Data Gap Investigation Report

Frenchies' Fill-N-Food
Moxee, Washington

for
Washington State Department of Ecology

April 3, 2014

GeoEngineers
Earth Science + Technology

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File No. 0504-075-01

April 3, 2014

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1.0 INTRODUCTION

This report describes data gap investigation and groundwater monitoring activities conducted at the Frenchies' Fill-N-Food site located at 106 East Moxee Avenue in Moxee, Washington (herein referred to as "site"). The site is located approximately as shown in the Vicinity Map, Figure 1.

Environmental activities at the site currently are managed by the Washington State Department of Ecology (Ecology). This report describes field activities and observations with chemical analytical results from soil and groundwater samples collected at the site during November and December 2013.

2.0 SITE DESCRIPTION AND BACKGROUND

The site is located within the south central portion of downtown Moxee, Washington. As defined by the Model Toxics Control Act (MTCA), the site is defined by those areas where hazardous substance(s) have been encountered. This condition extends to two parcels (Parcel Nos. 42011 and 42542) bounded by East Moxee Avenue on the north, North Spokane Street on the east and South Rivard Street on the west. Two adjacent parcels to the south (Parcel Nos. 42543 and 42544) are occupied by a City Park. Two existing buildings are located within the site. The former Frenchies' Fill-N-Food building is situated within Parcel No. 42011 and currently is occupied by a restaurant and hair salon. A second commercial building (herein designated the west building) is located within Parcel No. 42542 and currently is occupied by a restaurant/arcade. The remainder of the property is paved with asphaltic concrete and is relatively level. The location of the project and the general site layout is shown in the Site Plan, Figure 2.

The east portion of the project area (Parcel No. 42011) formerly operated as a gasoline station and auto service center until about 1994. During January 1994, Cayuse Environmental (Cayuse) and their excavation contractor removed three 4,000-gallon and one 6,000-gallon gasoline underground storage tanks (USTs) from the site. The associated UST removal report (Cayuse, 1994) indicated the four USTs were located south of the "store" building (assumed to be the former Frenchies' Fill-N-Food building) and the associated fuel lines ran from the tanks to fuel dispensers located north of the store. The four USTs removed in 1994 reportedly were installed during the mid-1980s and replaced four previously-installed gasoline USTs. Precise UST and dispenser locations were not provided in the Cayuse report. The Cayuse report indicated approximately 1,800 cubic yards of petroleum-impacted soil were excavated during UST removal activities. Soil samples contained concentrations of gasoline-range petroleum hydrocarbons (GRPH) greater than MTCA Method A cleanup criteria. Groundwater was encountered about 10 feet below ground surface (depths in this report are referenced to ground surface unless otherwise noted) during excavation activities. Laboratory results indicated a grab sample collected from groundwater accumulated in the excavation contained GRPH concentrations greater than MTCA Method A cleanup criteria.

GeoEngineers conducted multiple phases of a soil assessment for Ecology at the site in February and September 2012 (GeoEngineers, 2012; GeoEngineers, 2013A). Soil assessment results indicate vadose zone soils (as well as soil within the interpreted zone of groundwater table

fluctuation) generally located north of the former Frenchies' Fill-N-Food building are contaminated with GRPH and volatile organic compounds (VOCs). Specifically, soil samples from borings DP-2 through DP-5, DP-8 through DP-10 and MW-2 and MW-3 contained concentrations of GRPH and/or VOCs greater than MTCA Method A cleanup criteria. Groundwater was encountered at depths between about 10 feet to 18½ feet during the soil assessment activities. (Depths in this report are referenced to ground surface unless otherwise noted.) Groundwater samples obtained from MW-2 and MW-3 historically have contained concentrations of GRPH and/or VOCs greater than MTCA Method A cleanup criteria. Groundwater was encountered at depths between about 11½ feet to 16½ feet during prior groundwater monitoring activities. Boring and monitoring well locations associated with GeoEngineers' February and September 2012 site assessments are presented in Figure 2.

3.0 SCOPE OF SERVICES

GeoEngineers prepared a Work Plan, dated November 6, 2013 (GeoEngineers, 2013B) to guide the data gap investigation described herein. The scope of services performed by GeoEngineers during implementation of the Work Plan included the following:

3.1. Direct-Push Borings

- Notified the Call-Before-You-Dig utility notification service before beginning drilling activities.
- Subcontracted Advanced Underground Utility Locating, Inc. (AUUL) to clear explorations located on private property before drilling.
- Subcontracted Environmental West Explorations, Inc. (Environmental West) to drill 10 direct-push soil borings at the site, designated DP-13 through DP-22, at the approximate locations specified in Figure 2.
- Collected soil samples continuously during direct-push drilling. Select sub-samples were field-screened using visual observations, water sheen, and headspace vapor measurements with a photoionization detector (PID) to assess possible presence of petroleum-related contaminants.
- Backfilled exploratory boreholes with bentonite and repaired the surface with cold patch asphalt as needed.
- Collected and submitted groundwater samples from each direct-push boring to TestAmerica Laboratories, Inc. (TestAmerica) of Spokane, Washington.
- Submitted 10 soil and 10 groundwater samples to TestAmerica for the following analyses: GRPH using Northwest Method NWTPH-Gx; benzene, toluene, ethylbenzene and total xylenes (BTEX), 1,2–dichloroethane (EDC) and n-hexane using Environmental Protection Agency (EPA) Method 8260B; and naphthalenes using EPA Method 8270D. The soil samples additionally were analyzed for lead using EPA Method 6010C.

3.2. Monitoring and Remediation Well Installation

- Subcontracted Environmental West to drill and construct a groundwater monitoring well (MW-5) near the downgradient limits of the petroleum hydrocarbon plume.

- Subcontracted Environmental West to drill and construct one pilot soil vapor extraction well (SVE-1) and one pilot air sparge well (AS-1) within the contamination zone.
- Developed the monitoring and air sparge wells using surging and pumping.
- Submitted one soil sample from each boring to TestAmerica for chemical analysis of: GRPH using Northwest Method NWTPH-Gx; BTEX, EDC, and n-hexane using EPA Method 8260; naphthalenes using EPA Method 8270D; and lead using EPA Method 6010.

3.3. Groundwater Monitoring

- Conducted a groundwater sampling event on December 19, 2013 during which the following tasks were performed:
    - Measured depth to groundwater in each of the five project monitoring wells (MW-1 through MW-5).
    - Collected groundwater samples from each well using low-flow/low-stress sampling techniques. One duplicate sample also was collected from monitoring well MW-2. During well purging, water quality parameters (pH, conductivity, temperature, dissolved oxygen and reduction-oxidation potential) were recorded.
    - Submitted groundwater samples to Test America for chemical analysis of: GRPH using Northwest Method NWTPH-Gx; BTEX, EDC, and n-hexane using EPA Method 8260B; lead using EPA Method 6010C; and naphthalenes using EPA Method 8270D. Additionally, samples were analyzed for natural attenuation parameters including nitrate, soluble manganese (Mn^{+2}), sulfate (SO_4), methane (CH_4) and alkalinity. Soluble ferrous iron (Fe^{+2}), which has a 15-minute hold time, was analyzed in the field using a Hach IR-18C color disc test kit and the 1,10 phenanthroline testing method.
    - Compared laboratory analytical results with applicable project cleanup criteria.
    - Calculated groundwater elevation within site monitoring wells.
    - Estimated groundwater flow direction and the range in hydraulic gradient across the site.

3.4. Investigation-Derived Waste

- Investigation-derived waste (IDW) generated during the above tasks were drummed, labeled, and stored on-site at a location requested by the property owner pending results of analytical testing.

3.5. Vapor Intrusion

- Preliminarily evaluated the potential for vapor intrusion (VI) into the former Frenchies' Fill-N-Food building and the building directly west of the Frenchies' property on Tax Parcel 42542 based on Ecology's draft VI guidance document.

4.0 FIELD ACTIVITIES

4.1. General

Under subcontract to GeoEngineers, the following activities were performed:

- AUUL conducted private utility locates of planned project direct-push boring and monitoring well locations on November 8, 2014 and December 10, 2013, respectively.
- Environmental West advanced 10 direct-push borings (DP-13 through DP-22) to depths of about 20 feet using a truck-mounted Geoprobe® drilling rig on November 15 through 16, 2013.
- Environmental West drilled and constructed a groundwater monitoring well (MW-5) to a depth of about 20 feet, a soil vapor extraction well (SVE-1) to a depth of about 12 feet, and an air sparge injection well (AS-1) to a depth of about 25 feet using a hollow stem auger drilling rig on December 10 and 11, 2013.

The approximate locations of these drilling locations are presented in Figure 2. Boring and well construction logs are provided in Appendix A.

4.2. Subsurface Conditions

Borings DP-13, DP-15 through DP-20 and DP-22 were drilled through asphalt and, in places, an asphalt base gravel layer generally 1 foot or less in thickness. The remainder of the explorations were drilled through unpaved portions of the site.

Observed soil conditions below imported surficial material generally are fine-grained and consistent with those described by GeoEngineers (2012 and 2013A). Brown silty fine sand and/or silt with variable sand content generally were observed below surficial material to the bottom of each of the borings. Observed heterogeneities included the following:

- Trace gravel was encountered in direct-push borings DP-20 through DP-22 to depths ranging between 3 to 10 feet.
- Well-graded gravel was encountered in MW-5 from the ground surface to about 5 feet.
- A thin (estimated about 6 inches) gravel layer was encountered in SVE-1 at about 5 feet.

Saturated soil conditions were encountered in borings DP-13 through DP-22, MW-5, SVE-1 and AS-1 beginning at depths that ranged from about 9 to 12 feet. These depths generally are higher than observed depths to groundwater in project monitoring wells and likely reflect development of a capillary fringe.

4.3. Field Screening and Sampling

Soil samples from each direct-push and well boring were field-screened for the potential presence of petroleum contamination by visual examination, headspace vapor monitoring with a PID, and water-sheen testing. Procedures for field-screening and sampling are provided in Appendix A. Headspace vapors were not detected above 1 part per million (ppm) and petroleum sheens were not observed except as described below:

- DP-14: Headspace vapors were measured at concentrations ranging between 9 to 245 ppm at depths between 14 to 17 feet.
- DP-16: Headspace vapors were measured at concentrations ranging between 46 to 1,440 ppm at depths between 6 to 11 feet. A slight sheen was observed at about 6 to 7 feet.

- DP-18: Headspace vapors were measured at concentrations ranging between 15 to 47 ppm at depths between 10 to 14 feet.
- DP-22: Headspace vapors were measured at concentrations ranging between 7 to 79 ppm at depths between 10 to 16 feet.
- AS-1: Headspace vapors were measured at concentrations ranging between 12 to 558 ppm at depths between 9 to 22 feet. A moderate sheen was observed at 9 feet and slight sheens were observed at 11 and 16 feet.
- SVE-1: Headspace vapors were measured at concentrations ranging between 80 to 868 ppm at depths between 6 to 13 feet.

4.4. Well Installation

Three wells, monitoring well MW-5, air sparge well AS-1 and soil vapor extraction well SVE-1, were installed in the approximate locations presented in Figure 2. Well construction details for MW-5, AS-1, and SVE-1 are provided in Appendix A. The wells were installed using hollow-stem auger drilling techniques and constructed of 2-inch-diameter (AS-1 and MW-5) or 4-inch-diameter (SVE-1), Schedule 40 polyvinyl chloride (PVC) casing and 0.010-inch slot Schedule 40 PVC well screen surrounded by a sand filter pack and bentonite seal. MW-5 is screened from 7 to 22 feet, AS-1 is screened from 22 to 25 feet, and SVE-1 is screened from 4 to 12 feet.

The wells were completed with flush-mount surface monuments. Lockable compression caps were installed to seal the top of the PVC well casing. A concrete surface seal was constructed around each monument at the ground surface to divert surface water away from the well casing.

The relative elevations of the top of well casing at each new monitoring well location were surveyed on December 18, 2013 by GeoEngineers' personnel. Elevations in this report are referenced in the North American Vertical Datum of 1988 (NAVD88). The top of casing elevation at existing monitoring wells MW-1 or MW-2 were used as references. Survey results are presented in Summary of Groundwater Level Measurements, Table 1.

4.5. Groundwater Elevation Monitoring

Static depth to groundwater was measured in each project monitoring well on December 19, 2013 using an electronic water level indicator. Depths ranged from 11.98 feet (MW-4) to 12.83 feet (MW-1) below the top of well casing. Corresponding groundwater elevations ranged from about 1,040.08 feet in MW-5 to 1,041.08 feet in MW-1. Groundwater elevations increased in each existing well relative to the previous monitoring event conducted during August 2013. The average increase in groundwater elevation was about 0.32 feet.

Based on groundwater elevations measured on December 19, 2013, groundwater flow in the shallow unconfined aquifer beneath the property generally was toward the west. However, an apparent trough in the groundwater surface near MW-5 created converging flow towards that monitoring well location. Estimated hydraulic gradient ranged from about $5x10^{-3}$ feet per foot (about 30 feet per mile) in the east portion of the project area to $3x10^{-2}$ feet per foot (about 200 feet per mile) near MW-5.

Groundwater elevations in the shallow aquifer underlying the site are influenced by the rate of groundwater recharge (infiltration of precipitation and snowmelt) within associated upland areas to the north, east and south of the site and, potentially, the stage of adjacent surface water within the Yakima River and irrigation canals. Groundwater elevations, hydraulic gradient, and groundwater flow direction vary seasonally by a minimum of about 3½ feet.

Groundwater depths and associated elevations are included in Table 1. Groundwater Elevations and Cleanup Level Exceedances, Figure 3 presents groundwater elevations, approximate groundwater elevation contours and interpreted groundwater flow direction on December 19, 2013.

4.6. Groundwater Sampling

4.6.1. Borings

Groundwater samples were collected from direct-push soil borings DP-13 through DP-22 on November 15 and 16, 2013. Upon reaching total depth, each boring was fitted with a steel screen and purged for approximately 10 minutes before sample collection. DP-13 was purged for only 2 minutes because the well pumped dry; a sample was collected from boring DP-13 after recharge.

4.6.2. Monitoring Wells

Monitoring wells MW-1 through MW-5 were purged and sampled using standard low-flow sampling methodology on December 19, 2013. A duplicate sample was collected from MW-2. A portable bladder pump equipped with a disposable bladder and disposable tubing was used to purge and sample each well. Groundwater quality parameters generally were measured at approximate 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. Purge water generated during groundwater sampling was drummed, labeled and stored on the subject property pending profiling and disposal.

5.0 CHEMICAL ANALYTICAL RESULTS

5.1. Soil Samples

5.1.1. General

Soil samples from direct-push soil borings DP-13 through DP-22, monitoring well MW-5, SVE-1 and AS-1 were submitted for chemical analysis. Soil chemical analytical results are summarized and compared to MTCA Method A or B cleanup levels (Method A CULs and Method B CULs, respectively) in Summary of Chemical Analytical Results - Soil, Table 2. TestAmerica's laboratory reports are provided in Appendix B.

5.1.2. Results

Analytes either were not detected or detected at concentrations less than the respective cleanup levels in samples collected from DP-13 through DP-15, DP-17, DP-19 through DP-22 and MW-5. Analyte concentrations greater than respective cleanup levels in DP-16, DP-18, SVE-1, and AS-1 are summarized by the following:

- DP-16 (8 to 9 feet): GRPH were detected at a concentration of 7,770 milligrams per kilogram (mg/kg), which exceeds the Method A CUL of 100 mg/kg (when benzene is not present). Ethylbenzene and total xylenes were detected at concentrations of 16.8 and 109 mg/kg, respectively, which exceed Method A CULs (6 and 9 mg/kg, respectively). Naphthalenes (naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene) were detected at a total concentration of 35.07 mg/kg, which exceeds the Method A CUL (5 mg/kg).
- DP-18 (9 to 10 feet): GRPH were detected at 612 mg/kg, which exceeds the Method A CUL of 30 mg/kg (when benzene is present).
- SVE-1 (6 to 7 feet): GRPH were detected at 5,020 mg/kg, which exceeds the Method A CUL of 30 mg/kg (when benzene is present). Benzene, ethylbenzene and total xylenes were detected at concentrations (0.224, 18.6, and 93.3 mg/kg, respectively), which exceed Method A CULs (0.03, 6 and 9 mg/kg, respectively). Naphthalenes were detected at a total concentration of 11.42 mg/kg, which exceeds the Method A CUL (5 mg/kg).
- AS-1 (10-11.5 feet): GRPH were detected at 4,820 mg/kg, which exceeds the Method A CUL of 30 mg/kg (when benzene is present). Benzene and ethylbenzene were detected at concentrations (0.0891 and 14.7 mg/kg, respectively), which exceed the Method A CULs (0.03 and 6 mg/kg, respectively). Total xylenes were not detected above the laboratory reporting limit of 26.7 mg/kg. However, m,p-xylene was detected at a concentration of 15.5 mg/kg, which exceeds the Method A CUL for total xylenes (9 mg/kg).

5.2. Groundwater Chemical Analytical Results

5.2.1. General

Groundwater samples from direct-push soil borings DP-13 through DP-22 and monitoring wells MW-1 through MW-5 were submitted for chemical analysis. Analytical results are tabulated and compared to Method A or B CULs in Summary of Chemical Analytical Results – Groundwater Samples from Soil Borings, Table 3 and Summary of Chemical Analytical Results – Groundwater Samples from Monitoring Wells, Table 4.

TestAmerica's laboratory reports are provided in Appendix B.

5.2.2. Petroleum-Based Compounds

Petroleum-based compounds were either not detected or detected at concentrations less than Method A or Method B CULs in groundwater samples collected from DP-13, DP-15, DP-17, DP-19 through DP-21, MW-1, MW-4 and MW-5. Petroleum-based compound concentrations greater than respective cleanup levels in samples collected from DP-14, DP-16, DP-18, DP-22, MW-2 and MW-3 are summarized by the following:

- DP-14: GRPH were detected at a concentration of 3,600 micrograms per liter (µg/L), which exceeds the Method A CUL of 1,000 µg/L (when benzene is not present).
- DP-16: GRPH were detected at a concentration of 12,000 µg/L, which exceeds the Method A CUL of 800 µg/L (when benzene is present). Benzene was detected at a concentration of 177 µg/L, which exceeds the Method A CUL of 5 µg/L.

- DP-18: GRPH were detected at a concentration of 1,970 µg/L, which exceeds the Method A CUL of 800 µg/L (when benzene is present).
- DP-22: GRPH were detected at a concentration of 13,400 µg/L, which exceeds the Method A CUL of 800 µg/L (when benzene is present). Benzene was detected at a concentration of 263 µg/L, which exceeds the Method A CUL of 5 µg/L.
- MW-2: GRPH were detected at a concentration of 2,340 µg/L, which exceeds the Method A CUL of 800 µg/L (when benzene is present).
- MW-3: GRPH were detected at a concentration of 5,840 µg/L, which exceeds the Method A CUL of 800 µg/L (when benzene is present). Benzene was detected at a concentration of 76.2 µg/L, which exceeds the Method A CUL of 5 µg/L.

5.2.3. Natural Attenuation Parameters

In addition to the contaminants of concern, groundwater samples were analyzed for natural attenuation parameters. Estimated DO, temperature, specific conductivity, pH and ORP were measured in the field using a calibrated In-Situ Troll 9500 multi-parameter meter equipped with a flow-through cell. Soluble ferrous iron (Fe^{+2}), which has a 15-minute hold time, was estimated in the field using a Hach IR-18C color disc test kit and the 1,10 phenanthroline testing method. Field measurement results are provided in Summary of Field-Measured Natural Attenuation Parameters, Table 5. Reported field parameters reflect conditions at the conclusion of well purging during low-flow sampling.

Concentrations of the following natural attenuation parameters were analyzed in the laboratory by TestAmerica: nitrate, soluble manganese, sulfate, methane and alkalinity. Associated laboratory results are provided in Table 4.

Field and laboratory analytical results for natural attenuation parameters are summarized by the following:

- DO ranged from 0.01 milligrams per liter (mg/L) in MW-4 to 3.43 mg/L in MW-5.
- Temperature ranged from 14.73 degrees Celsius in MW-5 to 17.16 degrees Celsius in MW-1.
- Specific conductivity ranged from 1.042 milliSiemens per centimeter (mS/cm) in MW-2 to 1.824 mS/cm in MW-4.
- pH ranged from 6.80 in MW-3 to 7.53 in MW-5.
- ORP ranged from -224 millivolts (mV) in MW-2 to 56 mV in MW-5.
- Nitrate-Nitrogen concentration ranged from 0.200 mg/L in MW-3 to 13.2 mg/L in MW-1. Note that the nitrate concentration in the sample collected from MW-1 exceeds the Maximum Contaminant Level of 10 mg/L.
- Soluble manganese concentration ranged from 0.501 mg/L in MW-5 to 5.90 mg/L in MW-3. Note that the soluble manganese concentrations in samples collected from MW-2 and MW-3 exceed the MTCA Method B CUL of 2.2 mg/L.
- Sulfate concentration ranged from 13.4 mg/L in MW-3 to 225 mg/L in MW-4.

- Soluble ferrous iron concentrations ranged from less than 0.2 mg/L in MW-1, MW-4, and MW-5 to 1.3 mg/l in MW-2 and MW-3.
- Methane concentrations were less than 0.00500 mg/L in each well.
- Total alkalinity ranged from 720 mg/L in MW-1 to 1,120 mg/L in MW-3.

5.3. QA/QC Summary

GeoEngineers reviewed the laboratory internal quality assurance/quality control (QA/QC) in the context of project data quality goals. Results of our review, as well as our evaluation of data suitability, are provided in Appendix B. In summary, it is our opinion that the quality of the analytical data generally is acceptable for the intended use. However, because of specific data quality exceptions described in Appendix B, it is our opinion that analytical results associated with groundwater samples collected from direct-push borings DP-13 through DP-22 should be considered approximate.

6.0 VAPOR INTRUSION ASSESSMENT

6.1. Regulatory Guidance

Ecology published a draft VI guidance document (Ecology, 2009) to assist potentially liable persons, site managers, and consultants who are evaluating VI as a component of the application of MTCA cleanup regulations. Ecology's VI guidance consists of a tiered evaluation that includes a preliminary VI assessment, Tier I screening and Tier II VI assessment. Site-specific data requirements increase as a site progresses through the assessment tiers. Ecology's draft guidance does not establish a minimum vertical separation distance (thickness of clean, biologically active soil between the highest vertical extent of a contaminant source and the lowest point of an overlying building) that would exclude a site from further VI evaluation.

The EPA is in the process of developing guidance on how to evaluate potential VI risks from petroleum hydrocarbon. Their approach ultimately could include depth-based screening criteria which could assist in identifying high-risk sites, and excluding low-risk sites from site-specific sampling. For example, emerging EPA petroleum VI documents suggest that vertical separation distances of 5.4 feet for dissolved sources and 13.5 feet from liquid-phase sources generally are sufficient to eliminate the potential for petroleum VI (EPA, 2013). Herein, these minimum separation distances have not been applied to the site dataset as a basis for excluding the site from further assessment.

6.2. Preliminary Assessment

GeoEngineers performed a preliminary assessment, consistent with Ecology's draft VI guidance, of the potential for VI into the former Frenchies' Fill-N-Food building and the buildings on the adjacent property to the west. The preliminary assessment considered the following criteria:

1. Are there sufficiently volatile and toxic chemicals present in site soil and shallow groundwater?
2. Are there occupied buildings above and near site contamination?

Based on site characteristics, our preliminary VI assessment concluded that there is a potential for VI at the site.

6.3. Limited Tier 1 Assessment

A Tier 1 Assessment consistent with Ecology (2009) requires soil vapor data to evaluate the VI pathway when soil and groundwater are subsurface sources of VOCs. Groundwater data can be used at sites where groundwater is the only VOC source. The current site dataset includes soil and groundwater results, but does not include soil vapor data. GeoEngineers conducted a limited Tier 1 assessment with the existing dataset to provide Ecology further context for deciding on a path forward for site VI evaluation. We compared groundwater VOC concentrations in samples collected from monitoring wells MW-1 through MW-5 to MTCA Method B groundwater screening levels for VI from Appendix B of Ecology's draft VI guidance; this evaluation does not consider the contribution from VOC-contaminated soil in the vadose zone. Benzene and 1,2-dichloroethane (1,2-DCA) have been detected in samples collected from monitoring well MW-3 at concentrations greater than their respective MTCA Method B VI groundwater screening levels. In addition, GRPH have been detected in samples collected from MW-2 and MW-3 at concentrations greater than the volatile petroleum hydrocarbon (VPH) VI groundwater screening levels. These groundwater data from MW-2 and MW-3 indicate that VOCs are present in site groundwater at concentrations that could result in indoor air concentrations greater than MTCA Method B air cleanup levels.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1. Soil

Project soil borings with petroleum-based contaminant concentration(s) exceeding respective cleanup levels are shown in Cleanup Level Exceedances - Soil, Figure 4. Groundwater sampling locations with historic petroleum-based contaminant concentration(s) exceeding Method A CULs are shown in Figure 3.

Based on information presented in Figures 3 and 4 and the associated tables, we provide the following conclusions regarding soil contamination:

- We identified an area of vadose zone soil contamination exceeding pertinent MTCA Method A CULs located north of the former Frenchies' Fill-N-Food building. This area is suspected to be in or near the source of the release(s) and is characterized by soil samples collected between about 6 and 10 feet below grade with GRPH concentrations greater than 5,000 mg/kg. The interpreted lateral extent of vadose zone contamination is depicted in the red-shaded area in Figure 4.
- We observed an area of deeper soil contamination generally surrounding the suspected source area referenced above. The area of deeper contamination generally traverses the east side of the building west of the Frenchies property and extends from near DP-2 on the south to near MW-2 on the north. Observed depths to contamination in this area were between 10 to 15 feet. Given the seasonal range in depth to groundwater summarized in Table 1, it is possible that the extent of this deeper zone of contamination reflects groundwater transport and smearing through the zone of groundwater table fluctuation. It also is possible that this deeper zone of soil contamination extends below the building west of the Frenchies property.

The interpreted lateral extent of this deeper (potential smear zone) soil contamination generally corresponds to the yellow-shaded area in Figure 4.

Based on the observed sample locations with contaminant concentrations greater than Method A CULs and consistent with GeoEngineers (2012 and 2013A), it is likely the former fuel dispensers and/or associated piping located north of the former Frenchies' Fill-N-Food are the source of the vadose zone contamination. The location of the former dispensers is shown in Figure 4.

7.2. Groundwater

Groundwater sampling locations with associated petroleum-based contaminant concentrations exceeding respective cleanup levels are shown in Figure 3. These locations are limited to monitoring wells DP-14, DP-16, DP-18, DP-22, MW-2, and MW-3. Of these, DP-16 and DP-18 are located within the likely source area, near the former dispensers. DP-14, DP-22, MW-2 and MW-3 are situated west and downgradient of the presumed source area. These observations suggest contaminant mobilization and downgradient transport via groundwater flow are ongoing and likely extend below, at a minimum, the west building. However, groundwater analytical results associated with this data gap investigation and from downgradient borings DP-13, DP-21 and downgradient monitoring wells MW-4 and MW-5 suggest that site contaminants are not migrating into or beyond South Rivard Road or East Moxee Avenue in groundwater at concentrations that exceed respective cleanup levels.

In general, observed natural attenuation parameters suggest that natural attenuation processes (and associated loss of contaminant mass) currently are ongoing near monitoring wells MW-2 and MW-3. This conclusion is based the following observed conditions in monitoring well MW-2 and MW-3 relative to upgradient monitoring well MW-1.

- A decrease in nitrate and sulfate concentrations, which can act as electron acceptor compounds in natural attenuation processes.
- An increase in soluble manganese concentrations, which can be a natural attenuation indicator compound.
- A decrease in ORP.
- An increase in alkalinity, which is generally expected to increase with the biologic activity associated with natural attenuation (and the production of carbon dioxide).

7.3. Recommendations

A total of 13 explorations were advanced as components of the data gap investigation described herein. Information from these explorations, in combination with previous data presented by GeoEngineers (2012 and 2013A) are summarized herein. In our judgment, these data sufficiently bound the extent of site contamination associated with previous petroleum release to warrant proceeding with the next project task, which consists of the development of a technical memorandum discussing a Focused Cleanup Approach for the site. We also recommend continuing the project groundwater monitoring program, including natural attenuation monitoring, pending selection of a project remedial approach.

Consistent with Ecology (2009), the limited Tier 1 VI assessment described herein suggest that the performance of a complete Tier 1 assessment and/or VI mitigation is warranted at the site. In consultation with GeoEngineers, Ecology will be evaluating VI investigative and/or mitigation alternatives within the context of emerging project pilot testing results and remedial alternative evaluation.

8.0 LIMITATIONS

We have prepared this report for the exclusive use of Ecology and their authorized agents.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted environmental science practices in this area at the time this report was prepared. The conclusions and opinions presented in this report are based on our professional knowledge, judgment and experience. No warranty or other conditions, express or implied, should be understood.

Any electronic form, facsimile or hard copy of the original document (email, text, table and/or figure), if provided, and any attachments should be considered a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

Please refer to "Report Limitations and Guidelines for Use," Appendix C for additional information pertaining to use of this report.

9.0 REFERENCES

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GeoEngineers, Inc. 2013A. "Soil and Groundwater Assessment, Frenchies' Fill-N-Food, Moxee, Washington." June 6, 2013.

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TABLES

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Table 1

Summary of Groundwater Level Measurements

Frenchies Fill-N-Food
Moxee, Washington

Well Number	Grid Northing[1] (feet)	Grid Easting[1] (feet)	Top of Casing Elevation[2] (feet)	Screen Elevation[2] (feet)	Date Measured	Monitoring Well Headspace[3] (ppm)	Depth to Groundwater[4] (feet)	Groundwater Elevation[2] (feet)	Change in Groundwater Elevation[5] (feet)
MW-1	445516.9131	1669628.5314	1,053.91	1,032.3 to 1,047.3	10/19/12	14.7	16.11	1,037.80	NA
					01/30/13	0.0	12.47	1,041.44	3.64
					04/02/13	1.1	13.00	1,040.91	-0.53
					08/20/13	NM	13.15	1,040.76	-0.15
					12/19/13	0.0	12.83	1,041.08	0.32
MW-2	445550.4938	1669546.4951	1,053.53	1,032.0 to 1,047.0	10/19/12	980	16.00	1,037.53	NA
					01/30/13	180	12.32	1,041.21	3.68
					04/03/13	145	12.92	1,040.61	-0.60
					08/20/13	NM	13.03	1,040.50	-0.11
					12/19/13	375.0	12.70	1,040.83	0.33
MW-3	445506.0355	1669547.5414	1,053.54	1,032.0 to 1,047.0	10/19/12	37.4	16.05	1,037.49	NA
					01/30/13	0.0	12.40	1,041.14	3.65
					04/02/13	5.5	12.97	1,040.57	-0.57
					08/20/13	NM	13.08	1,040.46	-0.11
					12/19/13	0.0	12.80	1,040.74	0.28
MW-4	445501.8313	1669479.9925	1,052.57	1,031.0 to 1,046.0	10/19/12	0.0	15.26	1,037.31	NA
					01/30/13	0.0	11.60	1,040.97	3.66
					04/02/13	0.3	12.13	1,040.44	-0.53
					08/20/13	NM	12.32	1,040.25	-0.19
					12/19/13	0.0	11.98	1,040.59	0.34
MW-5	NM	NM	1053.18	1,031.5 to 1,046.5	12/19/13	3.3	12.49	1,040.08	NA

Notes:

[1]Grid northing and easting are referenced to NAVD88, Washington State Plane Coordinate System, South Zone.

