| d8-Toluene | 98.7% |
| Bromofluorobenzene | 103% |
| d4-1,2-Dichlorobenzene | 101% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-1**
**SAMPLE**

Lab Sample ID: YH76A
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 18:36
Instrument/Analyst: NT14/YZ
GPC Cleanup: No

Sample Amount: 10.63 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 3.7%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 108-95-2 | Phenol | 19 | < 19 U |
| 111-44-4 | Bis-(2-Chloroethyl) Ether | 19 | < 19 U |
| 95-57-8 | 2-Chlorophenol | 19 | < 19 U |
| 541-73-1 | 1,3-Dichlorobenzene | 19 | < 19 U |
| 106-46-7 | 1,4-Dichlorobenzene | 19 | < 19 U |
| 100-51-6 | Benzyl Alcohol | 19 | < 19 U |
| 95-50-1 | 1,2-Dichlorobenzene | 19 | < 19 U |
| 95-48-7 | 2-Methylphenol | 19 | < 19 U |
| 108-60-1 | 2,2'-Oxybis(1-Chloropropane) | 19 | < 19 U |
| 106-44-5 | 4-Methylphenol | 19 | < 19 U |
| 621-64-7 | N-Nitroso-Di-N-Propylamine | 19 | < 19 U |
| 67-72-1 | Hexachloroethane | 19 | < 19 U |
| 98-95-3 | Nitrobenzene | 19 | < 19 U |
| 78-59-1 | Isophorone | 19 | < 19 U |
| 88-75-5 | 2-Nitrophenol | 19 | < 19 U |
| 105-67-9 | 2,4-Dimethylphenol | 94 | < 94 U |
| 65-85-0 | Benzoic Acid | 190 | < 190 U |
| 111-91-1 | bis(2-Chloroethoxy) Methane | 19 | < 19 U |
| 120-83-2 | 2,4-Dichlorophenol | 94 | < 94 U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 19 | < 19 U |
| 91-20-3 | Naphthalene | 19 | < 19 U |
| 106-47-8 | 4-Chloroaniline | 94 | < 94 U |
| 87-68-3 | Hexachlorobutadiene | 19 | < 19 U |
| 59-50-7 | 4-Chloro-3-methylphenol | 94 | < 94 U |
| 91-57-6 | 2-Methylnaphthalene | 19 | < 19 U |
| 77-47-4 | Hexachlorocyclopentadiene | 94 | < 94 U |
| 88-06-2 | 2,4,6-Trichlorophenol | 94 | < 94 U |
| 95-95-4 | 2,4,5-Trichlorophenol | 94 | < 94 U |
| 91-58-7 | 2-Chloronaphthalene | 19 | < 19 U |
| 88-74-4 | 2-Nitroaniline | 94 | < 94 U |
| 131-11-3 | Dimethylphthalate | 19 | < 19 U |
| 208-96-8 | Acenaphthylene | 19 | < 19 U |
| 99-09-2 | 3-Nitroaniline | 94 | < 94 U |
| 83-32-9 | Acenaphthene | 19 | < 19 U |
| 51-28-5 | 2,4-Dinitrophenol | 190 | < 190 U |
| 100-02-7 | 4-Nitrophenol | 94 | < 94 U |
| 132-64-9 | Dibenzofuran | 19 | < 19 U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-1**
**SAMPLE**

Lab Sample ID: YH76A
LIMS ID: 14-7698
Matrix: Soil
Date Analyzed: 05/03/14 18:36

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 606-20-2 | 2,6-Dinitrotoluene | 94 | < 94 U |
| 121-14-2 | 2,4-Dinitrotoluene | 94 | < 94 U |
| 84-66-2 | Diethylphthalate | 19 | < 19 U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 19 | < 19 U |
| 86-73-7 | Fluorene | 19 | < 19 U |
| 100-01-6 | 4-Nitroaniline | 94 | < 94 U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 190 | < 190 U |
| 86-30-6 | N-Nitrosodiphenylamine | 19 | < 19 U |
| 101-55-3 | 4-Bromophenyl-phenylether | 19 | < 19 U |
| 118-74-1 | Hexachlorobenzene | 19 | < 19 U |
| 87-86-5 | Pentachlorophenol | 94 | < 94 U |
| 85-01-8 | Phenanthrene | 19 | < 19 U |
| 86-74-8 | Carbazole | 19 | < 19 U |
| 120-12-7 | Anthracene | 19 | < 19 U |
| 84-74-2 | Di-n-Butylphthalate | 19 | < 19 U |
| 206-44-0 | Fluoranthene | 19 | < 19 U |
| 129-00-0 | Pyrene | 19 | < 19 U |
| 85-68-7 | Butylbenzylphthalate | 19 | < 19 U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 94 | < 94 U |
| 56-55-3 | Benzo(a)anthracene | 19 | < 19 U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 47 | < 47 U |
| 218-01-9 | Chrysene | 19 | < 19 U |
| 117-84-0 | Di-n-Octyl phthalate | 19 | < 19 U |
| 50-32-8 | Benzo(a)pyrene | 19 | < 19 U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 19 | < 19 U |
| 53-70-3 | Dibenz(a,h)anthracene | 19 | < 19 U |
| 191-24-2 | Benzo(g,h,i)perylene | 19 | < 19 U |
| 90-12-0 | 1-Methylnaphthalene | 19 | < 19 U |
| TOTBFA | Total Benzofluoranthenes | 38 | < 38 U |

Reported in µg/kg (ppb)

**Semivolatile Surrogate Recovery**

| | | | |
|---|---|---|---|
| d5-Nitrobenzene | 68.6% | 2-Fluorobiphenyl | 72.8% |
| d14-p-Terphenyl | 87.0% | d4-1,2-Dichlorobenzene | 61.8% |
| d5-Phenol | 65.6% | 2-Fluorophenol | 65.5% |
| 2,4,6-Tribromophenol | 54.8% | d4-2-Chlorophenol | 68.4% |

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-2**
**SAMPLE**

Lab Sample ID: YH76B
LIMS ID: 14-7699
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 19:11
Instrument/Analyst: NT14/YZ
GPC Cleanup: No

Sample Amount: 10.52 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 4.8%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 108-95-2 | Phenol | 19 | < 19 U |
| 111-44-4 | Bis-(2-Chloroethyl) Ether | 19 | < 19 U |
| 95-57-8 | 2-Chlorophenol | 19 | < 19 U |
| 541-73-1 | 1,3-Dichlorobenzene | 19 | < 19 U |
| 106-46-7 | 1,4-Dichlorobenzene | 19 | < 19 U |
| 100-51-6 | Benzyl Alcohol | 19 | < 19 U |
| 95-50-1 | 1,2-Dichlorobenzene | 19 | < 19 U |
| 95-48-7 | 2-Methylphenol | 19 | < 19 U |
| 108-60-1 | 2,2'-Oxybis(1-Chloropropane) | 19 | < 19 U |
| 106-44-5 | 4-Methylphenol | 19 | < 19 U |
| 621-64-7 | N-Nitroso-Di-N-Propylamine | 19 | < 19 U |
| 67-72-1 | Hexachloroethane | 19 | < 19 U |
| 98-95-3 | Nitrobenzene | 19 | < 19 U |
| 78-59-1 | Isophorone | 19 | < 19 U |
| 88-75-5 | 2-Nitrophenol | 19 | < 19 U |
| 105-67-9 | 2,4-Dimethylphenol | 95 | < 95 U |
| 65-85-0 | Benzoic Acid | 190 | < 190 U |
| 111-91-1 | bis(2-Chloroethoxy) Methane | 19 | < 19 U |
| 120-83-2 | 2,4-Dichlorophenol | 95 | < 95 U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 19 | < 19 U |
| 91-20-3 | Naphthalene | 19 | < 19 U |
| 106-47-8 | 4-Chloroaniline | 95 | < 95 U |
| 87-68-3 | Hexachlorobutadiene | 19 | < 19 U |
| 59-50-7 | 4-Chloro-3-methylphenol | 95 | < 95 U |
| 91-57-6 | 2-Methylnaphthalene | 19 | < 19 U |
| 77-47-4 | Hexachlorocyclopentadiene | 95 | < 95 U |
| 88-06-2 | 2,4,6-Trichlorophenol | 95 | < 95 U |
| 95-95-4 | 2,4,5-Trichlorophenol | 95 | < 95 U |
| 91-58-7 | 2-Chloronaphthalene | 19 | < 19 U |
| 88-74-4 | 2-Nitroaniline | 95 | < 95 U |
| 131-11-3 | Dimethylphthalate | 19 | < 19 U |
| 208-96-8 | Acenaphthylene | 19 | < 19 U |
| 99-09-2 | 3-Nitroaniline | 95 | < 95 U |
| 83-32-9 | Acenaphthene | 19 | < 19 U |
| 51-28-5 | 2,4-Dinitrophenol | 190 | < 190 U |
| 100-02-7 | 4-Nitrophenol | 95 | < 95 U |
| 132-64-9 | Dibenzofuran | 19 | < 19 U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-2**
**SAMPLE**

Lab Sample ID: YH76B
LIMS ID: 14-7699
Matrix: Soil
Date Analyzed: 05/03/14 19:11

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 606-20-2 | 2,6-Dinitrotoluene | 95 | < 95 U |
| 121-14-2 | 2,4-Dinitrotoluene | 95 | < 95 U |
| 84-66-2 | Diethylphthalate | 19 | < 19 U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 19 | < 19 U |
| 86-73-7 | Fluorene | 19 | < 19 U |
| 100-01-6 | 4-Nitroaniline | 95 | < 95 U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 190 | < 190 U |
| 86-30-6 | N-Nitrosodiphenylamine | 19 | < 19 U |
| 101-55-3 | 4-Bromophenyl-phenylether | 19 | < 19 U |
| 118-74-1 | Hexachlorobenzene | 19 | < 19 U |
| 87-86-5 | Pentachlorophenol | 95 | < 95 U |
| 85-01-8 | Phenanthrene | 19 | < 19 U |
| 86-74-8 | Carbazole | 19 | < 19 U |
| 120-12-7 | Anthracene | 19 | < 19 U |
| 84-74-2 | Di-n-Butylphthalate | 19 | < 19 U |
| 206-44-0 | Fluoranthene | 19 | < 19 U |
| 129-00-0 | Pyrene | 19 | < 19 U |
| 85-68-7 | Butylbenzylphthalate | 19 | < 19 U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 95 | < 95 U |
| 56-55-3 | Benzo(a)anthracene | 19 | < 19 U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 48 | < 48 U |
| 218-01-9 | Chrysene | 19 | < 19 U |
| 117-84-0 | Di-n-Octyl phthalate | 19 | < 19 U |
| 50-32-8 | Benzo(a)pyrene | 19 | < 19 U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 19 | < 19 U |
| 53-70-3 | Dibenz(a,h)anthracene | 19 | < 19 U |
| 191-24-2 | Benzo(g,h,i)perylene | 19 | < 19 U |
| 90-12-0 | 1-Methylnaphthalene | 19 | < 19 U |
| TOTBFA | Total Benzofluoranthenes | 38 | < 38 U |

Reported in µg/kg (ppb)

**Semivolatile Surrogate Recovery**

| | | | |
|---|---|---|---|
| d5-Nitrobenzene | 59.2% | 2-Fluorobiphenyl | 62.2% |
| d14-p-Terphenyl | 80.8% | d4-1,2-Dichlorobenzene | 58.0% |
| d5-Phenol | 60.5% | 2-Fluorophenol | 59.2% |
| 2,4,6-Tribromophenol | 57.1% | d4-2-Chlorophenol | 59.5% |

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-3**
**SAMPLE**

Lab Sample ID: YH76C
LIMS ID: 14-7700
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 20:54
Instrument/Analyst: NT14/YZ
GPC Cleanup: No

Sample Amount: 10.28 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 6.5%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 108-95-2 | Phenol | 20 | < 20 U |
| 111-44-4 | Bis-(2-Chloroethyl) Ether | 20 | < 20 U |
| 95-57-8 | 2-Chlorophenol | 20 | < 20 U |
| 541-73-1 | 1,3-Dichlorobenzene | 20 | < 20 U |
| 106-46-7 | 1,4-Dichlorobenzene | 20 | < 20 U |
| 100-51-6 | Benzyl Alcohol | 20 | < 20 U |
| 95-50-1 | 1,2-Dichlorobenzene | 20 | < 20 U |
| 95-48-7 | 2-Methylphenol | 20 | < 20 U |
| 108-60-1 | 2,2'-Oxybis(1-Chloropropane) | 20 | < 20 U |
| 106-44-5 | 4-Methylphenol | 20 | < 20 U |
| 621-64-7 | N-Nitroso-Di-N-Propylamine | 20 | < 20 U |
| 67-72-1 | Hexachloroethane | 20 | < 20 U |
| 98-95-3 | Nitrobenzene | 20 | < 20 U |
| 78-59-1 | Isophorone | 20 | < 20 U |
| 88-75-5 | 2-Nitrophenol | 20 | < 20 U |
| 105-67-9 | 2,4-Dimethylphenol | 97 | < 97 U |
| 65-85-0 | Benzoic Acid | 200 | < 200 U |
| 111-91-1 | bis(2-Chloroethoxy) Methane | 20 | < 20 U |
| 120-83-2 | 2,4-Dichlorophenol | 97 | < 97 U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 20 | < 20 U |
| 91-20-3 | Naphthalene | 20 | < 20 U |
| 106-47-8 | 4-Chloroaniline | 97 | < 97 U |
| 87-68-3 | Hexachlorobutadiene | 20 | < 20 U |
| 59-50-7 | 4-Chloro-3-methylphenol | 97 | < 97 U |
| 91-57-6 | 2-Methylnaphthalene | 20 | < 20 U |
| 77-47-4 | Hexachlorocyclopentadiene | 97 | < 97 U |
| 88-06-2 | 2,4,6-Trichlorophenol | 97 | < 97 U |
| 95-95-4 | 2,4,5-Trichlorophenol | 97 | < 97 U |
| 91-58-7 | 2-Chloronaphthalene | 20 | < 20 U |
| 88-74-4 | 2-Nitroaniline | 97 | < 97 U |
| 131-11-3 | Dimethylphthalate | 20 | < 20 U |
| 208-96-8 | Acenaphthylene | 20 | < 20 U |
| 99-09-2 | 3-Nitroaniline | 97 | < 97 U |
| 83-32-9 | Acenaphthene | 20 | < 20 U |
| 51-28-5 | 2,4-Dinitrophenol | 200 | < 200 U |
| 100-02-7 | 4-Nitrophenol | 97 | < 97 U |
| 132-64-9 | Dibenzofuran | 20 | < 20 U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS** **Sample ID: WM-3**
**Extraction Method: SW3546** **SAMPLE**


Lab Sample ID: YH76C QC Report No: YH76-RH2 Engineering
LIMS ID: 14-7700 Project: CMS - Landfill
Matrix: Soil 208.020.01.129
Date Analyzed: 05/03/14 20:54

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 606-20-2 | 2,6-Dinitrotoluene | 97 | < 97 U |
| 121-14-2 | 2,4-Dinitrotoluene | 97 | < 97 U |
| 84-66-2 | Diethylphthalate | 20 | < 20 U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 20 | < 20 U |
| 86-73-7 | Fluorene | 20 | < 20 U |
| 100-01-6 | 4-Nitroaniline | 97 | < 97 U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 200 | < 200 U |
| 86-30-6 | N-Nitrosodiphenylamine | 20 | < 20 U |
| 101-55-3 | 4-Bromophenyl-phenylether | 20 | < 20 U |
| 118-74-1 | Hexachlorobenzene | 20 | < 20 U |
| 87-86-5 | Pentachlorophenol | 97 | < 97 U |
| 85-01-8 | Phenanthrene | 20 | < 20 U |
| 86-74-8 | Carbazole | 20 | < 20 U |
| 120-12-7 | Anthracene | 20 | < 20 U |
| 84-74-2 | Di-n-Butylphthalate | 20 | < 20 U |
| 206-44-0 | Fluoranthene | 20 | < 20 U |
| 129-00-0 | Pyrene | 20 | < 20 U |
| 85-68-7 | Butylbenzylphthalate | 20 | < 20 U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 97 | < 97 U |
| 56-55-3 | Benzo(a)anthracene | 20 | < 20 U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 49 | < 49 U |
| 218-01-9 | Chrysene | 20 | < 20 U |
| 117-84-0 | Di-n-Octyl phthalate | 20 | < 20 U |
| 50-32-8 | Benzo(a)pyrene | 20 | < 20 U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 20 | < 20 U |
| 53-70-3 | Dibenz(a,h)anthracene | 20 | < 20 U |
| 191-24-2 | Benzo(g,h,i)perylene | 20 | < 20 U |
| 90-12-0 | 1-Methylnaphthalene | 20 | < 20 U |
| TOTBFA | Total Benzofluoranthenes | 39 | < 39 U |

Reported in µg/kg (ppb)

**Semivolatile Surrogate Recovery**

| | | | |
|---|---|---|---|
| d5-Nitrobenzene | 60.8% | 2-Fluorobiphenyl | 62.4% |
| d14-p-Terphenyl | 76.0% | d4-1,2-Dichlorobenzene | 59.0% |
| d5-Phenol | 56.1% | 2-Fluorophenol | 58.9% |
| 2,4,6-Tribromophenol | 49.7% | d4-2-Chlorophenol | 58.9% |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-4**
**SAMPLE**

Lab Sample ID: YH76D
LIMS ID: 14-7701
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 21:29
Instrument/Analyst: NT14/YZ
GPC Cleanup: No

Sample Amount: 10.32 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 6.5%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 108-95-2 | Phenol | 19 | < 19 U |
| 111-44-4 | Bis-(2-Chloroethyl) Ether | 19 | < 19 U |
| 95-57-8 | 2-Chlorophenol | 19 | < 19 U |
| 541-73-1 | 1,3-Dichlorobenzene | 19 | < 19 U |
| 106-46-7 | 1,4-Dichlorobenzene | 19 | < 19 U |
| 100-51-6 | Benzyl Alcohol | 19 | < 19 U |
| 95-50-1 | 1,2-Dichlorobenzene | 19 | < 19 U |
| 95-48-7 | 2-Methylphenol | 19 | < 19 U |
| 108-60-1 | 2,2'-Oxybis(1-Chloropropane) | 19 | < 19 U |
| 106-44-5 | 4-Methylphenol | 19 | < 19 U |
| 621-64-7 | N-Nitroso-Di-N-Propylamine | 19 | < 19 U |
| 67-72-1 | Hexachloroethane | 19 | < 19 U |
| 98-95-3 | Nitrobenzene | 19 | < 19 U |
| 78-59-1 | Isophorone | 19 | < 19 U |
| 88-75-5 | 2-Nitrophenol | 19 | < 19 U |
| 105-67-9 | 2,4-Dimethylphenol | 97 | < 97 U |
| 65-85-0 | Benzoic Acid | 190 | < 190 U |
| 111-91-1 | bis(2-Chloroethoxy) Methane | 19 | < 19 U |
| 120-83-2 | 2,4-Dichlorophenol | 97 | < 97 U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 19 | < 19 U |
| 91-20-3 | Naphthalene | 19 | < 19 U |
| 106-47-8 | 4-Chloroaniline | 97 | < 97 U |
| 87-68-3 | Hexachlorobutadiene | 19 | < 19 U |
| 59-50-7 | 4-Chloro-3-methylphenol | 97 | < 97 U |
| 91-57-6 | 2-Methylnaphthalene | 19 | < 19 U |
| 77-47-4 | Hexachlorocyclopentadiene | 97 | < 97 U |
| 88-06-2 | 2,4,6-Trichlorophenol | 97 | < 97 U |
| 95-95-4 | 2,4,5-Trichlorophenol | 97 | < 97 U |
| 91-58-7 | 2-Chloronaphthalene | 19 | < 19 U |
| 88-74-4 | 2-Nitroaniline | 97 | < 97 U |
| 131-11-3 | Dimethylphthalate | 19 | < 19 U |
| 208-96-8 | Acenaphthylene | 19 | < 19 U |
| 99-09-2 | 3-Nitroaniline | 97 | < 97 U |
| 83-32-9 | Acenaphthene | 19 | < 19 U |
| 51-28-5 | 2,4-Dinitrophenol | 190 | < 190 U |
| 100-02-7 | 4-Nitrophenol | 97 | < 97 U |
| 132-64-9 | Dibenzofuran | 19 | < 19 U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-4**
**SAMPLE**