[2]Elevations are referenced to the North American Vertical Datum of 1988 (NAVD88).

[3]Well headspace measurements were obtained using a photoionization detector immediately upon removal of the well's compression cap.

[4]Depth to water measurements obtained from top of PVC well casing.

[5]Represents change in groundwater elevation from previous monitoring event, as measured in monitoring wells.

ppm = parts per million; NA = Not Applicable; NM = Not Measured

https://projects.geoengineers.com/sites/0050407501/Draft/Supplemental Assessment Report/[Frenchies Analytical Tables_Nov Dec 2013.xlsx]Table 1.

Table 2

Summary of Chemical Analytical Results - Soil [1,2]

Frenchies Fill-N-Food
Moxee, Washington

Boring	Regulatory Levels [3]	DP-13	DP-14	DP-15	DP-16	DP-17	DP-18	DP-19	DP-20	DP-21	DP-22	MW-5	SVE-1	AS-1
Sample Depth (feet)		12-13	8-8.5	8-9	6-7	6-7	9-10	8-9	8-9	8-9	5-6	5-6	6-7	10-11.5
Date Sampled		11/15/13	11/15/13	11/15/13	11/15/13	11/15/13	11/15/13	11/16/13	11/16/13	11/16/13	11/16/13	12/10/13	12/11/13	12/10/13
Method EPA 8260C - NWTPH-Gx and Volatile Organic Compounds (mg/kg)														
Gasoline-range hydrocarbons	30/100 [4]	<8.20	<12.2	<12.2	**7,770**	<8.94	**612**	<23.0	<5.49	<10.6	<6.22	<6.87	**5,020**	**4,820**
Benzene	0.03	<0.00820	<0.0122	<0.0122	<0.0900	<0.00894	0.0164	<0.0230	<0.00549	<0.0106	<0.00622	<0.00687	**0.224**	**0.0891**
Ethylbenzene	6	<0.164	<0.245	<0.243	**16.8**	<0.179	2.63	<0.459	<0.110	<0.212	<0.124	<0.137	**18.6**	**14.7**
Toluene	7	<0.164	<0.245	<0.243	<1.80	<0.179	<0.164	<0.459	<0.110	<0.212	<0.124	<0.137	2.30	<1.78
o-Xylene	9 [5]	<0.328	<0.489	<0.486	**16.1**	<0.357	<0.329	<0.919	<0.220	<0.425	<0.249	<0.275	**11.8**	<3.57
m,p-Xylene	9 [5]	<0.656	<0.978	<0.972	**92.4**	<0.715	<0.658	<1.84	<0.439	<0.850	<0.498	<0.549	**81.5**	**15.5**
1,2-Dichloroethane (EDC)	11 [6]	<0.164	<0.245	<0.243	<1.80	<0.179	<0.164	<0.459	<0.110	<0.212	<0.124	<0.137	<2.13	<1.78
Hexane	4,800 [7]	<0.164	<0.245	<0.243	<1.80	<0.179	<0.164	<0.459	<0.110	<0.212	<0.124	<0.137	<2.13	<1.78
Xylenes (total)	9 [5]	<2.46	<3.67	<3.65	**109**	<2.68	<2.47	<6.89	<1.65	<3.19	<1.87	<2.06	**93.3**	**<26.7**
Method EPA 8270D - Polynuclear Aromatic Compounds (PAH) by GC/MS with Selected Ion Monitoring (mg/kg)														
Naphthalene	5 [8]	<0.0129	<0.0144	<0.0158	**16.0**	<0.0131	1.90	<0.0283	<0.0109	<0.0147	<0.0115	<0.0129	**4.98**	1.23
2-Methylnaphthalene	5 [8]	<0.0129	<0.0144	<0.0158	**14.0**	<0.0131	1.57	<0.0283	<0.0109	<0.0147	<0.0115	<0.0129	**4.68**	1.70
1-Methylnaphthalene	5 [8]	<0.0129	<0.0144	<0.0158	**5.07**	<0.0131	0.562	<0.0283	<0.0109	<0.0147	<0.0115	<0.0129	**1.76**	0.603
Method EPA 6010C - Total Metals (mg/kg)														
Lead	250	6.74	<1.87	<1.58	14.0	<1.64	4.12	30.8	18.7	<1.91	17.5	2.36	9.39	7.18

Notes:

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

[2] All analyte concentrations presented in milligrams per kilogram (mg/kg), unless otherwise noted.

[3] Regulatory level refers to Washington State Model Toxics Control Act (MTCA) Method A (restricted land use) cleanup level unless otherwise footnoted.

[4] Gasoline-range petroleum hydrocarbon cleanup levels in soil are 30 mg/kg when benzene is detected and 100 mg/kg when benzene is not detected.

[5] Cleanup level for total xylenes.

[6] Standard formula value for MTCA Method B, Carcinogen, in Soil, as calculated by Ecology's Cleanup Levels and Risk Calculations (CLARC) database.

[7] Standard formula value for MTCA Method B, Non-Carcinogen, in Soil, as calculated by Ecology's CLARC database.

[8] Cleanup level refers to sum of naphthalenes.

Bold indicates analyte concentration exceeds referenced Regulatory Level.

mg/kg = milligrams per kilogram; EPA = Environmental Protection Agency

Table 3

Summary of Chemical Analytical Results - Groundwater Samples from Soil Borings [1]

Frenchies Fill-N-Food
Moxee, Washington

Boring / Date Sampled	Regulatory Levels [2]	DP-13 11/15/13	DP-14 11/15/13	DP-15 11/15/13	DP-16 11/15/13	DP-17 11/15/13	DP-18 11/15/13	DP-19 11/16/13	DP-20 11/16/13	DP-21 11/16/13	DP-22 11/16/13
Method EPA 8260C - NWTPH-Gx and Volatile Organic Compounds (µg/L)											
Gasoline-range hydrocarbons	1,000/800 [3]	<90.0	**3,600**	<90.0	**12,000**	<90.0	**1,970**	<90.0	<90.0	<90.0	**13,400**
Benzene	5	<0.200	<2.00	<0.200	**177**	<0.200	1.96	<0.200	<0.200	<0.200	**263**
Toluene	1,000	<0.500	<5.00	<0.500	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	52.0
Ethylbenzene	700	<0.500	<5.00	<0.500	344	<0.500	10.2	<0.500	<0.500	<0.500	501
m,p-Xylene	1,000 [4]	<0.500	<5.00	<0.500	157	<0.500	1.07	<0.500	<0.500	<0.500	89.0
o-Xylene	1,000 [4]	<0.500	<5.00	<0.500	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<50.0
1,2-Dichloroethane (EDC)	5	<0.500	<5.00	<0.500	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<50.0
Xylenes (total)	1,000 [4]	<1.50	<15.0	<1.50	157	<1.50	<1.50	<1.50	<1.50	<1.50	<150
Hexane	480 [5]	<1.00	<10.0	<1.00	<100	<1.00	<1.00	<1.00	<1.00	<1.00	<100
Method EPA 8270D - Polynuclear Aromatic Compounds (PAH) by GC/MS with Selected Ion Monitoring (µg/L)											
Naphthalene	160 [6]	NT [7]	1.56	<0.100	103	0.409	3.44	0.106	<0.107	<0.122	85.8
2-Methylnaphthalene	160 [6]	NT [7]	<0.100	<0.100	18.5	0.288	0.924	<0.106	<0.107	<0.122	16.3
1-Methylnaphthalene	160 [6]	NT [7]	2.24	<0.100	12.4	0.177	0.421	<0.106	<0.107	<0.122	13.4

Notes:

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

[2] Regulatory Level refers to Washington State Model Toxics Control Act (MTCA) Method A cleanup level unless otherwise footnoted.

[3] Gasoline-range petroleum hydrocarbon cleanup levels in groundwater are 1,000 µg/L when benzene is not detected and 800 µg/L when benzene is detected.

[4] Cleanup level for total xylenes.

[5] Standard formula value for MTCA Method B, Non-Carcinogen, in Groundwater, as calculated by Ecology's Cleanup Levels and Risk Calculations (CLARC) database.

[6] Cleanup level refers to sum of naphthalenes.

[7] Groundwater yield in boring DP-13 was poor and not sufficient to fill required containers for Method EPA 8270D.

Bold indicates analyte concentration exceeds referenced Regulatory Level.

µg/L = micrograms per liter; NT = not tested

Table 4

Summary of Chemical Analytical Results - Groundwater Samples from Monitoring Wells [1]

Frenchies' Fill-N-Food
Moxee, Washington

	Regulatory Levels [2]	Monitoring Well and Date Sampled															
		MW-1					MW-2					MW-2 Duplicate	MW-3				
		10/19/12	01/30/13	04/02/13	08/20/13	12/19/13	10/19/12	01/30/13	04/03/13	08/21/13	12/19/13	12/19/13	10/19/12	01/30/13	04/02/13	08/21/13	12/19/13
Method EPA 8260C (µg/L)																	
Gasoline-range petroleum hydrocarbons	1,000/800 [3]	<90.0	<90.0	<90.0	<90.0	<90.0	**1,030**	**1,980**	**1,810**	**5,430**	**2,340**	**2,490**	**5,640**	**4,410**	**3,490**	**5,090**	**5,840**
Methyl tert-butyl ether	20	<0.500	NT	NT	NT	NT	<0.500	NT	NT	NT	NT	NT	<0.500	NT	NT	NT	NT
Benzene	5	<0.200	<0.200	<0.200	<0.200	<0.200	1.07	1.97	1.49	2.57	0.880	0.990	**71.6**	**85.9**	**54.4**	**54.2**	**76.2**
Toluene	1,000	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.880	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	700	<0.500	<0.500	<0.500	<0.500	<0.500	1.28	5.07	6.21	18.0	1.17	1.24	2.88	4.65	3.43	2.46	3.27
m,p-Xylene	1,000 [4]	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.500	0.510	1.37	<0.500	<0.500	3.30	3.66	2.91	2.78	4.11
o-Xylene	1,000 [4]	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.680	0.790	0.670	<0.500	0.940
Xylenes (total)	1,000 [4]	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	1.57	<1.50	<1.50	3.98	4.45	3.58	3.27	5.05
1,2-Dichloroethane (EDC)	5	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	4.07	4.81	3.04	3.22	4.04
N-Hexane	480 [5]	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	56.9	13.4	<1.00	<1.00	<1.00	30.4	44.3	10.6	<1.00	<1.00
Method EPA 8011 (µg/L)																	
1,2-Dibromoethane (EDB)	0.01	<0.0100	NT	NT	NT	NT	<0.0100	NT	NT	NT	NT	NT	<0.0100	NT	NT	NT	NT
Method EPA 8270 (µg/L)																	
Naphthalene	160 [6]	<0.219	<0.0952	<0.0957	<0.0957	<0.0977	0.397	1.09	1.05	2.64	1.10	1.26	<0.222	3.45	2.73	<0.0956	3.09
2-Methylnaphthalene	160 [6]	<0.219	<0.0952	<0.0957	<0.0957	<0.0977	<0.220	<0.952	<0.0964	0.125	<0.101	<0.966	<0.222	<0.0955	<0.0963	<0.0956	<0.0990
1-Methylnapthalene	160 [6]	<0.219	<0.0952	<0.0957	<0.0957	<0.0977	0.364	0.952	1.46	7.26	0.919	1.10	3.30	5.44	4.45	5.89	4.03
Method EPA 200.7 - Total Metals by EPA 200 Series Methods (mg/L)																	
Lead	0.015	<0.0150	<0.0300	<0.050	<0.0140	<0.0150	<0.0150	<0.0300	<0.050	<0.0140	<0.0150	<0.0150	<0.0150	<0.0300	<0.050	<0.0140	<0.0150
Method RSK-175 - Dissolved Gases (GC) (mg/L)																	
Methane	NE	<0.005	<0.00500	<0.00500	0.00942	<0.00500	0.00598	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0136	0.00796	0.00895	0.00597	<0.00500
Method EPA 200.7 - Dissolved Metals by EPA 200 Series Methods (mg/L)																	
Manganese	2.2 [5]	0.881	1.12	1.4	0.922	0.904	**2.61**	**2.71**	**3.1**	**2.52**	**2.65**	**2.65**	0.933	**6.46**	**7.1**	**6.36**	**5.90**
Method EPA 300.0 - Anions by EPA Method 300.0 (mg/L)																	
Nitrate-Nitrogen	10 [7]	**10.9**	**10.2**	**12.5**	**13.1**	**13.2**	<0.200	<0.200	0.200	1.32	1.98	<0.200	<0.200	0.290	0.230	0.230	0.200
Sulfate	250 [8]	199	47.4	239	210	163	78.2	48.0	53.9	15.4	33.5	32.5	3.76	33.6	28.1	20.3	13.4
Method SM 2320B - Conventional Chemistry Parameters by APHA/EPA Methods (mg/L)																	
Total Alkalinity	NE	695	830	750	750	720	785	795	695	665	765	725	1,140	1,370	1,250	1,250	1,120

	Regulatory Levels [2]	Monitoring Well and Date Sampled					
		MW-4					MW-5
		10/19/12	01/30/13	04/02/13	08/20/13	12/19/13	12/19/13
Method EPA 8260C (µg/L)							
Gasoline-range petroleum hydrocarbons	1,000/800 [3]	<90.0	<90.0	<90.0	<90.0	<90.0	<90.0
Methyl tert-butyl ether	20	<0.500	NT	NT	NT	NT	NT
Benzene	5	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
Toluene	1,000	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	700	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
m,p-Xylene	1,000 [4]	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	1,000 [4]	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Xylenes (total)	1,000 [4]	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50
1,2-Dichloroethane (EDC)	5	1.78	1.86	1.51	1.83	2.10	<0.500
N-Hexane	480 [5]	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Method EPA 8011 (µg/L)							
1,2-Dibromoethane (EDB)	0.01	<0.0100	NT	NT	NT	NT	NT
Method EPA 8270 (µg/L)							
Naphthalene	160 [6]	<0.222	<0.0934	<0.0969	<0.0963	<0.0975	<0.0963
2-Methylnaphthalene	160 [6]	<0.222	<0.0934	<0.0969	<0.0963	<0.0975	<0.0963
1-Methylnapthalene	160 [6]	<0.222	<0.0934	<0.0969	<0.0963	<0.0975	<0.0963
Method EPA 200.7 - Total Metals by EPA 200 Series Methods (mg/L)							
Lead	0.015	<0.0150	<0.0300	<0.050	<0.0140	<0.0150	<0.0150
Method RSK-175 - Dissolved Gases (GC) (mg/L)							
Methane	NE	0.00565	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Method EPA 200.7 - Dissolved Metals by EPA 200 Series Methods (mg/L)							
Manganese	2.2 [5]	**6.04**	1.02	0.97	1.07	1.21	0.501
Method EPA 300.0 - Anions by EPA Method 300.0 (mg/L)							
Nitrate-Nitrogen	10 [7]	<0.200	0.480	1.11	0.320	3.10	0.570
Sulfate	250 [8]	141	158	285	189	225	88.1
Method SM 2320B - Conventional Chemistry Parameters by APHA/EPA Methods (mg/L)							
Total Alkalinity	NE	1,000	1,100	1,080	1,110	1,060	940

Notes:

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

[2]Regulatory Level refers to Washington State Model Toxics Control Act (MTCA) Method A cleanup level unless otherwise footnoted.

[3]MTCA Method A cleanup level for gasoline-range petroleum hydrocarbons is 1,000 µg/L, if benzene is not detected; otherwise the cleanup level is 800 µg/L.

[4]Cleanup level for total xylenes.

[5]Standard formula value for MTCA Method B in Groundwater, as calculated by Ecology's Cleanup Levels and Risk Calculations (CLARC) database.

[6]Cleanup level refers to sum of naphthalenes.

[7]Maximum contaminant level established by Title 40, Volume 19 of the Code of Federal Regulations.

[8]Secondary maximum contaminant level recommeded by the Environmental Protection Agency.

Bold indicates analyte concentration exceeds referenced Regulatory Level.

µg/L = micrograms per liter; mg/L = milligrams per liter; NT = not tested; NE = not established

https://projects.geoengineers.com/sites/0050407501/Draft/Supplemental Assessment Report/[Frenchies Analytical Tables_Nov Dec 2013.xlsx]Table 4

Table 5

Summary of Field-Measured Natural Attenuation Parameters[1]

Frenchies' Fill-N-Food
Moxee, Washington

Well Number	Date Collected	pH	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Soluble Ferrous Iron (mg/L)
MW-1	10/19/12	7.26	17.28	1.422	0.66	259	NT
	01/30/13	7.35	16.73	1.429	0.03	-22	<0.2
	04/02/13	7.40	16.69	1.70	0.00	37.5	<0.2
	08/20/13	7.35	17.52	1.35	0.00	434	<0.2
	12/19/13	7.12	17.16	1.395	0.06	36	<0.2
MW-2	10/19/12	7.08	16.25	1.294	0.08	170	NT
	01/30/13	7.29	15.28	1.106	0.06	-76	0.4
	04/03/13	7.27	15.59	1.30	0.00	-14.4	0.5
	08/21/13	7.23	15.29	0.978	0.00	-94	0.3
	12/19/13	7.16	15.04	1.042	0.03	-224	1.3
MW-3	10/19/12	6.72	17.09	1.702	0.00	-21	NT
	01/30/13	7.77	15.88	1.712	0.03	-69	1.6
	04/02/13	6.93	15.61	2.00	0.00	-36.1	1.5
	08/21/13	6.88	15.84	1.64	0.02	-80	1.4
	12/19/13	6.80	16.14	1.622	0.04	-163	1.3
MW-4	10/19/12	7.21	16.61	1.787	0.32	295	NT
	01/30/13	8.08	16.19	1.847	0.08	-36	<0.2
	04/02/13	7.30	17.45	2.20	0.08	39.9	<0.2
	08/20/13	7.31	16.70	1.81	0.01	429	<0.2
	12/19/13	7.21	15.42	1.824	0.01	4	<0.2
MW-5	12/19/13	7.53	14.73	1.327	3.43	56	<0.2

Notes:

[1]Reported water quality parameters reflect stabilized conditions at the conclusion of well purging during low-flow sampling.

°C = degrees Celsius; mS/cm = millisiemens per centimeter; mg/L = milligrams per liter; mV = millivolts; NT = not tested

https://projects.geoengineers.com/sites/0050407501/Draft/Supplemental Assessment Report/[Frenchies Analytical Tables_Nov Dec 2013.xlsx]Table 5

FIGURES

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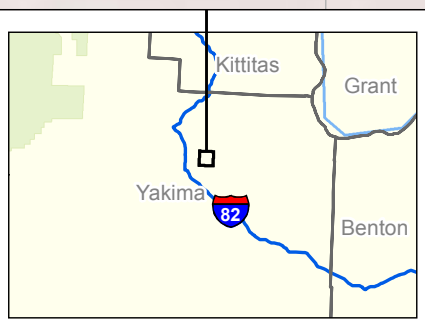
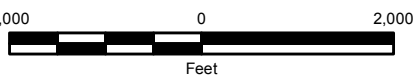




Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
Data Sources: ESRI Data & Maps, Street Maps 2008.
Projection: NAD 1983, UTM Zone 10 North.

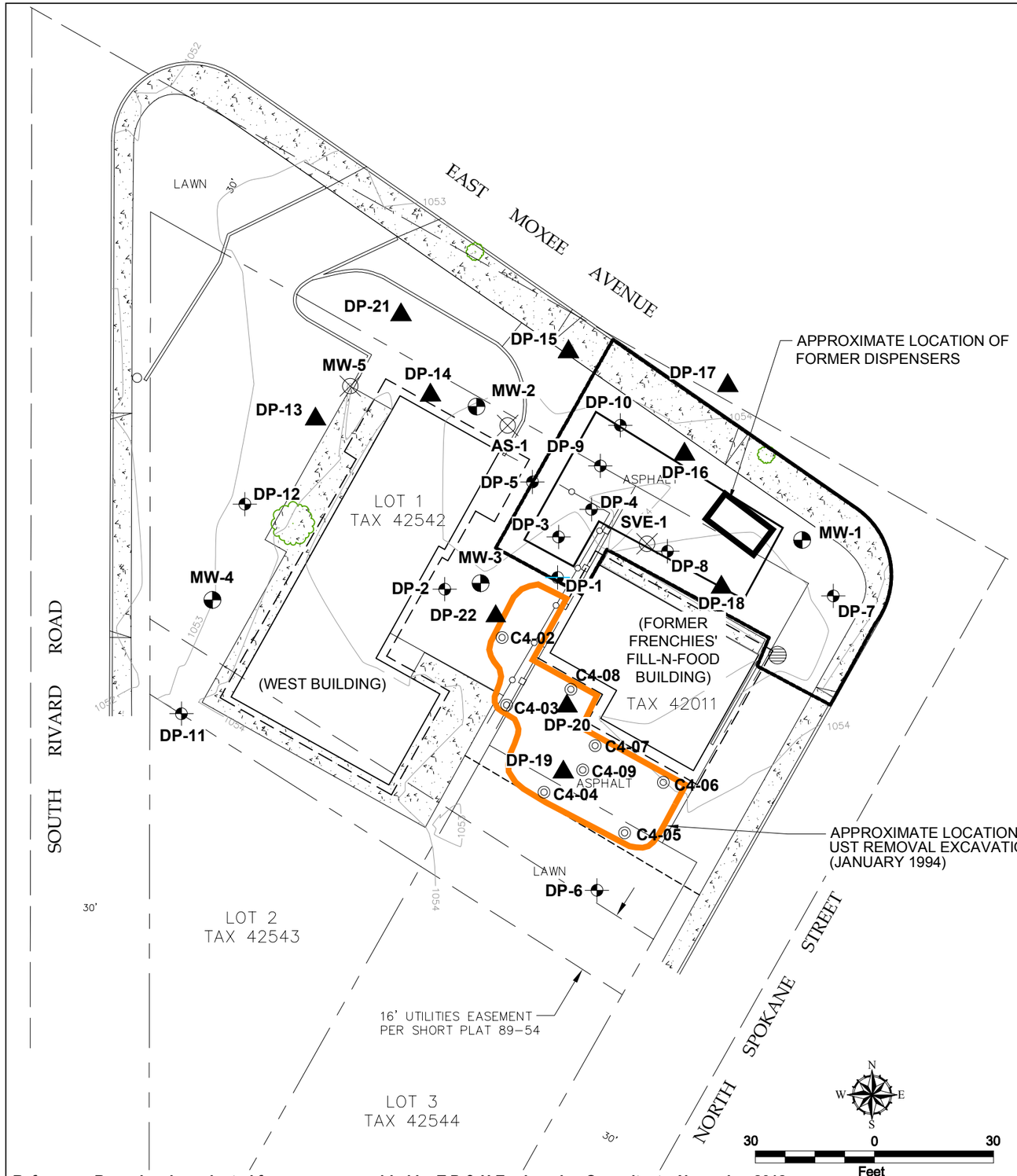
Vicinity Map

Frenchies' Fill-N-Food
Moxee, Washington

GeoEngineers

Figure 1

Office: SPO Path: W:\Spokane\Projects\0\0504075\01\GIS\MXD\0504075O1_F1_VicinityMap.mxd Map Revised: 2/19/2014 CRC



LEGEND

- Approximate Right-of-way (ROW)
- Approximate Parcel Boundary
- 1054 — Contour Line
- **MW-1** — Approximate Existing Groundwater Monitoring Well Location (September 2012)
- **MW-5** — Approximate New Well Location[3] (December 2013)
- **DP-13** — Approximate Direct-Push Boring Location (November 2013)
- **DP-1** — Approximate Direct-Push Boring Location (February 2012)
- **C4-01** — Approximate UST Closure Sample Location (1994)
- Deciduous Tree
- Catch Basin
- Concrete Curb
- Concrete
- Edge of Asphalt
- Roof Line
- Chain Link Fence
- Guard Rail
- Approximate Location of 1994 UST Excavation

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not 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.
3. MW=Monitoring Well; SVE=Soil Vapor Extraction Well; AS=Air Sparge Well (December 2013)

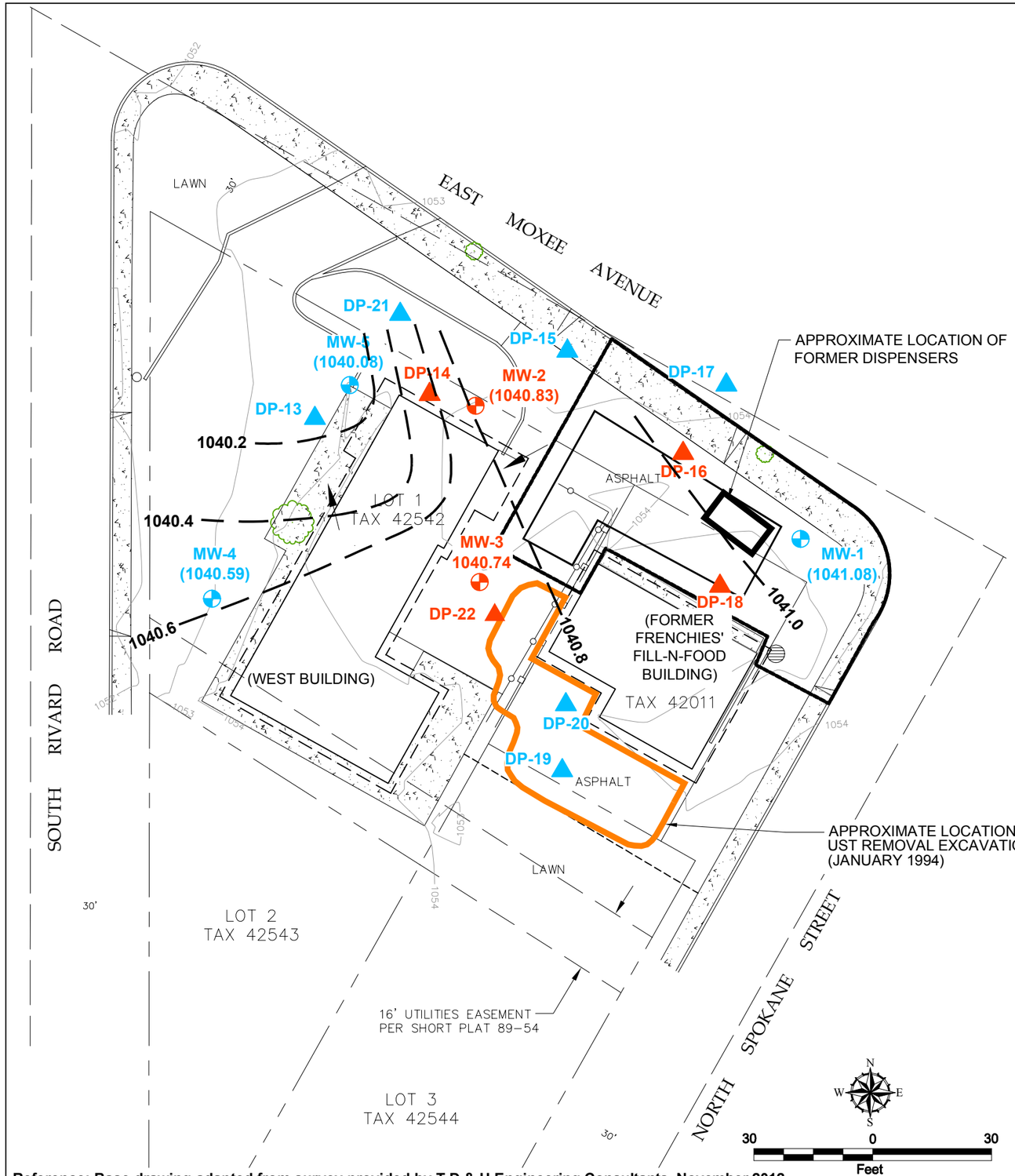
Reference: Base drawing adapted from survey provided by T,D & H Engineering Consultants, November 2012.

Site Plan

Frenchies' Fill-N-Food
Moxee, Washington

GeoEngineers

Figure 2



Legend

- (1041.08) MW-1 — Approximate Groundwater Monitoring Well Location and Groundwater Elevation on 12/19/13
- DP-13 — Approximate Direct-Push Boring Location (November 2013)
- GRPH and/or VOCs Either Not Detected or Detected at Concentrations Less Than MTCA Method A Cleanup Levels in Groundwater Sample(s)
- GRPH and/or VOCs Detected at Concentrations Greater Than MTCA Method A in Groundwater Sample(s)
- Approximate Groundwater Elevation Contour (0.2-foot increment)
- Interpreted Groundwater Flow Direction
- Deciduous Tree
- Catch Basin
- Concrete Curb
- Concrete
- Edge of Asphalt
- Roof Line
- Chain Link Fence
- Guard Rail
- Approximate Location of 1994 UST Excavation
- Approximate Right-of-way (ROW)
- Approximate Parcel Boundary
- 1054 — Topographic Contour Line

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not 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.
3. Groundwater elevations are referenced to the North American Vertical Datum of 1988 (NAVD 83)

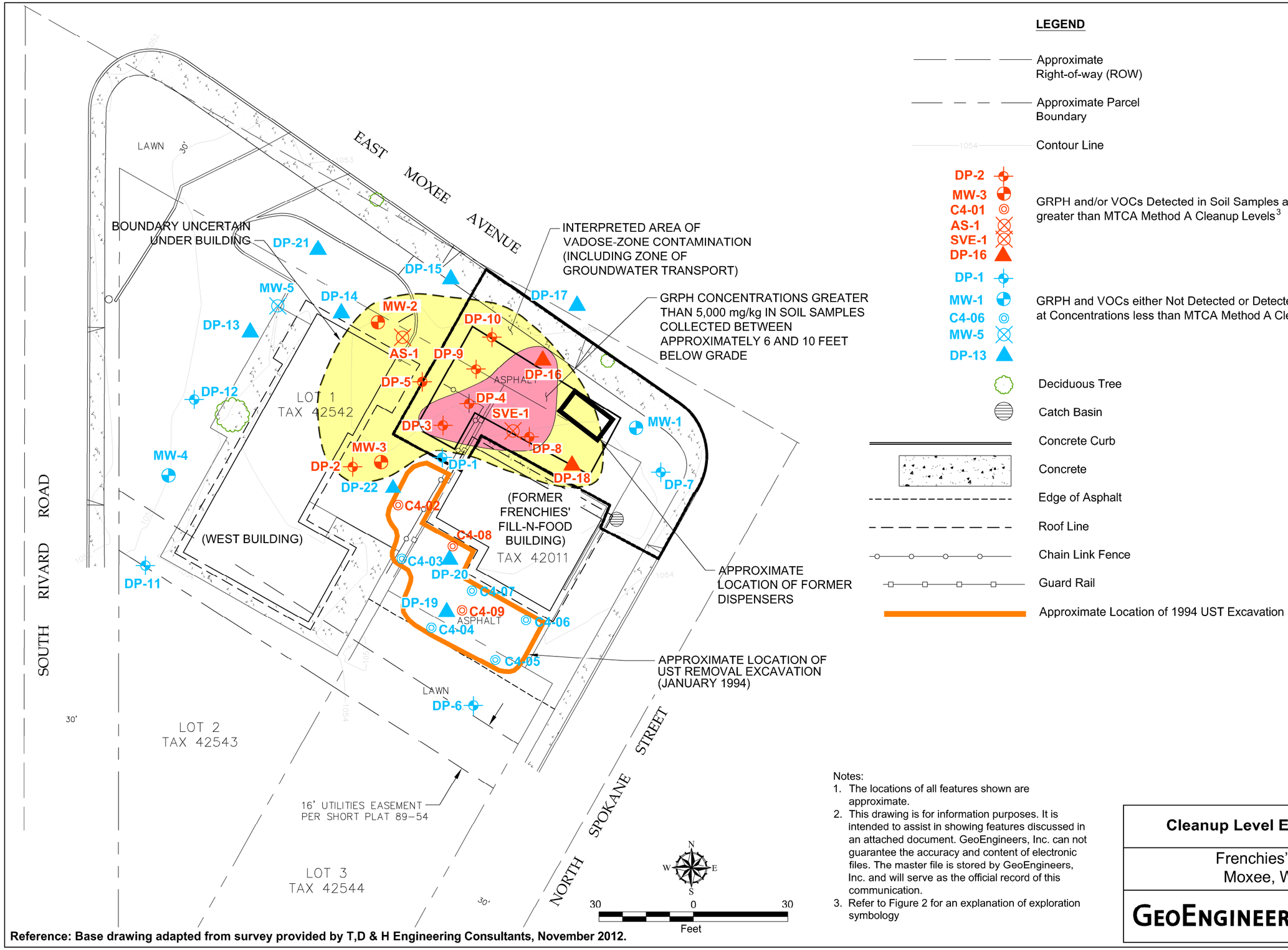
Reference: Base drawing adapted from survey provided by T,D & H Engineering Consultants, November 2012.

Groundwater Elevations and Cleanup Level Exceedances Summary

Frenchies' Fill-N-Food
Moxee, Washington

GeoEngineers

Figure 3



LEGEND

- Approximate Right-of-way (ROW)
- Approximate Parcel Boundary
- Contour Line
- DP-2, MW-3, C4-01, AS-1, SVE-1, DP-16 — GRPH and/or VOCs Detected in Soil Samples at Concentrations greater than MTCA Method A Cleanup Levels[3]
- DP-1, MW-1, C4-06, MW-5, DP-13 — GRPH and VOCs either Not Detected or Detected in Soil Samples at Concentrations less than MTCA Method A Cleanup Levels[3]
- Deciduous Tree
- Catch Basin
- Concrete Curb
- Concrete
- Edge of Asphalt
- Roof Line
- Chain Link Fence
- Guard Rail
- Approximate Location of 1994 UST Excavation

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not 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.
3. Refer to Figure 2 for an explanation of exploration symbology

Reference: Base drawing adapted from survey provided by T,D & H Engineering Consultants, November 2012.

Cleanup Level Exceedances - Soil

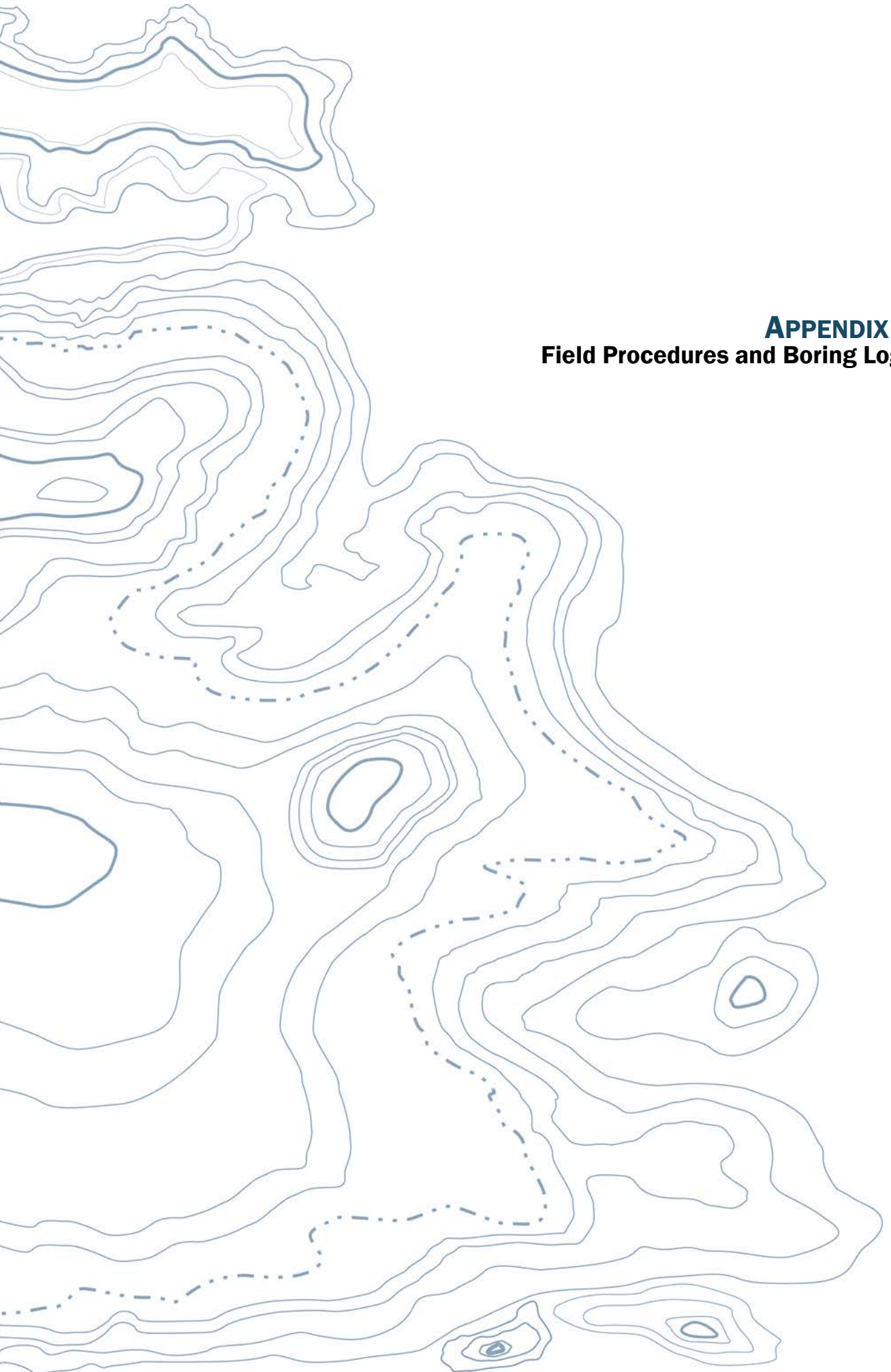
Frenchies' Fill-N-Food
Moxee, Washington

GeoEngineers

Figure 4

APPENDICES

GeoEngineers



APPENDIX A
Field Procedures and Boring Logs

APPENDIX A
FIELD PROCEDURES AND BORING LOGS

General

Field methods generally were performed in compliance with the project Work Plan (GeoEngineers, 2013B).

Soil Sample Collection

Environmental Protection Agency (EPA) 5035 sampling methods were used to collect soil samples for gasoline-range petroleum hydrocarbon (GRPH) and volatile organic compound (VOC) analyses. The soil for analysis of other parameters were placed in laboratory-supplied sample bottles and filled to minimize headspace. All soil samples were stored in a chilled cooler until delivery to the analytical laboratory.

Subsurface conditions during the data gap investigation at the Frenchies' Fill-N-Food site were explored by advancing 10 direct-push and three hollow-stem auger borings at the approximate locations shown on Figure 2. The borings were advanced about 12 to 25 feet below existing site grade. Boring locations were established in the field by taping from existing site features. Consequently, exploration locations should be considered accurate to the degree implied by the method used.

The boring operations were monitored by staff from our firm who examined and classified the soil encountered; obtained soil samples and maintained a continuous log of explorations. Soil encountered in the borings was classified in general accordance with ASTM International (ASTM) D 2488 and the classification chart listed in Key to Exploration Logs, Figure A-1. Logs of the borings are presented in Figures A-2 through A-14. The logs are based on interpretation of the field data and indicate the depth at which subsurface materials or their characteristics change, although these changes might actually be gradual.

Field Screening of Soil Samples

GeoEngineers' field representative performed field-screening tests on soil samples obtained from the borings. Field screening results were used as a general guideline to assess areas of possible petroleum-related contamination. The field screening methods used include: (1) visual screening; (2) water-sheen screening; and (3) headspace-vapor screening using a Photo Ionization Detector (PID) calibrated to isobutylene on the day of testing.

Visual screening consisted of observing soil for stains indicative of metal- or petroleum-related contamination. Water-sheen screening involved placing soil in a pan of water and observing the water surface for signs of sheen. Sheen screening may detect both volatile and nonvolatile petroleum hydrocarbons. Sheens observed are classified as follows:

No Sheen (NS)	No visible sheen on the water surface.
Slight Sheen (SS)	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 (MS)	Light to heavy sheen; may have some color/iridescence; spread is irregular to flowing, may be rapid; few remaining areas of no sheen on the water surface.
Heavy Sheen (HS)	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 parts per million (ppm), with a resolution of +/- 2 ppm.

Field screening results can be site specific. The effectiveness of field screening can 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 contaminants.

Construction, Development and Surveying

Wells generally were constructed in accordance with Chapter 173-160, Section 400 of the Washington Administrative Code (WAC), titled *Washington State Resource Protection Well Construction Standards*. Well installation was observed and documented by a GeoEngineers field representative on a well construction record form.

Monitoring well MW-5 and air sparge well AS-1 are constructed of 2-inch-diameter, Schedule 40, polyvinyl chloride (PVC) casing and well screens. The total depth of MW-5 is about 22 feet and 0.010-inch slotted screens were installed from about 7 to 22 feet in depth. The remediation wells (AS-1 and SVE-1) were constructed using similar techniques. AS-1 is set at a total depth of about 25 feet and screened from 22 to 25 feet. SVE-1 was constructed using 4-inch-diameter PVC casing and screen material. SVE-1 is set at a total depth of about 12 feet and screened from 4 to 12 feet.

Each well was completed with a bentonite seal and a flush-mount surface monument. A lockable cap was installed in the top of the PVC well casing. A concrete surface-seal was placed around the monument at the ground surface to divert surface water away from the well location.

MW-5 and AS-1 were developed to remove water introduced into the well during drilling (if any), stabilize the filter pack and formation materials surrounding the well screen, and restore the hydraulic connection between the well screen and the surrounding soil. The wells were developed by pumping, surging, bailing, or a combination of these methods. Well development continued until the water was as free of sediment as practicable with respect to the subsurface material composition adjacent to the screened interval. The removal rate and groundwater volume removed was recorded during the well development procedures.

The horizontal locations of the new wells were surveyed relative to existing site features and top-of-casing elevations were surveyed using a laser level relative to the top of casing in monitoring well MW-1 and MW-2.

Groundwater Elevations

Depths to groundwater were measured relative to the monitoring well casing rim using an electric water level indicator. The probe of the water level indicator was decontaminated after use with a detergent wash, followed by two distilled water rinses.

Groundwater Sampling Procedures – Direct-Push Borings

Groundwater samples were collected from direct-push soil borings after reaching final boring depth. Each boring was fitted with a steel screen and, with the exception of DP-13, purged for approximately 10 minutes before sample collection using a peristaltic pump and disposable tubing. DP-13 was purged for only 2 minutes because the boring pumped dry after that time period.

Groundwater Sampling Procedures – Monitoring Wells

Groundwater samples from monitoring wells generally were collected consistent with the EPA's low-flow groundwater sampling procedure, as described by EPA (1996) and Puls and Barcelona (1996). Monitoring well purging activities were accomplished using a QED Sample Pro bladder pump equipped with disposable bladders. During purging activities, water quality parameters, including pH, conductivity, temperature, turbidity, oxidation-reduction potential and dissolved oxygen, were measured using an In-Situ Troll 9500 multi-parameter meter equipped with a flow-through cell; measurements were recorded approximately every three 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 collected after (1) water quality parameters had stabilized; or (2) a maximum purge time of thirty minutes was achieved. During purging and sampling, purge rate was not allowed to exceed 500 milliliters per minute. Water quality parameter stabilization criteria include the following:

- Turbidity: ±10 percent or ±10 nephelometric turbidity units (NTU);
- Dissolved oxygen: ±10 percent;
- Conductivity: ±3 percent;
- pH: ±0.1 unit;
- Temperature: ±3 percent; and
- Oxidation reduction potential: ±10 percent or ±10 millivolts (mV).

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. Each sample was pumped directly into sample containers supplied by the laboratory. All groundwater samples collected for chemical analysis were kept cool during on-site storage and

transport to the laboratory. Chain-of-custody procedures were observed during transport of the groundwater samples.

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% RETAINED ON NO. 200 SIEVE	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS
				SP	POORLY-GRADED SANDS, GRAVELLY SAND
	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

ADDITIONAL MATERIAL SYMBOLS

SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
	AC	Asphalt Concrete
	CC	Cement Concrete
	CR	Crushed Rock/ Quarry Spalls
	TS	Topsoil/ Forest Duff/Sod

Groundwater Contact

Measured groundwater level in exploration, well, or piezometer

Measured free product in well or piezometer

Graphic Log Contact

Distinct contact between soil strata or geologic units

Approximate location of soil strata change within a geologic soil unit

Material Description Contact

Distinct contact between soil strata or geologic units

Approximate location of soil strata change within a geologic soil unit

Sampler Symbol Descriptions

2.4-inch I.D. split barrel

Standard Penetration Test (SPT)

Shelby tube

Piston

Direct-Push

Bulk or grab

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

A "P" indicates sampler pushed using the weight of the drill rig.

Laboratory / Field Tests

%F	Percent fines
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
OC	Organic content
PM	Permeability or hydraulic conductivity
PI	Plasticity index
PP	Pocket penetrometer
PPM	Parts per million
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
VS	Vane shear

Sheen Classification

NS	No Visible Sheen
SS	Slight Sheen
MS	Moderate Sheen
HS	Heavy Sheen
NT	Not Tested

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

KEY TO EXPLORATION LOGS

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FIGURE A-1

Drilled Start 11/15/2013 End 11/15/2013	Total Depth (ft) 20	Logged By KAH Checked By JER	Driller Environmental West Explorations, Inc.	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Not Applicable		Drilling Equipment Truck-Mounted Geoprobe
Easting (X) Northing (Y)		System Datum		Groundwater Date Measured / Depth to Water (ft) / Elevation (ft)
Notes:				

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		24			1			AC	Asphalt concrete pavement			
									GP	Brown fine to coarse gravel with trace silt and sand (medium dense, moist)	NS	<1	
									SM	Brown silty fine sand (medium dense, moist)	NS	<1	
			29			2					NS	<1	
	5												DP-13 (5-6)
											NS	<1	
			0										No recovery from 8 to 12 feet
	10												
			12			3 CA				Grades to wet	NS	<1	
	15												
			2			4					NS	<1	
	20												

Notes: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-13

GeoEngineers

Project: Frenchie's Fill-N-Food
Project Location: Moxee, Washington
Project Number: 0504-075-01

Figure A-2
Sheet 1 of 1

Drilled Start 11/15/2013 End 11/15/2013	Total Depth (ft) 20	Logged By KAH Checked By JER	Driller Environmental West Explorations, Inc.	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Not Applicable		Drilling Equipment Truck-Mounted Geoprobe
Easting (X) Northing (Y)		System Datum		Groundwater Date Measured / Depth to Water (ft) / Elevation (ft)
Notes:				

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		33			1			SM	Brown silty fine to coarse sand (medium dense, moist)	NS	<1	
									SM	Brown silty fine sand (medium dense, moist)	NS	<1	
			36			2					NS	<1	
	5										NS	<1	
			34			3 CA				Grades to tan Grades to wet	NS	<1	DP-14 (8-8.5)
	10									Grades to brown	NS	<1	
			48			4					NS	<1	
											NS	9	
	15										NS	245	
			36			5					NS	16.2	
											NS	<1	
	20												

Notes: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-14

GeoEngineers

Project: Frenchie's Fill-N-Food
Project Location: Moxee, Washington
Project Number: 0504-075-01

Figure A-3
Sheet 1 of 1

Drilled Start 11/15/2013 End 11/15/2013	Total Depth (ft) 20	Logged By KAH Checked By JER	Driller Environmental West Explorations, Inc.	Drilling Method Direct-Push	
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Not Applicable		Drilling Equipment Truck-Mounted Geoprobe	
Easting (X) Northing (Y)		System Datum		Groundwater Date Measured / Depth to Water (ft) / Elevation (ft)	
Notes:					

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0								AC	Asphalt concrete pavement			
			29			1			GP	Brown fine to coarse gravel with trace sand and silt (medium dense, moist)	NS	<1	
									SM	Brown silty fine sand (medium dense, moist)	NS	<1	
			39			2					NS	<1	
	5										NS	<1	
			36			3 CA				Grades to tan	NS	<1	DP-15 (8-9)
										Grades to wet and brown			
	10										NS	<1	
			29			4					NS	<1	
											NS	<1	
	15												
			36			5					NS	<1	
											NS	<1	
	20												

Notes: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-15

GeoEngineers

Project: Frenchie's Fill-N-Food
Project Location: Moxee, Washington
Project Number: 0504-075-01

Figure A-4
Sheet 1 of 1

Drilled Start 11/15/2013 End 11/15/2013	Total Depth (ft) 20	Logged By KAH Checked By JER	Driller Environmental West Explorations, Inc.	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Not Applicable		Drilling Equipment Truck-Mounted Geoprobe
Easting (X) Northing (Y)		System Datum		Groundwater Date Measured / Depth to Water (ft) / Elevation (ft)
Notes:				

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name / Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		31			1			AC	Asphalt concrete pavement			
									SM	Brown silty fine sand (medium dense, moist)	NS	<1	
											NS	<1	
			39			2					NS	<1	
	5										SS	46	DP-16 (6-7)
						CA					SS	1440	
			38			3				Grades to tan	NS	850	
										Grades to wet and brown			
	10										NS	275	
			NR										No recovery from 12 to 20 feet
	15												
			NR										
	20										NS	<1	

Notes: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-16

GeoEngineers

Project: Frenchie's Fill-N-Food
Project Location: Moxee, Washington
Project Number: 0504-075-01

Figure A-5
Sheet 1 of 1

Drilled Start 11/15/2013 End 11/15/2013	Total Depth (ft) 20	Logged By KAH Checked By JER	Driller Environmental West Explorations, Inc.	Drilling Method Direct-Push	
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Not Applicable		Drilling Equipment Truck-Mounted Geoprobe	
Easting (X) Northing (Y)		System Datum		Groundwater Date Measured / Depth to Water (ft) / Elevation (ft)	
Notes:					

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name / Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0								AC	Asphalt concrete pavement			
			39			1			SM	Brown silty fine sand (moist)	NS	<1	
											NS	<1	
			40			2					NS	<1	
	5					CA							DP-17 (6-7)
											NS	<1	
			41			3					NS	<1	
										Grades to tan and wet Grades to brown			
	10												
											NS	<1	
			48			4					NS	<1	
	15												
											NS	<1	
			36			5							
											NS	<1	
	20												

Notes: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-17

GeoEngineers

Project: Frenchie's Fill-N-Food
Project Location: Moxee, Washington
Project Number: 0504-075-01

Figure A-6
Sheet 1 of 1

Drilled Start 11/15/2013 End 11/15/2013	Total Depth (ft) 20	Logged By KAH Checked By JER	Driller Environmental West Explorations, Inc.	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Not Applicable		Drilling Equipment Truck-Mounted Geoprobe
Easting (X) Northing (Y)		System Datum		Groundwater: Date Measured / Depth to Water (ft) / Elevation (ft)
Notes:				

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name / Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0								AC	Asphalt concrete pavement			
			32			1			GP	Brown fine to coarse gravel with trace sand and silt (medium dense, moist)	NS	<1	
									SM	Brown silty fine sand (medium dense, moist)	NS	<1	
			48			2					NS	<1	
	5										NS	<1	
											NS	<1	
			24			3				Grades to tan			
						CA				Grades to brown and wet	NS	46.6	DP-18 (9-10)
	10										NS	25	
			46			4					NS	15	
	15										NS	<1	
			12			5					NS	<1	
	20												

Notes: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-18

GeoEngineers

Project: Frenchie's Fill-N-Food
Project Location: Moxee, Washington
Project Number: 0504-075-01

Figure A-7
Sheet 1 of 1

Drilled Start 11/16/2013 End 11/16/2013	Total Depth (ft) 20	Logged By KAH Checked By JER	Driller Environmental West Explorations, Inc.	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Not Applicable	Drilling Equipment Truck-Mounted Geoprobe	
Easting (X) Northing (Y)		System Datum	Groundwater Date Measured / Depth to Water (ft) / Elevation (ft)	
Notes:				

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0								AC	Asphalt concrete pavement			
			28			1			SM	Brown silty fine sand (medium dense, moist)	NS	<1	
											NS	<1	
			31			2					NS	<1	
	5										NS	<1	
			38			3 CA					NS	<1	DP-19 (8-9)
										Grades to wet			
	10										NS	<1	
			30			4					NS	<1	
											NS	<1	
	15												
			24			5					NS	<1	
											NS	<1	
	20												

Notes: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-19

GeoEngineers

Project: Frenchie's Fill-N-Food
Project Location: Moxee, Washington
Project Number: 0504-075-01

Figure A-8
Sheet 1 of 1

Drilled	Start 11/16/2013	End 11/16/2013	Total Depth (ft)	20	Logged By	KAH	Driller	Environmental West Explorations, Inc.	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	Undetermined		Hammer Data	Not Applicable			Drilling Equipment	Truck-Mounted Geoprobe		
Easting (X) Northing (Y)			System Datum				Groundwater Date Measured	Depth to Water (ft)	Elevation (ft)	
Notes:										

Elevation (feet)	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0								AC	Asphalt concrete pavement	NS	<1	
			24			1			SM	Brown silty fine sand with trace gravel (medium dense, moist)			
											NS	<1	
			16			2							
	5										NS	<1	
			29			3 CA					NS	<1	DP-20 (8-9)
										Grades to wet			
	10										NS	<1	
									SM	Brown silty fine sand (medium dense, wet)			
			36			4					NS	<1	
	15										NS	<1	
			24			5				Grades to light brown	NS	<1	
											NS	<1	
	20												

Notes: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-20

GeoEngineers

Project: Frenchie's Fill-N-Food
Project Location: Moxee, Washington
Project Number: 0504-075-01

Figure A-9
Sheet 1 of 1

Drilled Start 11/16/2013 End 11/16/2013	Total Depth (ft) 20	Logged By KAH Checked By JER	Driller Environmental West Explorations, Inc.	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Not Applicable	Drilling Equipment Truck-Mounted Geoprobe	
Easting (X) Northing (Y)		System Datum	Groundwater Date Measured / Depth to Water (ft) / Elevation (ft)	
Notes:				

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		29			1			SM	Brown silty fine sand with trace gravel (moist)	NS	<1	
											NS	<1	
									SM	Brown silty fine sand (moist)			
			40			2					NS	<1	
	5										NS	<1	
			42			3 CA				Grades to tan	NS	<1	DP-21 (8-9)
										Grades to wet and brown			
	10										NS	<1	
			32			4					NS	<1	
											NS	<1	
	15		12			5					NS	<1	
	20												

Notes: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-21

GeoEngineers

Project: Frenchie's Fill-N-Food
Project Location: Moxee, Washington
Project Number: 0504-075-01

Figure A-10
Sheet 1 of 1

Drilled Start 11/16/2013 End 11/16/2013	Total Depth (ft) 20	Logged By KAH Checked By JER	Driller Environmental West Explorations, Inc.	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Not Applicable		Drilling Equipment Truck-Mounted Geoprobe
Easting (X) Northing (Y)		System Datum		Groundwater Date Measured / Depth to Water (ft) / Elevation (ft)
Notes:				

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0								AC	Asphalt concrete pavement			
			26			1			GP	Brown fine to coarse gravel with trace silt and sand (medium dense, moist)	NS	<1	
									SM	Brown silty fine sand with trace gravel (medium dense, moist)	NS	<1	
			36			2					NS	<1	
	5					CA							DP-22 (5-6)
									SM	Tan to brown silty fine sand (moist)			
											NS	<1	
			32			3					NS	<1	
										Grades to wet			
	10										NS	25.1	
			24			4					NS	78.2	
											NS	15.8	
	15												
			24			5					NS	7	
											NS	<1	
	20												

Notes: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-22

GeoEngineers

Project: Frenchie's Fill-N-Food
Project Location: Moxee, Washington
Project Number: 0504-075-01

Figure A-11
Sheet 1 of 1

Drilled Start 12/10/2013	End 12/10/2013	Total Depth (ft) 26.5	Logged By ERH / Checked By JER	Driller Environmental West Explorations, Inc.	Drilling Method Hollow-Stem Auger

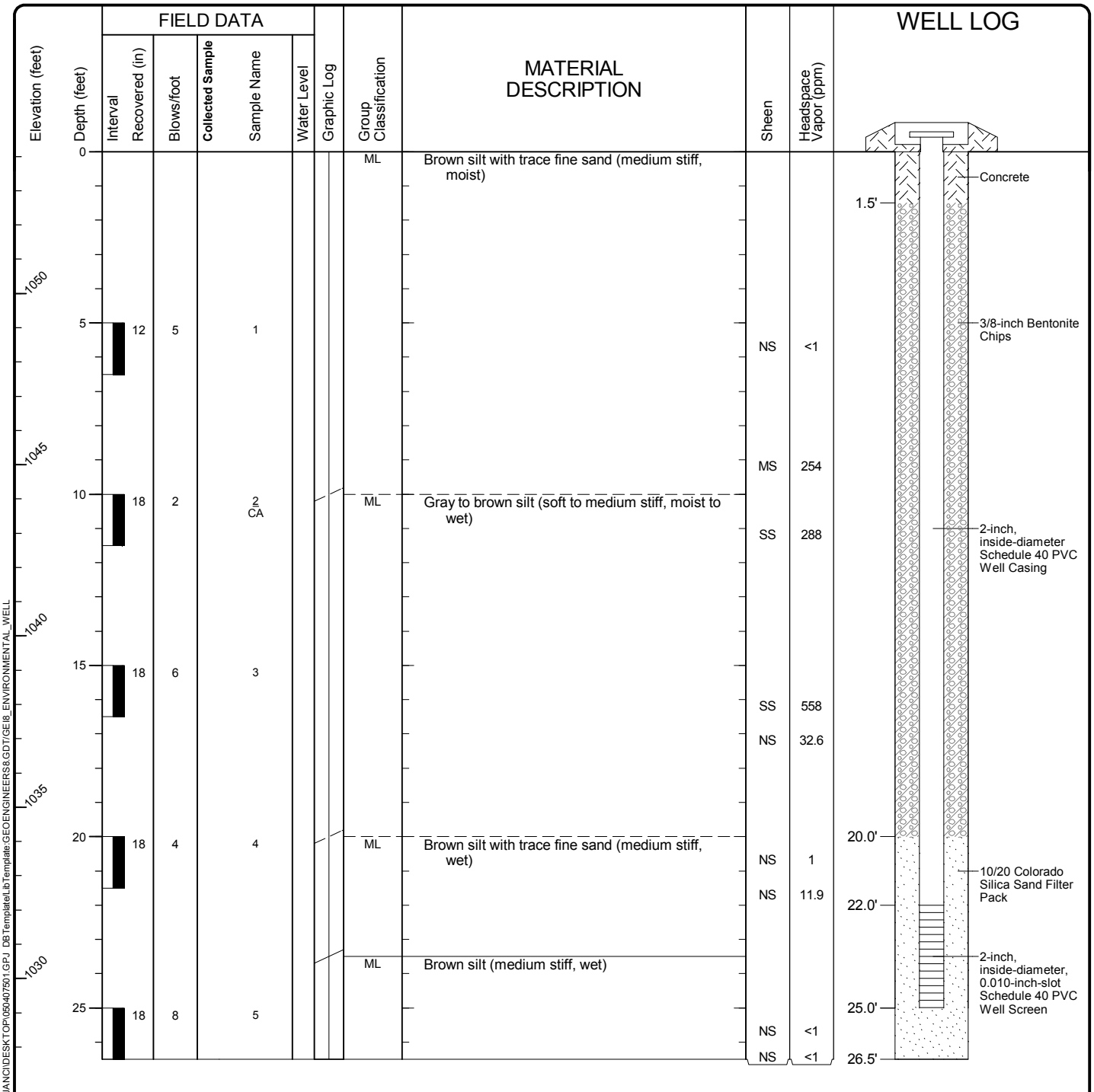
Hammer Data	140 (lbs) / 30 (in) Drop	Drilling Equipment	Shramm T-300
Surface Elevation (ft) / Vertical Datum	1054.14 / NAVD88	Top of Casing Elevation (ft)	1054.03
Easting (X) / Northing (Y)		Horizontal Datum	

DOE Well I.D.: BHW 813
A 2 (in) well was installed on 12/10/2013 to a depth of 25 (ft).

Groundwater

Date Measured	Depth to Water (ft)	Elevation (ft)

Notes:



Notes: See Figure A-1 for explanation of symbols.