Lab Sample ID: YH76D
LIMS ID: 14-7701
Matrix: Soil
Date Analyzed: 05/03/14 21:29

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 606-20-2 | 2,6-Dinitrotoluene | 97 | < 97 U |
| 121-14-2 | 2,4-Dinitrotoluene | 97 | < 97 U |
| 84-66-2 | Diethylphthalate | 19 | < 19 U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 19 | < 19 U |
| 86-73-7 | Fluorene | 19 | < 19 U |
| 100-01-6 | 4-Nitroaniline | 97 | < 97 U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 190 | < 190 U |
| 86-30-6 | N-Nitrosodiphenylamine | 19 | < 19 U |
| 101-55-3 | 4-Bromophenyl-phenylether | 19 | < 19 U |
| 118-74-1 | Hexachlorobenzene | 19 | < 19 U |
| 87-86-5 | Pentachlorophenol | 97 | < 97 U |
| 85-01-8 | Phenanthrene | 19 | < 19 U |
| 86-74-8 | Carbazole | 19 | < 19 U |
| 120-12-7 | Anthracene | 19 | < 19 U |
| 84-74-2 | Di-n-Butylphthalate | 19 | < 19 U |
| 206-44-0 | Fluoranthene | 19 | < 19 U |
| 129-00-0 | Pyrene | 19 | < 19 U |
| 85-68-7 | Butylbenzylphthalate | 19 | < 19 U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 97 | < 97 U |
| 56-55-3 | Benzo(a)anthracene | 19 | < 19 U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 48 | < 48 U |
| 218-01-9 | Chrysene | 19 | < 19 U |
| 117-84-0 | Di-n-Octyl phthalate | 19 | < 19 U |
| 50-32-8 | Benzo(a)pyrene | 19 | < 19 U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 19 | < 19 U |
| 53-70-3 | Dibenz(a,h)anthracene | 19 | < 19 U |
| 191-24-2 | Benzo(g,h,i)perylene | 19 | < 19 U |
| 90-12-0 | 1-Methylnaphthalene | 19 | < 19 U |
| TOTBFA | Total Benzofluoranthenes | 39 | < 39 U |

Reported in µg/kg (ppb)

**Semivolatile Surrogate Recovery**

| | | | |
|---|---|---|---|
| d5-Nitrobenzene | 50.4% | 2-Fluorobiphenyl | 58.6% |
| d14-p-Terphenyl | 70.4% | d4-1,2-Dichlorobenzene | 50.4% |
| d5-Phenol | 48.7% | 2-Fluorophenol | 46.7% |
| 2,4,6-Tribromophenol | 44.5% | d4-2-Chlorophenol | 50.4% |

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-5**
**SAMPLE**

Lab Sample ID: YH76E
LIMS ID: 14-7702
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 22:03
Instrument/Analyst: NT14/YZ
GPC Cleanup: No

Sample Amount: 10.23 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 7.3%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 108-95-2 | Phenol | 20 | < 20 U |
| 111-44-4 | Bis-(2-Chloroethyl) Ether | 20 | < 20 U |
| 95-57-8 | 2-Chlorophenol | 20 | < 20 U |
| 541-73-1 | 1,3-Dichlorobenzene | 20 | < 20 U |
| 106-46-7 | 1,4-Dichlorobenzene | 20 | < 20 U |
| 100-51-6 | Benzyl Alcohol | 20 | < 20 U |
| 95-50-1 | 1,2-Dichlorobenzene | 20 | < 20 U |
| 95-48-7 | 2-Methylphenol | 20 | < 20 U |
| 108-60-1 | 2,2'-Oxybis(1-Chloropropane) | 20 | < 20 U |
| 106-44-5 | 4-Methylphenol | 20 | < 20 U |
| 621-64-7 | N-Nitroso-Di-N-Propylamine | 20 | < 20 U |
| 67-72-1 | Hexachloroethane | 20 | < 20 U |
| 98-95-3 | Nitrobenzene | 20 | < 20 U |
| 78-59-1 | Isophorone | 20 | < 20 U |
| 88-75-5 | 2-Nitrophenol | 20 | < 20 U |
| 105-67-9 | 2,4-Dimethylphenol | 98 | < 98 U |
| 65-85-0 | Benzoic Acid | 200 | < 200 U |
| 111-91-1 | bis(2-Chloroethoxy) Methane | 20 | < 20 U |
| 120-83-2 | 2,4-Dichlorophenol | 98 | < 98 U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 20 | < 20 U |
| 91-20-3 | Naphthalene | 20 | < 20 U |
| 106-47-8 | 4-Chloroaniline | 98 | < 98 U |
| 87-68-3 | Hexachlorobutadiene | 20 | < 20 U |
| 59-50-7 | 4-Chloro-3-methylphenol | 98 | < 98 U |
| 91-57-6 | 2-Methylnaphthalene | 20 | < 20 U |
| 77-47-4 | Hexachlorocyclopentadiene | 98 | < 98 U |
| 88-06-2 | 2,4,6-Trichlorophenol | 98 | < 98 U |
| 95-95-4 | 2,4,5-Trichlorophenol | 98 | < 98 U |
| 91-58-7 | 2-Chloronaphthalene | 20 | < 20 U |
| 88-74-4 | 2-Nitroaniline | 98 | < 98 U |
| 131-11-3 | Dimethylphthalate | 20 | < 20 U |
| 208-96-8 | Acenaphthylene | 20 | < 20 U |
| 99-09-2 | 3-Nitroaniline | 98 | < 98 U |
| 83-32-9 | Acenaphthene | 20 | < 20 U |
| 51-28-5 | 2,4-Dinitrophenol | 200 | < 200 U |
| 100-02-7 | 4-Nitrophenol | 98 | < 98 U |
| 132-64-9 | Dibenzofuran | 20 | < 20 U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-5**
**SAMPLE**

Lab Sample ID: YH76E
LIMS ID: 14-7702
Matrix: Soil
Date Analyzed: 05/03/14 22:03

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 606-20-2 | 2,6-Dinitrotoluene | 98 | < 98 U |
| 121-14-2 | 2,4-Dinitrotoluene | 98 | < 98 U |
| 84-66-2 | Diethylphthalate | 20 | < 20 U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 20 | < 20 U |
| 86-73-7 | Fluorene | 20 | < 20 U |
| 100-01-6 | 4-Nitroaniline | 98 | < 98 U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 200 | < 200 U |
| 86-30-6 | N-Nitrosodiphenylamine | 20 | < 20 U |
| 101-55-3 | 4-Bromophenyl-phenylether | 20 | < 20 U |
| 118-74-1 | Hexachlorobenzene | 20 | < 20 U |
| 87-86-5 | Pentachlorophenol | 98 | < 98 U |
| 85-01-8 | Phenanthrene | 20 | < 20 U |
| 86-74-8 | Carbazole | 20 | < 20 U |
| 120-12-7 | Anthracene | 20 | < 20 U |
| 84-74-2 | Di-n-Butylphthalate | 20 | < 20 U |
| 206-44-0 | Fluoranthene | 20 | < 20 U |
| 129-00-0 | Pyrene | 20 | < 20 U |
| 85-68-7 | Butylbenzylphthalate | 20 | < 20 U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 98 | < 98 U |
| 56-55-3 | Benzo(a)anthracene | 20 | < 20 U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 49 | < 49 U |
| 218-01-9 | Chrysene | 20 | < 20 U |
| 117-84-0 | Di-n-Octyl phthalate | 20 | < 20 U |
| 50-32-8 | Benzo(a)pyrene | 20 | < 20 U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 20 | < 20 U |
| 53-70-3 | Dibenz(a,h)anthracene | 20 | < 20 U |
| 191-24-2 | Benzo(g,h,i)perylene | 20 | < 20 U |
| 90-12-0 | 1-Methylnaphthalene | 20 | < 20 U |
| TOTBFA | Total Benzofluoranthenes | 39 | < 39 U |

Reported in µg/kg (ppb)

**Semivolatile Surrogate Recovery**

| | | | |
|---|---|---|---|
| d5-Nitrobenzene | 55.6% | 2-Fluorobiphenyl | 59.6% |
| d14-p-Terphenyl | 73.8% | d4-1,2-Dichlorobenzene | 54.0% |
| d5-Phenol | 50.3% | 2-Fluorophenol | 52.1% |
| 2,4,6-Tribromophenol | 44.7% | d4-2-Chlorophenol | 53.1% |

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-6**
**SAMPLE**

Lab Sample ID: YH76F
LIMS ID: 14-7703
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 22:38
Instrument/Analyst: NT14/YZ
GPC Cleanup: No

Sample Amount: 10.13 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 15.7%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 108-95-2 | Phenol | 20 | < 20 U |
| 111-44-4 | Bis-(2-Chloroethyl) Ether | 20 | < 20 U |
| 95-57-8 | 2-Chlorophenol | 20 | < 20 U |
| 541-73-1 | 1,3-Dichlorobenzene | 20 | < 20 U |
| 106-46-7 | 1,4-Dichlorobenzene | 20 | < 20 U |
| 100-51-6 | Benzyl Alcohol | 20 | < 20 U |
| 95-50-1 | 1,2-Dichlorobenzene | 20 | < 20 U |
| 95-48-7 | 2-Methylphenol | 20 | < 20 U |
| 108-60-1 | 2,2'-Oxybis(1-Chloropropane) | 20 | < 20 U |
| 106-44-5 | 4-Methylphenol | 20 | < 20 U |
| 621-64-7 | N-Nitroso-Di-N-Propylamine | 20 | < 20 U |
| 67-72-1 | Hexachloroethane | 20 | < 20 U |
| 98-95-3 | Nitrobenzene | 20 | < 20 U |
| 78-59-1 | Isophorone | 20 | < 20 U |
| 88-75-5 | 2-Nitrophenol | 20 | < 20 U |
| 105-67-9 | 2,4-Dimethylphenol | 99 | < 99 U |
| 65-85-0 | Benzoic Acid | 200 | < 200 U |
| 111-91-1 | bis(2-Chloroethoxy) Methane | 20 | < 20 U |
| 120-83-2 | 2,4-Dichlorophenol | 99 | < 99 U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 20 | < 20 U |
| **91-20-3** | **Naphthalene** | **20** | **15 J** |
| 106-47-8 | 4-Chloroaniline | 99 | < 99 U |
| 87-68-3 | Hexachlorobutadiene | 20 | < 20 U |
| 59-50-7 | 4-Chloro-3-methylphenol | 99 | < 99 U |
| 91-57-6 | 2-Methylnaphthalene | 20 | < 20 U |
| 77-47-4 | Hexachlorocyclopentadiene | 99 | < 99 U |
| 88-06-2 | 2,4,6-Trichlorophenol | 99 | < 99 U |
| 95-95-4 | 2,4,5-Trichlorophenol | 99 | < 99 U |
| 91-58-7 | 2-Chloronaphthalene | 20 | < 20 U |
| 88-74-4 | 2-Nitroaniline | 99 | < 99 U |
| 131-11-3 | Dimethylphthalate | 20 | < 20 U |
| 208-96-8 | Acenaphthylene | 20 | < 20 U |
| 99-09-2 | 3-Nitroaniline | 99 | < 99 U |
| 83-32-9 | Acenaphthene | 20 | < 20 U |
| 51-28-5 | 2,4-Dinitrophenol | 200 | < 200 U |
| 100-02-7 | 4-Nitrophenol | 99 | < 99 U |
| 132-64-9 | Dibenzofuran | 20 | < 20 U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-6**
**SAMPLE**

Lab Sample ID: YH76F
LIMS ID: 14-7703
Matrix: Soil
Date Analyzed: 05/03/14 22:38

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 606-20-2 | 2,6-Dinitrotoluene | 99 | < 99 U |
| 121-14-2 | 2,4-Dinitrotoluene | 99 | < 99 U |
| 84-66-2 | Diethylphthalate | 20 | < 20 U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 20 | < 20 U |
| 86-73-7 | Fluorene | 20 | < 20 U |
| 100-01-6 | 4-Nitroaniline | 99 | < 99 U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 200 | < 200 U |
| 86-30-6 | N-Nitrosodiphenylamine | 20 | < 20 U |
| 101-55-3 | 4-Bromophenyl-phenylether | 20 | < 20 U |
| 118-74-1 | Hexachlorobenzene | 20 | < 20 U |
| 87-86-5 | Pentachlorophenol | 99 | < 99 U |
| **85-01-8** | **Phenanthrene** | **20** | **27** |
| 86-74-8 | Carbazole | 20 | < 20 U |
| 120-12-7 | Anthracene | 20 | < 20 U |
| 84-74-2 | Di-n-Butylphthalate | 20 | < 20 U |
| 206-44-0 | Fluoranthene | 20 | < 20 U |
| 129-00-0 | Pyrene | 20 | < 20 U |
| 85-68-7 | Butylbenzylphthalate | 20 | < 20 U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 99 | < 99 U |
| 56-55-3 | Benzo(a)anthracene | 20 | < 20 U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 49 | < 49 U |
| 218-01-9 | Chrysene | 20 | < 20 U |
| 117-84-0 | Di-n-Octyl phthalate | 20 | < 20 U |
| 50-32-8 | Benzo(a)pyrene | 20 | < 20 U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 20 | < 20 U |
| 53-70-3 | Dibenz(a,h)anthracene | 20 | < 20 U |
| 191-24-2 | Benzo(g,h,i)perylene | 20 | < 20 U |
| 90-12-0 | 1-Methylnaphthalene | 20 | < 20 U |
| TOTBFA | Total Benzofluoranthenes | 40 | < 40 U |

Reported in µg/kg (ppb)

**Semivolatile Surrogate Recovery**

| | | | |
|---|---|---|---|
| d5-Nitrobenzene | 68.8% | 2-Fluorobiphenyl | 69.6% |
| d14-p-Terphenyl | 83.0% | d4-1,2-Dichlorobenzene | 66.8% |
| d5-Phenol | 59.9% | 2-Fluorophenol | 62.8% |
| 2,4,6-Tribromophenol | 39.7% | d4-2-Chlorophenol | 64.0% |

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-7**
**SAMPLE**

Lab Sample ID: YH76G
LIMS ID: 14-7704
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 23:12
Instrument/Analyst: NT14/YZ
GPC Cleanup: No

Sample Amount: 10.48 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 4.7%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 108-95-2 | Phenol | 19 | < 19 U |
| 111-44-4 | Bis-(2-Chloroethyl) Ether | 19 | < 19 U |
| 95-57-8 | 2-Chlorophenol | 19 | < 19 U |
| 541-73-1 | 1,3-Dichlorobenzene | 19 | < 19 U |
| 106-46-7 | 1,4-Dichlorobenzene | 19 | < 19 U |
| 100-51-6 | Benzyl Alcohol | 19 | < 19 U |
| 95-50-1 | 1,2-Dichlorobenzene | 19 | < 19 U |
| 95-48-7 | 2-Methylphenol | 19 | < 19 U |
| 108-60-1 | 2,2'-Oxybis(1-Chloropropane) | 19 | < 19 U |
| 106-44-5 | 4-Methylphenol | 19 | < 19 U |
| 621-64-7 | N-Nitroso-Di-N-Propylamine | 19 | < 19 U |
| 67-72-1 | Hexachloroethane | 19 | < 19 U |
| 98-95-3 | Nitrobenzene | 19 | < 19 U |
| 78-59-1 | Isophorone | 19 | < 19 U |
| 88-75-5 | 2-Nitrophenol | 19 | < 19 U |
| 105-67-9 | 2,4-Dimethylphenol | 95 | < 95 U |
| 65-85-0 | Benzoic Acid | 190 | < 190 U |
| 111-91-1 | bis(2-Chloroethoxy) Methane | 19 | < 19 U |
| 120-83-2 | 2,4-Dichlorophenol | 95 | < 95 U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 19 | < 19 U |
| 91-20-3 | Naphthalene | 19 | < 19 U |
| 106-47-8 | 4-Chloroaniline | 95 | < 95 U |
| 87-68-3 | Hexachlorobutadiene | 19 | < 19 U |
| 59-50-7 | 4-Chloro-3-methylphenol | 95 | < 95 U |
| 91-57-6 | 2-Methylnaphthalene | 19 | < 19 U |
| 77-47-4 | Hexachlorocyclopentadiene | 95 | < 95 U |
| 88-06-2 | 2,4,6-Trichlorophenol | 95 | < 95 U |
| 95-95-4 | 2,4,5-Trichlorophenol | 95 | < 95 U |
| 91-58-7 | 2-Chloronaphthalene | 19 | < 19 U |
| 88-74-4 | 2-Nitroaniline | 95 | < 95 U |
| 131-11-3 | Dimethylphthalate | 19 | < 19 U |
| 208-96-8 | Acenaphthylene | 19 | < 19 U |
| 99-09-2 | 3-Nitroaniline | 95 | < 95 U |
| 83-32-9 | Acenaphthene | 19 | < 19 U |
| 51-28-5 | 2,4-Dinitrophenol | 190 | < 190 U |
| 100-02-7 | 4-Nitrophenol | 95 | < 95 U |
| 132-64-9 | Dibenzofuran | 19 | < 19 U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-7**
**SAMPLE**

Lab Sample ID: YH76G
LIMS ID: 14-7704
Matrix: Soil
Date Analyzed: 05/03/14 23:12

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 606-20-2 | 2,6-Dinitrotoluene | 95 | < 95 U |
| 121-14-2 | 2,4-Dinitrotoluene | 95 | < 95 U |
| 84-66-2 | Diethylphthalate | 19 | < 19 U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 19 | < 19 U |
| 86-73-7 | Fluorene | 19 | < 19 U |
| 100-01-6 | 4-Nitroaniline | 95 | < 95 U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 190 | < 190 U |
| 86-30-6 | N-Nitrosodiphenylamine | 19 | < 19 U |
| 101-55-3 | 4-Bromophenyl-phenylether | 19 | < 19 U |
| 118-74-1 | Hexachlorobenzene | 19 | < 19 U |
| 87-86-5 | Pentachlorophenol | 95 | < 95 U |
| 85-01-8 | Phenanthrene | 19 | < 19 U |
| 86-74-8 | Carbazole | 19 | < 19 U |
| 120-12-7 | Anthracene | 19 | < 19 U |
| 84-74-2 | Di-n-Butylphthalate | 19 | < 19 U |
| 206-44-0 | Fluoranthene | 19 | < 19 U |
| 129-00-0 | Pyrene | 19 | < 19 U |
| 85-68-7 | Butylbenzylphthalate | 19 | < 19 U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 95 | < 95 U |
| 56-55-3 | Benzo(a)anthracene | 19 | < 19 U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 48 | < 48 U |
| 218-01-9 | Chrysene | 19 | < 19 U |
| 117-84-0 | Di-n-Octyl phthalate | 19 | < 19 U |
| 50-32-8 | Benzo(a)pyrene | 19 | < 19 U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 19 | < 19 U |
| 53-70-3 | Dibenz(a,h)anthracene | 19 | < 19 U |
| 191-24-2 | Benzo(g,h,i)perylene | 19 | < 19 U |
| 90-12-0 | 1-Methylnaphthalene | 19 | < 19 U |
| TOTBFA | Total Benzofluoranthenes | 38 | < 38 U |