Log of Remediation Well AS-1

GeoEngineers

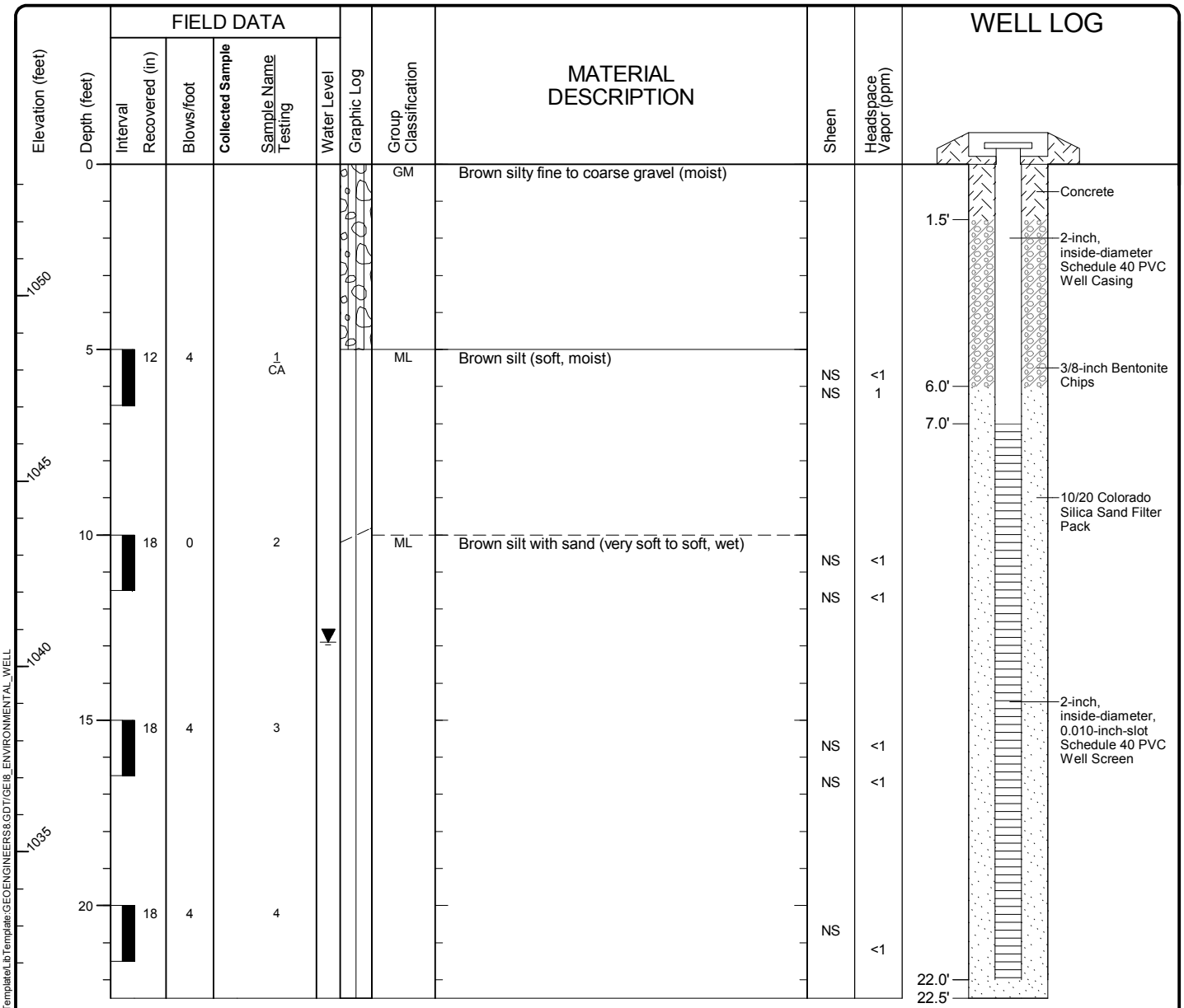
Project:	Frenchie's Fill-N-Food
Project Location:	Moxee, Washington
Project Number:	0504-075-01

Figure A-12
Sheet 1 of 1

Drilled Start 12/10/2013	End 12/10/2013	Total Depth (ft) 22.5	Logged By ERH / Checked By JER	Driller Environmental West Explorations, Inc.	Drilling Method Hollow-Stem Auger

Hammer Data: 140 (lbs) / 30 (in) Drop	Drilling Equipment: Shramm T-300	DOE Well I.D.: BHW 814 A 2 (in) well was installed on 12/10/2013 to a depth of 22 (ft).	
Surface Elevation (ft): 1053.55 Vertical Datum: NAVD88	Top of Casing Elevation (ft)	Groundwater Date Measured: 12/19/2013	Depth to Water (ft): 12.9 Elevation (ft): 1040.7
Easting (X) Northing (Y)	Horizontal Datum		

Notes:



Notes: See Figure A-1 for explanation of symbols.

Log of Monitoring Well MW-5

GeoEngineers

Project: Frenchie's Fill-N-Food
Project Location: Moxee, Washington
Project Number: 0504-075-01

Figure A-13
Sheet 1 of 1

Start Drilled	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
12/11/2013	12/11/2013	15	ERH / JER	Environmental West Explorations, Inc.	Hollow-Stem Auger

Hammer Data	140 (lbs) / 30 (in) Drop	Drilling Equipment	Shramm T-300
Surface Elevation (ft)	1053.92	Top of Casing Elevation (ft)	1053.64
Vertical Datum	NAVD88		
Easting (X)		Horizontal Datum	
Northing (Y)			

DOE Well I.D.: BHW 815
A 4 (in) well was installed on 12/11/2013 to a depth of 12 (ft).

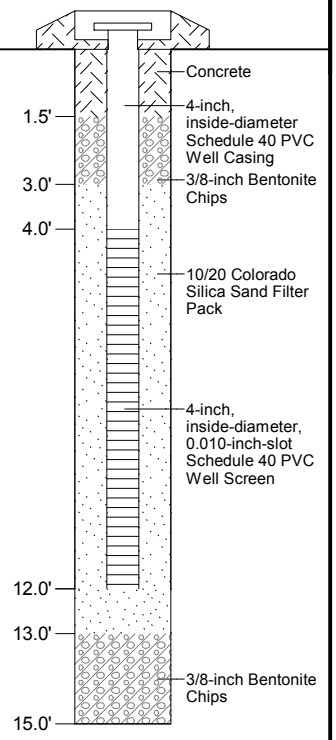
Groundwater

Date Measured	Depth to Water (ft)	Elevation (ft)

Notes:

Elevation (feet)	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)
	0							GP	Brown fine gravel with sand and trace silt (moist)		
		5	8		1			SP-SM	Brown fine to coarse sand with silt and trace gravel (loose, moist)	NS	<1
1050								SM	Brown fine silty sand (loose, moist)		
	5							GP	Orange-black fine to coarse gravel with trace silt (loose, moist)		
		12	5		2 CA			SM	Grayish-brown silty fine sand (loose, moist)	NS	868
										NS	496
1045											
	10							SM-ML	Brown silty fine sand to silt with fine sand (very loose to very soft, moist to wet)		
		18	0		3				Strong petroleum-like odor	NS	80.4
										NS	106
1040											
	15										

WELL LOG



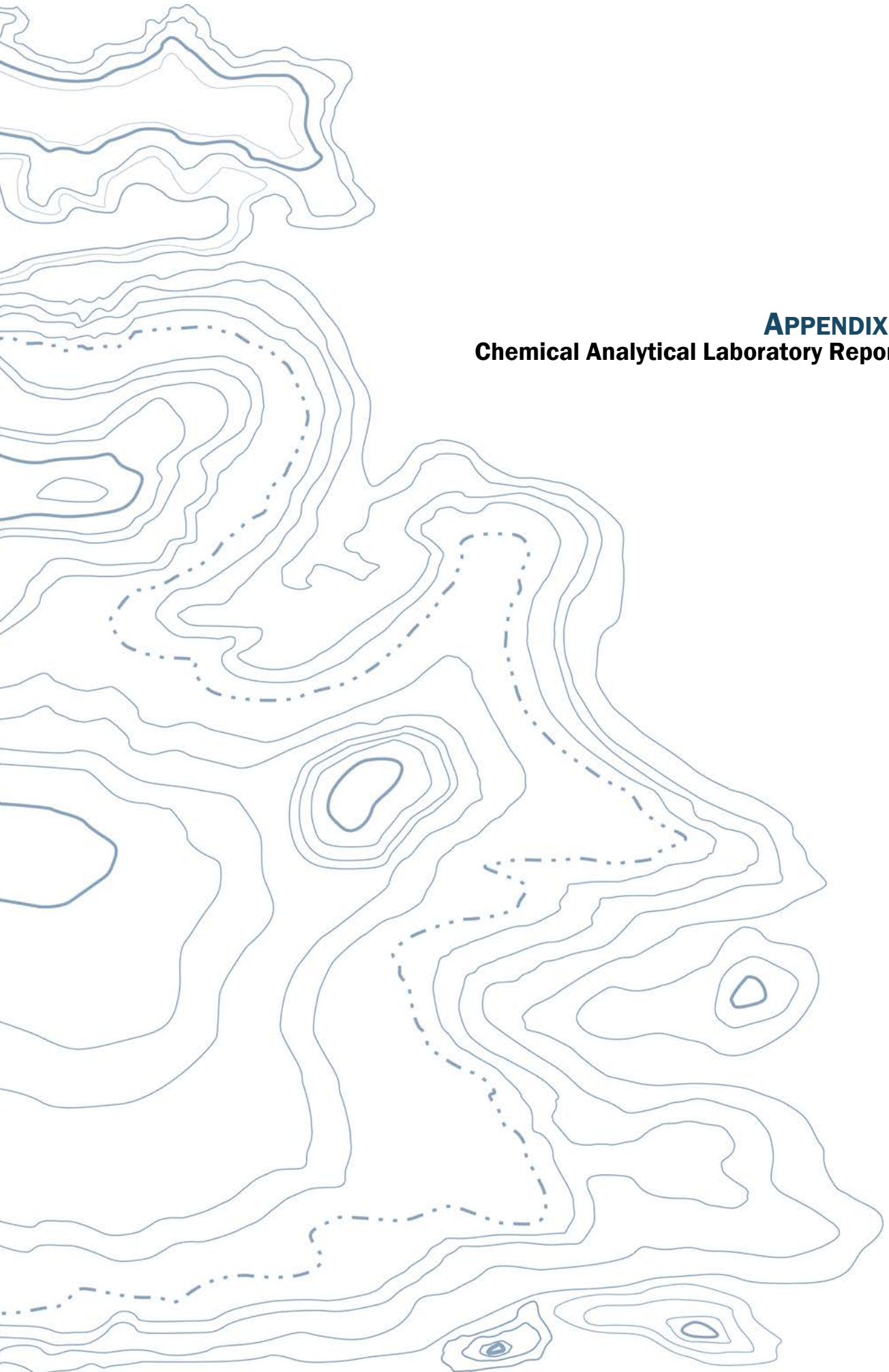
Notes: See Figure A-1 for explanation of symbols.

Log of Remediation Well SVE-1

GeoEngineers

Project:	Frenchie's Fill-N-Food
Project Location:	Moxee, Washington
Project Number:	0504-075-01

Figure A-14
Sheet 1 of 1



APPENDIX B
Chemical Analytical Laboratory Reports

APPENDIX B
CHEMICAL ANALYTICAL LABORATORY REPORTS

Samples

Chain-of-custody procedures were followed during the transport of the field samples to TestAmerica Laboratories, Inc. located in Spokane, Washington. The samples were held in cold storage pending extraction and/or analysis. The analytical results and quality control records are included in this appendix.

Field Duplicate

During the December 2013 groundwater sampling event, a duplicate sample was collected from MW-2 and designated Duplicate-1-121913. Toluene, xylenes, 1,2-dichloroethane (EDB), n-hexane, 2-methylnapthalene, lead, and methane were not detected greater than respective method reporting limits in both samples. The relative percent differences (RPDs) between the concentrations reported for the primary (X_1) and duplicate (X_2) samples were calculated using the following equation if both positive concentrations were more than 5 times the reporting limit:

$$RPD = \frac{|X_1 - X_2|}{(X_1 + X_2)/2} * 100$$

The resulting RPDs calculated using this method are summarized below:

- GRPH – 6.2 percent
- Naphthalene – 13.6 percent
- 1-methylnaphthalene – 17.9 percent
- Manganese – 0.0 percent
- Sulfate – 3.0 percent
- Total Alkalinity – 5.4 percent

RPD goals for this assessment, as specified in the project QAPP, are 30 percent in groundwater, unless the duplicate sample values are within 5 times the reporting limit. The RPD values specified above are within acceptable limits.

If both positive concentrations of contaminants were not more than 5 times the reporting limit the data were analyzed by calculating the relative difference (RD) between the numbers as shown below:

$$RD = |X_1 - X_2|$$

The resulting RDs calculated using this method are shown below:

- Benzene – 0.110 µg/L

- Ethylbenzene – 0.07 µg/L
- Nitrate-Nitrogen – 1.78 mg/L

The control limit used for this method for groundwater samples is the reporting limit. Each of these RDs are in compliance with respective control limits, with the exception of the nitrate analysis, which had a reporting limit of 0.400 mg/L for the primary sample.

Analytical Data Review

The laboratory maintains an internal quality assurance/quality control (QA/QC) program as documented in its laboratory quality assurance manual. The laboratory uses a combination of blanks, surrogate recoveries, duplicates, matrix spike recoveries, matrix spike duplicate recoveries, blank spike recoveries and blank spike duplicate recoveries to evaluate the analytical results. The laboratory also uses data quality goals for individual chemicals or groups of chemicals based on the long-term performance of the test methods. The data quality goals were included in the laboratory reports. The laboratory compared each group of samples with the existing data quality goals. The laboratory noted the following exception in the laboratory report dated December 4, 2013 and associated with direct-push soil borings:

- Submitted groundwater samples from DP-13 through DP-22 contained suspended sediment and pH measurements were outside of method requirements for Method NWTPH-Gx and Environmental Protection Agency (EPA) Method 8260C. Whole bottle extraction was not performed for analysis by EPA Method 8270D.
- Sample DP-16 (6-7) required a dilution during analysis by EPA Method 8270D. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level which the recovery calculation did not provide useful information.
- The RPD exceeded the method control limits for analysis of laboratory sample 13L0010-MSD1 by EPA Method 6010C. However, the laboratory reported that the individual analyte QA/QC recoveries were within acceptance limits.

The laboratory noted the following exceptions in the laboratory report dated January 2, 2014 and associated with soil samples collected from the monitoring well and remediation wells.

- The matrix spike was above acceptance limits for analysis of laboratory sample 13L0127-MS1 by EPA Method 6010C. The laboratory referred the reader to results of the associated blank spike.
- The RPD exceeded the method control limits for analysis of laboratory sample 13L0127-MSD1 by EPA Method 6010C. However, the laboratory reported that the individual analyte QA/QC recoveries were within acceptance limits.

The laboratory noted the following exceptions in the laboratory report dated January 8, 2014 and associated with groundwater samples collected from site monitoring wells:

- For the manganese analyses via EPA Method 200.7, the laboratory analyst had to re-digest the entire batch of samples. Because of this requirement, no sample contained sufficient volume to run a matrix spike, matrix spike duplicate, and duplicate. As a result, the laboratory elected

not to run a matrix spike duplicate for these analyses. During further discussion, the laboratory referred to the observation that QC analyses associated with the matrix spike were within laboratory control limits as justification that associated data quality is acceptable.

Analytical Data Review Summary

We reviewed the laboratory internal quality assurance/quality control (QA/QC) in the context of data quality goals. Based on our review, in our opinion, the quality of the analytical data is acceptable for the intended use, subject to the data quality exceptions described herein. However, based on the method of collection and data quality exception described above, it is our opinion that analytical results associated with groundwater samples collected from direct-push borings DP-13 through DP-22 should be considered approximate.

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: SWK0100
Client Project/Site: 0504-075-01
Client Project Description: Frenchies Fill-n-Food

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

Attn: Jon Rudders

Authorized for release by:
12/4/2013 3:30:50 PM

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

Table of Contents

Sample Summary

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWK0100

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SWK0100-02	DP-13(12-13)	Soil	11/15/13 08:54	11/18/13 14:20
SWK0100-06	DP-14(8-8.5)	Soil	11/15/13 09:51	11/18/13 14:20
SWK0100-11	DP-15(8-9)	Soil	11/15/13 11:11	11/18/13 14:20
SWK0100-15	DP-16(6-7)	Soil	11/15/13 12:40	11/18/13 14:20
SWK0100-19	DP-17(6-7)	Soil	11/15/13 13:56	11/18/13 14:20
SWK0100-25	DP-18(9-10)	Soil	11/15/13 15:13	11/18/13 14:20
SWK0100-30	DP-19(8-9)	Soil	11/16/13 08:45	11/18/13 14:20
SWK0100-35	DP-20(8-9)	Soil	11/16/13 09:53	11/18/13 14:20
SWK0100-40	DP-21(8-9)	Soil	11/16/13 11:05	11/18/13 14:20
SWK0100-44	DP-22(5-6)	Soil	11/16/13 13:00	11/18/13 14:20
SWK0100-48	DP-13-111513	Water	11/15/13 09:57	11/18/13 14:20
SWK0100-49	DP-14-111513	Water	11/15/13 11:25	11/18/13 14:20
SWK0100-50	DP-15-111513	Water	11/15/13 12:06	11/18/13 14:20
SWK0100-51	DP-16-111513	Water	11/15/13 13:26	11/18/13 14:20
SWK0100-52	DP-17-111513	Water	11/15/13 14:35	11/18/13 14:20
SWK0100-53	DP-18-111513	Water	11/15/13 16:02	11/18/13 14:20
SWK0100-54	DP-19-111613	Water	11/16/13 09:19	11/18/13 14:20
SWK0100-55	DP-20-111613	Water	11/16/13 10:28	11/18/13 14:20
SWK0100-56	DP-21-111613	Water	11/16/13 11:32	11/18/13 14:20
SWK0100-57	DP-22-111613	Water	11/16/13 13:41	11/18/13 14:20
SWK0100-58	Trip Blank	Water	11/13/13 00:00	11/18/13 14:20
SWK0100-59	Trip Blank	Soil	11/13/13 00:00	11/18/13 14:20

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
A-01	The sample contained a significant amount of sediment. As a result the pH was outside of method requirements. The proper container and preservative was used.

Semivolatiles

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.
A-01a	whole-bottle extraction not performed
S6	Sediment present.

Metals

Qualifier	Qualifier Description
R	The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within 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
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: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWK0100

Client Sample ID: DP-13(12-13)

Lab Sample ID: SWK0100-02

Date Collected: 11/15/13 08:54
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 73.5

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		8.20		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:30	1.00
Benzene	ND		0.00820		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:30	1.00
Ethylbenzene	ND		0.164		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:30	1.00
Toluene	ND		0.164		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:30	1.00
o-Xylene	ND		0.328		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:30	1.00
m,p-Xylene	ND		0.656		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:30	1.00
1,2-Dichloroethane (EDC)	ND		0.164		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:30	1.00
Hexane	ND		0.164		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:30	1.00
Xylenes (total)	ND		2.46		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:30	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*106*		*42.4 - 163*	*11/22/13 08:12*	*11/22/13 11:30*	*1.00*
1,2-dichloroethane-d4	*98.6*		*50 - 150*	*11/22/13 08:12*	*11/22/13 11:30*	*1.00*
Toluene-d8	*99.1*		*45.8 - 155*	*11/22/13 08:12*	*11/22/13 11:30*	*1.00*
4-bromofluorobenzene	*105*		*41.5 - 162*	*11/22/13 08:12*	*11/22/13 11:30*	*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	ND		0.0129		mg/kg dry	☼	11/25/13 10:45	11/26/13 20:26	1.00
2-Methylnaphthalene	ND		0.0129		mg/kg dry	☼	11/25/13 10:45	11/26/13 20:26	1.00
1-Methylnaphthalene	ND		0.0129		mg/kg dry	☼	11/25/13 10:45	11/26/13 20:26	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*84.8*		*53.2 - 137*	*11/25/13 10:45*	*11/26/13 20:26*	*1.00*

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
Lead	**6.74**		1.53		mg/kg dry	☼	12/02/13 15:17	12/04/13 10:00	1.00

Client Sample ID: DP-14(8-8.5)

Lab Sample ID: SWK0100-06

Date Collected: 11/15/13 09:51
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 69

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		12.2		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:54	1.00
Benzene	ND		0.0122		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:54	1.00
Ethylbenzene	ND		0.245		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:54	1.00
Toluene	ND		0.245		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:54	1.00
o-Xylene	ND		0.489		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:54	1.00
m,p-Xylene	ND		0.978		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:54	1.00
1,2-Dichloroethane (EDC)	ND		0.245		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:54	1.00
Hexane	ND		0.245		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:54	1.00
Xylenes (total)	ND		3.67		mg/kg dry	☼	11/22/13 08:12	11/22/13 11:54	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*100*		*42.4 - 163*	*11/22/13 08:12*	*11/22/13 11:54*	*1.00*
1,2-dichloroethane-d4	*97.8*		*50 - 150*	*11/22/13 08:12*	*11/22/13 11:54*	*1.00*
Toluene-d8	*101*		*45.8 - 155*	*11/22/13 08:12*	*11/22/13 11:54*	*1.00*
4-bromofluorobenzene	*102*		*41.5 - 162*	*11/22/13 08:12*	*11/22/13 11:54*	*1.00*

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWK0100

Client Sample ID: DP-14(8-8.5)

Lab Sample ID: SWK0100-06
Date Collected: 11/15/13 09:51
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 69

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		0.0144		mg/kg dry	☼	11/25/13 10:45	11/26/13 20:51	1.00
2-Methylnaphthalene	ND		0.0144		mg/kg dry	☼	11/25/13 10:45	11/26/13 20:51	1.00
1-Methylnaphthalene	ND		0.0144		mg/kg dry	☼	11/25/13 10:45	11/26/13 20:51	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*71.8*		*53.2 - 137*	*11/25/13 10:45*	*11/26/13 20:51*	*1.00*

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
Lead	ND		1.87		mg/kg dry	☼	12/02/13 15:17	12/04/13 10:18	1.00

Client Sample ID: DP-15(8-9)

Lab Sample ID: SWK0100-11
Date Collected: 11/15/13 11:11
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 62.2

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		12.2		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:17	1.00
Benzene	ND		0.0122		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:17	1.00
Ethylbenzene	ND		0.243		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:17	1.00
Toluene	ND		0.243		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:17	1.00
o-Xylene	ND		0.486		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:17	1.00
m,p-Xylene	ND		0.972		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:17	1.00
1,2-Dichloroethane (EDC)	ND		0.243		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:17	1.00
Hexane	ND		0.243		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:17	1.00
Xylenes (total)	ND		3.65		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:17	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*101*		*42.4 - 163*	*11/22/13 08:12*	*11/22/13 12:17*	*1.00*
1,2-dichloroethane-d4	*98.7*		*50 - 150*	*11/22/13 08:12*	*11/22/13 12:17*	*1.00*
Toluene-d8	*101*		*45.8 - 155*	*11/22/13 08:12*	*11/22/13 12:17*	*1.00*
4-bromofluorobenzene	*103*		*41.5 - 162*	*11/22/13 08:12*	*11/22/13 12:17*	*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	ND		0.0158		mg/kg dry	☼	11/25/13 10:45	11/26/13 21:17	1.00
2-Methylnaphthalene	ND		0.0158		mg/kg dry	☼	11/25/13 10:45	11/26/13 21:17	1.00
1-Methylnaphthalene	ND		0.0158		mg/kg dry	☼	11/25/13 10:45	11/26/13 21:17	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*75.0*		*53.2 - 137*	*11/25/13 10:45*	*11/26/13 21:17*	*1.00*

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
Lead	ND		1.58		mg/kg dry	☼	12/02/13 15:17	12/04/13 10:21	1.00

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWK0100

Client Sample ID: DP-16(6-7)

Lab Sample ID: SWK0100-15
Date Collected: 11/15/13 12:40
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 81.4

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	**7770**		90.0		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:40	10.0
Benzene	ND		0.0900		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:40	10.0
Ethylbenzene	**16.8**		1.80		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:40	10.0
Toluene	ND		1.80		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:40	10.0
o-Xylene	**16.1**		3.60		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:40	10.0
m,p-Xylene	**92.4**		72.0		mg/kg dry	☼	11/22/13 08:12	11/22/13 23:07	100
1,2-Dichloroethane (EDC)	ND		1.80		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:40	10.0
Hexane	ND		1.80		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:40	10.0
Xylenes (total)	**109**		27.0		mg/kg dry	☼	11/22/13 08:12	11/22/13 12:40	10.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.7*		*42.4 - 163*	*11/22/13 08:12*	*11/22/13 12:40*	*10.0*
1,2-dichloroethane-d4	*101*		*50 - 150*	*11/22/13 08:12*	*11/22/13 12:40*	*10.0*
Toluene-d8	*91.4*		*45.8 - 155*	*11/22/13 08:12*	*11/22/13 12:40*	*10.0*
4-bromofluorobenzene	*142*		*41.5 - 162*	*11/22/13 08:12*	*11/22/13 12:40*	*10.0*

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	**16.0**		1.21		mg/kg dry	☼	11/25/13 10:45	12/03/13 00:39	50.0
2-Methylnaphthalene	**14.0**		1.21		mg/kg dry	☼	11/25/13 10:45	12/03/13 00:39	50.0
1-Methylnaphthalene	**5.07**		1.21		mg/kg dry	☼	11/25/13 10:45	12/03/13 00:39	50.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*160*	*Z3*	*53.2 - 137*	*11/25/13 10:45*	*12/03/13 00:39*	*50.0*

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
Lead	**14.0**		1.36		mg/kg dry	☼	12/02/13 15:17	12/04/13 10:25	1.00

Client Sample ID: DP-17(6-7)

Lab Sample ID: SWK0100-19
Date Collected: 11/15/13 13:56
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 74.7

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		8.94		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:04	1.00
Benzene	ND		0.00894		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:04	1.00
Ethylbenzene	ND		0.179		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:04	1.00
Toluene	ND		0.179		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:04	1.00
o-Xylene	ND		0.357		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:04	1.00
m,p-Xylene	ND		0.715		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:04	1.00
1,2-Dichloroethane (EDC)	ND		0.179		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:04	1.00
Hexane	ND		0.179		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:04	1.00
Xylenes (total)	ND		2.68		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:04	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.1*		*42.4 - 163*	*11/22/13 08:12*	*11/22/13 13:04*	*1.00*
1,2-dichloroethane-d4	*93.6*		*50 - 150*	*11/22/13 08:12*	*11/22/13 13:04*	*1.00*
Toluene-d8	*102*		*45.8 - 155*	*11/22/13 08:12*	*11/22/13 13:04*	*1.00*
4-bromofluorobenzene	*107*		*41.5 - 162*	*11/22/13 08:12*	*11/22/13 13:04*	*1.00*

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWK0100

Client Sample ID: DP-17(6-7)

Lab Sample ID: SWK0100-19
Date Collected: 11/15/13 13:56
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 74.7

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		0.0131		mg/kg dry	☼	11/25/13 10:45	11/26/13 22:08	1.00
2-Methylnaphthalene	ND		0.0131		mg/kg dry	☼	11/25/13 10:45	11/26/13 22:08	1.00
1-Methylnaphthalene	ND		0.0131		mg/kg dry	☼	11/25/13 10:45	11/26/13 22:08	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*93.4*		*53.2 - 137*	*11/25/13 10:45*	*11/26/13 22:08*	*1.00*

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
Lead	ND		1.64		mg/kg dry	☼	12/02/13 15:17	12/04/13 10:37	1.00

Client Sample ID: DP-18(9-10)

Lab Sample ID: SWK0100-25
Date Collected: 11/15/13 15:13
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 75.4

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	**612**		8.22		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:27	1.00
Benzene	**0.0164**		0.00822		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:27	1.00
Ethylbenzene	**2.63**		0.164		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:27	1.00
Toluene	ND		0.164		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:27	1.00
o-Xylene	ND		0.329		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:27	1.00
m,p-Xylene	ND		0.658		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:27	1.00
1,2-Dichloroethane (EDC)	ND		0.164		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:27	1.00
Hexane	ND		0.164		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:27	1.00
Xylenes (total)	ND		2.47		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:27	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*96.1*		*42.4 - 163*	*11/22/13 08:12*	*11/22/13 13:27*	*1.00*
1,2-dichloroethane-d4	*98.9*		*50 - 150*	*11/22/13 08:12*	*11/22/13 13:27*	*1.00*
Toluene-d8	*90.9*		*45.8 - 155*	*11/22/13 08:12*	*11/22/13 13:27*	*1.00*
4-bromofluorobenzene	*134*		*41.5 - 162*	*11/22/13 08:12*	*11/22/13 13:27*	*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	**1.90**		0.0215		mg/kg dry	☼	11/25/13 10:45	12/03/13 01:04	1.00
2-Methylnaphthalene	**1.57**		0.0215		mg/kg dry	☼	11/25/13 10:45	12/03/13 01:04	1.00
1-Methylnaphthalene	**0.562**		0.0215		mg/kg dry	☼	11/25/13 10:45	12/03/13 01:04	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*111*		*53.2 - 137*	*11/25/13 10:45*	*12/03/13 01:04*	*1.00*

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
Lead	**4.12**		1.51		mg/kg dry	☼	12/02/13 15:17	12/04/13 10:40	1.00

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWK0100

Client Sample ID: DP-19(8-9)

Lab Sample ID: SWK0100-30

Date Collected: 11/16/13 08:45
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 34.4

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		23.0		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:50	1.00
Benzene	ND		0.0230		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:50	1.00
Ethylbenzene	ND		0.459		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:50	1.00
Toluene	ND		0.459		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:50	1.00
o-Xylene	ND		0.919		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:50	1.00
m,p-Xylene	ND		1.84		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:50	1.00
1,2-Dichloroethane (EDC)	ND		0.459		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:50	1.00
Hexane	ND		0.459		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:50	1.00
Xylenes (total)	ND		6.89		mg/kg dry	☼	11/22/13 08:12	11/22/13 13:50	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*98.2*		*42.4 - 163*	*11/22/13 08:12*	*11/22/13 13:50*	*1.00*
1,2-dichloroethane-d4	*88.5*		*50 - 150*	*11/22/13 08:12*	*11/22/13 13:50*	*1.00*
Toluene-d8	*102*		*45.8 - 155*	*11/22/13 08:12*	*11/22/13 13:50*	*1.00*
4-bromofluorobenzene	*108*		*41.5 - 162*	*11/22/13 08:12*	*11/22/13 13:50*	*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	ND		0.0283		mg/kg dry	☼	11/25/13 10:45	11/26/13 22:59	1.00
2-Methylnaphthalene	ND		0.0283		mg/kg dry	☼	11/25/13 10:45	11/26/13 22:59	1.00
1-Methylnaphthalene	ND		0.0283		mg/kg dry	☼	11/25/13 10:45	11/26/13 22:59	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*114*		*53.2 - 137*	*11/25/13 10:45*	*11/26/13 22:59*	*1.00*

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
Lead	**30.8**		3.46		mg/kg dry	☼	12/02/13 15:17	12/04/13 10:44	1.00

Client Sample ID: DP-20(8-9)

Lab Sample ID: SWK0100-35

Date Collected: 11/16/13 09:53
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 88.6

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5.49		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:14	1.00
Benzene	ND		0.00549		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:14	1.00
Ethylbenzene	ND		0.110		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:14	1.00
Toluene	ND		0.110		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:14	1.00
o-Xylene	ND		0.220		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:14	1.00
m,p-Xylene	ND		0.439		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:14	1.00
1,2-Dichloroethane (EDC)	ND		0.110		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:14	1.00
Hexane	ND		0.110		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:14	1.00
Xylenes (total)	ND		1.65		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:14	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*96.2*		*42.4 - 163*	*11/22/13 08:12*	*11/22/13 14:14*	*1.00*
1,2-dichloroethane-d4	*91.5*		*50 - 150*	*11/22/13 08:12*	*11/22/13 14:14*	*1.00*
Toluene-d8	*99.4*		*45.8 - 155*	*11/22/13 08:12*	*11/22/13 14:14*	*1.00*
4-bromofluorobenzene	*110*		*41.5 - 162*	*11/22/13 08:12*	*11/22/13 14:14*	*1.00*

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWK0100

Client Sample ID: DP-20(8-9)

Lab Sample ID: SWK0100-35
Date Collected: 11/16/13 09:53
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 88.6