Reported in µg/kg (ppb)

**Semivolatile Surrogate Recovery**

| | | | |
|---|---|---|---|
| d5-Nitrobenzene | 59.6% | 2-Fluorobiphenyl | 67.0% |
| d14-p-Terphenyl | 79.6% | d4-1,2-Dichlorobenzene | 58.6% |
| d5-Phenol | 58.0% | 2-Fluorophenol | 58.0% |
| 2,4,6-Tribromophenol | 44.9% | d4-2-Chlorophenol | 59.2% |

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

## SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| Client ID | NBZ | FBP | TPH | DCB | PHL | 2FP | TBP | 2CP | TOT OUT |
|---|---|---|---|---|---|---|---|---|---|
| WM-1 | 68.6% | 72.8% | 87.0% | 61.8% | 65.6% | 65.5% | 54.8% | 68.4% | 0 |
| MB-042514 | 64.0% | 64.8% | 88.6% | 60.6% | 63.3% | 62.4% | 63.2% | 63.9% | 0 |
| LCS-042514 | 78.0% | 73.4% | 92.2% | 73.0% | 76.4% | 75.7% | 75.6% | 75.2% | 0 |
| WM-2 | 59.2% | 62.2% | 80.8% | 58.0% | 60.5% | 59.2% | 57.1% | 59.5% | 0 |
| WM-2 MS | 63.2% | 67.4% | 73.0% | 58.0% | 62.9% | 60.4% | 70.4% | 62.5% | 0 |
| WM-2 MSD | 62.2% | 65.4% | 71.8% | 61.4% | 60.7% | 57.9% | 65.6% | 60.9% | 0 |
| WM-3 | 60.8% | 62.4% | 76.0% | 59.0% | 56.1% | 58.9% | 49.7% | 58.9% | 0 |
| WM-4 | 50.4% | 58.6% | 70.4% | 50.4% | 48.7% | 46.7% | 44.5% | 50.4% | 0 |
| WM-5 | 55.6% | 59.6% | 73.8% | 54.0% | 50.3% | 52.1% | 44.7% | 53.1% | 0 |
| WM-6 | 68.8% | 69.6% | 83.0% | 66.8% | 59.9% | 62.8% | 39.7% | 64.0% | 0 |
| WM-7 | 59.6% | 67.0% | 79.6% | 58.6% | 58.0% | 58.0% | 44.9% | 59.2% | 0 |

| | LCS/MB LIMITS | QC LIMITS |
|---|---|---|
| (NBZ) = d5-Nitrobenzene | (30-120) | (30-120) |
| (FBP) = 2-Fluorobiphenyl | (35-120) | (35-120) |
| (TPH) = d14-p-Terphenyl | (37-120) | (37-120) |
| (DCB) = d4-1,2-Dichlorobenzene | (32-120) | (32-120) |
| (PHL) = d5-Phenol | (29-120) | (29-120) |
| (2FP) = 2-Fluorophenol | (27-120) | (27-120) |
| (TBP) = 2,4,6-Tribromophenol | (24-134) | (24-134) |
| (2CP) = d4-2-Chlorophenol | (31-120) | (31-120) |

Prep Method: SW3546
Log Number Range: 14-7698 to 14-7704

FORM-II SW8270

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**


**Sample ID: WM-2**
**MS/MSD**

Lab Sample ID: YH76B
LIMS ID: 14-7699
Matrix: Soil
Data Release Authorized:
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted MS/MSD: 04/25/14

Date Analyzed MS: 05/03/14 19:45
MSD: 05/03/14 20:20
Instrument/Analyst MS: NT14/YZ
MSD: NT14/YZ
GPC Cleanup: No

Sample Amount MS: 10.52 g-dry-wt
MSD: 10.47 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00
Percent Moisture: 4.8 %

| Analyte | Sample | MS | Spike Added-MS | MS Recovery | MSD | Spike Added-MSD | MSD Recovery | RPD |
|---|---|---|---|---|---|---|---|---|
| Phenol | < 19 U | 343 | 475 | 72.2% | 329 | 478 | 68.8% | 4.2% |
| Bis-(2-Chloroethyl) Ether | < 19 U | 332 | 475 | 69.9% | 370 | 478 | 77.4% | 10.8% |
| 2-Chlorophenol | < 19 U | 336 | 475 | 70.7% | 336 | 478 | 70.3% | 0.0% |
| 1,3-Dichlorobenzene | < 19 U | 291 | 475 | 61.3% | 287 | 478 | 60.0% | 1.4% |
| 1,4-Dichlorobenzene | < 19 U | 301 | 475 | 63.4% | 299 | 478 | 62.6% | 0.7% |
| Benzyl Alcohol | < 19 U | 215 | 475 | 45.3% | 128 | 478 | 26.8% | 50.7% |
| 1,2-Dichlorobenzene | < 19 U | 298 | 475 | 62.7% | 334 | 478 | 69.9% | 11.4% |
| 2-Methylphenol | < 19 U | 346 | 475 | 72.8% | 384 | 478 | 80.3% | 10.4% |
| 2,2'-Oxybis(1-Chloropropane) | < 19 U | 304 | 475 | 64.0% | 306 | 478 | 64.0% | 0.7% |
| 4-Methylphenol | < 19 U | 742 | 951 | 78.0% | 680 | 955 | 71.2% | 8.7% |
| N-Nitroso-Di-N-Propylamine | < 19 U | 317 | 475 | 66.7% | 301 | 478 | 63.0% | 5.2% |
| Hexachloroethane | < 19 U | 298 | 475 | 62.7% | 290 | 478 | 60.7% | 2.7% |
| Nitrobenzene | < 19 U | 337 | 475 | 70.9% | 328 | 478 | 68.6% | 2.7% |
| Isophorone | < 19 U | 319 | 475 | 67.2% | 308 | 478 | 64.4% | 3.5% |
| 2-Nitrophenol | < 19 U | 316 | 475 | 66.5% | 313 | 478 | 65.5% | 1.0% |
| 2,4-Dimethylphenol | < 95 U | 862 | 1430 | 60.3% | 834 | 1430 | 58.3% | 3.3% |
| Benzoic Acid | < 190 U | 989 Q | 2610 | 37.9% | 995 Q | 2630 | 37.8% | 0.6% |
| bis(2-Chloroethoxy) Methane | < 19 U | 329 | 475 | 69.3% | 316 | 478 | 66.1% | 4.0% |
| 2,4-Dichlorophenol | < 95 U | 1090 | 1430 | 76.2% | 1100 | 1430 | 76.9% | 0.9% |
| 1,2,4-Trichlorobenzene | < 19 U | 321 | 475 | 67.6% | 317 | 478 | 66.3% | 1.3% |
| Naphthalene | < 19 U | 301 | 475 | 63.4% | 301 | 478 | 63.0% | 0.0% |
| 4-Chloroaniline | < 95 U | 477 | 1430 | 33.4% | 544 | 1430 | 38.0% | 13.1% |
| Hexachlorobutadiene | < 19 U | 325 | 475 | 68.4% | 315 | 478 | 65.9% | 3.1% |
| 4-Chloro-3-methylphenol | < 95 U | 1060 | 1430 | 74.1% | 1070 | 1430 | 74.8% | 0.9% |
| 2-Methylnaphthalene | < 19 U | 363 | 475 | 76.4% | 348 | 478 | 72.8% | 4.2% |
| Hexachlorocyclopentadiene | < 95 U | 597 Q | 1430 | 41.7% | 592 Q | 1430 | 41.4% | 0.8% |
| 2,4,6-Trichlorophenol | < 95 U | 1030 | 1430 | 72.0% | 971 | 1430 | 67.9% | 5.9% |
| 2,4,5-Trichlorophenol | < 95 U | 1060 | 1430 | 74.1% | 1050 | 1430 | 73.4% | 0.9% |
| 2-Chloronaphthalene | < 19 U | 356 | 475 | 74.9% | 352 | 478 | 73.6% | 1.1% |
| 2-Nitroaniline | < 95 U | 1200 | 1430 | 83.9% | 1190 | 1430 | 83.2% | 0.8% |
| Dimethylphthalate | < 19 U | 395 | 475 | 83.2% | 378 | 478 | 79.1% | 4.4% |
| Acenaphthylene | < 19 U | 342 | 475 | 72.0% | 329 | 478 | 68.8% | 3.9% |
| 3-Nitroaniline | < 95 U | 729 | 1430 | 51.0% | 725 | 1430 | 50.7% | 0.6% |
| Acenaphthene | < 19 U | 360 | 475 | 75.8% | 342 | 478 | 71.5% | 5.1% |
| 2,4-Dinitrophenol | < 190 U | 1170 Q | 2610 | 44.8% | 1170 Q | 2630 | 44.5% | 0.0% |
| 4-Nitrophenol | < 95 U | 877 | 1430 | 61.3% | 889 | 1430 | 62.2% | 1.4% |
| Dibenzofuran | < 19 U | 394 | 475 | 82.9% | 372 | 478 | 77.8% | 5.7% |
| 2,6-Dinitrotoluene | < 95 U | 1200 | 1430 | 83.9% | 1170 | 1430 | 81.8% | 2.5% |
| 2,4-Dinitrotoluene | < 95 U | 1160 | 1430 | 81.1% | 1110 | 1430 | 77.6% | 4.4% |
| Diethylphthalate | < 19 U | 394 | 475 | 82.9% | 376 | 478 | 78.7% | 4.7% |
| 4-Chlorophenyl-phenylether | < 19 U | 369 | 475 | 77.7% | 344 | 478 | 72.0% | 7.0% |
| Fluorene | < 19 U | 349 | 475 | 73.5% | 311 | 478 | 65.1% | 11.5% |
| 4-Nitroaniline | < 95 U | 912 | 1430 | 63.8% | 851 | 1430 | 59.5% | 6.9% |
| 4,6-Dinitro-2-Methylphenol | < 190 U | 1910 | 2610 | 73.2% | 1850 | 2630 | 70.3% | 3.2% |
| N-Nitrosodiphenylamine | < 19 U | 445 Q | 475 | 93.7% | 426 Q | 478 | 89.1% | 4.4% |

**FORM III**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**


**Sample ID: WM-2**
**MS/MSD**

Lab Sample ID: YH76B
LIMS ID: 14-7699
Matrix: Soil
Date Analyzed MS: 05/03/14 19:45
MSD: 05/03/14 20:20

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| Analyte | Sample | MS | Spike Added-MS | MS Recovery | MSD | Spike Added-MSD | MSD Recovery | RPD |
|---|---|---|---|---|---|---|---|---|
| 4-Bromophenyl-phenylether | < 19 U | 387 | 475 | 81.5% | 381 | 478 | 79.7% | 1.6% |
| Hexachlorobenzene | < 19 U | 403 | 475 | 84.8% | 390 | 478 | 81.6% | 3.3% |
| Pentachlorophenol | < 95 U | 695 Q | 1430 | 48.6% | 733 Q | 1430 | 51.3% | 5.3% |
| Phenanthrene | < 19 U | 380 | 475 | 80.0% | 374 | 478 | 78.2% | 1.6% |
| Carbazole | < 19 U | 395 | 475 | 83.2% | 386 | 478 | 80.8% | 2.3% |
| Anthracene | < 19 U | 363 | 475 | 76.4% | 348 | 478 | 72.8% | 4.2% |
| Di-n-Butylphthalate | < 19 U | 390 | 475 | 82.1% | 397 | 478 | 83.1% | 1.8% |
| Fluoranthene | < 19 U | 371 | 475 | 78.1% | 365 | 478 | 76.4% | 1.6% |
| Pyrene | < 19 U | 389 | 475 | 81.9% | 378 | 478 | 79.1% | 2.9% |
| Butylbenzylphthalate | < 19 U | 385 | 475 | 81.1% | 359 | 478 | 75.1% | 7.0% |
| 3,3'-Dichlorobenzidine | < 95 U | 497 | 1430 | 34.8% | 480 | 1430 | 33.6% | 3.5% |
| Benzo(a)anthracene | < 19 U | 371 | 475 | 78.1% | 357 | 478 | 74.7% | 3.8% |
| bis(2-Ethylhexyl)phthalate | < 48 U | 452 | 475 | 95.2% | 418 | 478 | 87.4% | 7.8% |
| Chrysene | < 19 U | 353 | 475 | 74.3% | 341 | 478 | 71.3% | 3.5% |
| Di-n-Octyl phthalate | < 19 U | 399 | 475 | 84.0% | 394 | 478 | 82.4% | 1.3% |
| Benzo(a)pyrene | < 19 U | 397 | 475 | 83.6% | 370 | 478 | 77.4% | 7.0% |
| Indeno(1,2,3-cd)pyrene | < 19 U | 406 Q | 475 | 85.5% | 409 Q | 478 | 85.6% | 0.7% |
| Dibenz(a,h)anthracene | < 19 U | 288 Q | 475 | 60.6% | 293 Q | 478 | 61.3% | 1.7% |
| Benzo(g,h,i)perylene | < 19 U | 360 Q | 475 | 75.8% | 333 Q | 478 | 69.7% | 7.8% |
| 1-Methylnaphthalene | < 19 U | 355 | 475 | 74.7% | 341 | 478 | 71.3% | 4.0% |
| Total Benzofluoranthenes | < 38 U | 749 | 951 | 78.8% | 710 | 955 | 74.3% | 5.3% |

Reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-2**
**MATRIX SPIKE**

Lab Sample ID: YH76B
LIMS ID: 14-7699
Matrix: Soil
Data Release Authorized:
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 19:45
Instrument/Analyst: NT14/YZ
GPC Cleanup: No

Sample Amount: 10.52 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 4.8%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 108-95-2 | Phenol | 19 | --- |
| 111-44-4 | Bis-(2-Chloroethyl) Ether | 19 | --- |
| 95-57-8 | 2-Chlorophenol | 19 | --- |
| 541-73-1 | 1,3-Dichlorobenzene | 19 | --- |
| 106-46-7 | 1,4-Dichlorobenzene | 19 | --- |
| 100-51-6 | Benzyl Alcohol | 19 | --- |
| 95-50-1 | 1,2-Dichlorobenzene | 19 | --- |
| 95-48-7 | 2-Methylphenol | 19 | --- |
| 108-60-1 | 2,2'-Oxybis(1-Chloropropane) | 19 | --- |
| 106-44-5 | 4-Methylphenol | 19 | --- |
| 621-64-7 | N-Nitroso-Di-N-Propylamine | 19 | --- |
| 67-72-1 | Hexachloroethane | 19 | --- |
| 98-95-3 | Nitrobenzene | 19 | --- |
| 78-59-1 | Isophorone | 19 | --- |
| 88-75-5 | 2-Nitrophenol | 19 | --- |
| 105-67-9 | 2,4-Dimethylphenol | 95 | --- |
| 65-85-0 | Benzoic Acid | 190 | --- |
| 111-91-1 | bis(2-Chloroethoxy) Methane | 19 | --- |
| 120-83-2 | 2,4-Dichlorophenol | 95 | --- |
| 120-82-1 | 1,2,4-Trichlorobenzene | 19 | --- |
| 91-20-3 | Naphthalene | 19 | --- |
| 106-47-8 | 4-Chloroaniline | 95 | --- |
| 87-68-3 | Hexachlorobutadiene | 19 | --- |
| 59-50-7 | 4-Chloro-3-methylphenol | 95 | --- |
| 91-57-6 | 2-Methylnaphthalene | 19 | --- |
| 77-47-4 | Hexachlorocyclopentadiene | 95 | --- |
| 88-06-2 | 2,4,6-Trichlorophenol | 95 | --- |
| 95-95-4 | 2,4,5-Trichlorophenol | 95 | --- |
| 91-58-7 | 2-Chloronaphthalene | 19 | --- |
| 88-74-4 | 2-Nitroaniline | 95 | --- |
| 131-11-3 | Dimethylphthalate | 19 | --- |
| 208-96-8 | Acenaphthylene | 19 | --- |
| 99-09-2 | 3-Nitroaniline | 95 | --- |
| 83-32-9 | Acenaphthene | 19 | --- |
| 51-28-5 | 2,4-Dinitrophenol | 190 | --- |
| 100-02-7 | 4-Nitrophenol | 95 | --- |
| 132-64-9 | Dibenzofuran | 19 | --- |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-2**
**MATRIX SPIKE**

Lab Sample ID: YH76B
LIMS ID: 14-7699
Matrix: Soil
Date Analyzed: 05/03/14 19:45

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 606-20-2 | 2,6-Dinitrotoluene | 95 | --- |
| 121-14-2 | 2,4-Dinitrotoluene | 95 | --- |
| 84-66-2 | Diethylphthalate | 19 | --- |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 19 | --- |
| 86-73-7 | Fluorene | 19 | --- |
| 100-01-6 | 4-Nitroaniline | 95 | --- |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 190 | --- |
| 86-30-6 | N-Nitrosodiphenylamine | 19 | --- |
| 101-55-3 | 4-Bromophenyl-phenylether | 19 | --- |
| 118-74-1 | Hexachlorobenzene | 19 | --- |
| 87-86-5 | Pentachlorophenol | 95 | --- |
| 85-01-8 | Phenanthrene | 19 | --- |
| 86-74-8 | Carbazole | 19 | --- |
| 120-12-7 | Anthracene | 19 | --- |
| 84-74-2 | Di-n-Butylphthalate | 19 | --- |
| 206-44-0 | Fluoranthene | 19 | --- |
| 129-00-0 | Pyrene | 19 | --- |
| 85-68-7 | Butylbenzylphthalate | 19 | --- |
| 91-94-1 | 3,3'-Dichlorobenzidine | 95 | --- |
| 56-55-3 | Benzo(a)anthracene | 19 | --- |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 48 | --- |
| 218-01-9 | Chrysene | 19 | --- |
| 117-84-0 | Di-n-Octyl phthalate | 19 | --- |
| 50-32-8 | Benzo(a)pyrene | 19 | --- |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 19 | --- |
| 53-70-3 | Dibenz(a,h)anthracene | 19 | --- |
| 191-24-2 | Benzo(g,h,i)perylene | 19 | --- |
| 90-12-0 | 1-Methylnaphthalene | 19 | --- |
| TOTBFA | Total Benzofluoranthenes | 38 | --- |

Reported in µg/kg (ppb)

**Semivolatile Surrogate Recovery**

| | | | |
|---|---|---|---|
| d5-Nitrobenzene | 63.2% | 2-Fluorobiphenyl | 67.4% |
| d14-p-Terphenyl | 73.0% | d4-1,2-Dichlorobenzene | 58.0% |
| d5-Phenol | 62.9% | 2-Fluorophenol | 60.4% |
| 2,4,6-Tribromophenol | 70.4% | d4-2-Chlorophenol | 62.5% |

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-2**
**MATRIX SPIKE DUPLICATE**

Lab Sample ID: YH76B
LIMS ID: 14-7699
Matrix: Soil
Data Release Authorized:
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 20:20
Instrument/Analyst: NT14/YZ
GPC Cleanup: No

Sample Amount: 10.47 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 4.8%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 108-95-2 | Phenol | 19 | --- |
| 111-44-4 | Bis-(2-Chloroethyl) Ether | 19 | --- |
| 95-57-8 | 2-Chlorophenol | 19 | --- |
| 541-73-1 | 1,3-Dichlorobenzene | 19 | --- |
| 106-46-7 | 1,4-Dichlorobenzene | 19 | --- |
| 100-51-6 | Benzyl Alcohol | 19 | --- |
| 95-50-1 | 1,2-Dichlorobenzene | 19 | --- |
| 95-48-7 | 2-Methylphenol | 19 | --- |
| 108-60-1 | 2,2'-Oxybis(1-Chloropropane) | 19 | --- |
| 106-44-5 | 4-Methylphenol | 19 | --- |
| 621-64-7 | N-Nitroso-Di-N-Propylamine | 19 | --- |
| 67-72-1 | Hexachloroethane | 19 | --- |
| 98-95-3 | Nitrobenzene | 19 | --- |
| 78-59-1 | Isophorone | 19 | --- |
| 88-75-5 | 2-Nitrophenol | 19 | --- |
| 105-67-9 | 2,4-Dimethylphenol | 96 | --- |
| 65-85-0 | Benzoic Acid | 190 | --- |
| 111-91-1 | bis(2-Chloroethoxy) Methane | 19 | --- |
| 120-83-2 | 2,4-Dichlorophenol | 96 | --- |
| 120-82-1 | 1,2,4-Trichlorobenzene | 19 | --- |
| 91-20-3 | Naphthalene | 19 | --- |
| 106-47-8 | 4-Chloroaniline | 96 | --- |
| 87-68-3 | Hexachlorobutadiene | 19 | --- |
| 59-50-7 | 4-Chloro-3-methylphenol | 96 | --- |
| 91-57-6 | 2-Methylnaphthalene | 19 | --- |
| 77-47-4 | Hexachlorocyclopentadiene | 96 | --- |
| 88-06-2 | 2,4,6-Trichlorophenol | 96 | --- |
| 95-95-4 | 2,4,5-Trichlorophenol | 96 | --- |
| 91-58-7 | 2-Chloronaphthalene | 19 | --- |
| 88-74-4 | 2-Nitroaniline | 96 | --- |
| 131-11-3 | Dimethylphthalate | 19 | --- |
| 208-96-8 | Acenaphthylene | 19 | --- |
| 99-09-2 | 3-Nitroaniline | 96 | --- |
| 83-32-9 | Acenaphthene | 19 | --- |
| 51-28-5 | 2,4-Dinitrophenol | 190 | --- |
| 100-02-7 | 4-Nitrophenol | 96 | --- |
| 132-64-9 | Dibenzofuran | 19 | --- |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: WM-2**
**MATRIX SPIKE DUPLICATE**

Lab Sample ID: YH76B
LIMS ID: 14-7699
Matrix: Soil
Date Analyzed: 05/03/14 20:20

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 606-20-2 | 2,6-Dinitrotoluene | 96 | --- |
| 121-14-2 | 2,4-Dinitrotoluene | 96 | --- |
| 84-66-2 | Diethylphthalate | 19 | --- |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 19 | --- |
| 86-73-7 | Fluorene | 19 | --- |
| 100-01-6 | 4-Nitroaniline | 96 | --- |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 190 | --- |
| 86-30-6 | N-Nitrosodiphenylamine | 19 | --- |
| 101-55-3 | 4-Bromophenyl-phenylether | 19 | --- |
| 118-74-1 | Hexachlorobenzene | 19 | --- |
| 87-86-5 | Pentachlorophenol | 96 | --- |
| 85-01-8 | Phenanthrene | 19 | --- |
| 86-74-8 | Carbazole | 19 | --- |
| 120-12-7 | Anthracene | 19 | --- |
| 84-74-2 | Di-n-Butylphthalate | 19 | --- |
| 206-44-0 | Fluoranthene | 19 | --- |
| 129-00-0 | Pyrene | 19 | --- |
| 85-68-7 | Butylbenzylphthalate | 19 | --- |
| 91-94-1 | 3,3'-Dichlorobenzidine | 96 | --- |
| 56-55-3 | Benzo(a)anthracene | 19 | --- |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 48 | --- |
| 218-01-9 | Chrysene | 19 | --- |
| 117-84-0 | Di-n-Octyl phthalate | 19 | --- |
| 50-32-8 | Benzo(a)pyrene | 19 | --- |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 19 | --- |
| 53-70-3 | Dibenz(a,h)anthracene | 19 | --- |
| 191-24-2 | Benzo(g,h,i)perylene | 19 | --- |
| 90-12-0 | 1-Methylnaphthalene | 19 | --- |
| TOTBFA | Total Benzofluoranthenes | 38 | --- |

Reported in µg/kg (ppb)

**Semivolatile Surrogate Recovery**

| | | | |
|---|---|---|---|
| d5-Nitrobenzene | 62.2% | 2-Fluorobiphenyl | 65.4% |
| d14-p-Terphenyl | 71.8% | d4-1,2-Dichlorobenzene | 61.4% |
| d5-Phenol | 60.7% | 2-Fluorophenol | 57.9% |
| 2,4,6-Tribromophenol | 65.6% | d4-2-Chlorophenol | 60.9% |

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**


**Sample ID: LCS-042514**
**LAB CONTROL**

Lab Sample ID: LCS-042514
LIMS ID: 14-7699
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 18:02
Instrument/Analyst: NT14/YZ
GPC Cleanup: No

Sample Amount: 10.00 g
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: NA

| Analyte | Lab Control | Spike Added | Recovery |
|---|---|---|---|
| Phenol | 458 | 500 | 91.6% |
| Bis-(2-Chloroethyl) Ether | 442 | 500 | 88.4% |
| 2-Chlorophenol | 425 | 500 | 85.0% |
| 1,3-Dichlorobenzene | 391 | 500 | 78.2% |
| 1,4-Dichlorobenzene | 401 | 500 | 80.2% |
| Benzyl Alcohol | 315 | 500 | 63.0% |
| 1,2-Dichlorobenzene | 394 | 500 | 78.8% |
| 2-Methylphenol | 434 | 500 | 86.8% |
| 2,2'-Oxybis(1-Chloropropane) | 392 | 500 | 78.4% |
| 4-Methylphenol | 936 | 1000 | 93.6% |
| N-Nitroso-Di-N-Propylamine | 393 | 500 | 78.6% |
| Hexachloroethane | 408 | 500 | 81.6% |
| Nitrobenzene | 429 | 500 | 85.8% |
| Isophorone | 392 | 500 | 78.4% |
| 2-Nitrophenol | 405 | 500 | 81.0% |
| 2,4-Dimethylphenol | 1170 | 1500 | 78.0% |
| Benzoic Acid | 1760 Q | 2750 | 64.0% |
| bis(2-Chloroethoxy) Methane | 411 | 500 | 82.2% |
| 2,4-Dichlorophenol | 1410 | 1500 | 94.0% |
| 1,2,4-Trichlorobenzene | 410 | 500 | 82.0% |
| Naphthalene | 387 | 500 | 77.4% |
| 4-Chloroaniline | 698 | 1500 | 46.5% |
| Hexachlorobutadiene | 409 | 500 | 81.8% |
| 4-Chloro-3-methylphenol | 1350 | 1500 | 90.0% |
| 2-Methylnaphthalene | 452 | 500 | 90.4% |
| Hexachlorocyclopentadiene | 697 Q | 1500 | 46.5% |
| 2,4,6-Trichlorophenol | 1160 | 1500 | 77.3% |
| 2,4,5-Trichlorophenol | 1200 | 1500 | 80.0% |
| 2-Chloronaphthalene | 408 | 500 | 81.6% |
| 2-Nitroaniline | 1310 | 1500 | 87.3% |
| Dimethylphthalate | 449 | 500 | 89.8% |
| Acenaphthylene | 418 | 500 | 83.6% |
| 3-Nitroaniline | 859 | 1500 | 57.3% |
| Acenaphthene | 397 | 500 | 79.4% |

**FORM III**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**


**Sample ID: LCS-042514**
**LAB CONTROL**

Lab Sample ID: LCS-042514
LIMS ID: 14-7699
Matrix: Soil
Date Analyzed: 05/03/14 18:02

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| Analyte | Lab Control | | Spike Added | Recovery |
|---|---|---|---|---|
| 2,4-Dinitrophenol | 1700 | Q | 2750 | 61.8% |
| 4-Nitrophenol | 1230 | | 1500 | 82.0% |
| Dibenzofuran | 420 | | 500 | 84.0% |
| 2,6-Dinitrotoluene | 1390 | | 1500 | 92.7% |
| 2,4-Dinitrotoluene | 1200 | | 1500 | 80.0% |
| Diethylphthalate | 425 | | 500 | 85.0% |
| 4-Chlorophenyl-phenylether | 394 | | 500 | 78.8% |
| Fluorene | 367 | | 500 | 73.4% |
| 4-Nitroaniline | 951 | | 1500 | 63.4% |
| 4,6-Dinitro-2-Methylphenol | 2080 | | 2750 | 75.6% |
| N-Nitrosodiphenylamine | 470 | Q | 500 | 94.0% |
| 4-Bromophenyl-phenylether | 418 | | 500 | 83.6% |
| Hexachlorobenzene | 445 | | 500 | 89.0% |
| Pentachlorophenol | 860 | Q | 1500 | 57.3% |
| Phenanthrene | 462 | | 500 | 92.4% |
| Carbazole | 410 | | 500 | 82.0% |
| Anthracene | 375 | | 500 | 75.0% |
| Di-n-Butylphthalate | 443 | | 500 | 88.6% |
| Fluoranthene | 402 | | 500 | 80.4% |
| Pyrene | 500 | | 500 | 100% |
| Butylbenzylphthalate | 509 | | 500 | 102% |
| 3,3'-Dichlorobenzidine | 537 | | 1500 | 35.8% |
| Benzo(a)anthracene | 460 | | 500 | 92.0% |
| bis(2-Ethylhexyl)phthalate | 526 | | 500 | 105% |
| Chrysene | 443 | | 500 | 88.6% |
| Di-n-Octyl phthalate | 507 | | 500 | 101% |
| Benzo(a)pyrene | 468 | | 500 | 93.6% |
| Indeno(1,2,3-cd)pyrene | 484 | Q | 500 | 96.8% |
| Dibenz(a,h)anthracene | 349 | Q | 500 | 69.8% |
| Benzo(g,h,i)perylene | 390 | Q | 500 | 78.0% |
| 1-Methylnaphthalene | 443 | | 500 | 88.6% |
| Total Benzofluoranthenes | 921 | | 1000 | 92.1% |

| Semivolatile Surrogate Recovery | |
|---|---|
| d5-Nitrobenzene | 78.0% |
| 2-Fluorobiphenyl | 73.4% |
| d14-p-Terphenyl | 92.2% |
| d4-1,2-Dichlorobenzene | 73.0% |
| d5-Phenol | 76.4% |
| 2-Fluorophenol | 75.7% |
| 2,4,6-Tribromophenol | 75.6% |
| d4-2-Chlorophenol | 75.2% |

Reported in µg/kg (ppb)

**FORM III**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: MB-042514**
**METHOD BLANK**

Lab Sample ID: MB-042514
LIMS ID: 14-7699
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: NA
Date Received: NA

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 17:27
Instrument/Analyst: NT14/YZ
GPC Cleanup: No

Sample Amount: 10.00 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: NA

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 108-95-2 | Phenol | 20 | < 20 U |
| 111-44-4 | Bis-(2-Chloroethyl) Ether | 20 | < 20 U |
| 95-57-8 | 2-Chlorophenol | 20 | < 20 U |
| 541-73-1 | 1,3-Dichlorobenzene | 20 | < 20 U |
| 106-46-7 | 1,4-Dichlorobenzene | 20 | < 20 U |
| 100-51-6 | Benzyl Alcohol | 20 | < 20 U |
| 95-50-1 | 1,2-Dichlorobenzene | 20 | < 20 U |
| 95-48-7 | 2-Methylphenol | 20 | < 20 U |
| 108-60-1 | 2,2'-Oxybis(1-Chloropropane) | 20 | < 20 U |
| 106-44-5 | 4-Methylphenol | 20 | < 20 U |
| 621-64-7 | N-Nitroso-Di-N-Propylamine | 20 | < 20 U |
| 67-72-1 | Hexachloroethane | 20 | < 20 U |
| 98-95-3 | Nitrobenzene | 20 | < 20 U |
| 78-59-1 | Isophorone | 20 | < 20 U |
| 88-75-5 | 2-Nitrophenol | 20 | < 20 U |
| 105-67-9 | 2,4-Dimethylphenol | 100 | < 100 U |
| 65-85-0 | Benzoic Acid | 200 | < 200 U |
| 111-91-1 | bis(2-Chloroethoxy) Methane | 20 | < 20 U |
| 120-83-2 | 2,4-Dichlorophenol | 100 | < 100 U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 20 | < 20 U |
| 91-20-3 | Naphthalene | 20 | < 20 U |
| 106-47-8 | 4-Chloroaniline | 100 | < 100 U |
| 87-68-3 | Hexachlorobutadiene | 20 | < 20 U |
| 59-50-7 | 4-Chloro-3-methylphenol | 100 | < 100 U |
| 91-57-6 | 2-Methylnaphthalene | 20 | < 20 U |
| 77-47-4 | Hexachlorocyclopentadiene | 100 | < 100 U |
| 88-06-2 | 2,4,6-Trichlorophenol | 100 | < 100 U |
| 95-95-4 | 2,4,5-Trichlorophenol | 100 | < 100 U |
| 91-58-7 | 2-Chloronaphthalene | 20 | < 20 U |
| 88-74-4 | 2-Nitroaniline | 100 | < 100 U |
| 131-11-3 | Dimethylphthalate | 20 | < 20 U |
| 208-96-8 | Acenaphthylene | 20 | < 20 U |
| 99-09-2 | 3-Nitroaniline | 100 | < 100 U |
| 83-32-9 | Acenaphthene | 20 | < 20 U |
| 51-28-5 | 2,4-Dinitrophenol | 200 | < 200 U |
| 100-02-7 | 4-Nitrophenol | 100 | < 100 U |
| 132-64-9 | Dibenzofuran | 20 | < 20 U |

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Semivolatiles by SW8270D GC/MS**
**Extraction Method: SW3546**


**Sample ID: MB-042514**
**METHOD BLANK**

Lab Sample ID: MB-042514
LIMS ID: 14-7699
Matrix: Soil
Date Analyzed: 05/03/14 17:27

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 606-20-2 | 2,6-Dinitrotoluene | 100 | < 100 U |
| 121-14-2 | 2,4-Dinitrotoluene | 100 | < 100 U |
| 84-66-2 | Diethylphthalate | 20 | < 20 U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 20 | < 20 U |
| 86-73-7 | Fluorene | 20 | < 20 U |
| 100-01-6 | 4-Nitroaniline | 100 | < 100 U |
| 534-52-1 | 4,6-Dinitro-2-Methylphenol | 200 | < 200 U |
| 86-30-6 | N-Nitrosodiphenylamine | 20 | < 20 U |
| 101-55-3 | 4-Bromophenyl-phenylether | 20 | < 20 U |
| 118-74-1 | Hexachlorobenzene | 20 | < 20 U |
| 87-86-5 | Pentachlorophenol | 100 | < 100 U |
| 85-01-8 | Phenanthrene | 20 | < 20 U |
| 86-74-8 | Carbazole | 20 | < 20 U |
| 120-12-7 | Anthracene | 20 | < 20 U |
| 84-74-2 | Di-n-Butylphthalate | 20 | < 20 U |
| 206-44-0 | Fluoranthene | 20 | < 20 U |
| 129-00-0 | Pyrene | 20 | < 20 U |
| 85-68-7 | Butylbenzylphthalate | 20 | < 20 U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 100 | < 100 U |
| 56-55-3 | Benzo(a)anthracene | 20 | < 20 U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 50 | < 50 U |
| 218-01-9 | Chrysene | 20 | < 20 U |
| 117-84-0 | Di-n-Octyl phthalate | 20 | < 20 U |
| 50-32-8 | Benzo(a)pyrene | 20 | < 20 U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 20 | < 20 U |
| 53-70-3 | Dibenz(a,h)anthracene | 20 | < 20 U |
| 191-24-2 | Benzo(g,h,i)perylene | 20 | < 20 U |
| 90-12-0 | 1-Methylnaphthalene | 20 | < 20 U |
| TOTBFA | Total Benzofluoranthenes | 40 | < 40 U |

Reported in µg/kg (ppb)

**Semivolatile Surrogate Recovery**

| | | | |
|---|---|---|---|
| d5-Nitrobenzene | 64.0% | 2-Fluorobiphenyl | 64.8% |
| d14-p-Terphenyl | 88.6% | d4-1,2-Dichlorobenzene | 60.6% |
| d5-Phenol | 63.3% | 2-Fluorophenol | 62.4% |
| 2,4,6-Tribromophenol | 63.2% | d4-2-Chlorophenol | 63.9% |

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Pesticides/PCB by GC/ECD**
**Extraction Method: SW3546**


**Sample ID: WM-1**
**SAMPLE**

Lab Sample ID: YH76A
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized:
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 18:44
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 12.5 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 3.7%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.50 | < 0.50 U |
| 319-85-7 | beta-BHC | 0.50 | < 0.50 U |
| 319-86-8 | delta-BHC | 0.50 | < 0.50 U |
| 58-89-9 | gamma-BHC (Lindane) | 0.50 | < 0.50 U |
| 76-44-8 | Heptachlor | 0.50 | < 0.50 U |
| 309-00-2 | Aldrin | 0.50 | < 0.50 U |
| 1024-57-3 | Heptachlor Epoxide | 1.0 | < 1.0 U |
| 959-98-8 | Endosulfan I | 0.50 | < 0.50 U |
| 60-57-1 | Dieldrin | 1.0 | < 1.0 U |
| 72-55-9 | 4,4'-DDE | 1.0 | < 1.0 U |
| 72-20-8 | Endrin | 1.0 | < 1.0 U |
| 33213-65-9 | Endosulfan II | 1.0 | < 1.0 U |
| 72-54-8 | 4,4'-DDD | 1.0 | < 1.0 U |
| 1031-07-8 | Endosulfan Sulfate | 1.0 | < 1.0 U |
| 50-29-3 | 4,4'-DDT | 1.0 | < 1.0 U |
| 72-43-5 | Methoxychlor | 5.0 | < 5.0 U |
| 53494-70-5 | Endrin Ketone | 1.0 | < 1.0 U |
| 7421-93-4 | Endrin Aldehyde | 1.0 | < 1.0 U |
| 5103-74-2 | trans-Chlordane # | 0.50 | < 0.50 U |
| 5103-71-9 | cis-Chlordane $ | 0.50 | < 0.50 U |
| 8001-35-2 | Toxaphene | 25 | < 25 U |

Reported in µg/kg (ppb)

**Pest/PCB Surrogate Recovery**

| | |
|---|---|
| Decachlorobiphenyl | 81.8% |
| Tetrachlorometaxylene | 67.0% |

# This analyte (CAS registry No. 5103-74-2) is named trans-Chlordane in EPA Method 8081B(Feb 2007). It has also been named beta-Chlordane.

$ This analyte (CAS registry No. 5103-71-9) is named cis-Chlordane in EPA Method 8081B(Feb 2007). It has also been named alpha-Chlordane.