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		0.0109		mg/kg dry	☼	11/25/13 10:45	11/26/13 23:25	1.00
2-Methylnaphthalene	ND		0.0109		mg/kg dry	☼	11/25/13 10:45	11/26/13 23:25	1.00
1-Methylnaphthalene	ND		0.0109		mg/kg dry	☼	11/25/13 10:45	11/26/13 23:25	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92.0*		*53.2 - 137*	*11/25/13 10:45*	*11/26/13 23:25*	*1.00*

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
Lead	**18.7**		1.36		mg/kg dry	☼	12/02/13 15:17	12/04/13 10:47	1.00

Client Sample ID: DP-21(8-9)

Lab Sample ID: SWK0100-40
Date Collected: 11/16/13 11:05
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 67.5

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		10.6		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:37	1.00
Benzene	ND		0.0106		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:37	1.00
Ethylbenzene	ND		0.212		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:37	1.00
Toluene	ND		0.212		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:37	1.00
o-Xylene	ND		0.425		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:37	1.00
m,p-Xylene	ND		0.850		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:37	1.00
1,2-Dichloroethane (EDC)	ND		0.212		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:37	1.00
Hexane	ND		0.212		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:37	1.00
Xylenes (total)	ND		3.19		mg/kg dry	☼	11/22/13 08:12	11/22/13 14:37	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*97.0*		*42.4 - 163*	*11/22/13 08:12*	*11/22/13 14:37*	*1.00*
1,2-dichloroethane-d4	*94.9*		*50 - 150*	*11/22/13 08:12*	*11/22/13 14:37*	*1.00*
Toluene-d8	*101*		*45.8 - 155*	*11/22/13 08:12*	*11/22/13 14:37*	*1.00*
4-bromofluorobenzene	*108*		*41.5 - 162*	*11/22/13 08:12*	*11/22/13 14:37*	*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	ND		0.0147		mg/kg dry	☼	11/25/13 10:45	12/03/13 01:30	1.00
2-Methylnaphthalene	ND		0.0147		mg/kg dry	☼	11/25/13 10:45	12/03/13 01:30	1.00
1-Methylnaphthalene	ND		0.0147		mg/kg dry	☼	11/25/13 10:45	12/03/13 01:30	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98.4*		*53.2 - 137*	*11/25/13 10:45*	*12/03/13 01:30*	*1.00*

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
Lead	ND		1.91		mg/kg dry	☼	12/02/13 15:17	12/04/13 10:51	1.00

Client Sample ID: DP-22(5-6)

Lab Sample ID: SWK0100-44

Date Collected: 11/16/13 13:00

Matrix: Soil

Date Received: 11/18/13 14:20

Percent Solids: 86.6

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		6.22		mg/kg dry	☼	11/22/13 08:12	11/22/13 15:00	1.00
Benzene	ND		0.00622		mg/kg dry	☼	11/22/13 08:12	11/22/13 15:00	1.00
Ethylbenzene	ND		0.124		mg/kg dry	☼	11/22/13 08:12	11/22/13 15:00	1.00
Toluene	ND		0.124		mg/kg dry	☼	11/22/13 08:12	11/22/13 15:00	1.00
o-Xylene	ND		0.249		mg/kg dry	☼	11/22/13 08:12	11/22/13 15:00	1.00
m,p-Xylene	ND		0.498		mg/kg dry	☼	11/22/13 08:12	11/22/13 15:00	1.00
1,2-Dichloroethane (EDC)	ND		0.124		mg/kg dry	☼	11/22/13 08:12	11/22/13 15:00	1.00
Hexane	ND		0.124		mg/kg dry	☼	11/22/13 08:12	11/22/13 15:00	1.00
Xylenes (total)	ND		1.87		mg/kg dry	☼	11/22/13 08:12	11/22/13 15:00	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*98.1*		*42.4 - 163*	*11/22/13 08:12*	*11/22/13 15:00*	*1.00*
1,2-dichloroethane-d4	*92.6*		*50 - 150*	*11/22/13 08:12*	*11/22/13 15:00*	*1.00*
Toluene-d8	*99.2*		*45.8 - 155*	*11/22/13 08:12*	*11/22/13 15:00*	*1.00*
4-bromofluorobenzene	*108*		*41.5 - 162*	*11/22/13 08:12*	*11/22/13 15:00*	*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	ND		0.0115		mg/kg dry	☼	11/26/13 06:27	12/03/13 01:55	1.00
2-Methylnaphthalene	ND		0.0115		mg/kg dry	☼	11/26/13 06:27	12/03/13 01:55	1.00
1-Methylnaphthalene	ND		0.0115		mg/kg dry	☼	11/26/13 06:27	12/03/13 01:55	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*115*		*53.2 - 137*	*11/26/13 06:27*	*12/03/13 01:55*	*1.00*

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
Lead	**17.5**		1.50		mg/kg dry	☼	12/02/13 15:17	12/04/13 10:54	1.00

Client Sample ID: DP-13-111513

Lab Sample ID: SWK0100-48

Date Collected: 11/15/13 09:57

Matrix: Water

Date Received: 11/18/13 14:20

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND	A-01	90.0		ug/l		11/19/13 13:41	11/19/13 18:42	1.00
Benzene	ND	A-01	0.200		ug/l		11/19/13 13:41	11/19/13 18:42	1.00
Toluene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 18:42	1.00
Ethylbenzene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 18:42	1.00
m,p-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 18:42	1.00
o-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 18:42	1.00
1,2-Dichloroethane (EDC)	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 18:42	1.00
Xylenes (total)	ND	A-01	1.50		ug/l		11/19/13 13:41	11/19/13 18:42	1.00
Hexane	ND	A-01	1.00		ug/l		11/19/13 13:41	11/19/13 18:42	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*102*	*A-01*	*71.2 - 143*	*11/19/13 13:41*	*11/19/13 18:42*	*1.00*
1,2-dichloroethane-d4	*100*	*A-01*	*70 - 140*	*11/19/13 13:41*	*11/19/13 18:42*	*1.00*
Toluene-d8	*102*	*A-01*	*74.1 - 135*	*11/19/13 13:41*	*11/19/13 18:42*	*1.00*
4-bromofluorobenzene	*99.2*	*A-01*	*68.7 - 141*	*11/19/13 13:41*	*11/19/13 18:42*	*1.00*

Client Sample ID: DP-14-111513

Lab Sample ID: SWK0100-49

Date Collected: 11/15/13 11:25

Matrix: Water

Date Received: 11/18/13 14:20

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	**3600**	**A-01**	900		ug/l		11/19/13 13:41	11/19/13 19:06	10.0
Benzene	ND	A-01	2.00		ug/l		11/19/13 13:41	11/19/13 19:06	10.0
Toluene	ND	A-01	5.00		ug/l		11/19/13 13:41	11/19/13 19:06	10.0
Ethylbenzene	ND	A-01	5.00		ug/l		11/19/13 13:41	11/19/13 19:06	10.0
m,p-Xylene	ND	A-01	5.00		ug/l		11/19/13 13:41	11/19/13 19:06	10.0
o-Xylene	ND	A-01	5.00		ug/l		11/19/13 13:41	11/19/13 19:06	10.0
1,2-Dichloroethane (EDC)	ND	A-01	5.00		ug/l		11/19/13 13:41	11/19/13 19:06	10.0
Xylenes (total)	ND	A-01	15.0		ug/l		11/19/13 13:41	11/19/13 19:06	10.0
Hexane	ND	A-01	10.0		ug/l		11/19/13 13:41	11/19/13 19:06	10.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*98.5*	*A-01*	*71.2 - 143*	*11/19/13 13:41*	*11/19/13 19:06*	*10.0*
1,2-dichloroethane-d4	*100*	*A-01*	*70 - 140*	*11/19/13 13:41*	*11/19/13 19:06*	*10.0*
Toluene-d8	*103*	*A-01*	*74.1 - 135*	*11/19/13 13:41*	*11/19/13 19:06*	*10.0*
4-bromofluorobenzene	*97.7*	*A-01*	*68.7 - 141*	*11/19/13 13:41*	*11/19/13 19:06*	*10.0*

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	**1.56**	**A-01a S6**	0.100		ug/l		11/19/13 09:06	11/19/13 15:30	1.00
2-Methylnaphthalene	ND	A-01a S6	0.100		ug/l		11/19/13 09:06	11/19/13 15:30	1.00
1-Methylnaphthalene	**2.24**	**A-01a S6**	0.100		ug/l		11/19/13 09:06	11/19/13 15:30	1.00

Client Sample ID: DP-15-111513

Lab Sample ID: SWK0100-50

Date Collected: 11/15/13 12:06

Matrix: Water

Date Received: 11/18/13 14:20

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND	A-01	90.0		ug/l		11/19/13 13:41	11/19/13 19:30	1.00
Benzene	ND	A-01	0.200		ug/l		11/19/13 13:41	11/19/13 19:30	1.00
Toluene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 19:30	1.00
Ethylbenzene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 19:30	1.00
m,p-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 19:30	1.00
o-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 19:30	1.00
1,2-Dichloroethane (EDC)	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 19:30	1.00
Xylenes (total)	ND	A-01	1.50		ug/l		11/19/13 13:41	11/19/13 19:30	1.00
Hexane	ND	A-01	1.00		ug/l		11/19/13 13:41	11/19/13 19:30	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*103*	*A-01*	*71.2 - 143*	*11/19/13 13:41*	*11/19/13 19:30*	*1.00*
1,2-dichloroethane-d4	*101*	*A-01*	*70 - 140*	*11/19/13 13:41*	*11/19/13 19:30*	*1.00*
Toluene-d8	*102*	*A-01*	*74.1 - 135*	*11/19/13 13:41*	*11/19/13 19:30*	*1.00*
4-bromofluorobenzene	*99.9*	*A-01*	*68.7 - 141*	*11/19/13 13:41*	*11/19/13 19:30*	*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	ND	A-01a S6	0.100		ug/l		11/19/13 09:06	11/19/13 15:55	1.00
2-Methylnaphthalene	ND	A-01a S6	0.100		ug/l		11/19/13 09:06	11/19/13 15:55	1.00
1-Methylnaphthalene	ND	A-01a S6	0.100		ug/l		11/19/13 09:06	11/19/13 15:55	1.00

Client Sample ID: DP-16-111513

Lab Sample ID: SWK0100-51

Date Collected: 11/15/13 13:26

Matrix: Water

Date Received: 11/18/13 14:20

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	**12000**	**A-01**	9000		ug/l		11/19/13 13:41	11/19/13 19:53	100
Benzene	**177**	**A-01**	20.0		ug/l		11/19/13 13:41	11/19/13 19:53	100
Toluene	ND	A-01	50.0		ug/l		11/19/13 13:41	11/19/13 19:53	100
Ethylbenzene	**344**	**A-01**	50.0		ug/l		11/19/13 13:41	11/19/13 19:53	100
m,p-Xylene	**157**	**A-01**	50.0		ug/l		11/19/13 13:41	11/19/13 19:53	100
o-Xylene	ND	A-01	50.0		ug/l		11/19/13 13:41	11/19/13 19:53	100
1,2-Dichloroethane (EDC)	ND	A-01	50.0		ug/l		11/19/13 13:41	11/19/13 19:53	100
Xylenes (total)	**157**	**A-01**	150		ug/l		11/19/13 13:41	11/19/13 19:53	100
Hexane	ND	A-01	100		ug/l		11/19/13 13:41	11/19/13 19:53	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*100*	*A-01*	*71.2 - 143*	*11/19/13 13:41*	*11/19/13 19:53*	*100*
1,2-dichloroethane-d4	*98.3*	*A-01*	*70 - 140*	*11/19/13 13:41*	*11/19/13 19:53*	*100*
Toluene-d8	*101*	*A-01*	*74.1 - 135*	*11/19/13 13:41*	*11/19/13 19:53*	*100*
4-bromofluorobenzene	*96.8*	*A-01*	*68.7 - 141*	*11/19/13 13:41*	*11/19/13 19:53*	*100*

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	**103**	**A-01a S6**	0.994		ug/l		11/19/13 09:06	11/20/13 08:29	10.0
2-Methylnaphthalene	**18.5**	**A-01a S6**	0.994		ug/l		11/19/13 09:06	11/20/13 08:29	10.0
1-Methylnaphthalene	**12.4**	**A-01a S6**	0.994		ug/l		11/19/13 09:06	11/20/13 08:29	10.0

Client Sample ID: DP-17-111513

Lab Sample ID: SWK0100-52

Date Collected: 11/15/13 14:35

Matrix: Water

Date Received: 11/18/13 14:20

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND	A-01	90.0		ug/l		11/19/13 13:41	11/19/13 20:17	1.00
Benzene	ND	A-01	0.200		ug/l		11/19/13 13:41	11/19/13 20:17	1.00
Toluene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 20:17	1.00
Ethylbenzene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 20:17	1.00
m,p-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 20:17	1.00
o-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 20:17	1.00
1,2-Dichloroethane (EDC)	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 20:17	1.00
Xylenes (total)	ND	A-01	1.50		ug/l		11/19/13 13:41	11/19/13 20:17	1.00
Hexane	ND	A-01	1.00		ug/l		11/19/13 13:41	11/19/13 20:17	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.5*	*A-01*	*71.2 - 143*	*11/19/13 13:41*	*11/19/13 20:17*	*1.00*
1,2-dichloroethane-d4	*100*	*A-01*	*70 - 140*	*11/19/13 13:41*	*11/19/13 20:17*	*1.00*
Toluene-d8	*102*	*A-01*	*74.1 - 135*	*11/19/13 13:41*	*11/19/13 20:17*	*1.00*
4-bromofluorobenzene	*97.9*	*A-01*	*68.7 - 141*	*11/19/13 13:41*	*11/19/13 20:17*	*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	**0.409**	**A-01a S6**	0.111		ug/l		11/19/13 09:06	11/19/13 16:47	1.00
2-Methylnaphthalene	**0.288**	**A-01a S6**	0.111		ug/l		11/19/13 09:06	11/19/13 16:47	1.00
1-Methylnaphthalene	**0.177**	**A-01a S6**	0.111		ug/l		11/19/13 09:06	11/19/13 16:47	1.00

Client Sample ID: DP-18-111513

Lab Sample ID: SWK0100-53

Date Collected: 11/15/13 16:02

Matrix: Water

Date Received: 11/18/13 14:20

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	**1970**	**A-01**	90.0		ug/l		11/19/13 13:41	11/19/13 20:40	1.00
Benzene	**1.96**	**A-01**	0.200		ug/l		11/19/13 13:41	11/19/13 20:40	1.00
Toluene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 20:40	1.00
Ethylbenzene	**10.2**	**A-01**	0.500		ug/l		11/19/13 13:41	11/19/13 20:40	1.00
m,p-Xylene	**1.07**	**A-01**	0.500		ug/l		11/19/13 13:41	11/19/13 20:40	1.00
o-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 20:40	1.00
1,2-Dichloroethane (EDC)	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 20:40	1.00
Xylenes (total)	ND	A-01	1.50		ug/l		11/19/13 13:41	11/19/13 20:40	1.00
Hexane	ND	A-01	1.00		ug/l		11/19/13 13:41	11/19/13 20:40	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*92.1*	*A-01*	*71.2 - 143*	*11/19/13 13:41*	*11/19/13 20:40*	*1.00*
1,2-dichloroethane-d4	*101*	*A-01*	*70 - 140*	*11/19/13 13:41*	*11/19/13 20:40*	*1.00*
Toluene-d8	*96.7*	*A-01*	*74.1 - 135*	*11/19/13 13:41*	*11/19/13 20:40*	*1.00*
4-bromofluorobenzene	*103*	*A-01*	*68.7 - 141*	*11/19/13 13:41*	*11/19/13 20:40*	*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	**3.44**	**A-01a S6**	0.103		ug/l		11/19/13 09:06	11/19/13 17:13	1.00
2-Methylnaphthalene	**0.924**	**A-01a S6**	0.103		ug/l		11/19/13 09:06	11/19/13 17:13	1.00
1-Methylnaphthalene	**0.421**	**A-01a S6**	0.103		ug/l		11/19/13 09:06	11/19/13 17:13	1.00

Client Sample ID: DP-19-111613

Lab Sample ID: SWK0100-54

Date Collected: 11/16/13 09:19

Matrix: Water

Date Received: 11/18/13 14:20

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND	A-01	90.0		ug/l		11/19/13 13:41	11/19/13 21:03	1.00
Benzene	ND	A-01	0.200		ug/l		11/19/13 13:41	11/19/13 21:03	1.00
Toluene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:03	1.00
Ethylbenzene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:03	1.00
m,p-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:03	1.00
o-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:03	1.00
1,2-Dichloroethane (EDC)	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:03	1.00
Xylenes (total)	ND	A-01	1.50		ug/l		11/19/13 13:41	11/19/13 21:03	1.00
Hexane	ND	A-01	1.00		ug/l		11/19/13 13:41	11/19/13 21:03	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.9*	*A-01*	*71.2 - 143*	*11/19/13 13:41*	*11/19/13 21:03*	*1.00*
1,2-dichloroethane-d4	*97.9*	*A-01*	*70 - 140*	*11/19/13 13:41*	*11/19/13 21:03*	*1.00*
Toluene-d8	*102*	*A-01*	*74.1 - 135*	*11/19/13 13:41*	*11/19/13 21:03*	*1.00*
4-bromofluorobenzene	*101*	*A-01*	*68.7 - 141*	*11/19/13 13:41*	*11/19/13 21:03*	*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	**0.106**	**A-01a S6**	0.106		ug/l		11/19/13 09:06	11/19/13 17:38	1.00
2-Methylnaphthalene	ND	A-01a S6	0.106		ug/l		11/19/13 09:06	11/19/13 17:38	1.00
1-Methylnaphthalene	ND	A-01a S6	0.106		ug/l		11/19/13 09:06	11/19/13 17:38	1.00

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWK0100

Client Sample ID: DP-20-111613

Lab Sample ID: SWK0100-55

Date Collected: 11/16/13 10:28

Matrix: Water

Date Received: 11/18/13 14:20

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND	A-01	90.0		ug/l		11/19/13 13:41	11/19/13 21:26	1.00
Benzene	ND	A-01	0.200		ug/l		11/19/13 13:41	11/19/13 21:26	1.00
Toluene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:26	1.00
Ethylbenzene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:26	1.00
m,p-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:26	1.00
o-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:26	1.00
1,2-Dichloroethane (EDC)	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:26	1.00
Xylenes (total)	ND	A-01	1.50		ug/l		11/19/13 13:41	11/19/13 21:26	1.00
Hexane	ND	A-01	1.00		ug/l		11/19/13 13:41	11/19/13 21:26	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*103*	*A-01*	*71.2 - 143*	*11/19/13 13:41*	*11/19/13 21:26*	*1.00*
1,2-dichloroethane-d4	*101*	*A-01*	*70 - 140*	*11/19/13 13:41*	*11/19/13 21:26*	*1.00*
Toluene-d8	*104*	*A-01*	*74.1 - 135*	*11/19/13 13:41*	*11/19/13 21:26*	*1.00*
4-bromofluorobenzene	*96.8*	*A-01*	*68.7 - 141*	*11/19/13 13:41*	*11/19/13 21:26*	*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	ND	A-01a S6	0.107		ug/l		11/19/13 09:06	11/19/13 18:04	1.00
2-Methylnaphthalene	ND	A-01a S6	0.107		ug/l		11/19/13 09:06	11/19/13 18:04	1.00
1-Methylnaphthalene	ND	A-01a S6	0.107		ug/l		11/19/13 09:06	11/19/13 18:04	1.00

Client Sample ID: DP-21-111613

Lab Sample ID: SWK0100-56

Date Collected: 11/16/13 11:32

Matrix: Water

Date Received: 11/18/13 14:20

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND	A-01	90.0		ug/l		11/19/13 13:41	11/19/13 21:50	1.00
Benzene	ND	A-01	0.200		ug/l		11/19/13 13:41	11/19/13 21:50	1.00
Toluene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:50	1.00
Ethylbenzene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:50	1.00
m,p-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:50	1.00
o-Xylene	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:50	1.00
1,2-Dichloroethane (EDC)	ND	A-01	0.500		ug/l		11/19/13 13:41	11/19/13 21:50	1.00
Xylenes (total)	ND	A-01	1.50		ug/l		11/19/13 13:41	11/19/13 21:50	1.00
Hexane	ND	A-01	1.00		ug/l		11/19/13 13:41	11/19/13 21:50	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*102*	*A-01*	*71.2 - 143*	*11/19/13 13:41*	*11/19/13 21:50*	*1.00*
1,2-dichloroethane-d4	*101*	*A-01*	*70 - 140*	*11/19/13 13:41*	*11/19/13 21:50*	*1.00*
Toluene-d8	*103*	*A-01*	*74.1 - 135*	*11/19/13 13:41*	*11/19/13 21:50*	*1.00*
4-bromofluorobenzene	*102*	*A-01*	*68.7 - 141*	*11/19/13 13:41*	*11/19/13 21:50*	*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	ND	A-01a S6	0.122		ug/l		11/19/13 09:06	11/19/13 18:30	1.00
2-Methylnaphthalene	ND	A-01a S6	0.122		ug/l		11/19/13 09:06	11/19/13 18:30	1.00
1-Methylnaphthalene	ND	A-01a S6	0.122		ug/l		11/19/13 09:06	11/19/13 18:30	1.00

Client Sample ID: DP-22-111613

Lab Sample ID: SWK0100-57

Date Collected: 11/16/13 13:41

Matrix: Water

Date Received: 11/18/13 14:20

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	**13400**	**A-01**	9000		ug/l		11/19/13 13:41	11/19/13 22:13	100
Benzene	**263**	**A-01**	20.0		ug/l		11/19/13 13:41	11/19/13 22:13	100
Toluene	**52.0**	**A-01**	50.0		ug/l		11/19/13 13:41	11/19/13 22:13	100
Ethylbenzene	**501**	**A-01**	50.0		ug/l		11/19/13 13:41	11/19/13 22:13	100
m,p-Xylene	**89.0**	**A-01**	50.0		ug/l		11/19/13 13:41	11/19/13 22:13	100
o-Xylene	ND	A-01	50.0		ug/l		11/19/13 13:41	11/19/13 22:13	100
1,2-Dichloroethane (EDC)	ND	A-01	50.0		ug/l		11/19/13 13:41	11/19/13 22:13	100
Xylenes (total)	ND	A-01	150		ug/l		11/19/13 13:41	11/19/13 22:13	100
Hexane	ND	A-01	100		ug/l		11/19/13 13:41	11/19/13 22:13	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*100*	*A-01*	*71.2 - 143*	*11/19/13 13:41*	*11/19/13 22:13*	*100*
1,2-dichloroethane-d4	*98.3*	*A-01*	*70 - 140*	*11/19/13 13:41*	*11/19/13 22:13*	*100*
Toluene-d8	*100*	*A-01*	*74.1 - 135*	*11/19/13 13:41*	*11/19/13 22:13*	*100*
4-bromofluorobenzene	*98.3*	*A-01*	*68.7 - 141*	*11/19/13 13:41*	*11/19/13 22:13*	*100*

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	**85.8**	**A-01a S6**	1.04		ug/l		11/19/13 09:06	11/20/13 11:24	10.0
2-Methylnaphthalene	**16.3**	**A-01a S6**	1.04		ug/l		11/19/13 09:06	11/20/13 11:24	10.0
1-Methylnaphthalene	**13.4**	**A-01a S6**	1.04		ug/l		11/19/13 09:06	11/20/13 11:24	10.0

Client Sample ID: Trip Blank

Lab Sample ID: SWK0100-58

Date Collected: 11/13/13 00:00

Matrix: Water

Date Received: 11/18/13 14:20

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		90.0		ug/l		11/19/13 13:41	11/19/13 22:36	1.00
Benzene	ND		0.200		ug/l		11/19/13 13:41	11/19/13 22:36	1.00
Toluene	ND		0.500		ug/l		11/19/13 13:41	11/19/13 22:36	1.00
Ethylbenzene	ND		0.500		ug/l		11/19/13 13:41	11/19/13 22:36	1.00
m,p-Xylene	ND		0.500		ug/l		11/19/13 13:41	11/19/13 22:36	1.00
o-Xylene	ND		0.500		ug/l		11/19/13 13:41	11/19/13 22:36	1.00
1,2-Dichloroethane (EDC)	ND		0.500		ug/l		11/19/13 13:41	11/19/13 22:36	1.00
Xylenes (total)	ND		1.50		ug/l		11/19/13 13:41	11/19/13 22:36	1.00
Hexane	ND		1.00		ug/l		11/19/13 13:41	11/19/13 22:36	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*102*		*71.2 - 143*	*11/19/13 13:41*	*11/19/13 22:36*	*1.00*
1,2-dichloroethane-d4	*102*		*70 - 140*	*11/19/13 13:41*	*11/19/13 22:36*	*1.00*
Toluene-d8	*102*		*74.1 - 135*	*11/19/13 13:41*	*11/19/13 22:36*	*1.00*
4-bromofluorobenzene	*97.3*		*68.7 - 141*	*11/19/13 13:41*	*11/19/13 22:36*	*1.00*

Client Sample ID: Trip Blank

Lab Sample ID: SWK0100-59

Date Collected: 11/13/13 00:00

Matrix: Soil

Date Received: 11/18/13 14:20

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5.00		mg/kg wet		11/20/13 08:21	11/20/13 19:45	1.00

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWK0100

Client Sample ID: Trip Blank
Date Collected: 11/13/13 00:00
Date Received: 11/18/13 14:20

Lab Sample ID: SWK0100-59
Matrix: Soil

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00500		mg/kg wet		11/20/13 08:21	11/20/13 19:45	1.00
Ethylbenzene	ND		0.100		mg/kg wet		11/20/13 08:21	11/20/13 19:45	1.00
Toluene	ND		0.100		mg/kg wet		11/20/13 08:21	11/20/13 19:45	1.00
o-Xylene	ND		0.200		mg/kg wet		11/20/13 08:21	11/20/13 19:45	1.00
m,p-Xylene	ND		0.400		mg/kg wet		11/20/13 08:21	11/20/13 19:45	1.00
1,2-Dichloroethane (EDC)	ND		0.100		mg/kg wet		11/20/13 08:21	11/20/13 19:45	1.00
Hexane	ND		0.100		mg/kg wet		11/20/13 08:21	11/20/13 19:45	1.00
Xylenes (total)	ND		1.50		mg/kg wet		11/20/13 08:21	11/20/13 19:45	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*93.3*		*42.4 - 163*	*11/20/13 08:21*	*11/20/13 19:45*	*1.00*
1,2-dichloroethane-d4	*96.5*		*50 - 150*	*11/20/13 08:21*	*11/20/13 19:45*	*1.00*
Toluene-d8	*101*		*45.8 - 155*	*11/20/13 08:21*	*11/20/13 19:45*	*1.00*
4-bromofluorobenzene	*102*		*41.5 - 162*	*11/20/13 08:21*	*11/20/13 19:45*	*1.00*

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Lab Sample ID: 13K0075-BLK1
Matrix: Water
Analysis Batch: 13K0075

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13K0075_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		90.0		ug/l		11/19/13 13:41	11/19/13 14:24	1.00
Benzene	ND		0.200		ug/l		11/19/13 13:41	11/19/13 14:24	1.00
Toluene	ND		0.500		ug/l		11/19/13 13:41	11/19/13 14:24	1.00
Ethylbenzene	ND		0.500		ug/l		11/19/13 13:41	11/19/13 14:24	1.00
m,p-Xylene	ND		0.500		ug/l		11/19/13 13:41	11/19/13 14:24	1.00
o-Xylene	ND		0.500		ug/l		11/19/13 13:41	11/19/13 14:24	1.00
1,2-Dichloroethane (EDC)	ND		0.500		ug/l		11/19/13 13:41	11/19/13 14:24	1.00
Xylenes (total)	ND		1.50		ug/l		11/19/13 13:41	11/19/13 14:24	1.00
Hexane	ND		1.00		ug/l		11/19/13 13:41	11/19/13 14:24	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*102*		*71.2 - 143*	*11/19/13 13:41*	*11/19/13 14:24*	*1.00*
Toluene-d8	*99.8*		*74.1 - 135*	*11/19/13 13:41*	*11/19/13 14:24*	*1.00*
4-bromofluorobenzene	*102*		*68.7 - 141*	*11/19/13 13:41*	*11/19/13 14:24*	*1.00*

Lab Sample ID: 13K0075-BS1
Matrix: Water
Analysis Batch: 13K0075

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13K0075_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	10.0	11.4		ug/l		114	80 - 128
Benzene	10.0	11.1		ug/l		111	80 - 122
Toluene	10.0	11.1		ug/l		111	80 - 123
Ethylbenzene	10.0	11.6		ug/l		116	80 - 120
m,p-Xylene	10.0	11.6		ug/l		116	80 - 120
o-Xylene	10.0	11.8		ug/l		118	80 - 120
Naphthalene	10.0	10.3		ug/l		103	62.8 - 132
Xylenes (total)	20.0	23.4		ug/l		117	80 - 120
Hexane	10.0	10.8		ug/l		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*101*		*71.2 - 143*
Toluene-d8	*102*		*74.1 - 135*
4-bromofluorobenzene	*102*		*68.7 - 141*

Lab Sample ID: 13K0075-BS2
Matrix: Water
Analysis Batch: 13K0075

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13K0075_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Hydrocarbons	1000	1010		ug/l		101	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*98.2*		*71.2 - 143*
Toluene-d8	*102*		*74.1 - 135*
4-bromofluorobenzene	*101*		*68.7 - 141*

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C (Continued)

Lab Sample ID: 13K0079-BLK1
Matrix: Soil
Analysis Batch: 13K0079

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13K0079_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5.00		mg/kg wet		11/20/13 08:21	11/20/13 13:54	1.00
Benzene	ND		0.00500		mg/kg wet		11/20/13 08:21	11/20/13 13:54	1.00
Ethylbenzene	ND		0.100		mg/kg wet		11/20/13 08:21	11/20/13 13:54	1.00
Toluene	ND		0.100		mg/kg wet		11/20/13 08:21	11/20/13 13:54	1.00
o-Xylene	ND		0.200		mg/kg wet		11/20/13 08:21	11/20/13 13:54	1.00
m,p-Xylene	ND		0.400		mg/kg wet		11/20/13 08:21	11/20/13 13:54	1.00
1,2-Dichloroethane (EDC)	ND		0.100		mg/kg wet		11/20/13 08:21	11/20/13 13:54	1.00
Hexane	ND		0.100		mg/kg wet		11/20/13 08:21	11/20/13 13:54	1.00
Xylenes (total)	ND		1.50		mg/kg wet		11/20/13 08:21	11/20/13 13:54	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*102*		*42.4 - 163*	*11/20/13 08:21*	*11/20/13 13:54*	*1.00*
1,2-dichloroethane-d4	*96.7*		*50 - 150*	*11/20/13 08:21*	*11/20/13 13:54*	*1.00*
Toluene-d8	*101*		*45.8 - 155*	*11/20/13 08:21*	*11/20/13 13:54*	*1.00*
4-bromofluorobenzene	*106*		*41.5 - 162*	*11/20/13 08:21*	*11/20/13 13:54*	*1.00*