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Pesticides/PCB by GC/ECD**
**Extraction Method: SW3546**


**Sample ID: WM-2**
**SAMPLE**

Lab Sample ID: YH76B
LIMS ID: 14-7699
Matrix: Soil
Data Release Authorized:
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 19:36
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 13.3 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 4.8%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.47 | < 0.47 U |
| 319-85-7 | beta-BHC | 0.47 | < 0.47 U |
| 319-86-8 | delta-BHC | 0.47 | < 0.47 U |
| 58-89-9 | gamma-BHC (Lindane) | 0.47 | < 0.47 U |
| 76-44-8 | Heptachlor | 0.47 | < 0.47 U |
| 309-00-2 | Aldrin | 0.47 | < 0.47 U |
| 1024-57-3 | Heptachlor Epoxide | 0.94 | < 0.94 U |
| 959-98-8 | Endosulfan I | 0.47 | < 0.47 U |
| 60-57-1 | Dieldrin | 0.94 | < 0.94 U |
| 72-55-9 | 4,4'-DDE | 0.94 | < 0.94 U |
| 72-20-8 | Endrin | 0.94 | < 0.94 U |
| 33213-65-9 | Endosulfan II | 0.94 | < 0.94 U |
| 72-54-8 | 4,4'-DDD | 0.94 | < 0.94 U |
| 1031-07-8 | Endosulfan Sulfate | 0.94 | < 0.94 U |
| 50-29-3 | 4,4'-DDT | 0.94 | < 0.94 U |
| 72-43-5 | Methoxychlor | 4.7 | < 4.7 U |
| 53494-70-5 | Endrin Ketone | 0.94 | < 0.94 U |
| 7421-93-4 | Endrin Aldehyde | 0.94 | < 0.94 U |
| 5103-74-2 | trans-Chlordane # | 0.47 | < 0.47 U |
| 5103-71-9 | cis-Chlordane $ | 0.47 | < 0.47 U |
| 8001-35-2 | Toxaphene | 23 | < 23 U |

Reported in µg/kg (ppb)

**Pest/PCB Surrogate Recovery**

| | |
|---|---|
| Decachlorobiphenyl | 66.8% |
| Tetrachlorometaxylene | 55.0% |

# This analyte (CAS registry No. 5103-74-2) is named trans-Chlordane in EPA Method 8081B(Feb 2007). It has also been named beta-Chlordane.

$ This analyte (CAS registry No. 5103-71-9) is named cis-Chlordane in EPA Method 8081B(Feb 2007). It has also been named alpha-Chlordane.

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Pesticides/PCB by GC/ECD**
**Extraction Method: SW3546**


**Sample ID: WM-3**
**SAMPLE**

Lab Sample ID: YH76C
LIMS ID: 14-7700
Matrix: Soil
Data Release Authorized:
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 19:53
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 13.1 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 6.5%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.48 | < 0.48 U |
| 319-85-7 | beta-BHC | 0.48 | < 0.48 U |
| 319-86-8 | delta-BHC | 0.48 | < 0.48 U |
| 58-89-9 | gamma-BHC (Lindane) | 0.48 | < 0.48 U |
| 76-44-8 | Heptachlor | 0.48 | < 0.48 U |
| 309-00-2 | Aldrin | 0.48 | < 0.48 U |
| 1024-57-3 | Heptachlor Epoxide | 0.95 | < 0.95 U |
| 959-98-8 | Endosulfan I | 0.48 | < 0.48 U |
| 60-57-1 | Dieldrin | 0.95 | < 0.95 U |
| 72-55-9 | 4,4'-DDE | 0.95 | < 0.95 U |
| 72-20-8 | Endrin | 0.95 | < 0.95 U |
| 33213-65-9 | Endosulfan II | 0.95 | < 0.95 U |
| 72-54-8 | 4,4'-DDD | 0.95 | < 0.95 U |
| 1031-07-8 | Endosulfan Sulfate | 0.95 | < 0.95 U |
| 50-29-3 | 4,4'-DDT | 0.95 | < 0.95 U |
| 72-43-5 | Methoxychlor | 4.8 | < 4.8 U |
| 53494-70-5 | Endrin Ketone | 0.95 | < 0.95 U |
| 7421-93-4 | Endrin Aldehyde | 0.95 | < 0.95 U |
| 5103-74-2 | trans-Chlordane # | 0.48 | < 0.48 U |
| 5103-71-9 | cis-Chlordane $ | 0.48 | < 0.48 U |
| 8001-35-2 | Toxaphene | 24 | < 24 U |

Reported in µg/kg (ppb)

**Pest/PCB Surrogate Recovery**

| | |
|---|---|
| Decachlorobiphenyl | 70.5% |
| Tetrachlorometaxylene | 58.2% |

# This analyte (CAS registry No. 5103-74-2) is named trans-Chlordane in EPA Method 8081B(Feb 2007). It has also been named beta-Chlordane.

$ This analyte (CAS registry No. 5103-71-9) is named cis-Chlordane in EPA Method 8081B(Feb 2007). It has also been named alpha-Chlordane.

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Pesticides/PCB by GC/ECD**
**Extraction Method: SW3546**


**Sample ID: WM-4**
**SAMPLE**

Lab Sample ID: YH76D
LIMS ID: 14-7701
Matrix: Soil
Data Release Authorized:
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 20:10
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 13.1 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 6.5%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.48 | < 0.48 U |
| 319-85-7 | beta-BHC | 0.48 | < 0.48 U |
| 319-86-8 | delta-BHC | 0.48 | < 0.48 U |
| 58-89-9 | gamma-BHC (Lindane) | 0.48 | < 0.48 U |
| 76-44-8 | Heptachlor | 0.48 | < 0.48 U |
| 309-00-2 | Aldrin | 0.48 | < 0.48 U |
| 1024-57-3 | Heptachlor Epoxide | 0.95 | < 0.95 U |
| 959-98-8 | Endosulfan I | 0.48 | < 0.48 U |
| 60-57-1 | Dieldrin | 0.95 | < 0.95 U |
| 72-55-9 | 4,4'-DDE | 0.95 | < 0.95 U |
| 72-20-8 | Endrin | 0.95 | < 0.95 U |
| 33213-65-9 | Endosulfan II | 0.95 | < 0.95 U |
| 72-54-8 | 4,4'-DDD | 0.95 | < 0.95 U |
| 1031-07-8 | Endosulfan Sulfate | 0.95 | < 0.95 U |
| 50-29-3 | 4,4'-DDT | 0.95 | < 0.95 U |
| 72-43-5 | Methoxychlor | 4.8 | < 4.8 U |
| 53494-70-5 | Endrin Ketone | 0.95 | < 0.95 U |
| 7421-93-4 | Endrin Aldehyde | 0.95 | < 0.95 U |
| 5103-74-2 | trans-Chlordane # | 0.48 | < 0.48 U |
| 5103-71-9 | cis-Chlordane $ | 0.48 | < 0.48 U |
| 8001-35-2 | Toxaphene | 24 | < 24 U |

Reported in µg/kg (ppb)

**Pest/PCB Surrogate Recovery**

| | |
|---|---|
| Decachlorobiphenyl | 72.2% |
| Tetrachlorometaxylene | 63.5% |

# This analyte (CAS registry No. 5103-74-2) is named trans-Chlordane in EPA Method 8081B(Feb 2007). It has also been named beta-Chlordane.

$ This analyte (CAS registry No. 5103-71-9) is named cis-Chlordane in EPA Method 8081B(Feb 2007). It has also been named alpha-Chlordane.

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Pesticides/PCB by GC/ECD**
**Extraction Method: SW3546**


**Sample ID: WM-5**
**SAMPLE**

Lab Sample ID: YH76E
LIMS ID: 14-7702
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 20:27
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 13.0 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 7.3%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.48 | < 0.48 U |
| 319-85-7 | beta-BHC | 0.48 | < 0.48 U |
| 319-86-8 | delta-BHC | 0.48 | < 0.48 U |
| 58-89-9 | gamma-BHC (Lindane) | 0.48 | < 0.48 U |
| 76-44-8 | Heptachlor | 0.48 | < 0.48 U |
| 309-00-2 | Aldrin | 0.48 | < 0.48 U |
| 1024-57-3 | Heptachlor Epoxide | 0.96 | < 0.96 U |
| 959-98-8 | Endosulfan I | 0.48 | < 0.48 U |
| 60-57-1 | Dieldrin | 0.96 | < 0.96 U |
| 72-55-9 | 4,4'-DDE | 0.96 | < 0.96 U |
| 72-20-8 | Endrin | 0.96 | < 0.96 U |
| 33213-65-9 | Endosulfan II | 0.96 | < 0.96 U |
| 72-54-8 | 4,4'-DDD | 0.96 | < 0.96 U |
| 1031-07-8 | Endosulfan Sulfate | 0.96 | < 0.96 U |
| 50-29-3 | 4,4'-DDT | 0.96 | < 0.96 U |
| 72-43-5 | Methoxychlor | 4.8 | < 4.8 U |
| 53494-70-5 | Endrin Ketone | 0.96 | < 0.96 U |
| 7421-93-4 | Endrin Aldehyde | 0.96 | < 0.96 U |
| 5103-74-2 | trans-Chlordane # | 0.48 | < 0.48 U |
| 5103-71-9 | cis-Chlordane $ | 0.48 | < 0.48 U |
| 8001-35-2 | Toxaphene | 24 | < 24 U |

Reported in µg/kg (ppb)

**Pest/PCB Surrogate Recovery**

| | |
|---|---|
| Decachlorobiphenyl | 66.5% |
| Tetrachlorometaxylene | 57.5% |

# This analyte (CAS registry No. 5103-74-2) is named trans-Chlordane in EPA Method 8081B(Feb 2007). It has also been named beta-Chlordane.

$ This analyte (CAS registry No. 5103-71-9) is named cis-Chlordane in EPA Method 8081B(Feb 2007). It has also been named alpha-Chlordane.

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Pesticides/PCB by GC/ECD**
**Extraction Method: SW3546**


**Sample ID: WM-6**
**SAMPLE**

Lab Sample ID: YH76F
LIMS ID: 14-7703
Matrix: Soil
Data Release Authorized:
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 20:45
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 12.7 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 15.7%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.49 | < 0.49 U |
| 319-85-7 | beta-BHC | 0.49 | < 0.49 U |
| 319-86-8 | delta-BHC | 0.49 | < 0.49 U |
| 58-89-9 | gamma-BHC (Lindane) | 0.49 | < 0.49 U |
| 76-44-8 | Heptachlor | 0.49 | < 0.49 U |
| 309-00-2 | Aldrin | 0.49 | < 0.49 U |
| 1024-57-3 | Heptachlor Epoxide | 0.99 | < 0.99 U |
| 959-98-8 | Endosulfan I | 0.49 | < 0.49 U |
| 60-57-1 | Dieldrin | 0.99 | < 0.99 U |
| 72-55-9 | 4,4'-DDE | 0.99 | < 0.99 U |
| 72-20-8 | Endrin | 0.99 | < 0.99 U |
| 33213-65-9 | Endosulfan II | 0.99 | < 0.99 U |
| 72-54-8 | 4,4'-DDD | 0.99 | < 0.99 U |
| 1031-07-8 | Endosulfan Sulfate | 0.99 | < 0.99 U |
| 50-29-3 | 4,4'-DDT | 0.99 | < 0.99 U |
| 72-43-5 | Methoxychlor | 4.9 | < 4.9 U |
| 53494-70-5 | Endrin Ketone | 0.99 | < 0.99 U |
| 7421-93-4 | Endrin Aldehyde | 0.99 | < 0.99 U |
| 5103-74-2 | trans-Chlordane # | 0.49 | < 0.49 U |
| 5103-71-9 | cis-Chlordane $ | 0.49 | < 0.49 U |
| 8001-35-2 | Toxaphene | 25 | < 25 U |

Reported in µg/kg (ppb)

**Pest/PCB Surrogate Recovery**

| | |
|---|---|
| Decachlorobiphenyl | 71.0% |
| Tetrachlorometaxylene | 57.2% |

# This analyte (CAS registry No. 5103-74-2) is named trans-Chlordane in EPA Method 8081B(Feb 2007). It has also been named beta-Chlordane.

$ This analyte (CAS registry No. 5103-71-9) is named cis-Chlordane in EPA Method 8081B(Feb 2007). It has also been named alpha-Chlordane.

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Pesticides/PCB by GC/ECD**
**Extraction Method: SW3546**


**Sample ID: WM-7**
**SAMPLE**

Lab Sample ID: YH76G
LIMS ID: 14-7704
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 21:02
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 13.4 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 4.7%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.47 | < 0.47 U |
| 319-85-7 | beta-BHC | 0.47 | < 0.47 U |
| 319-86-8 | delta-BHC | 0.47 | < 0.47 U |
| 58-89-9 | gamma-BHC (Lindane) | 0.47 | < 0.47 U |
| 76-44-8 | Heptachlor | 0.47 | < 0.47 U |
| 309-00-2 | Aldrin | 0.47 | < 0.47 U |
| 1024-57-3 | Heptachlor Epoxide | 0.94 | < 0.94 U |
| 959-98-8 | Endosulfan I | 0.47 | < 0.47 U |
| 60-57-1 | Dieldrin | 0.94 | < 0.94 U |
| 72-55-9 | 4,4'-DDE | 0.94 | < 0.94 U |
| 72-20-8 | Endrin | 0.94 | < 0.94 U |
| 33213-65-9 | Endosulfan II | 0.94 | < 0.94 U |
| 72-54-8 | 4,4'-DDD | 0.94 | < 0.94 U |
| 1031-07-8 | Endosulfan Sulfate | 0.94 | < 0.94 U |
| 50-29-3 | 4,4'-DDT | 0.94 | < 0.94 U |
| 72-43-5 | Methoxychlor | 4.7 | < 4.7 U |
| 53494-70-5 | Endrin Ketone | 0.94 | < 0.94 U |
| 7421-93-4 | Endrin Aldehyde | 0.94 | < 0.94 U |
| 5103-74-2 | trans-Chlordane # | 0.47 | < 0.47 U |
| 5103-71-9 | cis-Chlordane $ | 0.47 | < 0.47 U |
| 8001-35-2 | Toxaphene | 23 | < 23 U |

Reported in µg/kg (ppb)

**Pest/PCB Surrogate Recovery**

| | |
|---|---|
| Decachlorobiphenyl | 70.8% |
| Tetrachlorometaxylene | 58.5% |

# This analyte (CAS registry No. 5103-74-2) is named trans-Chlordane in EPA Method 8081B(Feb 2007). It has also been named beta-Chlordane.

$ This analyte (CAS registry No. 5103-71-9) is named cis-Chlordane in EPA Method 8081B(Feb 2007). It has also been named alpha-Chlordane.

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

## SW8081 PESTICIDE SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129

| Client ID | DCBP | TCMX | TOT OUT |
|---|---|---|---|
| MB-042514 | 77.2% | 64.8% | 0 |
| LCS-042514 | 79.0% | 62.0% | 0 |
| WM-1 | 81.8% | 67.0% | 0 |
| WM-1 MS | 77.0% | 61.5% | 0 |
| WM-1 MSD | 70.2% | 54.0% | 0 |
| WM-2 | 66.8% | 55.0% | 0 |
| WM-3 | 70.5% | 58.2% | 0 |
| WM-4 | 72.2% | 63.5% | 0 |
| WM-5 | 66.5% | 57.5% | 0 |
| WM-6 | 71.0% | 57.2% | 0 |
| WM-7 | 70.8% | 58.5% | 0 |

| | LCS/MB LIMITS | QC LIMITS |
|---|---|---|
| (DCBP) = Decachlorobiphenyl | (30-160) | (30-160) |
| (TCMX) = Tetrachlorometaxylene | (30-160) | (30-160) |

Prep Method: SW3546
Log Number Range: 14-7698 to 14-7704

FORM-II SW8081

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Pesticides/PCB by GC/ECD**


**Sample ID: WM-1**
**MS/MSD**

Lab Sample ID: YH76A
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted MS/MSD: 04/25/14

Date Analyzed MS: 05/03/14 19:02
MSD: 05/03/14 19:19
Instrument/Analyst MS: ECD6/YZ
MSD: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount MS: 12.5 g-dry-wt
MSD: 12.5 g-dry-wt
Final Extract Volume MS: 2.5 mL
MSD: 2.5 mL
Dilution Factor MS: 1.00
MSD: 1.00
Silica Gel: Yes

Percent Moisture: 3.7%

| Analyte | Sample | MS | Spike Added-MS | MS Recovery | MSD | Spike Added-MSD | MSD Recovery | RPD |
|---|---|---|---|---|---|---|---|---|
| alpha-BHC | < 0.498 | 2.74 | 3.99 | 68.7% | 2.48 | 3.99 | 62.2% | 10.0% |
| beta-BHC | < 0.498 | 2.66 | 3.99 | 66.7% | 2.50 | 3.99 | 62.7% | 6.2% |
| delta-BHC | < 0.498 | 3.00 | 3.99 | 75.2% | 2.82 | 3.99 | 70.7% | 6.2% |
| gamma-BHC (Lindane) | < 0.498 | 2.96 | 3.99 | 74.2% | 2.72 | 3.99 | 68.2% | 8.5% |
| Heptachlor | < 0.498 | 2.72 | 3.99 | 68.2% | 2.50 | 3.99 | 62.7% | 8.4% |
| Aldrin | < 0.498 | 2.68 | 3.99 | 67.2% | 2.44 | 3.99 | 61.2% | 9.4% |
| Heptachlor Epoxide | < 0.997 | 2.90 | 3.99 | 72.7% | 2.80 | 3.99 | 70.2% | 3.5% |
| Endosulfan I | < 0.498 | 2.72 | 3.99 | 68.2% | 2.54 | 3.99 | 63.7% | 6.8% |
| Dieldrin | < 0.997 | 5.61 | 7.99 | 70.2% | 5.31 | 7.99 | 66.5% | 5.5% |
| 4,4'-DDE | < 0.997 | 6.77 | 7.99 | 84.7% | 6.57 | 7.99 | 82.2% | 3.0% |
| Endrin | < 0.997 | 7.01 | 7.99 | 87.7% | 6.45 | 7.99 | 80.7% | 8.3% |
| Endosulfan II | < 0.997 | 6.51 | 7.99 | 81.5% | 5.99 | 7.99 | 75.0% | 8.3% |
| 4,4'-DDD | < 0.997 | 7.13 | 7.99 | 89.2% | 6.61 | 7.99 | 82.7% | 7.6% |
| Endosulfan Sulfate | < 0.997 | 6.87 | 7.99 | 86.0% | 6.41 | 7.99 | 80.2% | 6.9% |
| 4,4'-DDT | < 0.997 | 7.07 | 7.99 | 88.5% | 6.51 | 7.99 | 81.5% | 8.2% |
| Methoxychlor | < 4.98 | 35.7 | 39.9 | 89.5% | 32.9 | 39.9 | 82.5% | 8.2% |
| Endrin Ketone | < 0.997 | 7.01 | 7.99 | 87.7% | 6.59 | 7.99 | 82.5% | 6.2% |
| Endrin Aldehyde | < 0.997 | 4.67 | 7.99 | 58.4% | 4.55 | 7.99 | 56.9% | 2.6% |
| trans-Chlordane | < 0.498 | 2.68 | 3.99 | 67.2% | 2.58 | 3.99 | 64.7% | 3.8% |
| cis-Chlordane | < 0.498 | 2.82 | 3.99 | 70.7% | 2.66 | 3.99 | 66.7% | 5.8% |

Reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

**FORM III**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Pesticides/PCB by GC/ECD**
**Extraction Method: SW3546**