Lab Sample ID: 13K0079-BS1
Matrix: Soil
Analysis Batch: 13K0079

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13K0079_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	0.500	0.535		mg/kg wet		107	79 - 127
Benzene	0.500	0.536		mg/kg wet		107	75.9 - 123
Ethylbenzene	0.500	0.530		mg/kg wet		106	80 - 120
Toluene	0.500	0.527		mg/kg wet		105	77.3 - 126
o-Xylene	0.500	0.576		mg/kg wet		115	80 - 120
m,p-Xylene	0.500	0.555		mg/kg wet		111	80 - 120
Naphthalene	0.500	0.515		mg/kg wet		103	58.8 - 130
1,2-Dichloroethane (EDC)	0.500	0.551		mg/kg wet		110	60 - 140
1,2-Dibromoethane	0.500	0.556		mg/kg wet		111	60 - 140
Hexane	0.500	0.501		mg/kg wet		100	50 - 150
Xylenes (total)	1.00	1.13		mg/kg wet		113	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*98.4*		*42.4 - 163*
1,2-dichloroethane-d4	*101*		*50 - 150*
Toluene-d8	*102*		*45.8 - 155*
4-bromofluorobenzene	*101*		*41.5 - 162*

Lab Sample ID: 13K0079-BS2
Matrix: Soil
Analysis Batch: 13K0079

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13K0079_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Hydrocarbons	50.0	50.9		mg/kg wet		102	74.4 - 124

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C (Continued)

Lab Sample ID: 13K0079-BS2
Matrix: Soil
Analysis Batch: 13K0079

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13K0079_P

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*98.5*		*42.4 - 163*
1,2-dichloroethane-d4	*96.9*		*50 - 150*
Toluene-d8	*100*		*45.8 - 155*
4-bromofluorobenzene	*105*		*41.5 - 162*

Lab Sample ID: 13K0098-BLK1
Matrix: Soil
Analysis Batch: 13K0098

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13K0098_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5.00		mg/kg wet		11/22/13 08:12	11/22/13 10:21	1.00
Benzene	ND		0.00500		mg/kg wet		11/22/13 08:12	11/22/13 10:21	1.00
Ethylbenzene	ND		0.100		mg/kg wet		11/22/13 08:12	11/22/13 10:21	1.00
Toluene	ND		0.100		mg/kg wet		11/22/13 08:12	11/22/13 10:21	1.00
o-Xylene	ND		0.200		mg/kg wet		11/22/13 08:12	11/22/13 10:21	1.00
m,p-Xylene	ND		0.400		mg/kg wet		11/22/13 08:12	11/22/13 10:21	1.00
1,2-Dichloroethane (EDC)	ND		0.100		mg/kg wet		11/22/13 08:12	11/22/13 10:21	1.00
Hexane	ND		0.100		mg/kg wet		11/22/13 08:12	11/22/13 10:21	1.00
Xylenes (total)	ND		1.50		mg/kg wet		11/22/13 08:12	11/22/13 10:21	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*109*		*42.4 - 163*	*11/22/13 08:12*	*11/22/13 10:21*	*1.00*
1,2-dichloroethane-d4	*104*		*50 - 150*	*11/22/13 08:12*	*11/22/13 10:21*	*1.00*
Toluene-d8	*97.5*		*45.8 - 155*	*11/22/13 08:12*	*11/22/13 10:21*	*1.00*
4-bromofluorobenzene	*102*		*41.5 - 162*	*11/22/13 08:12*	*11/22/13 10:21*	*1.00*

Lab Sample ID: 13K0098-BS1
Matrix: Soil
Analysis Batch: 13K0098

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13K0098_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	0.500	0.532		mg/kg wet		106	79 - 127
Benzene	0.500	0.502		mg/kg wet		100	75.9 - 123
Ethylbenzene	0.500	0.481		mg/kg wet		96.2	80 - 120
Toluene	0.500	0.474		mg/kg wet		94.8	77.3 - 126
o-Xylene	0.500	0.529		mg/kg wet		106	80 - 120
m,p-Xylene	0.500	0.520		mg/kg wet		104	80 - 120
Naphthalene	0.500	0.403		mg/kg wet		80.6	58.8 - 130
1,2-Dichloroethane (EDC)	0.500	0.575		mg/kg wet		115	60 - 140
Hexane	0.500	0.470		mg/kg wet		94.1	50 - 150
Xylenes (total)	1.00	1.05		mg/kg wet		105	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*101*		*42.4 - 163*
1,2-dichloroethane-d4	*104*		*50 - 150*
Toluene-d8	*95.1*		*45.8 - 155*

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C (Continued)

Lab Sample ID: 13K0098-BS1
Matrix: Soil
Analysis Batch: 13K0098

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13K0098_P

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-bromofluorobenzene	*104*		*41.5 - 162*

Lab Sample ID: 13K0098-BS2
Matrix: Soil
Analysis Batch: 13K0098

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13K0098_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Hydrocarbons	50.0	49.0		mg/kg wet		97.9	74.4 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane	*99.2*		*42.4 - 163*
1,2-dichloroethane-d4	*98.7*		*50 - 150*
Toluene-d8	*99.3*		*45.8 - 155*
4-bromofluorobenzene	*104*		*41.5 - 162*

Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Lab Sample ID: 13K0071-BLK1
Matrix: Water
Analysis Batch: 13K0071

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13K0071_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.100		ug/l		11/19/13 09:06	11/19/13 13:47	1.00
2-Methylnaphthalene	ND		0.100		ug/l		11/19/13 09:06	11/19/13 13:47	1.00
1-Methylnaphthalene	ND		0.100		ug/l		11/19/13 09:06	11/19/13 13:47	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*74.0*		*32.7 - 135*	*11/19/13 09:06*	*11/19/13 13:47*	*1.00*
2-FBP	*61.9*		*44.3 - 120*	*11/19/13 09:06*	*11/19/13 13:47*	*1.00*
p-Terphenyl-d14	*92.4*		*59.5 - 154*	*11/19/13 09:06*	*11/19/13 13:47*	*1.00*

Lab Sample ID: 13K0071-BS1
Matrix: Water
Analysis Batch: 13K0071

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13K0071_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	4.00	3.32		ug/l		83.0	27.8 - 143
Fluorene	4.00	3.26		ug/l		81.5	59.2 - 120
Chrysene	4.00	3.47		ug/l		86.8	69.1 - 122
Indeno (1,2,3-cd) pyrene	4.00	3.36		ug/l		84.0	56.1 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	*90.9*		*32.7 - 135*
2-FBP	*75.4*		*44.3 - 120*
p-Terphenyl-d14	*89.2*		*59.5 - 154*

Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring (Continued)

Lab Sample ID: 13K0117-BLK1
Matrix: Soil
Analysis Batch: 13K0117

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13K0117_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.0100		mg/kg wet		11/25/13 10:45	11/26/13 13:49	1.00
2-Methylnaphthalene	ND		0.0100		mg/kg wet		11/25/13 10:45	11/26/13 13:49	1.00
1-Methylnaphthalene	ND		0.0100		mg/kg wet		11/25/13 10:45	11/26/13 13:49	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92.0*		*53.2 - 137*	*11/25/13 10:45*	*11/26/13 13:49*	*1.00*

Lab Sample ID: 13K0117-BS1
Matrix: Soil
Analysis Batch: 13K0117

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13K0117_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Naphthalene			0.133	0.127		mg/kg wet		95.0	62.7 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*109*		*53.2 - 137*

Lab Sample ID: 13K0117-MS1
Matrix: Soil
Analysis Batch: 13K0117

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 13K0117_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits		
Naphthalene	0.00266		0.149	0.129		mg/kg dry	☼	85.2	30 - 120		

Surrogate	*Matrix Spike %Recovery*	*Matrix Spike Qualifier*	*Limits*
Nitrobenzene-d5	*101*		*53.2 - 137*

Lab Sample ID: 13K0117-MSD1
Matrix: Soil
Analysis Batch: 13K0117

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 13K0117_P

Analyte	Sample Result	Sample Qualifier	Spike Added	ıtrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	0.00266		0.144	0.141		mg/kg dry	☼	96.2	30 - 120	8.80	35

Surrogate	*Matrix Spike Dup %Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
Nitrobenzene-d5	*102*		*53.2 - 137*

Lab Sample ID: 13K0121-BLK1
Matrix: Soil
Analysis Batch: 13K0121

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13K0121_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
2-Methylnaphthalene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
1-Methylnaphthalene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Acenaphthylene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00

Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring (Continued)

Lab Sample ID: 13K0121-BLK1
Matrix: Soil
Analysis Batch: 13K0121

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13K0121_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Fluorene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Phenanthrene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Anthracene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Fluoranthene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Pyrene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Benzo (a) anthracene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Chrysene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Benzo (b) fluoranthene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Benzo (k) fluoranthene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Benzo (a) pyrene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Dibenzo (a,h) anthracene	ND		0.00600		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00
Benzo (ghi) perylene	ND		0.0100		mg/kg wet		11/26/13 06:27	11/26/13 10:24	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*99.8*		*53.2 - 137*	*11/26/13 06:27*	*11/26/13 10:24*	*1.00*
2-FBP	*87.8*		*63.6 - 123*	*11/26/13 06:27*	*11/26/13 10:24*	*1.00*
p-Terphenyl-d14	*95.4*		*65.6 - 167*	*11/26/13 06:27*	*11/26/13 10:24*	*1.00*

Lab Sample ID: 13K0121-BS1
Matrix: Soil
Analysis Batch: 13K0121

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13K0121_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	0.133	0.126		mg/kg wet		94.5	62.7 - 120
Fluorene	0.133	0.137		mg/kg wet		103	67.9 - 124
Chrysene	0.133	0.134		mg/kg wet		100	68.2 - 132
Indeno (1,2,3-cd) pyrene	0.133	0.165		mg/kg wet		124	52.6 - 149

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*104*		*53.2 - 137*
2-FBP	*91.6*		*63.6 - 123*
p-Terphenyl-d14	*97.6*		*65.6 - 167*

Lab Sample ID: 13K0121-MS1
Matrix: Soil
Analysis Batch: 13K0121

Client Sample ID: DP-22(5-6)
Prep Type: Total
Prep Batch: 13K0121_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	ND		0.187	0.177		mg/kg dry	☼	95.0	30 - 120
Fluorene	ND		0.187	0.187		mg/kg dry	☼	100	30 - 140
Chrysene	0.00692		0.187	0.212		mg/kg dry	☼	110	30 - 133
Indeno (1,2,3-cd) pyrene	0.00461		0.187	0.194		mg/kg dry	☼	102	30 - 140

Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring (Continued)

Lab Sample ID: 13K0121-MS1
Matrix: Soil
Analysis Batch: 13K0121

Client Sample ID: DP-22(5-6)
Prep Type: Total
Prep Batch: 13K0121_P

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
Nitrobenzene-d5	*103*		*53.2 - 137*
2-FBP	*78.4*		*63.6 - 123*
p-Terphenyl-d14	*109*		*65.6 - 167*

Lab Sample ID: 13K0121-MSD1
Matrix: Soil
Analysis Batch: 13K0121

Client Sample ID: DP-22(5-6)
Prep Type: Total
Prep Batch: 13K0121_P

Analyte	Sample Result	Sample Qualifier	Spike Added	ıtrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	ND		0.173	0.159		mg/kg dry	☼	92.0	30 - 120	10.6	35
Fluorene	ND		0.173	0.189		mg/kg dry	☼	109	30 - 140	1.22	35
Chrysene	0.00692		0.173	0.186		mg/kg dry	☼	104	30 - 133	12.8	35
Indeno (1,2,3-cd) pyrene	0.00461		0.173	0.181		mg/kg dry	☼	102	30 - 140	6.91	35

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
Nitrobenzene-d5	*105*		*53.2 - 137*
2-FBP	*102*		*63.6 - 123*
p-Terphenyl-d14	*109*		*65.6 - 167*

Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B

Lab Sample ID: 13L0010-BLK1
Matrix: Other (S)
Analysis Batch: 13L0010

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13L0010_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.25		mg/kg wet		12/02/13 15:17	12/04/13 09:58	1.00

Lab Sample ID: 13L0010-BS1
Matrix: Other (S)
Analysis Batch: 13L0010

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13L0010_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	50.7		mg/kg wet		101	80 - 120

Lab Sample ID: 13L0010-MS1
Matrix: Other (S)
Analysis Batch: 13L0010

Client Sample ID: DP-13(12-13)
Prep Type: Total
Prep Batch: 13L0010_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	6.74		75.6	72.6		mg/kg dry	☼	87.1	75 - 125

Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B (Continued)

Lab Sample ID: 13L0010-MSD1 — **Client Sample ID: DP-13(12-13)**
Matrix: Other (S) — **Prep Type: Total**
Analysis Batch: 13L0010 — **Prep Batch: 13L0010_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	trix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	6.74		55.8	50.9	R	mg/kg dry	☼	79.2	75 - 125	35.1	20

Lab Sample ID: 13L0010-DUP1 — **Client Sample ID: DP-13(12-13)**
Matrix: Other (S) — **Prep Type: Total**
Analysis Batch: 13L0010 — **Prep Batch: 13L0010_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Lead	6.74			7.28		mg/kg dry	☼			7.62	20

Client Sample ID: DP-13(12-13)

Lab Sample ID: SWK0100-02

Date Collected: 11/15/13 08:54

Matrix: Soil

Date Received: 11/18/13 14:20

Percent Solids: 73.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.940	13K0098_P	11/22/13 08:12	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0098	11/22/13 11:30	CBW	TAL SPK
Total	Prep	EPA 3550B		0.945	13K0117_P	11/25/13 10:45	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0117	11/26/13 20:26	MRS	TAL SPK
Total	Prep	EPA 3050B		0.901	13L0010_P	12/02/13 15:17	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0010	12/04/13 10:00	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	13K0127_P	11/25/13 17:05	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0127	11/26/13 14:18	MS	TAL SPK

Client Sample ID: DP-14(8-8.5)

Lab Sample ID: SWK0100-06

Date Collected: 11/15/13 09:51

Matrix: Soil

Date Received: 11/18/13 14:20

Percent Solids: 69

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.38	13K0098_P	11/22/13 08:12	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0098	11/22/13 11:54	CBW	TAL SPK
Total	Prep	EPA 3550B		0.991	13K0117_P	11/25/13 10:45	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0117	11/26/13 20:51	MRS	TAL SPK
Total	Prep	EPA 3050B		1.03	13L0010_P	12/02/13 15:17	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0010	12/04/13 10:18	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	13K0127_P	11/25/13 17:05	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0127	11/26/13 14:18	MS	TAL SPK

Client Sample ID: DP-15(8-9)

Lab Sample ID: SWK0100-11

Date Collected: 11/15/13 11:11

Matrix: Soil

Date Received: 11/18/13 14:20

Percent Solids: 62.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.13	13K0098_P	11/22/13 08:12	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0098	11/22/13 12:17	CBW	TAL SPK
Total	Prep	EPA 3550B		0.981	13K0117_P	11/25/13 10:45	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0117	11/26/13 21:17	MRS	TAL SPK
Total	Prep	EPA 3050B		0.787	13L0010_P	12/02/13 15:17	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0010	12/04/13 10:21	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	13K0127_P	11/25/13 17:05	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0127	11/26/13 14:18	MS	TAL SPK

Client Sample ID: DP-16(6-7)

Lab Sample ID: SWK0100-15

Date Collected: 11/15/13 12:40

Matrix: Soil

Date Received: 11/18/13 14:20

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	EPA 8260C		100	13K0098	11/22/13 23:07	CBW	TAL SPK

Client Sample ID: DP-16(6-7)

Lab Sample ID: SWK0100-15

Date Collected: 11/15/13 12:40
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.28	13K0098_P	11/22/13 08:12	CBW	TAL SPK
Total	Analysis	EPA 8260C		10.0	13K0098	11/22/13 12:40	CBW	TAL SPK
Total	Prep	EPA 3550B		1.97	13K0117_P	11/25/13 10:45	MS	TAL SPK
Total	Analysis	EPA 8270D		50.0	13K0117	12/03/13 00:39	MRS	TAL SPK
Total	Prep	EPA 3050B		0.885	13L0010_P	12/02/13 15:17	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0010	12/04/13 10:25	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	13K0127_P	11/25/13 17:05	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0127	11/26/13 14:18	MS	TAL SPK

Client Sample ID: DP-17(6-7)

Lab Sample ID: SWK0100-19

Date Collected: 11/15/13 13:56
Matrix: Soil
Date Received: 11/18/13 14:20
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		1.08	13K0098_P	11/22/13 08:12	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0098	11/22/13 13:04	CBW	TAL SPK
Total	Prep	EPA 3550B		0.979	13K0117_P	11/25/13 10:45	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0117	11/26/13 22:08	MRS	TAL SPK
Total	Prep	EPA 3050B		0.980	13L0010_P	12/02/13 15:17	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0010	12/04/13 10:37	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	13K0127_P	11/25/13 17:05	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0127	11/26/13 14:18	MS	TAL SPK

Client Sample ID: DP-18(9-10)

Lab Sample ID: SWK0100-25

Date Collected: 11/15/13 15:13
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 75.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.994	13K0098_P	11/22/13 08:12	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0098	11/22/13 13:27	CBW	TAL SPK
Total	Prep	EPA 3550B		1.62	13K0117_P	11/25/13 10:45	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0117	12/03/13 01:04	MRS	TAL SPK
Total	Prep	EPA 3050B		0.909	13L0010_P	12/02/13 15:17	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0010	12/04/13 10:40	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	13K0127_P	11/25/13 17:05	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0127	11/26/13 14:18	MS	TAL SPK

Client Sample ID: DP-19(8-9)

Lab Sample ID: SWK0100-30

Date Collected: 11/16/13 08:45
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 34.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.924	13K0098_P	11/22/13 08:12	CBW	TAL SPK

Client Sample ID: DP-19(8-9)

Lab Sample ID: SWK0100-30

Date Collected: 11/16/13 08:45
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 34.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	EPA 8260C		1.00	13K0098	11/22/13 13:50	CBW	TAL SPK
Total	Prep	EPA 3550B		0.973	13K0117_P	11/25/13 10:45	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0117	11/26/13 22:59	MRS	TAL SPK
Total	Prep	EPA 3050B		0.952	13L0010_P	12/02/13 15:17	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0010	12/04/13 10:44	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	13K0127_P	11/25/13 17:05	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0127	11/26/13 14:18	MS	TAL SPK

Client Sample ID: DP-20(8-9)

Lab Sample ID: SWK0100-35

Date Collected: 11/16/13 09:53
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 88.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.859	13K0098_P	11/22/13 08:12	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0098	11/22/13 14:14	CBW	TAL SPK
Total	Prep	EPA 3550B		0.962	13K0117_P	11/25/13 10:45	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0117	11/26/13 23:25	MRS	TAL SPK
Total	Prep	EPA 3050B		0.962	13L0010_P	12/02/13 15:17	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0010	12/04/13 10:47	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	13K0127_P	11/25/13 17:05	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0127	11/26/13 14:18	MS	TAL SPK

Client Sample ID: DP-21(8-9)

Lab Sample ID: SWK0100-40

Date Collected: 11/16/13 11:05
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 67.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.11	13K0098_P	11/22/13 08:12	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0098	11/22/13 14:37	CBW	TAL SPK
Total	Prep	EPA 3550B		0.990	13K0117_P	11/25/13 10:45	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0117	12/03/13 01:30	MRS	TAL SPK
Total	Prep	EPA 3050B		1.03	13L0010_P	12/02/13 15:17	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0010	12/04/13 10:51	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	13K0127_P	11/25/13 17:05	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0127	11/26/13 14:18	MS	TAL SPK

Client Sample ID: DP-22(5-6)

Lab Sample ID: SWK0100-44

Date Collected: 11/16/13 13:00
Matrix: Soil
Date Received: 11/18/13 14:20
Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.943	13K0098_P	11/22/13 08:12	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0098	11/22/13 15:00	CBW	TAL SPK

Client Sample ID: DP-22(5-6)

Lab Sample ID: SWK0100-44

Date Collected: 11/16/13 13:00

Matrix: Soil

Date Received: 11/18/13 14:20

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.999	13K0121_P	11/26/13 06:27	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0121	12/03/13 01:55	MRS	TAL SPK
Total	Prep	EPA 3050B		1.04	13L0010_P	12/02/13 15:17	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0010	12/04/13 10:54	ICP	TAL SPK
Total	Analysis	TA SOP		1.00	13L0007	11/26/13 14:18	MS	TAL SPK
Total	Prep	Wet Chem		1.00	13L0007_P	11/26/13 14:18	MS	TAL SPK

Client Sample ID: DP-13-111513

Lab Sample ID: SWK0100-48

Date Collected: 11/15/13 09:57

Matrix: Water

Date Received: 11/18/13 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13K0075_P	11/19/13 13:41	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0075	11/19/13 18:42	CBW	TAL SPK

Client Sample ID: DP-14-111513

Lab Sample ID: SWK0100-49

Date Collected: 11/15/13 11:25

Matrix: Water

Date Received: 11/18/13 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13K0075_P	11/19/13 13:41	CBW	TAL SPK
Total	Analysis	EPA 8260C		10.0	13K0075	11/19/13 19:06	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		1.00	13K0071_P	11/19/13 09:06	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0071	11/19/13 15:30	MRS	TAL SPK

Client Sample ID: DP-15-111513

Lab Sample ID: SWK0100-50

Date Collected: 11/15/13 12:06

Matrix: Water

Date Received: 11/18/13 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13K0075_P	11/19/13 13:41	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0075	11/19/13 19:30	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		1.00	13K0071_P	11/19/13 09:06	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0071	11/19/13 15:55	MRS	TAL SPK

Client Sample ID: DP-16-111513

Lab Sample ID: SWK0100-51

Date Collected: 11/15/13 13:26

Matrix: Water

Date Received: 11/18/13 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13K0075_P	11/19/13 13:41	CBW	TAL SPK
Total	Analysis	EPA 8260C		100	13K0075	11/19/13 19:53	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		0.994	13K0071_P	11/19/13 09:06	MS	TAL SPK

Client Sample ID: DP-16-111513

Lab Sample ID: SWK0100-51

Date Collected: 11/15/13 13:26

Matrix: Water

Date Received: 11/18/13 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	EPA 8270D		10.0	13K0071	11/20/13 08:29	MRS	TAL SPK

Client Sample ID: DP-17-111513

Lab Sample ID: SWK0100-52

Date Collected: 11/15/13 14:35

Matrix: Water

Date Received: 11/18/13 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13K0075_P	11/19/13 13:41	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0075	11/19/13 20:17	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		1.11	13K0071_P	11/19/13 09:06	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0071	11/19/13 16:47	MRS	TAL SPK

Client Sample ID: DP-18-111513

Lab Sample ID: SWK0100-53

Date Collected: 11/15/13 16:02

Matrix: Water

Date Received: 11/18/13 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13K0075_P	11/19/13 13:41	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0075	11/19/13 20:40	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		1.03	13K0071_P	11/19/13 09:06	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0071	11/19/13 17:13	MRS	TAL SPK

Client Sample ID: DP-19-111613

Lab Sample ID: SWK0100-54

Date Collected: 11/16/13 09:19

Matrix: Water

Date Received: 11/18/13 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13K0075_P	11/19/13 13:41	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0075	11/19/13 21:03	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		1.06	13K0071_P	11/19/13 09:06	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0071	11/19/13 17:38	MRS	TAL SPK

Client Sample ID: DP-20-111613

Lab Sample ID: SWK0100-55

Date Collected: 11/16/13 10:28

Matrix: Water

Date Received: 11/18/13 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13K0075_P	11/19/13 13:41	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0075	11/19/13 21:26	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		1.07	13K0071_P	11/19/13 09:06	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0071	11/19/13 18:04	MRS	TAL SPK

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWK0100

Client Sample ID: DP-21-111613
Date Collected: 11/16/13 11:32
Date Received: 11/18/13 14:20

Lab Sample ID: SWK0100-56
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13K0075_P	11/19/13 13:41	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0075	11/19/13 21:50	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		1.22	13K0071_P	11/19/13 09:06	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13K0071	11/19/13 18:30	MRS	TAL SPK

Client Sample ID: DP-22-111613
Date Collected: 11/16/13 13:41
Date Received: 11/18/13 14:20

Lab Sample ID: SWK0100-57
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13K0075_P	11/19/13 13:41	CBW	TAL SPK
Total	Analysis	EPA 8260C		100	13K0075	11/19/13 22:13	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		1.04	13K0071_P	11/19/13 09:06	MS	TAL SPK
Total	Analysis	EPA 8270D		10.0	13K0071	11/20/13 11:24	MRS	TAL SPK

Client Sample ID: Trip Blank
Date Collected: 11/13/13 00:00
Date Received: 11/18/13 14:20

Lab Sample ID: SWK0100-58
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13K0075_P	11/19/13 13:41	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0075	11/19/13 22:36	CBW	TAL SPK

Client Sample ID: Trip Blank
Date Collected: 11/13/13 00:00
Date Received: 11/18/13 14:20

Lab Sample ID: SWK0100-59
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13K0079_P	11/20/13 08:21	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13K0079	11/20/13 19:45	CBW	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: 0504-075-01

TestAmerica Job ID: SWK0100

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	01-06-14

Method Summary

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWK0100

Method	Method Description	Protocol	Laboratory
EPA 8260C	NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C		TAL SPK
EPA 8270D	Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring		TAL SPK
EPA 6010C	Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B		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

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
5755 8Th Street East, Tacoma, Wa 98424 253-922-2310 FAX 922-5047
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

12/4/2013

CHAIN OF CUSTODY REPORT

Work Order #: GWK0100

CLIENT: GED ENGINEERS

INVOICE TO: JON RUDDERS, GED ENGINEERS

REPORT TO: JON RUDDERS
ADDRESS: 523 E 2ND AVE, SPOKANE, WA 99202
PHONE: 509-363-3125 FAX: 509-363-3126

P.O. NUMBER:

PROJECT NAME: FRENCHMEN FILL N FOOD
PROJECT NUMBER: 0504-075-01
SAMPLED BY: LEATH

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.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES: NWTPH-Gx	BTEX EPA 8260	EDC EPA 8260	N-HEXANE EPA 8260	NAPHTHALENE EPA 8270	LEAD EPA 6010	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	DP-13(1-2)	11/15/13 0845								S	3		
2	DP-13(12-13)	0854									1		
3	DP-13(5-6)	0848		X	X	X	X	X	X		1		
4	DP-14(2-2.8)	0945									1		
5	DP-14(6-7)	0948									1		
6	DP-14(8-8.5)	0951		X	X	X	X	X	X		3		
7	DP-14(15-16)	1009									3		
8	DP-14(18-19)	1012									3		
9	DP-15(1-2)	1105									1		
10	DP-15(4-5)	1108									1		

RELEASED BY: [signature] DATE: 11/18/13
PRINT NAME: KATIE HALL FIRM: GED TIME: 1430

RECEIVED BY: [signature] DATE: 11-18-13
PRINT NAME: Pat Stanton FIRM: TestAmerica TIME: 14:20

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 0.9

PAGE 1 OF 6

TAL-1000 (0212)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
5755 8Th Street East,Tacoma,Wa 98424 253-922-2310 FAX922-5047
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

12/4/2013

CHAIN OF CUSTODY REPORT

Work Order #SWK0100

CLIENT: GET

REPORT TO: JON RUDDERS
ADDRESS:

PHONE: FAX:

INVOICE TO:

P.O. NUMBER:

PROJECT NAME: FRENCHTIES FILLNFOOD
PROJECT NUMBER: 0504-075-01
SAMPLED BY: KMH

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.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES: NWTPH-GX	BTEX EPA 8260	EDC EPA 8260	N-HEXANE EPA 8260	NWTPH-DX EPA 8270	LEAD EPA 6010	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	DP-15 (8-9)	11/15/13 1111		X	X	X	X	X	X	S	3		
2	DP-15 (13-14)	1120									1		
3	DP-15 (17-18)	1140									1		
4	DP-16 (2.5-2.5)	1234									1		
5	DP-16 (6-7)	1240		X	X	X	X	X	X		3		
6	DP-16 (8-9)	1249									3		
7	DP-16 (17-18)	1255									3		
8	DP-17 (2-3)	1351									1		
9	DP-17 (6-7)	1356		X	X	X	X	X	X		3		
10	DP-17 (8-9)	1405									3		

RELEASED BY:		DATE: 11/18/13	RECEIVED BY:		DATE: 11-18-13
PRINT NAME: KATIE HALL	FIRM: GET	TIME: 1420	PRINT NAME:	FIRM: TA	TIME: 1420
RELEASED BY:		DATE:	RECEIVED BY:		DATE:
PRINT NAME:	FIRM:	TIME:	PRINT NAME:	FIRM:	TIME:

ADDITIONAL REMARKS:

TEMP: 0.9

PAGE 2 OF 6

TAL-1000 (0212)

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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 # SWK0100

CLIENT: GEI

REPORT TO: JON RUDDERS

ADDRESS:

PHONE: FAX:

INVOICE TO:

P.O. NUMBER:

PROJECT NAME: FRENCHMEN FILM FOOD

PROJECT NUMBER: 0504-075-01

SAMPLED BY: KATH

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: [X] 10 STD. / 7 / 5 / 4 / 3 / 2 / 1 / <1

Petroleum Hydrocarbon Analyses: [X] 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	BTEX EPA 8260	EDC EPA 8260	N-HEXANE EPA 8260	NAPHTHALENES EPA 8270	LEAD EPA 6010								MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 DP-17 (13-14)	11/15/13	1410														S	1		
2 DP-17 (18-19)	↓	1416														↓	1		
3 DP-18 (1.5-2.5)	↓	1504														↓	1		
4 DP-18 (7-8)	↓	1510														↓	1		
5 DP-18 (9-10)	↓	1513	X	X	X	X	X	X								↓	3		
6 DP-18 (15-16)	↓	1517														↓	1		
7 DP-18 (16-17)	↓	1547														↓	3		
8 DP-19 (1-2)	11/16/13	0840														↓	1		
9 DP-19 (5-6)	↓	0843														↓	1		
10 DP-19 (8-9)	↓	0845	X	X	X	X	X	X								↓	3		

RELEASED BY: [signature] PRINT NAME: KATIE HALL FIRM: GEI DATE: 11/18/13 TIME: 1420

RECEIVED BY: [signature] PRINT NAME: Cat Stapleton FIRM: TestAmerica DATE: 11-18-13 TIME: 14:20

RELEASED BY: PRINT NAME: FIRM: DATE: TIME:

RECEIVED BY: PRINT NAME: FIRM: DATE: TIME:

ADDITIONAL REMARKS:

TEMP: 0.9

PAGE 3 OF 6

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

12/4/2013

CHAIN OF CUSTODY REPORT

Work Order #: SWK0100

CLIENT: GET

INVOICE TO:

REPORT TO: JON RUDDERS
ADDRESS:

PHONE: FAX:

P.O. NUMBER:

PROJECT NAME: FRENCHES FILM FOOD

PROJECT NUMBER: 0504-075-01

SAMPLED BY: KAH

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: [10] STD. [7] [5] [4] [3] [2] [1] [<1]