**Sample ID: WM-1**
**MATRIX SPIKE**

Lab Sample ID: YH76A
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized:
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 19:02
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 12.5 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 3.7%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.50 | --- |
| 319-85-7 | beta-BHC | 0.50 | --- |
| 319-86-8 | delta-BHC | 0.50 | --- |
| 58-89-9 | gamma-BHC (Lindane) | 0.50 | --- |
| 76-44-8 | Heptachlor | 0.50 | --- |
| 309-00-2 | Aldrin | 0.50 | --- |
| 1024-57-3 | Heptachlor Epoxide | 1.0 | --- |
| 959-98-8 | Endosulfan I | 0.50 | --- |
| 60-57-1 | Dieldrin | 1.0 | --- |
| 72-55-9 | 4,4'-DDE | 1.0 | --- |
| 72-20-8 | Endrin | 1.0 | --- |
| 33213-65-9 | Endosulfan II | 1.0 | --- |
| 72-54-8 | 4,4'-DDD | 1.0 | --- |
| 1031-07-8 | Endosulfan Sulfate | 1.0 | --- |
| 50-29-3 | 4,4'-DDT | 1.0 | --- |
| 72-43-5 | Methoxychlor | 5.0 | --- |
| 53494-70-5 | Endrin Ketone | 1.0 | --- |
| 7421-93-4 | Endrin Aldehyde | 1.0 | --- |
| 5103-74-2 | trans-Chlordane | 0.50 | --- |
| 5103-71-9 | cis-Chlordane | 0.50 | --- |
| 8001-35-2 | Toxaphene | 25 | < 25 U |

Reported in µg/kg (ppb)

**Pest/PCB Surrogate Recovery**

| | |
|---|---|
| Decachlorobiphenyl | 77.0% |
| Tetrachlorometaxylene | 61.5% |

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Pesticides/PCB by GC/ECD**
**Extraction Method: SW3546**


**Sample ID: WM-1**
**MATRIX SPIKE DUP**

Lab Sample ID: YH76A
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 19:19
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 12.5 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 3.7%

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.50 | --- |
| 319-85-7 | beta-BHC | 0.50 | --- |
| 319-86-8 | delta-BHC | 0.50 | --- |
| 58-89-9 | gamma-BHC (Lindane) | 0.50 | --- |
| 76-44-8 | Heptachlor | 0.50 | --- |
| 309-00-2 | Aldrin | 0.50 | --- |
| 1024-57-3 | Heptachlor Epoxide | 1.0 | --- |
| 959-98-8 | Endosulfan I | 0.50 | --- |
| 60-57-1 | Dieldrin | 1.0 | --- |
| 72-55-9 | 4,4'-DDE | 1.0 | --- |
| 72-20-8 | Endrin | 1.0 | --- |
| 33213-65-9 | Endosulfan II | 1.0 | --- |
| 72-54-8 | 4,4'-DDD | 1.0 | --- |
| 1031-07-8 | Endosulfan Sulfate | 1.0 | --- |
| 50-29-3 | 4,4'-DDT | 1.0 | --- |
| 72-43-5 | Methoxychlor | 5.0 | --- |
| 53494-70-5 | Endrin Ketone | 1.0 | --- |
| 7421-93-4 | Endrin Aldehyde | 1.0 | --- |
| 5103-74-2 | trans-Chlordane | 0.50 | --- |
| 5103-71-9 | cis-Chlordane | 0.50 | --- |
| 8001-35-2 | Toxaphene | 25 | < 25 U |

Reported in µg/kg (ppb)

**Pest/PCB Surrogate Recovery**

| | |
|---|---|
| Decachlorobiphenyl | 70.2% |
| Tetrachlorometaxylene | 54.0% |

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Pesticides/PCB by GC/ECD**


**Sample ID: LCS-042514**
**LAB CONTROL**

Lab Sample ID: LCS-042514
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 18:10
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 12.5 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: NA

| Analyte | Lab Control | Spike Added | Recovery |
|---|---|---|---|
| alpha-BHC | 2.68 | 4.00 | 67.0% |
| beta-BHC | 2.70 | 4.00 | 67.5% |
| delta-BHC | 3.10 | 4.00 | 77.5% |
| gamma-BHC (Lindane) | 2.90 | 4.00 | 72.5% |
| Heptachlor | 2.70 | 4.00 | 67.5% |
| Aldrin | 2.64 | 4.00 | 66.0% |
| Heptachlor Epoxide | 3.00 | 4.00 | 75.0% |
| Endosulfan I | 2.72 | 4.00 | 68.0% |
| Dieldrin | 5.72 | 8.00 | 71.5% |
| 4,4'-DDE | 7.02 | 8.00 | 87.8% |
| Endrin | 7.04 | 8.00 | 88.0% |
| Endosulfan II | 6.54 | 8.00 | 81.8% |
| 4,4'-DDD | 7.18 | 8.00 | 89.8% |
| Endosulfan Sulfate | 7.18 | 8.00 | 89.8% |
| 4,4'-DDT | 7.04 | 8.00 | 88.0% |
| Methoxychlor | 36.0 | 40.0 | 90.0% |
| Endrin Ketone | 7.20 | 8.00 | 90.0% |
| Endrin Aldehyde | 4.98 | 8.00 | 62.2% |
| trans-Chlordane | 2.76 | 4.00 | 69.0% |
| cis-Chlordane | 2.84 | 4.00 | 71.0% |

**Pest/PCB Surrogate Recovery**

| | |
|---|---|
| Decachlorobiphenyl | 79.0% |
| Tetrachlorometaxylene | 62.0% |

Reported in µg/kg (ppb)

**FORM III**

ANALYTICAL RESOURCES INCORPORATED

**ORGANICS ANALYSIS DATA SHEET**
**PSDDA Pesticides/PCB by GC/ECD**
**Extraction Method: SW3546**


**Sample ID: MB-042514**
**METHOD BLANK**

Lab Sample ID: MB-042514
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized: MW
Reported: 05/05/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: NA
Date Received: NA

Date Extracted: 04/25/14
Date Analyzed: 05/03/14 17:53
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 12.5 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: NA

| CAS Number | Analyte | RL | Result |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.50 | < 0.50 U |
| 319-85-7 | beta-BHC | 0.50 | < 0.50 U |
| 319-86-8 | delta-BHC | 0.50 | < 0.50 U |
| 58-89-9 | gamma-BHC (Lindane) | 0.50 | < 0.50 U |
| 76-44-8 | Heptachlor | 0.50 | < 0.50 U |
| 309-00-2 | Aldrin | 0.50 | < 0.50 U |
| 1024-57-3 | Heptachlor Epoxide | 1.0 | < 1.0 U |
| 959-98-8 | Endosulfan I | 0.50 | < 0.50 U |
| 60-57-1 | Dieldrin | 1.0 | < 1.0 U |
| 72-55-9 | 4,4'-DDE | 1.0 | < 1.0 U |
| 72-20-8 | Endrin | 1.0 | < 1.0 U |
| 33213-65-9 | Endosulfan II | 1.0 | < 1.0 U |
| 72-54-8 | 4,4'-DDD | 1.0 | < 1.0 U |
| 1031-07-8 | Endosulfan Sulfate | 1.0 | < 1.0 U |
| 50-29-3 | 4,4'-DDT | 1.0 | < 1.0 U |
| 72-43-5 | Methoxychlor | 5.0 | < 5.0 U |
| 53494-70-5 | Endrin Ketone | 1.0 | < 1.0 U |
| 7421-93-4 | Endrin Aldehyde | 1.0 | < 1.0 U |
| 5103-74-2 | trans-Chlordane | 0.50 | < 0.50 U |
| 5103-71-9 | cis-Chlordane | 0.50 | < 0.50 U |
| 8001-35-2 | Toxaphene | 25 | < 25 U |

Reported in µg/kg (ppb)

**Pest/PCB Surrogate Recovery**

| | |
|---|---|
| Decachlorobiphenyl | 77.2% |
| Tetrachlorometaxylene | 64.8% |

**FORM I**

ANALYTICAL RESOURCES INCORPORATED

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**


**Sample ID: WM-1**
**SAMPLE**

Lab Sample ID: YH76A
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized:
Reported: 04/28/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Percent Total Solids: 95.4%

| Prep Meth | Prep Date | Analysis Method | Analysis Date | CAS Number | Analyte | LOQ | mg/kg-dry | Q |
|---|---|---|---|---|---|---|---|---|
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-38-2** | **Arsenic** | 0.2 | **3.2** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-47-3** | **Chromium** | 0.5 | **8.4** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-50-8** | **Copper** | 0.5 | **9.0** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7439-92-1** | **Lead** | 0.1 | **4.3** | |

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**


**Sample ID: WM-2**
**SAMPLE**

Lab Sample ID: YH76B
LIMS ID: 14-7699
Matrix: Soil
Data Release Authorized:
Reported: 04/28/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Percent Total Solids: 95.4%

| Prep Meth | Prep Date | Analysis Method | Analysis Date | CAS Number | Analyte | LOQ | mg/kg-dry | Q |
|---|---|---|---|---|---|---|---|---|
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-38-2** | **Arsenic** | 0.2 | **1.7** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-47-3** | **Chromium** | 0.5 | **8.8** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-50-8** | **Copper** | 0.5 | **10.1** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7439-92-1** | **Lead** | 0.1 | **3.5** | |

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**


**Sample ID: WM-3**
**SAMPLE**

Lab Sample ID: YH76C
LIMS ID: 14-7700
Matrix: Soil
Data Release Authorized:
Reported: 04/28/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Percent Total Solids: 92.5%

| Prep Meth | Prep Date | Analysis Method | Analysis Date | CAS Number | Analyte | LOQ | mg/kg-dry | Q |
|---|---|---|---|---|---|---|---|---|
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-38-2** | **Arsenic** | 0.2 | **2.5** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-47-3** | **Chromium** | 0.5 | **14.4** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-50-8** | **Copper** | 0.5 | **13.0** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7439-92-1** | **Lead** | 0.1 | **5.7** | |

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**


**Sample ID: WM-4**
**SAMPLE**

Lab Sample ID: YH76D
LIMS ID: 14-7701
Matrix: Soil
Data Release Authorized:
Reported: 04/28/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Percent Total Solids: 95.6%

| Prep Meth | Prep Date | Analysis Method | Analysis Date | CAS Number | Analyte | LOQ | mg/kg-dry | Q |
|---|---|---|---|---|---|---|---|---|
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-38-2** | **Arsenic** | 0.2 | **2.1** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-47-3** | **Chromium** | 0.5 | **11.6** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-50-8** | **Copper** | 0.5 | **12.0** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7439-92-1** | **Lead** | 0.1 | **4.0** | |

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**


**Sample ID: WM-5**
**SAMPLE**

Lab Sample ID: YH76E
LIMS ID: 14-7702
Matrix: Soil
Data Release Authorized:
Reported: 04/28/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Percent Total Solids: 92.4%

| Prep Meth | Prep Date | Analysis Method | Analysis Date | CAS Number | Analyte | LOQ | mg/kg-dry | Q |
|---|---|---|---|---|---|---|---|---|
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-38-2** | **Arsenic** | 0.2 | **3.0** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-47-3** | **Chromium** | 0.5 | **16.8** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-50-8** | **Copper** | 0.5 | **15.8** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7439-92-1** | **Lead** | 0.1 | **5.9** | |

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**


**Sample ID: WM-6**
**SAMPLE**

Lab Sample ID: YH76F
LIMS ID: 14-7703
Matrix: Soil
Data Release Authorized:
Reported: 04/28/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Percent Total Solids: 91.9%

| Prep Meth | Prep Date | Analysis Method | Analysis Date | CAS Number | Analyte | LOQ | mg/kg-dry | Q |
|---|---|---|---|---|---|---|---|---|
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-38-2** | **Arsenic** | 0.2 | **5.3** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-47-3** | **Chromium** | 0.5 | **12.6** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-50-8** | **Copper** | 0.5 | **11.9** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7439-92-1** | **Lead** | 0.1 | **6.4** | |

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**


**Sample ID: WM-7**
**SAMPLE**

Lab Sample ID: YH76G
LIMS ID: 14-7704
Matrix: Soil
Data Release Authorized:
Reported: 04/28/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

Percent Total Solids: 97.1%

| Prep Meth | Prep Date | Analysis Method | Analysis Date | CAS Number | Analyte | LOQ | mg/kg-dry | Q |
|---|---|---|---|---|---|---|---|---|
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-38-2** | **Arsenic** | 0.2 | **2.2** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-47-3** | **Chromium** | 0.5 | **9.5** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7440-50-8** | **Copper** | 0.5 | **10.4** | |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | **7439-92-1** | **Lead** | 0.1 | **3.7** | |

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**


**Sample ID: WM-1**
**MATRIX SPIKE**

Lab Sample ID: YH76A
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized:
Reported: 04/28/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

**MATRIX SPIKE QUALITY CONTROL REPORT**

| Analyte | Analysis Method | Sample | Spike | Spike Added | % Recovery | Q |
|---|---|---|---|---|---|---|
| Arsenic | 200.8 | 3.2 | 31.2 | 25.3 | 111% | |
| Chromium | 200.8 | 8.4 | 35.1 | 25.3 | 106% | |
| Copper | 200.8 | 9.0 | 33.9 | 25.3 | 98.4% | |
| Lead | 200.8 | 4.3 | 30.8 | 25.3 | 105% | |

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**


**Sample ID: WM-1**
**DUPLICATE**

Lab Sample ID: YH76A
LIMS ID: 14-7698
Matrix: Soil
Data Release Authorized:
Reported: 04/28/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: 04/22/14
Date Received: 04/23/14

**MATRIX DUPLICATE QUALITY CONTROL REPORT**

| Analyte | Analysis Method | Sample | Duplicate | RPD | Control Limit | Q |
|---|---|---|---|---|---|---|
| Arsenic | 200.8 | 3.2 | 3.6 | 11.8% | +/- 20% | |
| Chromium | 200.8 | 8.4 | 10.2 | 19.4% | +/- 20% | |
| Copper | 200.8 | 9.0 | 11.6 | 25.2% | +/- 20% | * |
| Lead | 200.8 | 4.3 | 4.9 | 13.0% | +/- 20% | |

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**


**Sample ID: LAB CONTROL**

Lab Sample ID: YH76LCS
LIMS ID: 14-7704
Matrix: Soil
Data Release Authorized:
Reported: 04/28/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: NA
Date Received: NA

**BLANK SPIKE QUALITY CONTROL REPORT**

| Analyte | Analysis Method | Spike Found | Spike Added | % Recovery | Q |
|---|---|---|---|---|---|
| Arsenic | 200.8 | 27.3 | 25.0 | 109% | |
| Chromium | 200.8 | 25.7 | 25.0 | 103% | |
| Copper | 200.8 | 26.0 | 25.0 | 104% | |
| Lead | 200.8 | 25.9 | 25.0 | 104% | |

Reported in mg/kg-dry

N-Control limit not met
NA-Not Applicable, Analyte Not Spiked
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**


**Sample ID: METHOD BLANK**

Lab Sample ID: YH76MB
LIMS ID: 14-7704
Matrix: Soil
Data Release Authorized:
Reported: 04/28/14

QC Report No: YH76-RH2 Engineering
Project: CMS - Landfill
208.020.01.129
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

| Prep Meth | Prep Date | Analysis Method | Analysis Date | CAS Number | Analyte | LOQ | mg/kg-dry | Q |
|---|---|---|---|---|---|---|---|---|
| 3050B | 04/24/14 | 200.8 | 04/25/14 | 7440-38-2 | Arsenic | 0.2 | 0.2 | U |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | 7440-47-3 | Chromium | 0.5 | 0.5 | U |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | 7440-50-8 | Copper | 0.5 | 0.5 | U |
| 3050B | 04/24/14 | 200.8 | 04/25/14 | 7439-92-1 | Lead | 0.1 | 0.1 | U |

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st. Avenue
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: SXL0021
Client Project/Site: 18593-001-04
Client Project Description: Cashmere Mill

For:
Geo Engineers - Spokane
523 East Second Ave.
Spokane, WA 99202

Attn: Dave Lauder

*Authorized for release by:*
*12/17/2014 4:47:20 PM*

Randee Arrington, Project Manager
(509)924-9200
Randee.Arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*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: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| SXL0021-01 | MW-5-12214 | Water | 12/02/14 12:17 | 12/04/14 09:15 |
| SXL0021-02 | MW-6-12214 | Water | 12/02/14 13:27 | 12/04/14 09:15 |
| SXL0021-03 | MW-4-12214 | Water | 12/02/14 14:17 | 12/04/14 09:15 |
| SXL0021-04 | MW-1-12214 | Water | 12/02/14 15:20 | 12/04/14 09:15 |
| SXL0021-05 | OW-1-12314 | Water | 12/03/14 08:31 | 12/04/14 09:15 |
| SXL0021-06 | MW-9-12314 | Water | 12/03/14 09:27 | 12/04/14 09:15 |
| SXL0021-07 | MW-8-12314 | Water | 12/03/14 10:09 | 12/04/14 09:15 |
| SXL0021-08 | MW-7-12314 | Water | 12/03/14 11:52 | 12/04/14 09:15 |
| SXL0021-09 | MW-2-12314 | Water | 12/03/14 12:34 | 12/04/14 09:15 |
| SXL0021-10 | B-1-12314 | Water | 12/03/14 13:09 | 12/04/14 09:15 |
| SXL0021-11 | MW-3-12314 | Water | 12/03/14 13:52 | 12/04/14 09:15 |
| SXL0021-12 | MW-Dup-12314 | Water | 12/03/14 12:00 | 12/04/14 09:15 |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Client Sample ID: MW-5-12214

**Lab Sample ID: SXL0021-01**

**Date Collected: 12/02/14 12:17**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:31 | 1.00 |
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:31 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:31 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:31 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:31 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:31 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *99.5* | | *71.2 - 143* | *12/04/14 11:50* | *12/04/14 14:31* | *1.00* |
| *1,2-dichloroethane-d4* | *101* | | *70 - 140* | *12/04/14 11:50* | *12/04/14 14:31* | *1.00* |
| *Toluene-d8* | *100* | | *74.1 - 135* | *12/04/14 11:50* | *12/04/14 14:31* | *1.00* |
| *4-bromofluorobenzene* | *101* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 14:31* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:31 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *101* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 14:31* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 0.238 | | mg/L | | 12/04/14 10:21 | 12/04/14 17:57 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 0.397 | | mg/L | | 12/04/14 10:21 | 12/04/14 17:57 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *92.1* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 17:57* | *1.00* |
| *n-Triacontane-d62* | *92.7* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 17:57* | *1.00* |

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **0.0052** | | 0.0010 | | mg/L | | 12/09/14 00:00 | 12/09/14 19:15 | 1 |

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 14:30 | 1.00 |

## Client Sample ID: MW-6-12214

**Lab Sample ID: SXL0021-02**

**Date Collected: 12/02/14 13:27**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:53 | 1.00 |
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:53 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:53 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:53 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:53 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:53 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Client Sample ID: MW-6-12214

**Lab Sample ID: SXL0021-02**

**Date Collected: 12/02/14 13:27**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *100* | | *71.2 - 143* | *12/04/14 11:50* | *12/04/14 14:53* | *1.00* |
| *1,2-dichloroethane-d4* | *102* | | *70 - 140* | *12/04/14 11:50* | *12/04/14 14:53* | *1.00* |
| *Toluene-d8* | *99.9* | | *74.1 - 135* | *12/04/14 11:50* | *12/04/14 14:53* | *1.00* |
| *4-bromofluorobenzene* | *102* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 14:53* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 14:53 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *102* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 14:53* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 0.237 | | mg/L | | 12/04/14 10:21 | 12/04/14 18:20 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 0.396 | | mg/L | | 12/04/14 10:21 | 12/04/14 18:20 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *88.2* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 18:20* | *1.00* |
| *n-Triacontane-d62* | *96.6* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 18:20* | *1.00* |

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **0.0054** | | 0.0010 | | mg/L | | 12/09/14 00:00 | 12/09/14 19:20 | 1 |

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 14:32 | 1.00 |

## Client Sample ID: MW-4-12214

**Lab Sample ID: SXL0021-03**

**Date Collected: 12/02/14 14:17**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:16 | 1.00 |
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:16 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:16 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:16 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:16 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:16 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *100* | | *71.2 - 143* | *12/04/14 11:50* | *12/04/14 15:16* | *1.00* |
| *1,2-dichloroethane-d4* | *105* | | *70 - 140* | *12/04/14 11:50* | *12/04/14 15:16* | *1.00* |
| *Toluene-d8* | *98.7* | | *74.1 - 135* | *12/04/14 11:50* | *12/04/14 15:16* | *1.00* |
| *4-bromofluorobenzene* | *99.9* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 15:16* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:16 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Client Sample ID: MW-4-12214

**Lab Sample ID: SXL0021-03**

**Date Collected: 12/02/14 14:17**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 99.9 | | 68.7 - 141 | 12/04/14 11:50 | 12/04/14 15:16 | 1.00 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 0.232 | | mg/L | | 12/04/14 10:21 | 12/04/14 18:44 | 1.00 |
| **Heavy Oil Range Hydrocarbons** | **0.387** | | 0.387 | | mg/L | | 12/04/14 10:21 | 12/04/14 18:44 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 78.3 | | 50 - 150 | 12/04/14 10:21 | 12/04/14 18:44 | 1.00 |
| n-Triacontane-d62 | 80.7 | | 50 - 150 | 12/04/14 10:21 | 12/04/14 18:44 | 1.00 |

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **0.0044** | | 0.0010 | | mg/L | | 12/09/14 00:00 | 12/09/14 19:39 | 1 |

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 14:39 | 1.00 |

## Client Sample ID: MW-1-12214

**Lab Sample ID: SXL0021-04**

**Date Collected: 12/02/14 15:20**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:38 | 1.00 |
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:38 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:38 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:38 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:38 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:38 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Dibromofluoromethane | 100 | | 71.2 - 143 | 12/04/14 11:50 | 12/04/14 15:38 | 1.00 |
| 1,2-dichloroethane-d4 | 103 | | 70 - 140 | 12/04/14 11:50 | 12/04/14 15:38 | 1.00 |
| Toluene-d8 | 97.8 | | 74.1 - 135 | 12/04/14 11:50 | 12/04/14 15:38 | 1.00 |
| 4-bromofluorobenzene | 104 | | 68.7 - 141 | 12/04/14 11:50 | 12/04/14 15:38 | 1.00 |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 15:38 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 104 | | 68.7 - 141 | 12/04/14 11:50 | 12/04/14 15:38 | 1.00 |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 0.234 | | mg/L | | 12/04/14 10:21 | 12/04/14 19:07 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 0.390 | | mg/L | | 12/04/14 10:21 | 12/04/14 19:07 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 90.7 | | 50 - 150 | 12/04/14 10:21 | 12/04/14 19:07 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Client Sample ID: MW-1-12214

**Lab Sample ID: SXL0021-04**

**Date Collected: 12/02/14 15:20**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Triacontane-d62* | *89.2* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 19:07* | *1.00* |

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **0.0024** | | 0.0010 | | mg/L | | 12/09/14 00:00 | 12/09/14 19:44 | 1 |

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 14:41 | 1.00 |

## Client Sample ID: OW-1-12314

**Lab Sample ID: SXL0021-05**

**Date Collected: 12/03/14 08:31**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:01 | 1.00 |
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:01 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:01 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:01 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:01 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:01 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *71.2 - 143* | *12/04/14 11:50* | *12/04/14 16:01* | *1.00* |
| *1,2-dichloroethane-d4* | *105* | | *70 - 140* | *12/04/14 11:50* | *12/04/14 16:01* | *1.00* |
| *Toluene-d8* | *100* | | *74.1 - 135* | *12/04/14 11:50* | *12/04/14 16:01* | *1.00* |
| *4-bromofluorobenzene* | *101* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 16:01* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:01 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *101* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 16:01* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 0.231 | | mg/L | | 12/04/14 10:21 | 12/04/14 19:30 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 0.385 | | mg/L | | 12/04/14 10:21 | 12/04/14 19:30 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *94.0* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 19:30* | *1.00* |
| *n-Triacontane-d62* | *90.1* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 19:30* | *1.00* |

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 0.0010 | | mg/L | | 12/09/14 00:00 | 12/09/14 19:48 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Client Sample ID: OW-1-12314 — Lab Sample ID: SXL0021-05

**Date Collected: 12/03/14 08:31** — **Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 14:44 | 1.00 |

## Client Sample ID: MW-9-12314 — Lab Sample ID: SXL0021-06

**Date Collected: 12/03/14 09:27** — **Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:23 | 1.00 |
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:23 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:23 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:23 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:23 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:23 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *71.2 - 143* | *12/04/14 11:50* | *12/04/14 16:23* | *1.00* |
| *1,2-dichloroethane-d4* | *104* | | *70 - 140* | *12/04/14 11:50* | *12/04/14 16:23* | *1.00* |
| *Toluene-d8* | *98.3* | | *74.1 - 135* | *12/04/14 11:50* | *12/04/14 16:23* | *1.00* |
| *4-bromofluorobenzene* | *101* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 16:23* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:23 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *101* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 16:23* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 0.233 | | mg/L | | 12/04/14 10:21 | 12/04/14 19:53 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 0.388 | | mg/L | | 12/04/14 10:21 | 12/04/14 19:53 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *97.2* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 19:53* | *1.00* |
| *n-Triacontane-d62* | *91.7* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 19:53* | *1.00* |

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **0.0054** | | 0.0010 | | mg/L | | 12/09/14 00:00 | 12/09/14 19:53 | 1 |

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 14:46 | 1.00 |

## Client Sample ID: MW-8-12314 — Lab Sample ID: SXL0021-07

**Date Collected: 12/03/14 10:09** — **Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:46 | 1.00 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Client Sample ID: MW-8-12314

**Lab Sample ID: SXL0021-07**

**Date Collected: 12/03/14 10:09**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:46 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:46 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:46 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:46 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:46 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *99.7* | | *71.2 - 143* | *12/04/14 11:50* | *12/04/14 16:46* | *1.00* |
| *1,2-dichloroethane-d4* | *104* | | *70 - 140* | *12/04/14 11:50* | *12/04/14 16:46* | *1.00* |
| *Toluene-d8* | *96.0* | | *74.1 - 135* | *12/04/14 11:50* | *12/04/14 16:46* | *1.00* |
| *4-bromofluorobenzene* | *100* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 16:46* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 16:46 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *100* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 16:46* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 0.238 | | mg/L | | 12/04/14 10:21 | 12/04/14 20:16 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 0.397 | | mg/L | | 12/04/14 10:21 | 12/04/14 20:16 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *91.8* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 20:16* | *1.00* |
| *n-Triacontane-d62* | *88.7* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 20:16* | *1.00* |

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **0.0065** | | 0.0010 | | mg/L | | 12/09/14 00:00 | 12/09/14 19:57 | 1 |

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 14:48 | 1.00 |

## Client Sample ID: MW-7-12314

**Lab Sample ID: SXL0021-08**

**Date Collected: 12/03/14 11:52**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:09 | 1.00 |
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:09 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:09 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:09 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:09 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:09 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *71.2 - 143* | *12/04/14 11:50* | *12/04/14 17:09* | *1.00* |
| *1,2-dichloroethane-d4* | *106* | | *70 - 140* | *12/04/14 11:50* | *12/04/14 17:09* | *1.00* |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Client Sample ID: MW-7-12314

**Lab Sample ID: SXL0021-08**

**Date Collected: 12/03/14 11:52**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8* | *96.6* | | *74.1 - 135* | *12/04/14 11:50* | *12/04/14 17:09* | *1.00* |
| *4-bromofluorobenzene* | *101* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 17:09* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:09 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *101* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 17:09* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 0.231 | | mg/L | | 12/04/14 10:21 | 12/04/14 20:39 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 0.385 | | mg/L | | 12/04/14 10:21 | 12/04/14 20:39 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *88.5* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 20:39* | *1.00* |
| *n-Triacontane-d62* | *88.8* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 20:39* | *1.00* |

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **0.0093** | | 0.0010 | | mg/L | | 12/09/14 00:00 | 12/09/14 20:06 | 1 |

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 14:50 | 1.00 |

## Client Sample ID: MW-2-12314

**Lab Sample ID: SXL0021-09**

**Date Collected: 12/03/14 12:34**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:31 | 1.00 |
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:31 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:31 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:31 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:31 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:31 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *71.2 - 143* | *12/04/14 11:50* | *12/04/14 17:31* | *1.00* |
| *1,2-dichloroethane-d4* | *107* | | *70 - 140* | *12/04/14 11:50* | *12/04/14 17:31* | *1.00* |
| *Toluene-d8* | *97.7* | | *74.1 - 135* | *12/04/14 11:50* | *12/04/14 17:31* | *1.00* |
| *4-bromofluorobenzene* | *99.3* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 17:31* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:31 | 1.00 |

## Client Sample ID: MW-2-12314 — Lab Sample ID: SXL0021-09

**Date Collected: 12/03/14 12:34**
**Date Received: 12/04/14 09:15**
**Matrix: Water**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *99.3* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 17:31* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 0.232 | | mg/L | | 12/04/14 10:21 | 12/04/14 21:26 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 0.386 | | mg/L | | 12/04/14 10:21 | 12/04/14 21:26 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *91.5* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 21:26* | *1.00* |
| *n-Triacontane-d62* | *83.1* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 21:26* | *1.00* |

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **0.0071** | | 0.0010 | | mg/L | | 12/09/14 00:00 | 12/09/14 20:11 | 1 |

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 14:53 | 1.00 |

## Client Sample ID: B-1-12314 — Lab Sample ID: SXL0021-10

**Date Collected: 12/03/14 13:09**
**Date Received: 12/04/14 09:15**
**Matrix: Water**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:53 | 1.00 |
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:53 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:53 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:53 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:53 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:53 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *101* | | *71.2 - 143* | *12/04/14 11:50* | *12/04/14 17:53* | *1.00* |
| *1,2-dichloroethane-d4* | *107* | | *70 - 140* | *12/04/14 11:50* | *12/04/14 17:53* | *1.00* |
| *Toluene-d8* | *97.0* | | *74.1 - 135* | *12/04/14 11:50* | *12/04/14 17:53* | *1.00* |
| *4-bromofluorobenzene* | *99.1* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 17:53* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 17:53 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *99.1* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 17:53* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Diesel Range Hydrocarbons** | **0.447** | | 0.232 | | mg/L | | 12/04/14 10:21 | 12/04/14 21:49 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 0.386 | | mg/L | | 12/04/14 10:21 | 12/04/14 21:49 | 1.00 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *99.1* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 21:49* | *1.00* |

## Client Sample ID: B-1-12314

**Lab Sample ID: SXL0021-10**

**Date Collected: 12/03/14 13:09**

**Matrix: Water**

**Date Received: 12/04/14 09:15**

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Triacontane-d62* | *93.4* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 21:49* | *1.00* |

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 0.010 | | mg/L | | 12/09/14 00:00 | 12/09/14 20:15 | 10 |

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 14:55 | 1.00 |

## Client Sample ID: MW-3-12314

**Lab Sample ID: SXL0021-11**

**Date Collected: 12/03/14 13:52**

**Matrix: Water**

**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:15 | 1.00 |
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:15 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:15 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:15 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:15 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:15 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *102* | | *71.2 - 143* | *12/04/14 11:50* | *12/04/14 18:15* | *1.00* |
| *1,2-dichloroethane-d4* | *108* | | *70 - 140* | *12/04/14 11:50* | *12/04/14 18:15* | *1.00* |
| *Toluene-d8* | *94.8* | | *74.1 - 135* | *12/04/14 11:50* | *12/04/14 18:15* | *1.00* |
| *4-bromofluorobenzene* | *102* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 18:15* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:15 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *102* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 18:15* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 0.229 | | mg/L | | 12/04/14 10:21 | 12/04/14 22:12 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 0.382 | | mg/L | | 12/04/14 10:21 | 12/04/14 22:12 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *75.3* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 22:12* | *1.00* |
| *n-Triacontane-d62* | *72.2* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 22:12* | *1.00* |

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **0.0022** | | 0.0010 | | mg/L | | 12/09/14 00:00 | 12/09/14 20:20 | 1 |

# Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Client Sample ID: MW-3-12314

**Lab Sample ID: SXL0021-11**

**Date Collected: 12/03/14 13:52**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 14:57 | 1.00 |

## Client Sample ID: MW-Dup-12314

**Lab Sample ID: SXL0021-12**

**Date Collected: 12/03/14 12:00**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

### Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:38 | 1.00 |
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:38 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:38 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:38 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:38 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:38 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *102* | | *71.2 - 143* | *12/04/14 11:50* | *12/04/14 18:38* | *1.00* |
| *1,2-dichloroethane-d4* | *106* | | *70 - 140* | *12/04/14 11:50* | *12/04/14 18:38* | *1.00* |
| *Toluene-d8* | *97.4* | | *74.1 - 135* | *12/04/14 11:50* | *12/04/14 18:38* | *1.00* |
| *4-bromofluorobenzene* | *102* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 18:38* | *1.00* |

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 18:38 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-bromofluorobenzene* | *102* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 18:38* | *1.00* |

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 0.231 | | mg/L | | 12/04/14 10:21 | 12/04/14 22:35 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 0.385 | | mg/L | | 12/04/14 10:21 | 12/04/14 22:35 | 1.00 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *88.3* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 22:35* | *1.00* |
| *n-Triacontane-d62* | *84.8* | | *50 - 150* | *12/04/14 10:21* | *12/04/14 22:35* | *1.00* |

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **0.0020** | | 0.0010 | | mg/L | | 12/09/14 00:00 | 12/09/14 22:41 | 1 |

### Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 15:00 | 1.00 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

**Lab Sample ID: 14L0028-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14L0028** — **Prep Batch: 14L0028_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |
| Benzene | ND | | 0.200 | | ug/L | | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |
| Toluene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |
| Ethylbenzene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |
| m,p-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |
| o-Xylene | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |
| Naphthalene | ND | | 2.00 | | ug/L | | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |
| 1,2-Dichloroethane (EDC) | ND | | 0.500 | | ug/L | | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |
| 1,2-Dibromoethane | ND | | 1.00 | | ug/L | | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |
| Xylenes (total) | ND | | 1.50 | | ug/L | | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |
| Hexane | ND | | 1.00 | | ug/L | | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |

| *Surrogate* | *Blank %Recovery* | *Blank Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane* | *99.6* | | *71.2 - 143* | *12/04/14 11:50* | *12/04/14 13:23* | *1.00* |
| *1,2-dichloroethane-d4* | *100* | | *70 - 140* | *12/04/14 11:50* | *12/04/14 13:23* | *1.00* |
| *Toluene-d8* | *99.7* | | *74.1 - 135* | *12/04/14 11:50* | *12/04/14 13:23* | *1.00* |
| *4-bromofluorobenzene* | *102* | | *68.7 - 141* | *12/04/14 11:50* | *12/04/14 13:23* | *1.00* |

**Lab Sample ID: 14L0028-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14L0028** — **Prep Batch: 14L0028_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | 10.0 | 11.0 | | ug/L | | 110 | 80 - 128 |
| Benzene | 10.0 | 10.8 | | ug/L | | 108 | 80 - 122 |
| Toluene | 10.0 | 10.6 | | ug/L | | 106 | 80 - 123 |
| Ethylbenzene | 10.0 | 10.4 | | ug/L | | 104 | 80 - 120 |
| m,p-Xylene | 10.0 | 10.6 | | ug/L | | 106 | 80 - 120 |
| o-Xylene | 10.0 | 10.7 | | ug/L | | 107 | 80 - 120 |
| Naphthalene | 10.0 | 9.38 | | ug/L | | 93.8 | 62.8 - 132 |
| Xylenes (total) | 20.0 | 21.2 | | ug/L | | 106 | 80 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Dibromofluoromethane* | *100* | | *71.2 - 143* |
| *1,2-dichloroethane-d4* | *106* | | *70 - 140* |
| *Toluene-d8* | *97.3* | | *74.1 - 135* |
| *4-bromofluorobenzene* | *99.6* | | *68.7 - 141* |

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

**Lab Sample ID: 14L0028-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14L0028** — **Prep Batch: 14L0028_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | ND | | 100 | | ug/L | | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |

## Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx (Continued)

**Lab Sample ID: 14L0028-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14L0028** — **Prep Batch: 14L0028_P**

| Surrogate | Blank %Recovery | Blank Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-bromofluorobenzene | 102 | | 68.7 - 141 | 12/04/14 11:50 | 12/04/14 13:23 | 1.00 |

**Lab Sample ID: 14L0028-BS2** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14L0028** — **Prep Batch: 14L0028_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | 1000 | 893 | | ug/L | | 89.3 | 80 - 120 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 4-bromofluorobenzene | 94.2 | | 68.7 - 141 |

## Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup

**Lab Sample ID: 14L0026-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14L0026** — **Prep Batch: 14L0026_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | ND | | 0.240 | | mg/L | | 12/04/14 10:21 | 12/04/14 17:11 | 1.00 |
| Heavy Oil Range Hydrocarbons | ND | | 0.400 | | mg/L | | 12/04/14 10:21 | 12/04/14 17:11 | 1.00 |

| Surrogate | Blank %Recovery | Blank Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 86.0 | | 50 - 150 | 12/04/14 10:21 | 12/04/14 17:11 | 1.00 |
| n-Triacontane-d62 | 96.6 | | 50 - 150 | 12/04/14 10:21 | 12/04/14 17:11 | 1.00 |

**Lab Sample ID: 14L0026-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14L0026** — **Prep Batch: 14L0026_P**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Diesel Range Hydrocarbons | 3.20 | 2.34 | | mg/L | | 73.2 | 50 - 150 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| o-Terphenyl | 96.4 | | 50 - 150 |
| n-Triacontane-d62 | 98.4 | | 50 - 150 |

## Method: 200.8 - Metals (ICP/MS)

**Lab Sample ID: MB 250-32843/1-A** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 32883** — **Prep Batch: 32843**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 0.0010 | | mg/L | | 12/09/14 00:00 | 12/09/14 18:38 | 1 |

## Method: 200.8 - Metals (ICP/MS) (Continued)

**Lab Sample ID: LCS 250-32843/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 32883** — **Prep Batch: 32843**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | | | 0.100 | 0.101 | | mg/L | | 101 | 85 - 115 | | |

**Lab Sample ID: 250-23181-7 MS** — **Client Sample ID: SXL0021-07**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 32883** — **Prep Batch: 32843**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0065 | | 0.100 | 0.111 | | mg/L | | 104 | 70 - 130 | | |

**Lab Sample ID: 250-23222-A-2-B DU** — **Client Sample ID: Duplicate**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 32883** — **Prep Batch: 32843**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | | ND | | mg/L | | | | NC | 20 |

## Method: EPA 245.1 - Total Metals by EPA 200 Series Methods

**Lab Sample ID: 14L0087-BLK1** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14L0087** — **Prep Batch: 14L0087_P**

| Analyte | Blank Result | Blank Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.200 | | ug/L | | 12/16/14 08:53 | 12/16/14 14:14 | 1.00 |