Petroleum Hydrocarbon Analyses: [X] 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	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID	Methane-Gx	BTEX EPA 8260	EDC EPA 8260	N-Hexane EPA 8260	n-Hexane EPA	Naphthalene EPA 8270	Lead EPA 6010
1 DP-19 (13-14)	11/16/13 0852	S	1									
2 DP-19 (17-18)	0900		3									
3 DP-20 (1-2)	0940		3									
4 DP-20 (4-5)	0950		1									
5 DP-20 (8-9)	0953		3			X	X	X	X	X	X	X
6 DP-20 (12-13)	1005		3									
7 DP-20 (16-17)	1008		1									
8 DP-21 (1-2)	1100		3									
9 DP-21 (5-6)	1103		1									
10 DP-21 (8-9)	1105		3			X	X	X	X	X	X	X

RELEASED BY: [signature] DATE: 11/18/13 TIME: 1420

PRINT NAME: KATIE HALL FIRM: GET

RECEIVED BY: [signature] DATE: 11-18-13

PRINT NAME: Cat Hamilton FIRM: TA TIME: 14:20

RELEASED BY: DATE:

PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:

PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 0.9

PAGE 4 OF 6

TAL-1000 (0612)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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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

12/4/2013

CHAIN OF CUSTODY REPORT

Work Order # SWK0100

CLIENT: GET

REPORT TO: JON RUDDERS
ADDRESS:

PHONE: FAX:

INVOICE TO:

P.O. NUMBER:

PROJECT NAME: FRENCHIES FUN FOOD

PROJECT NUMBER: 0504-075-01

SAMPLED BY: KATH

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	BTEX EPA 8260	EDC EPA 8260	N-HEXANE EPA 8260	NAPHTHALENE EPA 8270	LEAD EPA 6010	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 DP-21 (14-14.7)	11/16/13 1108							S	3		
2 DP-21 (16-17)	1110								3		
3 DP-22 (1-2)	1255								3		
4 DP-22 (5-6)	1300	X	X	X	X	X	X		3		
5 DP-22 (8-9)	1306								3		
6 DP-22 (12-13)	1310								3		
7 DP-22 (17-18)	1324								3		
8 DP-13-111513	11/15/13 0957	X	X	X	X	X		W	2		
9 DP-14-111513	1125	X	X	X	X	X			2		
10 DP-15-111513	1206	X	X	X	X	X			3		

RELEASED BY: [signature] DATE: 11/18/13
PRINT NAME: KATIE HALL FIRM: GET TIME: 1400

RECEIVED BY: [signature] DATE: 11/18/13
PRINT NAME: Cat Stapleton FIRM: TA TIME: 1420

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 0.9

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TAL-1000 (0612)

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
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12/4/2013

CHAIN OF CUSTODY REPORT

Work Order #: SWK0100

CLIENT: GET

REPORT TO: JON RUDDERS
ADDRESS:

PHONE: FAX:

INVOICE TO:

P.O. NUMBER:

PROJECT NAME: FRENCHIES BLUFF000
PROJECT NUMBER: 0504-075-01
SAMPLED BY: BTH

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.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME		NWTPH-Dx	BTEX EPA 8260	EDB/EDC EPA 8260	N-HEXANE EPA 8260	NAPHTHALENE EPA 8270	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
VA	1 DP-16-111513	11/15/13	1326	X	X	X	X	X	SW	3		
VA	2 DP-17-111513		1435	X	X	X	X	X		3		
AV	3 DP-18-111513		1602	X	X	X	X	X		2		
VA	4 DP-19-111613	11/16/13	0919	X	X	X	X	X		3		
VA	5 DP-20-111613		1028	X	X	X	X	X		3		
VA	6 DP-21-111613		1132	X	X	X	X	X		3		
VA	7 DP-22-111613		1341	X	X	X	X	X		3		
✓	8 TRIP BLANK WATER			X	X							
	9 TRIP BLANK SOIL			X	X							
	10											

RELEASED BY: [signature] DATE: 11/18/13
PRINT NAME: KATIE NASH FIRM: GET TIME: 1420

RECEIVED BY: Cat Stapleton DATE: 11-18-13
PRINT NAME: FIRM: TA TIME: 1420

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 0.9

PAGE 6 OF 6

TAL-1000 (0612)

TestAmerica Spokane
Sample Receipt Form

Work Order #: SWK0100	Client: Geo Engineers	Project: Frenchies
Date/Time Received: 11-18-13 14:20	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:	✓			
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: 0.9 °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: 11-19-13 9:18 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		✓		Sample -48 only has 2 HCL vials requested analysis for PAH cannot be done.
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		✓		
Are there any short hold time tests (see chart below)	✓			PAH analyses starts to expire on 11-28-13.
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: SWL0085
Client Project/Site: 0504-075-01
Client Project Description: Frenchies Fill-n-Food

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

Attn: Jon Rudders

Authorized for release by:
1/2/2014 2:08:18 PM

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

Table of Contents

Sample Summary

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWL0085

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SWL0085-01	MW-5 (5-6)	Soil	12/10/13 13:30	12/16/13 16:50
SWL0085-06	SVE-1 (6-7)	Soil	12/11/13 09:20	12/16/13 16:50
SWL0085-09	AS-1(10-11.5)	Soil	12/10/13 11:30	12/16/13 16:50

Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWL0085

Qualifiers

Metals

Qualifier	Qualifier Description
M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
R	The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within 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
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: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWL0085

Client Sample ID: MW-5 (5-6)

Lab Sample ID: SWL0085-01

Date Collected: 12/10/13 13:30
Matrix: Soil
Date Received: 12/16/13 16:50
Percent Solids: 77.3

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		6.87		mg/kg dry	☼	12/20/13 08:35	12/20/13 12:49	1.00
Benzene	ND		0.00687		mg/kg dry	☼	12/20/13 08:35	12/20/13 12:49	1.00
Ethylbenzene	ND		0.137		mg/kg dry	☼	12/20/13 08:35	12/20/13 12:49	1.00
Toluene	ND		0.137		mg/kg dry	☼	12/20/13 08:35	12/20/13 12:49	1.00
o-Xylene	ND		0.275		mg/kg dry	☼	12/20/13 08:35	12/20/13 12:49	1.00
m,p-Xylene	ND		0.549		mg/kg dry	☼	12/20/13 08:35	12/20/13 12:49	1.00
1,2-Dichloroethane (EDC)	ND		0.137		mg/kg dry	☼	12/20/13 08:35	12/20/13 12:49	1.00
Hexane	ND		0.137		mg/kg dry	☼	12/20/13 08:35	12/20/13 12:49	1.00
Xylenes (total)	ND		2.06		mg/kg dry	☼	12/20/13 08:35	12/20/13 12:49	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*105*		*42.4 - 163*	*12/20/13 08:35*	*12/20/13 12:49*	*1.00*
1,2-dichloroethane-d4	*98.8*		*50 - 150*	*12/20/13 08:35*	*12/20/13 12:49*	*1.00*
Toluene-d8	*95.3*		*45.8 - 155*	*12/20/13 08:35*	*12/20/13 12:49*	*1.00*
4-bromofluorobenzene	*107*		*41.5 - 162*	*12/20/13 08:35*	*12/20/13 12:49*	*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	ND		0.0129		mg/kg dry	☼	12/19/13 13:06	12/27/13 19:38	1.00
2-Methylnaphthalene	ND		0.0129		mg/kg dry	☼	12/19/13 13:06	12/27/13 19:38	1.00
1-Methylnaphthalene	ND		0.0129		mg/kg dry	☼	12/19/13 13:06	12/27/13 19:38	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*69.0*		*53.2 - 137*	*12/19/13 13:06*	*12/27/13 19:38*	*1.00*

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
Lead	**2.36**		1.57		mg/kg dry	☼	12/26/13 08:42	12/27/13 14:38	1.00

Client Sample ID: SVE-1 (6-7)

Lab Sample ID: SWL0085-06

Date Collected: 12/11/13 09:20
Matrix: Soil
Date Received: 12/16/13 16:50
Percent Solids: 75.6

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	**5020**		106		mg/kg dry	☼	12/20/13 08:35	12/20/13 14:46	10.0
Benzene	**0.224**		0.106		mg/kg dry	☼	12/20/13 08:35	12/20/13 14:46	10.0
Ethylbenzene	**18.6**		2.13		mg/kg dry	☼	12/20/13 08:35	12/20/13 14:46	10.0
Toluene	**2.30**		2.13		mg/kg dry	☼	12/20/13 08:35	12/20/13 14:46	10.0
o-Xylene	**11.8**		4.26		mg/kg dry	☼	12/20/13 08:35	12/20/13 14:46	10.0
m,p-Xylene	**81.5**		8.52		mg/kg dry	☼	12/20/13 08:35	12/20/13 14:46	10.0
1,2-Dichloroethane (EDC)	ND		2.13		mg/kg dry	☼	12/20/13 08:35	12/20/13 14:46	10.0
Hexane	ND		2.13		mg/kg dry	☼	12/20/13 08:35	12/20/13 14:46	10.0
Xylenes (total)	**93.3**		31.9		mg/kg dry	☼	12/20/13 08:35	12/20/13 14:46	10.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*93.7*		*42.4 - 163*	*12/20/13 08:35*	*12/20/13 14:46*	*10.0*
1,2-dichloroethane-d4	*93.5*		*50 - 150*	*12/20/13 08:35*	*12/20/13 14:46*	*10.0*
Toluene-d8	*98.0*		*45.8 - 155*	*12/20/13 08:35*	*12/20/13 14:46*	*10.0*
4-bromofluorobenzene	*128*		*41.5 - 162*	*12/20/13 08:35*	*12/20/13 14:46*	*10.0*

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWL0085

Client Sample ID: SVE-1 (6-7)

Lab Sample ID: SWL0085-06
Date Collected: 12/11/13 09:20
Matrix: Soil
Date Received: 12/16/13 16:50
Percent Solids: 75.6

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	**4.98**		0.236		mg/kg dry	☼	12/19/13 13:06	12/31/13 17:25	10.0
2-Methylnaphthalene	**4.68**		0.236		mg/kg dry	☼	12/19/13 13:06	12/31/13 17:25	10.0
1-Methylnaphthalene	**1.76**		0.236		mg/kg dry	☼	12/19/13 13:06	12/31/13 17:25	10.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*104*		*53.2 - 137*	*12/19/13 13:06*	*12/31/13 17:25*	*10.0*

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
Lead	**9.39**		1.72		mg/kg dry	☼	12/26/13 08:42	12/27/13 14:42	1.00

Client Sample ID: AS-1(10-11.5)

Lab Sample ID: SWL0085-09
Date Collected: 12/10/13 11:30
Matrix: Soil
Date Received: 12/16/13 16:50
Percent Solids: 74

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	**4820**		89.1		mg/kg dry	☼	12/20/13 08:35	12/20/13 15:07	10.0
Benzene	**0.0891**		0.0891		mg/kg dry	☼	12/20/13 08:35	12/20/13 15:07	10.0
Ethylbenzene	**14.7**		1.78		mg/kg dry	☼	12/20/13 08:35	12/20/13 15:07	10.0
Toluene	ND		1.78		mg/kg dry	☼	12/20/13 08:35	12/20/13 15:07	10.0
o-Xylene	ND		3.57		mg/kg dry	☼	12/20/13 08:35	12/20/13 15:07	10.0
m,p-Xylene	**15.5**		7.13		mg/kg dry	☼	12/20/13 08:35	12/20/13 15:07	10.0
1,2-Dichloroethane (EDC)	ND		1.78		mg/kg dry	☼	12/20/13 08:35	12/20/13 15:07	10.0
Hexane	ND		1.78		mg/kg dry	☼	12/20/13 08:35	12/20/13 15:07	10.0
Xylenes (total)	ND		26.7		mg/kg dry	☼	12/20/13 08:35	12/20/13 15:07	10.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*91.3*		*42.4 - 163*	*12/20/13 08:35*	*12/20/13 15:07*	*10.0*
1,2-dichloroethane-d4	*97.8*		*50 - 150*	*12/20/13 08:35*	*12/20/13 15:07*	*10.0*
Toluene-d8	*99.4*		*45.8 - 155*	*12/20/13 08:35*	*12/20/13 15:07*	*10.0*
4-bromofluorobenzene	*130*		*41.5 - 162*	*12/20/13 08:35*	*12/20/13 15:07*	*10.0*

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	**1.23**		0.0344		mg/kg dry	☼	12/19/13 13:06	01/02/14 12:02	1.00
2-Methylnaphthalene	**1.70**		0.0344		mg/kg dry	☼	12/19/13 13:06	01/02/14 12:02	1.00
1-Methylnaphthalene	**0.603**		0.0344		mg/kg dry	☼	12/19/13 13:06	01/02/14 12:02	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*59.2*		*53.2 - 137*	*12/19/13 13:06*	*01/02/14 12:02*	*1.00*

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
Lead	**7.18**		1.82		mg/kg dry	☼	12/26/13 08:42	12/27/13 14:46	1.00

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Lab Sample ID: 13L0110-BLK1
Matrix: Soil
Analysis Batch: 13L0110

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13L0110_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5.00		mg/kg wet		12/20/13 08:35	12/20/13 10:26	1.00
Benzene	ND		0.00500		mg/kg wet		12/20/13 08:35	12/20/13 10:26	1.00
Ethylbenzene	ND		0.100		mg/kg wet		12/20/13 08:35	12/20/13 10:26	1.00
Toluene	ND		0.100		mg/kg wet		12/20/13 08:35	12/20/13 10:26	1.00
o-Xylene	ND		0.200		mg/kg wet		12/20/13 08:35	12/20/13 10:26	1.00
m,p-Xylene	ND		0.400		mg/kg wet		12/20/13 08:35	12/20/13 10:26	1.00
1,2-Dichloroethane (EDC)	ND		0.100		mg/kg wet		12/20/13 08:35	12/20/13 10:26	1.00
Hexane	ND		0.100		mg/kg wet		12/20/13 08:35	12/20/13 10:26	1.00
Xylenes (total)	ND		1.50		mg/kg wet		12/20/13 08:35	12/20/13 10:26	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*105*		*42.4 - 163*	*12/20/13 08:35*	*12/20/13 10:26*	*1.00*
1,2-dichloroethane-d4	*101*		*50 - 150*	*12/20/13 08:35*	*12/20/13 10:26*	*1.00*
Toluene-d8	*97.3*		*45.8 - 155*	*12/20/13 08:35*	*12/20/13 10:26*	*1.00*
4-bromofluorobenzene	*103*		*41.5 - 162*	*12/20/13 08:35*	*12/20/13 10:26*	*1.00*

Lab Sample ID: 13L0110-BS1
Matrix: Soil
Analysis Batch: 13L0110

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13L0110_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	0.500	0.592		mg/kg wet		118	79 - 127
Benzene	0.500	0.586		mg/kg wet		117	75.9 - 123
Ethylbenzene	0.500	0.534		mg/kg wet		107	80 - 120
Toluene	0.500	0.530		mg/kg wet		106	77.3 - 126
o-Xylene	0.500	0.560		mg/kg wet		112	80 - 120
m,p-Xylene	0.500	0.545		mg/kg wet		109	80 - 120
Naphthalene	0.500	0.411		mg/kg wet		82.2	58.8 - 130
1,2-Dichloroethane (EDC)	0.500	0.591		mg/kg wet		118	60 - 140
1,2-Dibromoethane	0.500	0.488		mg/kg wet		97.6	60 - 140
Hexane	0.500	0.532		mg/kg wet		106	50 - 150
Xylenes (total)	1.00	1.10		mg/kg wet		110	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*103*		*42.4 - 163*
1,2-dichloroethane-d4	*108*		*50 - 150*
Toluene-d8	*93.0*		*45.8 - 155*
4-bromofluorobenzene	*101*		*41.5 - 162*

Lab Sample ID: 13L0110-BS2
Matrix: Soil
Analysis Batch: 13L0110

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13L0110_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Hydrocarbons	50.0	44.6		mg/kg wet		89.2	74.4 - 124

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C (Continued)

Lab Sample ID: 13L0110-BS2
Matrix: Soil
Analysis Batch: 13L0110

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13L0110_P

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*100*		*42.4 - 163*
1,2-dichloroethane-d4	*100*		*50 - 150*
Toluene-d8	*97.6*		*45.8 - 155*
4-bromofluorobenzene	*104*		*41.5 - 162*

Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Lab Sample ID: 13L0104-BLK1
Matrix: Soil
Analysis Batch: 13L0104

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13L0104_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.0100		mg/kg wet		12/19/13 13:06	12/27/13 18:47	1.00
2-Methylnaphthalene	ND		0.0100		mg/kg wet		12/19/13 13:06	12/27/13 18:47	1.00
1-Methylnaphthalene	ND		0.0100		mg/kg wet		12/19/13 13:06	12/27/13 18:47	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*90.2*		*53.2 - 137*	*12/19/13 13:06*	*12/27/13 18:47*	*1.00*

Lab Sample ID: 13L0104-BS1
Matrix: Soil
Analysis Batch: 13L0104

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13L0104_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Naphthalene			0.133	0.129		mg/kg wet		96.5	62.7 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*86.8*		*53.2 - 137*

Lab Sample ID: 13L0104-MS1
Matrix: Soil
Analysis Batch: 13L0104

Client Sample ID: MW-5 (5-6)
Prep Type: Total
Prep Batch: 13L0104_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits		
Naphthalene	ND		0.338	0.208		mg/kg dry	☼	61.5	30 - 120		

Surrogate	*Matrix Spike %Recovery*	*Matrix Spike Qualifier*	*Limits*
Nitrobenzene-d5	*71.4*		*53.2 - 137*

Lab Sample ID: 13L0104-MSD1
Matrix: Soil
Analysis Batch: 13L0104

Client Sample ID: MW-5 (5-6)
Prep Type: Total
Prep Batch: 13L0104_P

Analyte	Sample Result	Sample Qualifier	Spike Added	ıtrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	ND		0.273	0.175		mg/kg dry	☼	64.0	30 - 120	17.5	35

Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring (Continued)

Lab Sample ID: 13L0104-MSD1
Matrix: Soil
Analysis Batch: 13L0104

Client Sample ID: MW-5 (5-6)
Prep Type: Total
Prep Batch: 13L0104_P

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
Nitrobenzene-d5	*80.4*		*53.2 - 137*

Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B

Lab Sample ID: 13L0127-BLK1
Matrix: Soil
Analysis Batch: 13L0127

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13L0127_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.25		mg/kg wet		12/26/13 08:42	12/27/13 13:38	1.00

Lab Sample ID: 13L0127-BS1
Matrix: Soil
Analysis Batch: 13L0127

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13L0127_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			50.0	50.9		mg/kg wet		102	80 - 120		

Lab Sample ID: 13L0127-MS1
Matrix: Soil
Analysis Batch: 13L0127

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 13L0127_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	16.7		56.2	105	M1	mg/kg dry	☼	157	75 - 125		

Lab Sample ID: 13L0127-MSD1
Matrix: Soil
Analysis Batch: 13L0127

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 13L0127_P

Analyte	Sample Result	Sample Qualifier	Spike Added	ıtrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	16.7		54.1	65.9	R	mg/kg dry	☼	91.1	75 - 125	45.5	20

Lab Sample ID: 13L0127-DUP1
Matrix: Soil
Analysis Batch: 13L0127

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 13L0127_P

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Lead	16.7			14.9		mg/kg dry	☼			11.4	20

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWL0085

Client Sample ID: MW-5 (5-6)

Lab Sample ID: SWL0085-01

Date Collected: 12/10/13 13:30
Matrix: Soil
Date Received: 12/16/13 16:50
Percent Solids: 77.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.835	13L0110_P	12/20/13 08:35	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13L0110	12/20/13 12:49	CBW	TAL SPK
Total	Prep	EPA 3550B		1.00	13L0104_P	12/19/13 13:06	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13L0104	12/27/13 19:38	MRS	TAL SPK
Total	Prep	EPA 3050B		0.971	13L0127_P	12/26/13 08:42	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0127	12/27/13 14:38	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	13L0153_P	12/19/13 15:50	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13L0153	12/20/13 16:45	MS	TAL SPK

Client Sample ID: SVE-1 (6-7)

Lab Sample ID: SWL0085-06

Date Collected: 12/11/13 09:20
Matrix: Soil
Date Received: 12/16/13 16:50
Percent Solids: 75.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.37	13L0110_P	12/20/13 08:35	CBW	TAL SPK
Total	Analysis	EPA 8260C		10.0	13L0110	12/20/13 14:46	CBW	TAL SPK
Total	Prep	EPA 3550B		1.79	13L0104_P	12/19/13 13:06	MS	TAL SPK
Total	Analysis	EPA 8270D		10.0	13L0104	12/31/13 17:25	MRS	TAL SPK
Total	Prep	EPA 3050B		1.04	13L0127_P	12/26/13 08:42	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0127	12/27/13 14:42	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	13L0153_P	12/19/13 15:50	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13L0153	12/20/13 16:45	MS	TAL SPK

Client Sample ID: AS-1(10-11.5)

Lab Sample ID: SWL0085-09

Date Collected: 12/10/13 11:30
Matrix: Soil
Date Received: 12/16/13 16:50
Percent Solids: 74

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.06	13L0110_P	12/20/13 08:35	CBW	TAL SPK
Total	Analysis	EPA 8260C		10.0	13L0110	12/20/13 15:07	CBW	TAL SPK
Total	Prep	EPA 3550B		2.54	13L0104_P	12/19/13 13:06	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13L0104	01/02/14 12:02	MRS	TAL SPK
Total	Prep	EPA 3050B		1.08	13L0127_P	12/26/13 08:42	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	13L0127	12/27/13 14:46	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	13L0153_P	12/19/13 15:50	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13L0153	12/20/13 16:45	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: 0504-075-01

TestAmerica Job ID: SWL0085

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	01-06-14

Method Summary

Client: Geo Engineers - Spokane
Project/Site: 0504-075-01

TestAmerica Job ID: SWL0085

Method	Method Description	Protocol	Laboratory
EPA 8260C	NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C		TAL SPK
EPA 8270D	Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring		TAL SPK
EPA 6010C	Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B		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
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

1/2/2014

CHAIN OF CUSTODY REPORT

Work Order #: SWL0085

CLIENT: GEOENGINEERS, INC

REPORT TO: JON RUDDERS
ADDRESS: jrudders@geoengineers.com

PHONE: 509-363-3125 FAX:

INVOICE TO: J. RUDDERS ← Same as

P.O. NUMBER:

PROJECT NAME: FRENCHIES FILL-N-FUEL

PROJECT NUMBER: 0504075-01

SAMPLED BY: ERH

TURNAROUND REQUEST

in Business Days *

Organic & Inorganic Analyses: [X] STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: [X] STD. | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES: NWTPH-GX	BTEX 8260	EDC 8260	n-hexane 8260	naphthalenes 8270	Lead 6010	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 MW-5 (5-6)	12/10/13 1330		X	X	X	X	X	X	S	4		
2 MW-5 (10-11)	1345											
3 MW-5 (15.5-16)	1355											
4 MW-5 (20.5-21.5)	1430											
5 SVE-1 (4-4.5)	12/11/13 0900											
6 SVE-1 (6-7)	0920		X	X	X	X	X	X				
7 SVE-1 (11.5-12.5)	0945											
8 AS-1 (5-6)	12/10/13 1020											
9 AS-1 (10-11.5)	1130		X	X	X	X	X	X				
10 AS-1 (15-16)	1105											

RELEASED BY: PRINT NAME: ERIN HOGAN FIRM: GEOENGINEERS DATE: 12/16/13 TIME: 0900

RECEIVED BY: PRINT NAME: Jonathan Rudders FIRM: GEI DATE: 12/16/13 TIME: 0900

RELEASED BY: PRINT NAME: Jonathan Rudders FIRM: GEI DATE: 12/16/13 TIME: 1650

RECEIVED BY: PRINT NAME: Cat Stapleton FIRM: TestAmerica DATE: 12-16-13 TIME: 16:50

ADDITIONAL REMARKS:

TEMP: 2.8

PAGE 1 OF 2

TAL-1000 (0612)

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

1/2/2014

CHAIN OF CUSTODY REPORT

Work Order #: SNL0085

CLIENT: GeoEngineers, Inc

REPORT TO: J. Rudders

ADDRESS: jrudders@geoengineers.com

PHONE: 509 363 3125 FAX:

INVOICE TO: Same as

P.O. NUMBER:

PROJECT NAME: Frenchies

PROJECT NUMBER: 0504-075-01

SAMPLED BY: ERH

TURNAROUND REQUEST

in Business Days *

Organic & Inorganic Analyses: [X] STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: [X] STD. | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	NWTPH-Gx	BTEX 8260	EDC 8260	n-hexane 8260	naphthalenes 8270	Lead 6010	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	AS-1 (10.5-11.5)	12/10/13 1115								S	4		
2	AS-1 (25.5-26.5)	12/10/13 1135								S	4		
3													
4													
5													
6													
7													
8													
9													
10													

JCR 12/16/13

RELEASED BY: ERH PRINT NAME: ERIN HOGAN FIRM: GeoEngineers DATE: 12/16/13 TIME: 0900

RECEIVED BY: PRINT NAME: Jonathan Rudders FIRM: G-E-I DATE: 12/16/13 TIME: 0900

RELEASED BY: PRINT NAME: Jonathan Rudders FIRM: DATE: 12/16/13 TIME: 1650

RECEIVED BY: PRINT NAME: Cat Stapleton FIRM: TestAmerica DATE: 12-16-13 TIME: 16:50

ADDITIONAL REMARKS:

TEMP: 28

PAGE 2 OF 2

TAL-1000 (0612)

TestAmerica Spokane
Sample Receipt Form

Work Order #: 580-100855	Client: GeoEngineers	Project: Frenchies
Date/Time Received: 12-16-13 16:50	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: 2.8 °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: 12-17-13 9:10 By: CS	Yes	No	NA	Comments
Are sample labels affixed and completed for each container	X			
Samples containers were received intact:		X		Vocs received upside down much leaked out of vials.
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: SWL0118
Client Project/Site: 0504-075-00
Client Project Description: Frenchies Fill-n-Food

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

Attn: Jon Rudders

Authorized for release by:
1/8/2014 4:01:44 PM

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

Table of Contents

Sample Summary

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SWL0118-01	MW-1-121913	Water	12/19/13 12:33	12/20/13 12:48
SWL0118-02	MW-2-121913	Water	12/19/13 11:32	12/20/13 12:48
SWL0118-03	MW-3-121913	Water	12/19/13 13:03	12/20/13 12:48
SWL0118-04	MW-4-121913	Water	12/19/13 09:04	12/20/13 12:48
SWL0118-05	MW-5-121913	Water	12/19/13 10:57	12/20/13 12:48
SWL0118-06	Duplicate-1-121913	Water	12/19/13 12:34	12/20/13 12:48

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Qualifiers

Metals

Qualifier	Qualifier Description
MNR3	Insufficient sample received to meet method QC requirements.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error 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: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Client Sample ID: MW-1-121913
Date Collected: 12/19/13 12:33
Date Received: 12/20/13 12:48

Lab Sample ID: SWL0118-01
Matrix: Water

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		90.0		ug/l		12/23/13 09:36	12/23/13 13:56	1.00
Benzene	ND		0.200		ug/l		12/23/13 09:36	12/23/13 13:56	1.00
Toluene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 13:56	1.00
Ethylbenzene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 13:56	1.00
m,p-Xylene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 13:56	1.00
o-Xylene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 13:56	1.00
1,2-Dichloroethane (EDC)	ND		0.500		ug/l		12/23/13 09:36	12/23/13 13:56	1.00
Xylenes (total)	ND		1.50		ug/l		12/23/13 09:36	12/23/13 13:56	1.00
Hexane	ND		1.00		ug/l		12/23/13 09:36	12/23/13 13:56	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*102*		*71.2 - 143*	*12/23/13 09:36*	*12/23/13 13:56*	*1.00*
Toluene-d8	*102*		*74.1 - 135*	*12/23/13 09:36*	*12/23/13 13:56*	*1.00*
4-bromofluorobenzene	*107*		*68.7 - 141*	*12/23/13 09:36*	*12/23/13 13:56*	*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	ND		0.0977		ug/l		12/20/13 14:40	12/27/13 22:37	1.00
2-Methylnaphthalene	ND		0.0977		ug/l		12/20/13 14:40	12/27/13 22:37	1.00
1-Methylnaphthalene	ND		0.0977		ug/l		12/20/13 14:40	12/27/13 22:37	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*71.7*		*32.7 - 135*	*12/20/13 14:40*	*12/27/13 22:37*	*1.00*
2-FBP	*67.6*		*44.3 - 120*	*12/20/13 14:40*	*12/27/13 22:37*	*1.00*
p-Terphenyl-d14	*93.0*		*59.5 - 154*	*12/20/13 14:40*	*12/27/13 22:37*	*1.00*

Method: EPA 200.7 - Dissolved Metals by EPA 200 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.904**	**MNR3**	0.0100		mg/l		12/30/13 10:49	01/03/14 11:48	1.00

Method: EPA 6010C - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150		mg/l		01/08/14 08:53	01/08/14 14:09	1.00

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	**13.2**		2.00		mg/l		12/20/13 13:24	12/20/13 14:21	10.0
Sulfate	**163**		5.00		mg/l		12/20/13 13:24	12/20/13 14:21	10.0

Method: SM 2320B - Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**720**		4.00		mg/l		01/02/14 08:54	01/02/14 13:16	1.00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.00500		mg/L		01/02/14 12:45	01/02/14 12:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Acetylene (Surr)	*78*		*62 - 124*	*01/02/14 12:45*	*01/02/14 12:45*	*1*

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Client Sample ID: MW-2-121913
Date Collected: 12/19/13 11:32
Date Received: 12/20/13 12:48

Lab Sample ID: SWL0118-02
Matrix: Water

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	**2340**		90.0		ug/l		12/23/13 09:36	12/23/13 14:22	1.00
Benzene	**0.880**		0.200		ug/l		12/23/13 09:36	12/23/13 14:22	1.00
Toluene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 14:22	1.00
Ethylbenzene	**1.17**		0.500		ug/l		12/23/13 09:36	12/23/13 14:22	1.00
m,p-Xylene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 14:22	1.00
o-Xylene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 14:22	1.00
1,2-Dichloroethane (EDC)	ND		0.500		ug/l		12/23/13 09:36	12/23/13 14:22	1.00
Xylenes (total)	ND		1.50		ug/l		12/23/13 09:36	12/23/13 14:22	1.00
Hexane	ND		1.00		ug/l		12/23/13 09:36	12/23/13 14:22	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*91.0*		*71.2 - 143*	*12/23/13 09:36*	*12/23/13 14:22*	*1.00*
Toluene-d8	*96.6*		*74.1 - 135*	*12/23/13 09:36*	*12/23/13 14:22*	*1.00*
4-bromofluorobenzene	*111*		*68.7 - 141*	*12/23/13 09:36*	*12/23/13 14:22*	*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	**1.10**		0.101		ug/l		12/20/13 14:40	12/27/13 23:03	1.00
2-Methylnaphthalene	ND		0.101		ug/l		12/20/13 14:40	12/27/13 23:03	1.00
1-Methylnaphthalene	**0.919**		0.101		ug/l		12/20/13 14:40	12/27/13 23:03	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*76.8*		*32.7 - 135*	*12/20/13 14:40*	*12/27/13 23:03*	*1.00*
2-FBP	*76.4*		*44.3 - 120*	*12/20/13 14:40*	*12/27/13 23:03*	*1.00*
p-Terphenyl-d14	*89.7*		*59.5 - 154*	*12/20/13 14:40*	*12/27/13 23:03*	*1.00*