**Lab Sample ID: 14L0087-BS1** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14L0087** — **Prep Batch: 14L0087_P**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 2.00 | 2.07 | | ug/L | | 104 | 85 - 115 | | |

**Lab Sample ID: 14L0087-MS1** — **Client Sample ID: Matrix Spike**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14L0087** — **Prep Batch: 14L0087_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | Matrix Spike Result | Matrix Spike Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 5.00 | 5.10 | | ug/L | | 102 | 70 - 130 | | |

**Lab Sample ID: 14L0087-MSD1** — **Client Sample ID: Matrix Spike Duplicate**
**Matrix: Water** — **Prep Type: Total**
**Analysis Batch: 14L0087** — **Prep Batch: 14L0087_P**

| Analyte | Sample Result | Sample Qualifier | Spike Added | trix Spike Dup Result | Matrix Spike Du Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 5.00 | 5.12 | | ug/L | | 102 | 70 - 130 | 0.489 | 18.2 |

# QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Method: EPA 245.1 - Total Metals by EPA 200 Series Methods (Continued)

**Lab Sample ID: 14L0087-DUP1**
**Matrix: Water**
**Analysis Batch: 14L0087**

**Client Sample ID: Duplicate**
**Prep Type: Total**
**Prep Batch: 14L0087_P**

| Analyte | Sample Result | Sample Qualifier | | Duplicate Result | Duplicate Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | | ND | | ug/L | | | | | 17.1 |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Client Sample ID: MW-5-12214 — Lab Sample ID: SXL0021-01

**Date Collected: 12/02/14 12:17** — **Matrix: Water**
**Date Received: 12/04/14 09:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14L0028 | 12/04/14 14:31 | MS | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14L0028 | 12/04/14 14:31 | MS | TAL SPK |
| Total | Prep | EPA 3510/600 Series | | 0.992 | 14L0026_P | 12/04/14 10:21 | NI | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14L0026 | 12/04/14 17:57 | NMI | TAL SPK |
| Total/NA | Prep | 200.8 | | | 32843 | 12/09/14 00:00 | TNL | TAL PRT |
| Total/NA | Analysis | 200.8 | | 1 | 32883 | 12/09/14 19:15 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14L0087_P | 12/16/14 08:53 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14L0087 | 12/16/14 14:30 | ZZZ | TAL SPK |

## Client Sample ID: MW-6-12214 — Lab Sample ID: SXL0021-02

**Date Collected: 12/02/14 13:27** — **Matrix: Water**
**Date Received: 12/04/14 09:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14L0028 | 12/04/14 14:53 | MS | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14L0028 | 12/04/14 14:53 | MS | TAL SPK |
| Total | Prep | EPA 3510/600 Series | | 0.989 | 14L0026_P | 12/04/14 10:21 | NI | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14L0026 | 12/04/14 18:20 | NMI | TAL SPK |
| Total/NA | Prep | 200.8 | | | 32843 | 12/09/14 00:00 | TNL | TAL PRT |
| Total/NA | Analysis | 200.8 | | 1 | 32883 | 12/09/14 19:20 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14L0087_P | 12/16/14 08:53 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14L0087 | 12/16/14 14:32 | ZZZ | TAL SPK |

## Client Sample ID: MW-4-12214 — Lab Sample ID: SXL0021-03

**Date Collected: 12/02/14 14:17** — **Matrix: Water**
**Date Received: 12/04/14 09:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14L0028 | 12/04/14 15:16 | MS | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14L0028 | 12/04/14 15:16 | MS | TAL SPK |
| Total | Prep | EPA 3510/600 Series | | 0.966 | 14L0026_P | 12/04/14 10:21 | NI | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14L0026 | 12/04/14 18:44 | NMI | TAL SPK |
| Total/NA | Prep | 200.8 | | | 32843 | 12/09/14 00:00 | TNL | TAL PRT |
| Total/NA | Analysis | 200.8 | | 1 | 32883 | 12/09/14 19:39 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14L0087_P | 12/16/14 08:53 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14L0087 | 12/16/14 14:39 | ZZZ | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Client Sample ID: MW-1-12214 — Lab Sample ID: SXL0021-04

**Date Collected: 12/02/14 15:20** — **Matrix: Water**
**Date Received: 12/04/14 09:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14L0028 | 12/04/14 15:38 | MS | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14L0028 | 12/04/14 15:38 | MS | TAL SPK |
| Total | Prep | EPA 3510/600 Series | | 0.976 | 14L0026_P | 12/04/14 10:21 | NI | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14L0026 | 12/04/14 19:07 | NMI | TAL SPK |
| Total/NA | Prep | 200.8 | | | 32843 | 12/09/14 00:00 | TNL | TAL PRT |
| Total/NA | Analysis | 200.8 | | 1 | 32883 | 12/09/14 19:44 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14L0087_P | 12/16/14 08:53 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14L0087 | 12/16/14 14:41 | ZZZ | TAL SPK |

## Client Sample ID: OW-1-12314 — Lab Sample ID: SXL0021-05

**Date Collected: 12/03/14 08:31** — **Matrix: Water**
**Date Received: 12/04/14 09:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14L0028 | 12/04/14 16:01 | MS | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14L0028 | 12/04/14 16:01 | MS | TAL SPK |
| Total | Prep | EPA 3510/600 Series | | 0.962 | 14L0026_P | 12/04/14 10:21 | NI | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14L0026 | 12/04/14 19:30 | NMI | TAL SPK |
| Total/NA | Prep | 200.8 | | | 32843 | 12/09/14 00:00 | TNL | TAL PRT |
| Total/NA | Analysis | 200.8 | | 1 | 32883 | 12/09/14 19:48 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14L0087_P | 12/16/14 08:53 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14L0087 | 12/16/14 14:44 | ZZZ | TAL SPK |

## Client Sample ID: MW-9-12314 — Lab Sample ID: SXL0021-06

**Date Collected: 12/03/14 09:27** — **Matrix: Water**
**Date Received: 12/04/14 09:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14L0028 | 12/04/14 16:23 | MS | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14L0028 | 12/04/14 16:23 | MS | TAL SPK |
| Total | Prep | EPA 3510/600 Series | | 0.969 | 14L0026_P | 12/04/14 10:21 | NI | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14L0026 | 12/04/14 19:53 | NMI | TAL SPK |
| Total/NA | Prep | 200.8 | | | 32843 | 12/09/14 00:00 | TNL | TAL PRT |
| Total/NA | Analysis | 200.8 | | 1 | 32883 | 12/09/14 19:53 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14L0087_P | 12/16/14 08:53 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14L0087 | 12/16/14 14:46 | ZZZ | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Client Sample ID: MW-8-12314 — Lab Sample ID: SXL0021-07

**Date Collected: 12/03/14 10:09** — **Matrix: Water**
**Date Received: 12/04/14 09:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14L0028 | 12/04/14 16:46 | MS | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14L0028 | 12/04/14 16:46 | MS | TAL SPK |
| Total | Prep | EPA 3510/600 Series | | 0.993 | 14L0026_P | 12/04/14 10:21 | NI | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14L0026 | 12/04/14 20:16 | NMI | TAL SPK |
| Total/NA | Prep | 200.8 | | | 32843 | 12/09/14 00:00 | TNL | TAL PRT |
| Total/NA | Analysis | 200.8 | | 1 | 32883 | 12/09/14 19:57 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14L0087_P | 12/16/14 08:53 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14L0087 | 12/16/14 14:48 | ZZZ | TAL SPK |

## Client Sample ID: MW-7-12314 — Lab Sample ID: SXL0021-08

**Date Collected: 12/03/14 11:52** — **Matrix: Water**
**Date Received: 12/04/14 09:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14L0028 | 12/04/14 17:09 | MS | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14L0028 | 12/04/14 17:09 | MS | TAL SPK |
| Total | Prep | EPA 3510/600 Series | | 0.963 | 14L0026_P | 12/04/14 10:21 | NI | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14L0026 | 12/04/14 20:39 | NMI | TAL SPK |
| Total/NA | Prep | 200.8 | | | 32843 | 12/09/14 00:00 | TNL | TAL PRT |
| Total/NA | Analysis | 200.8 | | 1 | 32883 | 12/09/14 20:06 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14L0087_P | 12/16/14 08:53 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14L0087 | 12/16/14 14:50 | ZZZ | TAL SPK |

## Client Sample ID: MW-2-12314 — Lab Sample ID: SXL0021-09

**Date Collected: 12/03/14 12:34** — **Matrix: Water**
**Date Received: 12/04/14 09:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14L0028 | 12/04/14 17:31 | MS | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14L0028 | 12/04/14 17:31 | MS | TAL SPK |
| Total | Prep | EPA 3510/600 Series | | 0.965 | 14L0026_P | 12/04/14 10:21 | NI | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14L0026 | 12/04/14 21:26 | NMI | TAL SPK |
| Total/NA | Prep | 200.8 | | | 32843 | 12/09/14 00:00 | TNL | TAL PRT |
| Total/NA | Analysis | 200.8 | | 1 | 32883 | 12/09/14 20:11 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14L0087_P | 12/16/14 08:53 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14L0087 | 12/16/14 14:53 | ZZZ | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Client Sample ID: B-1-12314 — Lab Sample ID: SXL0021-10

**Date Collected: 12/03/14 13:09**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14L0028 | 12/04/14 17:53 | MS | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14L0028 | 12/04/14 17:53 | MS | TAL SPK |
| Total | Prep | EPA 3510/600 Series | | 0.966 | 14L0026_P | 12/04/14 10:21 | NI | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14L0026 | 12/04/14 21:49 | NMI | TAL SPK |
| Total/NA | Prep | 200.8 | | | 32843 | 12/09/14 00:00 | TNL | TAL PRT |
| Total/NA | Analysis | 200.8 | | 10 | 32883 | 12/09/14 20:15 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14L0087_P | 12/16/14 08:53 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14L0087 | 12/16/14 14:55 | ZZZ | TAL SPK |

## Client Sample ID: MW-3-12314 — Lab Sample ID: SXL0021-11

**Date Collected: 12/03/14 13:52**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14L0028 | 12/04/14 18:15 | MS | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14L0028 | 12/04/14 18:15 | MS | TAL SPK |
| Total | Prep | EPA 3510/600 Series | | 0.955 | 14L0026_P | 12/04/14 10:21 | NI | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14L0026 | 12/04/14 22:12 | NMI | TAL SPK |
| Total/NA | Prep | 200.8 | | | 32843 | 12/09/14 00:00 | TNL | TAL PRT |
| Total/NA | Analysis | 200.8 | | 1 | 32883 | 12/09/14 20:20 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14L0087_P | 12/16/14 08:53 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14L0087 | 12/16/14 14:57 | ZZZ | TAL SPK |

## Client Sample ID: MW-Dup-12314 — Lab Sample ID: SXL0021-12

**Date Collected: 12/03/14 12:00**
**Matrix: Water**
**Date Received: 12/04/14 09:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | EPA 8260C | | 1.00 | 14L0028 | 12/04/14 18:38 | MS | TAL SPK |
| Total | Prep | GC/MS Volatiles | | 1.00 | 14L0028_P | 12/04/14 11:50 | MS | TAL SPK |
| Total | Analysis | NWTPH-Gx | | 1.00 | 14L0028 | 12/04/14 18:38 | MS | TAL SPK |
| Total | Prep | EPA 3510/600 Series | | 0.963 | 14L0026_P | 12/04/14 10:21 | NI | TAL SPK |
| Total | Analysis | NWTPH-Dx | | 1.00 | 14L0026 | 12/04/14 22:35 | NMI | TAL SPK |
| Total/NA | Prep | 200.8 | | | 32843 | 12/09/14 00:00 | TNL | TAL PRT |
| Total/NA | Analysis | 200.8 | | 1 | 32883 | 12/09/14 22:41 | TNL | TAL PRT |
| Total | Prep | EPA 200 Series | | 1.00 | 14L0087_P | 12/16/14 08:53 | JSP | TAL SPK |
| Total | Analysis | EPA 245.1 | | 1.00 | 14L0087 | 12/16/14 15:00 | ZZZ | TAL SPK |

# Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

**Laboratory References:**

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

## Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska (UST) | State Program | 10 | UST-071 | 10-31-15 |
| Washington | State Program | 10 | C569 | 01-06-15 |

## Laboratory: TestAmerica Portland

The certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Washington | State Program | 10 | C586 | 06-23-15 |

# Method Summary

Client: Geo Engineers - Spokane
Project/Site: 18593-001-04

TestAmerica Job ID: SXL0021

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 8260C | Volatile Organic Compounds by EPA Method 8260C | | TAL SPK |
| NWTPH-Gx | Gasoline Hydrocarbons by NWTPH-Gx | | TAL SPK |
| NWTPH-Dx | Semivolatile Petroleum Products by NWTPH-Dx w/Silica Gel Cleanup | | TAL SPK |
| 200.8 | Metals (ICP/MS) | EPA | TAL PRT |
| EPA 245.1 | Total Metals by EPA 200 Series Methods | | TAL SPK |

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 [X]
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210 [ ]
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210 [ ]

# CHAIN OF CUSTODY REPORT

Work Order #: SXL0021

CLIENT: GeoEngineers

REPORT TO: Dave Lauder dlauder@geoengineers.com
ADDRESS: 523 E Second Ave
Spokane WA 99202
PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO:

P.O. NUMBER:

PROJECT NAME: Former Cashmere mill site
PROJECT NUMBER: 18593-001-04
SAMPLED BY: JWR

**TURNAROUND REQUEST** in Business Days *

Organic & Inorganic Analyses: ~~10~~ STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: ~~5~~ STD. | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NWTPH-Gx | NWTPH-Dx (w/silica gel) | BTEX | arsenic | mercury | | | | | | | | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MW-5-12214 | 12/2/14 1217 | X | X | X | X | X | | | | | | | | W | 4 | | |
| 2 | MW-6-12214 | 1327 | | | | | | | | | | | | | | | | |
| 3 | MW-4-12214 | 1417 | | | | | | | | | | | | | | | | |
| 4 | MW-1-12214 | 1520 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| RELEASED BY: JR | | DATE: 12-4-14 | RECEIVED BY: Cat Stapleton | | DATE: 12-4-14 |
| PRINT NAME: Justin Rice | FIRM: Geo | TIME: 0915 | PRINT NAME: | FIRM: TestAmerica | TIME: 915 |
| RELEASED BY: | | DATE: | RECEIVED BY: | | DATE: |
| PRINT NAME: | FIRM: | TIME: | PRINT NAME: | FIRM: | TIME: |

ADDITIONAL REMARKS: GRPH, DRPH/ORPH (with silica gel cleanup), BTEX, arsenic, mercury

TEMP: 3.4

PAGE 1 OF 2

TAL-1000 (0714)

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290 [X]
9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210 [ ]
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210 [ ]

## CHAIN OF CUSTODY REPORT

Work Order #: XL0021

CLIENT: GeoEngineers

REPORT TO: Dave Lauder dlauder@geoengineers.com

ADDRESS: 523 E Second Ave
Spokane WA 99202

PHONE: 509-363-3125 FAX: 509-363-3126

INVOICE TO:

P.O. NUMBER:

PROJECT NAME: Former Cashmere Mill Site

PROJECT NUMBER: 18593-001-04

SAMPLED BY: JWR

**TURNAROUND REQUEST** in Business Days *

Organic & Inorganic Analyses: ~~10~~ STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: ~~5~~ STD. | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

| | CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | NWTPH Gx | NWTPH Dx | BTEX | Acetone | Mercury | | | | | | | | | MATRIX (W, S, O) | # OF CONT. | LOCATION/ COMMENTS | TA WO ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | OW-1-12314 | 12/3/14 0831 | X | X | X | X | X | | | | | | | | | W | 4 | | |
| 2 | MW-9-12314 | 0927 | | | | | | | | | | | | | | | | | |
| 3 | MW-8-12314 | 1009 | | | | | | | | | | | | | | | | | |
| 4 | MW-7-12314 | 1152 | | | | | | | | | | | | | | | | | |
| 5 | MW-2-12314 | 1234 | | | | | | | | | | | | | | | | | |
| 6 | B-1-12314 | 1309 | | | | | | | | | | | | | | | | | |
| 7 | MW-3-12314 | 1352 | | | | | | | | | | | | | | | | | |
| 8 | MW-DUP-12314 | 1200 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| RELEASED BY: | | DATE: 12-4-14 | RECEIVED BY: Cat Stapleton | | DATE: 12-4-14 |
| PRINT NAME: Justin Rice | FIRM: Geo | TIME: 0915 | PRINT NAME: | FIRM: TestAmerica | TIME: 9:15 |
| RELEASED BY: | | DATE: | RECEIVED BY: | | DATE: |
| PRINT NAME: | FIRM: | TIME: | PRINT NAME: | FIRM: | TIME: |

ADDITIONAL REMARKS:

TEMP: 3.4

PAGE 2 OF 2

TAL-1000 (0714)

## TestAmerica Spokane
## Sample Receipt Form

| Work Order #: SXL0021 | Client: GeoEngineers | Project: Former Cashmere |
|---|---|---|
| Date/Time Received: 12-4-14 9:15 | By: CS | |

Samples Delivered By: ☐Shipping Service ☐Courier ☒Client ☐Other:

List Air Bill Number(s) or Attach a photocopy of the Air Bill:

| Receipt Phase | Yes | No | NA | Comments |
|---|---|---|---|---|
| Were samples received in a cooler: | X | | | |
| Custody Seals are present and intact: | | | X | |
| Are CoC documents present: | X | | | |
| Necessary signatures: | X | | | |

Thermal Preservation Type: ☐Blue Ice ☐Gel Ice ☒Real Ice ☐Dry Ice ☐None ☐Other:

Temperature: 3.4 °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6

Temperature out of range: ☐Not enough ice ☐Ice melted ☐w/in 4hrs of collection ☐NA ☐Other:

| Log-In Phase Date/Time: 12-4-14 9:50 By: CS | Yes | No | NA | Comments |
|---|---|---|---|---|
| Are sample labels affixed and completed for each container | X | | | |
| Samples containers were received intact: | X | | | |
| Do sample IDs match the CoC | X | | | |
| Appropriate sample containers were received for tests requested | X | | | |
| Are sample volumes adequate for tests requested | X | | | |
| Appropriate preservatives were used for the tests requested | X | | | |
| pH of inorganic samples checked and is within method specification | X | | | |
| Are VOC samples free of bubbles >6mm (1/4" diameter) | X | | | |
| Are dissolved parameters field filtered | | | X | |
| Do any samples need to be filtered or preserved by the lab | | | X | |
| Does this project require quick turnaround analysis | | | X | |
| Are there any short hold time tests (see chart below) | | | X | |
| Are any samples within 2 days of or past expiration | | X | | |
| Was the CoC scanned | X | | | |
| Were there Non-conformance issues at login | | X | | |
| If yes, was a CAR generated #_____ | | | X | |

| 24 hours or less | 48 hours | 7 days |
|---|---|---|
| Coliform Bacteria | BOD, Color, MBAS | TDS, TSS, VDS, FDS |
| Chromium +6 | Nitrate/Nitrite | Sulfide |
| | Orthophosphate | Aqueous Organic Prep |

Form No. SP-FORM-SPL-002 12 December 2012

# APPENDIX C
## Disposal Documentation
## (On attached CD)

## APPENDIX C
## DISPOSAL DOCUMENTATION
## (ON ATTACHED CD)

Daily load tickets from Waste Management Greater Wenatchee Regional Landfill are provided in this appendix. Disposal documents for large concrete debris also are included in this appendix.

Have we delivered World Class Client Service?

Please let us know by visiting **www.geoengineers.com/feedback**.

GeoEngineers