Method: EPA 200.7 - Dissolved Metals by EPA 200 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**2.65**	**MNR3**	0.0100		mg/l		12/30/13 10:49	01/03/14 11:52	1.00

Method: EPA 6010C - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150		mg/l		01/08/14 08:53	01/08/14 14:13	1.00

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	**1.98**		0.400		mg/l		12/20/13 13:24	12/20/13 14:40	2.00
Sulfate	**33.5**		1.00		mg/l		12/20/13 13:24	12/20/13 14:40	2.00

Method: SM 2320B - Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**765**		4.00		mg/l		01/02/14 08:54	01/02/14 13:16	1.00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.00500		mg/L		01/02/14 12:47	01/02/14 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Acetylene (Surr)	*79*		*62 - 124*	*01/02/14 12:47*	*01/02/14 12:47*	*1*

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Client Sample ID: MW-3-121913
Date Collected: 12/19/13 13:03
Date Received: 12/20/13 12:48

Lab Sample ID: SWL0118-03
Matrix: Water

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	5840		90.0		ug/l		12/23/13 09:36	12/23/13 14:46	1.00
Benzene	76.2		0.200		ug/l		12/23/13 09:36	12/23/13 14:46	1.00
Toluene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 14:46	1.00
Ethylbenzene	3.27		0.500		ug/l		12/23/13 09:36	12/23/13 14:46	1.00
m,p-Xylene	4.11		0.500		ug/l		12/23/13 09:36	12/23/13 14:46	1.00
o-Xylene	0.940		0.500		ug/l		12/23/13 09:36	12/23/13 14:46	1.00
1,2-Dichloroethane (EDC)	4.04		0.500		ug/l		12/23/13 09:36	12/23/13 14:46	1.00
Xylenes (total)	5.05		1.50		ug/l		12/23/13 09:36	12/23/13 14:46	1.00
Hexane	ND		1.00		ug/l		12/23/13 09:36	12/23/13 14:46	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*78.7*		*71.2 - 143*	*12/23/13 09:36*	*12/23/13 14:46*	*1.00*
Toluene-d8	*95.1*		*74.1 - 135*	*12/23/13 09:36*	*12/23/13 14:46*	*1.00*
4-bromofluorobenzene	*110*		*68.7 - 141*	*12/23/13 09:36*	*12/23/13 14:46*	*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	3.09		0.0990		ug/l		12/20/13 14:40	12/31/13 16:59	1.00
2-Methylnaphthalene	ND		0.0990		ug/l		12/20/13 14:40	12/31/13 16:59	1.00
1-Methylnaphthalene	4.03		0.0990		ug/l		12/20/13 14:40	12/31/13 16:59	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*102*		*32.7 - 135*	*12/20/13 14:40*	*12/31/13 16:59*	*1.00*
2-FBP	*75.3*		*44.3 - 120*	*12/20/13 14:40*	*12/31/13 16:59*	*1.00*
p-Terphenyl-d14	*80.0*		*59.5 - 154*	*12/20/13 14:40*	*12/31/13 16:59*	*1.00*

Method: EPA 200.7 - Dissolved Metals by EPA 200 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	5.90	MNR3	0.0100		mg/l		12/30/13 10:49	01/03/14 11:54	1.00

Method: EPA 6010C - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150		mg/l		01/08/14 08:53	01/08/14 14:16	1.00

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	0.200		0.200		mg/l		12/20/13 13:24	12/20/13 15:00	1.00
Sulfate	13.4		0.500		mg/l		12/20/13 13:24	12/20/13 15:00	1.00

Method: SM 2320B - Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	1120		4.00		mg/l		01/02/14 08:54	01/02/14 13:16	1.00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.00500		mg/L		01/02/14 12:49	01/02/14 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Acetylene (Surr)	*74*		*62 - 124*	*01/02/14 12:49*	*01/02/14 12:49*	*1*

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Client Sample ID: MW-4-121913
Date Collected: 12/19/13 09:04
Date Received: 12/20/13 12:48

Lab Sample ID: SWL0118-04
Matrix: Water

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		90.0		ug/l		12/23/13 09:36	12/23/13 15:09	1.00
Benzene	ND		0.200		ug/l		12/23/13 09:36	12/23/13 15:09	1.00
Toluene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:09	1.00
Ethylbenzene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:09	1.00
m,p-Xylene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:09	1.00
o-Xylene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:09	1.00
1,2-Dichloroethane (EDC)	**2.10**		0.500		ug/l		12/23/13 09:36	12/23/13 15:09	1.00
Xylenes (total)	ND		1.50		ug/l		12/23/13 09:36	12/23/13 15:09	1.00
Hexane	ND		1.00		ug/l		12/23/13 09:36	12/23/13 15:09	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.2*		*71.2 - 143*	*12/23/13 09:36*	*12/23/13 15:09*	*1.00*
Toluene-d8	*99.8*		*74.1 - 135*	*12/23/13 09:36*	*12/23/13 15:09*	*1.00*
4-bromofluorobenzene	*110*		*68.7 - 141*	*12/23/13 09:36*	*12/23/13 15:09*	*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	ND		0.0975		ug/l		12/20/13 14:40	12/27/13 23:54	1.00
2-Methylnaphthalene	ND		0.0975		ug/l		12/20/13 14:40	12/27/13 23:54	1.00
1-Methylnaphthalene	ND		0.0975		ug/l		12/20/13 14:40	12/27/13 23:54	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*72.3*		*32.7 - 135*	*12/20/13 14:40*	*12/27/13 23:54*	*1.00*
2-FBP	*71.3*		*44.3 - 120*	*12/20/13 14:40*	*12/27/13 23:54*	*1.00*
p-Terphenyl-d14	*91.8*		*59.5 - 154*	*12/20/13 14:40*	*12/27/13 23:54*	*1.00*

Method: EPA 200.7 - Dissolved Metals by EPA 200 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.21**	**MNR3**	0.0100		mg/l		12/30/13 10:49	01/03/14 11:58	1.00

Method: EPA 6010C - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150		mg/l		01/08/14 08:53	01/08/14 14:19	1.00

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	**3.10**		2.00		mg/l		12/20/13 13:24	12/20/13 15:19	10.0
Sulfate	**225**		5.00		mg/l		12/20/13 13:24	12/20/13 15:19	10.0

Method: SM 2320B - Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**1060**		4.00		mg/l		01/02/14 08:54	01/02/14 13:16	1.00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.00500		mg/L		01/02/14 12:51	01/02/14 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Acetylene (Surr)	*80*		*62 - 124*	*01/02/14 12:51*	*01/02/14 12:51*	*1*

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Client Sample ID: MW-5-121913
Date Collected: 12/19/13 10:57
Date Received: 12/20/13 12:48

Lab Sample ID: SWL0118-05
Matrix: Water

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		90.0		ug/l		12/23/13 09:36	12/23/13 15:32	1.00
Benzene	ND		0.200		ug/l		12/23/13 09:36	12/23/13 15:32	1.00
Toluene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:32	1.00
Ethylbenzene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:32	1.00
m,p-Xylene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:32	1.00
o-Xylene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:32	1.00
1,2-Dichloroethane (EDC)	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:32	1.00
Xylenes (total)	ND		1.50		ug/l		12/23/13 09:36	12/23/13 15:32	1.00
Hexane	ND		1.00		ug/l		12/23/13 09:36	12/23/13 15:32	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.8*		*71.2 - 143*	*12/23/13 09:36*	*12/23/13 15:32*	*1.00*
Toluene-d8	*98.1*		*74.1 - 135*	*12/23/13 09:36*	*12/23/13 15:32*	*1.00*
4-bromofluorobenzene	*108*		*68.7 - 141*	*12/23/13 09:36*	*12/23/13 15:32*	*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	ND		0.0963		ug/l		12/20/13 14:40	12/28/13 00:19	1.00
2-Methylnaphthalene	ND		0.0963		ug/l		12/20/13 14:40	12/28/13 00:19	1.00
1-Methylnaphthalene	ND		0.0963		ug/l		12/20/13 14:40	12/28/13 00:19	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*74.3*		*32.7 - 135*	*12/20/13 14:40*	*12/28/13 00:19*	*1.00*
2-FBP	*75.6*		*44.3 - 120*	*12/20/13 14:40*	*12/28/13 00:19*	*1.00*
p-Terphenyl-d14	*98.6*		*59.5 - 154*	*12/20/13 14:40*	*12/28/13 00:19*	*1.00*

Method: EPA 200.7 - Dissolved Metals by EPA 200 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.501**	**MNR3**	0.0100		mg/l		12/30/13 10:49	01/03/14 12:02	1.00

Method: EPA 6010C - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150		mg/l		01/08/14 08:53	01/08/14 14:24	1.00

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	**0.570**		0.200		mg/l		12/20/13 13:24	12/20/13 15:39	1.00
Sulfate	**88.1**		1.00		mg/l		12/20/13 13:24	12/20/13 16:57	2.00

Method: SM 2320B - Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**940**		4.00		mg/l		01/02/14 08:54	01/02/14 13:16	1.00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.00500		mg/L		01/02/14 12:54	01/02/14 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Acetylene (Surr)	*78*		*62 - 124*	*01/02/14 12:54*	*01/02/14 12:54*	*1*

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Client Sample ID: Duplicate-1-121913
Date Collected: 12/19/13 12:34
Date Received: 12/20/13 12:48

Lab Sample ID: SWL0118-06
Matrix: Water

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	**2490**		90.0		ug/l		12/23/13 09:36	12/23/13 15:56	1.00
Benzene	**0.990**		0.200		ug/l		12/23/13 09:36	12/23/13 15:56	1.00
Toluene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:56	1.00
Ethylbenzene	**1.24**		0.500		ug/l		12/23/13 09:36	12/23/13 15:56	1.00
m,p-Xylene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:56	1.00
o-Xylene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:56	1.00
1,2-Dichloroethane (EDC)	ND		0.500		ug/l		12/23/13 09:36	12/23/13 15:56	1.00
Xylenes (total)	ND		1.50		ug/l		12/23/13 09:36	12/23/13 15:56	1.00
Hexane	ND		1.00		ug/l		12/23/13 09:36	12/23/13 15:56	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*89.9*		*71.2 - 143*	*12/23/13 09:36*	*12/23/13 15:56*	*1.00*
Toluene-d8	*99.8*		*74.1 - 135*	*12/23/13 09:36*	*12/23/13 15:56*	*1.00*
4-bromofluorobenzene	*113*		*68.7 - 141*	*12/23/13 09:36*	*12/23/13 15:56*	*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	**1.26**		0.0966		ug/l		12/20/13 14:40	12/28/13 00:45	1.00
2-Methylnaphthalene	ND		0.0966		ug/l		12/20/13 14:40	12/28/13 00:45	1.00
1-Methylnaphthalene	**1.10**		0.0966		ug/l		12/20/13 14:40	12/28/13 00:45	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*88.5*		*32.7 - 135*	*12/20/13 14:40*	*12/28/13 00:45*	*1.00*
2-FBP	*81.6*		*44.3 - 120*	*12/20/13 14:40*	*12/28/13 00:45*	*1.00*
p-Terphenyl-d14	*112*		*59.5 - 154*	*12/20/13 14:40*	*12/28/13 00:45*	*1.00*

Method: EPA 200.7 - Dissolved Metals by EPA 200 Series Methods - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**2.65**	**MNR3**	0.0100		mg/l		12/30/13 10:49	01/03/14 12:08	1.00

Method: EPA 6010C - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150		mg/l		01/08/14 08:53	01/08/14 14:36	1.00

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	ND		0.200		mg/l		12/20/13 13:24	12/20/13 15:58	1.00
Sulfate	**32.5**		0.500		mg/l		12/20/13 13:24	12/20/13 15:58	1.00

Method: SM 2320B - Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**725**		4.00		mg/l		01/02/14 08:54	01/02/14 13:16	1.00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.00500		mg/L		01/02/14 12:59	01/02/14 12:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Acetylene (Surr)	*83*		*62 - 124*	*01/02/14 12:59*	*01/02/14 12:59*	*1*

Method: EPA 8260C - NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C

Lab Sample ID: 13L0119-BLK1
Matrix: Water
Analysis Batch: 13L0119

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13L0119_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		90.0		ug/l		12/23/13 09:36	12/23/13 12:09	1.00
Benzene	ND		0.200		ug/l		12/23/13 09:36	12/23/13 12:09	1.00
Toluene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 12:09	1.00
Ethylbenzene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 12:09	1.00
m,p-Xylene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 12:09	1.00
o-Xylene	ND		0.500		ug/l		12/23/13 09:36	12/23/13 12:09	1.00
1,2-Dichloroethane (EDC)	ND		0.500		ug/l		12/23/13 09:36	12/23/13 12:09	1.00
Xylenes (total)	ND		1.50		ug/l		12/23/13 09:36	12/23/13 12:09	1.00
Hexane	ND		1.00		ug/l		12/23/13 09:36	12/23/13 12:09	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*100*		*71.2 - 143*	*12/23/13 09:36*	*12/23/13 12:09*	*1.00*
Toluene-d8	*100*		*74.1 - 135*	*12/23/13 09:36*	*12/23/13 12:09*	*1.00*
4-bromofluorobenzene	*106*		*68.7 - 141*	*12/23/13 09:36*	*12/23/13 12:09*	*1.00*

Lab Sample ID: 13L0119-BS1
Matrix: Water
Analysis Batch: 13L0119

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13L0119_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	10.0	10.8		ug/l		108	80 - 128
Benzene	10.0	10.8		ug/l		108	80 - 122
Toluene	10.0	9.64		ug/l		96.4	80 - 123
Ethylbenzene	10.0	9.93		ug/l		99.3	80 - 120
m,p-Xylene	10.0	10.1		ug/l		101	80 - 120
o-Xylene	10.0	10.5		ug/l		105	80 - 120
Naphthalene	10.0	8.52		ug/l		85.2	62.8 - 132
Xylenes (total)	20.0	20.6		ug/l		103	80 - 120
Hexane	10.0	10.5		ug/l		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*102*		*71.2 - 143*
Toluene-d8	*95.6*		*74.1 - 135*
4-bromofluorobenzene	*106*		*68.7 - 141*

Lab Sample ID: 13L0119-BS2
Matrix: Water
Analysis Batch: 13L0119

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13L0119_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Hydrocarbons	1000	1050		ug/l		105	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*99.6*		*71.2 - 143*
Toluene-d8	*98.8*		*74.1 - 135*
4-bromofluorobenzene	*104*		*68.7 - 141*

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Lab Sample ID: 13L0108-BLK1
Matrix: Water
Analysis Batch: 13L0108

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13L0108_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.100		ug/l		12/20/13 08:16	12/27/13 15:22	1.00
2-Methylnaphthalene	ND		0.100		ug/l		12/20/13 08:16	12/27/13 15:22	1.00
1-Methylnaphthalene	ND		0.100		ug/l		12/20/13 08:16	12/27/13 15:22	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*82.9*		*32.7 - 135*	*12/20/13 08:16*	*12/27/13 15:22*	*1.00*
2-FBP	*74.9*		*44.3 - 120*	*12/20/13 08:16*	*12/27/13 15:22*	*1.00*
p-Terphenyl-d14	*94.4*		*59.5 - 154*	*12/20/13 08:16*	*12/27/13 15:22*	*1.00*

Lab Sample ID: 13L0108-BS1
Matrix: Water
Analysis Batch: 13L0108

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13L0108_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	4.00	2.58		ug/l		64.5	27.8 - 143
Fluorene	4.00	3.13		ug/l		78.2	59.2 - 120
Chrysene	4.00	3.58		ug/l		89.5	69.1 - 122
Indeno (1,2,3-cd) pyrene	4.00	4.01		ug/l		100	56.1 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*71.9*		*32.7 - 135*
2-FBP	*72.1*		*44.3 - 120*
p-Terphenyl-d14	*88.4*		*59.5 - 154*

Method: EPA 200.7 - Dissolved Metals by EPA 200 Series Methods

Lab Sample ID: 13L0143-BLK1
Matrix: Water
Analysis Batch: 13L0143

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 13L0143_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND	MNR3	0.0100		mg/l		12/30/13 10:49	01/03/14 11:05	1.00

Lab Sample ID: 13L0143-BS1
Matrix: Water
Analysis Batch: 13L0143

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 13L0143_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	1.00	0.986	MNR3	mg/l		98.6	85 - 115

Lab Sample ID: 13L0143-MS1
Matrix: Water
Analysis Batch: 13L0143

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 13L0143_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	3.76		1.00	4.67	MNR3	mg/l		90.4	75 - 125

Method: EPA 200.7 - Dissolved Metals by EPA 200 Series Methods (Continued)

Lab Sample ID: 13L0143-DUP1 — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 13L0143 — **Prep Batch: 13L0143_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Manganese	3.76			3.76	MNR3	mg/l				0.102	20

Method: EPA 6010C - Total Metals by EPA 6010/7000 Series Methods

Lab Sample ID: 14A0025-BLK1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 14A0025 — **Prep Batch: 14A0025_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0300		mg/l		01/08/14 08:53	01/08/14 13:57	1.00

Lab Sample ID: 14A0025-BS1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 14A0025 — **Prep Batch: 14A0025_P**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			1.00	0.955		mg/l		95.5	80 - 120		

Lab Sample ID: 14A0025-MS1 — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 14A0025 — **Prep Batch: 14A0025_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	0.297		1.00	1.16		mg/l		86.7	75 - 125		

Lab Sample ID: 14A0025-DUP1 — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 14A0025 — **Prep Batch: 14A0025_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Lead	0.297			0.295		mg/l				0.743	20

Method: EPA 300.0 - Anions by EPA Method 300.0

Lab Sample ID: 13L0115-BLK1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 13L0115 — **Prep Batch: 13L0115_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	ND		0.200		mg/l		12/20/13 10:03	12/20/13 14:01	1.00
Sulfate	ND		0.500		mg/l		12/20/13 10:03	12/20/13 14:01	1.00

Lab Sample ID: 13L0115-BS1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 13L0115 — **Prep Batch: 13L0115_P**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate-Nitrogen			5.00	4.98		mg/l		99.6	90 - 110		
Sulfate			12.5	12.2		mg/l		97.3	90 - 110		

Method: EPA 300.0 - Anions by EPA Method 300.0 (Continued)

Lab Sample ID: 13L0115-MS1 — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 13L0115 — **Prep Batch: 13L0115_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate-Nitrogen	0.170		5.00	4.80		mg/l		92.6	80 - 120
Sulfate	6.41		12.5	18.0		mg/l		92.7	80 - 120

Lab Sample ID: 13L0115-MSD1 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 13L0115 — **Prep Batch: 13L0115_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	trix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate-Nitrogen	0.170		5.00	5.18		mg/l		100	80 - 120	7.62	12.1
Sulfate	6.41		12.5	18.4		mg/l		95.7	80 - 120	2.03	10

Lab Sample ID: 13L0115-DUP1 — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 13L0115 — **Prep Batch: 13L0115_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Nitrate-Nitrogen	0.170		0.170		mg/l		0.00	13.1
Sulfate	6.41		6.34		mg/l		1.10	15.7

Method: SM 2320B - Conventional Chemistry Parameters by APHA/EPA Methods

Lab Sample ID: 14A0001-BLK1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 14A0001 — **Prep Batch: 14A0001_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		4.00		mg/l		01/02/14 08:54	01/02/14 13:16	1.00

Lab Sample ID: 14A0001-BS1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 14A0001 — **Prep Batch: 14A0001_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity	500	475		mg/l		95.0	90 - 110

Lab Sample ID: 14A0001-DUP1 — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total**
Analysis Batch: 14A0001 — **Prep Batch: 14A0001_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	75.0		70.0		mg/l		6.90	10

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: 132796-4
Matrix: Water
Analysis Batch: 132796

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 132796_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.00500		mg/L		01/02/14 10:59	01/02/14 10:59	1

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Acetylene (Surr)	*100*		*62 - 124*	*01/02/14 10:59*	*01/02/14 10:59*	*1*

Lab Sample ID: 132796-5
Matrix: Water
Analysis Batch: 132796

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 132796_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			0.273	0.2631		mg/L		96	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Acetylene (Surr)	*95*		*62 - 124*

Lab Sample ID: 132796-6
Matrix: Water
Analysis Batch: 132796

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 132796_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane			0.273	0.2590		mg/L		95	80 - 120	2	33

Surrogate	*LCS Dup %Recovery*	*LCS Dup Qualifier*	*Limits*
Acetylene (Surr)	*90*		*62 - 124*

Lab Sample ID: 132796-8
Matrix: Water
Analysis Batch: 132796

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 132796_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			0.273	0.2716		mg/L		90	46 - 142		

Surrogate	*Matrix Spike %Recovery*	*Matrix Spike Qualifier*	*Limits*
Acetylene (Surr)	*88*		*62 - 124*

Lab Sample ID: 132796-9
Matrix: Water
Analysis Batch: 132796

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 132796_P

Analyte	Sample Result	Sample Qualifier	Spike Added	ıtrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane			0.273	0.2723		mg/L		91	46 - 142	0	30

Surrogate	*Matrix Spike Dup %Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
Acetylene (Surr)	*86*		*62 - 124*

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Client Sample ID: MW-1-121913

Lab Sample ID: SWL0118-01

Date Collected: 12/19/13 12:33

Matrix: Water

Date Received: 12/20/13 12:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13L0119_P	12/23/13 09:36	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13L0119	12/23/13 13:56	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		0.977	13L0108_P	12/20/13 14:40	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13L0108	12/27/13 22:37	MRS	TAL SPK
Dissolved	Prep	EPA 3005A		1.00	13L0143_P	12/30/13 10:49	JSP	TAL SPK
Dissolved	Analysis	EPA 200.7		1.00	13L0143	01/03/14 11:48	ICP	TAL SPK
Total	Prep	EPA 3005A		1.00	14A0025_P	01/08/14 08:53	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14A0025	01/08/14 14:09	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	14A0001_P	01/02/14 08:54	JSP	TAL SPK
Total	Analysis	SM 2320B		1.00	14A0001	01/02/14 13:16	JSP	TAL SPK
Total	Prep	Wet Chem		1.00	13L0115_P	12/20/13 13:24	CBW	TAL SPK
Total	Analysis	EPA 300.0		10.0	13L0115	12/20/13 14:21	CBW	TAL SPK
Total	Prep	NA			132796_P	01/02/14 12:45		TAL NSH
Total	Analysis	RSK-175		1	132796	01/02/14 12:45	MGH	TAL NSH

Client Sample ID: MW-2-121913

Lab Sample ID: SWL0118-02

Date Collected: 12/19/13 11:32

Matrix: Water

Date Received: 12/20/13 12:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13L0119_P	12/23/13 09:36	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13L0119	12/23/13 14:22	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		1.01	13L0108_P	12/20/13 14:40	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13L0108	12/27/13 23:03	MRS	TAL SPK
Dissolved	Prep	EPA 3005A		1.00	13L0143_P	12/30/13 10:49	JSP	TAL SPK
Dissolved	Analysis	EPA 200.7		1.00	13L0143	01/03/14 11:52	ICP	TAL SPK
Total	Prep	EPA 3005A		1.00	14A0025_P	01/08/14 08:53	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14A0025	01/08/14 14:13	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	14A0001_P	01/02/14 08:54	JSP	TAL SPK
Total	Analysis	SM 2320B		1.00	14A0001	01/02/14 13:16	JSP	TAL SPK
Total	Prep	Wet Chem		1.00	13L0115_P	12/20/13 13:24	CBW	TAL SPK
Total	Analysis	EPA 300.0		2.00	13L0115	12/20/13 14:40	CBW	TAL SPK
Total	Prep	NA			132796_P	01/02/14 12:47		TAL NSH
Total	Analysis	RSK-175		1	132796	01/02/14 12:47	MGH	TAL NSH

Client Sample ID: MW-3-121913

Lab Sample ID: SWL0118-03

Date Collected: 12/19/13 13:03

Matrix: Water

Date Received: 12/20/13 12:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13L0119_P	12/23/13 09:36	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13L0119	12/23/13 14:46	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		0.990	13L0108_P	12/20/13 14:40	MS	TAL SPK

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Client Sample ID: MW-3-121913

Date Collected: 12/19/13 13:03
Date Received: 12/20/13 12:48

Lab Sample ID: SWL0118-03

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	EPA 8270D		1.00	13L0108	12/31/13 16:59	MRS	TAL SPK
Dissolved	Prep	EPA 3005A		1.00	13L0143_P	12/30/13 10:49	JSP	TAL SPK
Dissolved	Analysis	EPA 200.7		1.00	13L0143	01/03/14 11:54	ICP	TAL SPK
Total	Prep	EPA 3005A		1.00	14A0025_P	01/08/14 08:53	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14A0025	01/08/14 14:16	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	14A0001_P	01/02/14 08:54	JSP	TAL SPK
Total	Analysis	SM 2320B		1.00	14A0001	01/02/14 13:16	JSP	TAL SPK
Total	Prep	Wet Chem		1.00	13L0115_P	12/20/13 13:24	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13L0115	12/20/13 15:00	CBW	TAL SPK
Total	Prep	NA			132796_P	01/02/14 12:49		TAL NSH
Total	Analysis	RSK-175		1	132796	01/02/14 12:49	MGH	TAL NSH

Client Sample ID: MW-4-121913

Date Collected: 12/19/13 09:04
Date Received: 12/20/13 12:48

Lab Sample ID: SWL0118-04

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13L0119_P	12/23/13 09:36	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13L0119	12/23/13 15:09	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		0.975	13L0108_P	12/20/13 14:40	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13L0108	12/27/13 23:54	MRS	TAL SPK
Dissolved	Prep	EPA 3005A		1.00	13L0143_P	12/30/13 10:49	JSP	TAL SPK
Dissolved	Analysis	EPA 200.7		1.00	13L0143	01/03/14 11:58	ICP	TAL SPK
Total	Prep	EPA 3005A		1.00	14A0025_P	01/08/14 08:53	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14A0025	01/08/14 14:19	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	14A0001_P	01/02/14 08:54	JSP	TAL SPK
Total	Analysis	SM 2320B		1.00	14A0001	01/02/14 13:16	JSP	TAL SPK
Total	Prep	Wet Chem		1.00	13L0115_P	12/20/13 13:24	CBW	TAL SPK
Total	Analysis	EPA 300.0		10.0	13L0115	12/20/13 15:19	CBW	TAL SPK
Total	Prep	NA			132796_P	01/02/14 12:51		TAL NSH
Total	Analysis	RSK-175		1	132796	01/02/14 12:51	MGH	TAL NSH

Client Sample ID: MW-5-121913

Date Collected: 12/19/13 10:57
Date Received: 12/20/13 12:48

Lab Sample ID: SWL0118-05

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13L0119_P	12/23/13 09:36	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13L0119	12/23/13 15:32	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		0.963	13L0108_P	12/20/13 14:40	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13L0108	12/28/13 00:19	MRS	TAL SPK
Dissolved	Prep	EPA 3005A		1.00	13L0143_P	12/30/13 10:49	JSP	TAL SPK
Dissolved	Analysis	EPA 200.7		1.00	13L0143	01/03/14 12:02	ICP	TAL SPK

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Client Sample ID: MW-5-121913

Lab Sample ID: SWL0118-05

Date Collected: 12/19/13 10:57

Matrix: Water

Date Received: 12/20/13 12:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3005A		1.00	14A0025_P	01/08/14 08:53	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14A0025	01/08/14 14:24	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	14A0001_P	01/02/14 08:54	JSP	TAL SPK
Total	Analysis	SM 2320B		1.00	14A0001	01/02/14 13:16	JSP	TAL SPK
Total	Analysis	EPA 300.0		1.00	13L0115	12/20/13 15:39	CBW	TAL SPK
Total	Prep	Wet Chem		1.00	13L0115_P	12/20/13 13:24	CBW	TAL SPK
Total	Analysis	EPA 300.0		2.00	13L0115	12/20/13 16:57	CBW	TAL SPK
Total	Prep	NA			132796_P	01/02/14 12:54		TAL NSH
Total	Analysis	RSK-175		1	132796	01/02/14 12:54	MGH	TAL NSH

Client Sample ID: Duplicate-1-121913

Lab Sample ID: SWL0118-06

Date Collected: 12/19/13 12:34

Matrix: Water

Date Received: 12/20/13 12:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13L0119_P	12/23/13 09:36	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13L0119	12/23/13 15:56	CBW	TAL SPK
Total	Prep	EPA 3510/600 Series		0.966	13L0108_P	12/20/13 14:40	MS	TAL SPK
Total	Analysis	EPA 8270D		1.00	13L0108	12/28/13 00:45	MRS	TAL SPK
Dissolved	Prep	EPA 3005A		1.00	13L0143_P	12/30/13 10:49	JSP	TAL SPK
Dissolved	Analysis	EPA 200.7		1.00	13L0143	01/03/14 12:08	ICP	TAL SPK
Total	Prep	EPA 3005A		1.00	14A0025_P	01/08/14 08:53	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14A0025	01/08/14 14:36	ICP	TAL SPK
Total	Prep	Wet Chem		1.00	14A0001_P	01/02/14 08:54	JSP	TAL SPK
Total	Analysis	SM 2320B		1.00	14A0001	01/02/14 13:16	JSP	TAL SPK
Total	Prep	Wet Chem		1.00	13L0115_P	12/20/13 13:24	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13L0115	12/20/13 15:58	CBW	TAL SPK
Total	Prep	NA			132796_P	01/02/14 12:59		TAL NSH
Total	Analysis	RSK-175		1	132796	01/02/14 12:59	MGH	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (800) 765-0980

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

Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

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	01-06-14

Laboratory: TestAmerica Nashville

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	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

Method Summary

Client: Geo Engineers - Spokane
Project/Site: 0504-075-00

TestAmerica Job ID: SWL0118

Method	Method Description	Protocol	Laboratory
EPA 8260C	NWTPH-Gx and Volatile Organic Compounds by EPA Method 8260C		TAL SPK
EPA 8270D	Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring		TAL SPK
EPA 200.7	Dissolved Metals by EPA 200 Series Methods		TAL SPK
EPA 6010C	Total Metals by EPA 6010/7000 Series Methods		TAL SPK
EPA 300.0	Anions by EPA Method 300.0		TAL SPK
SM 2320B	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK
RSK-175	Dissolved Gases (GC)		TAL NSH

Protocol References:

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (800) 765-0980

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 #: SWL0118

CLIENT: GEOENGINEERS INC.

REPORT TO: JON RUDDERS

ADDRESS: jrudders@geoengineers.com

PHONE: 509-363-3125 FAX:

INVOICE TO: same as ←

P.O. NUMBER:

PROJECT NAME: FRENCHIES-FILL-N-FEED

PROJECT NUMBER:

SAMPLED BY: ERH/MJP

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: [X] 10 STD. [ ] 7 [ ] 5 [ ] 4 [ ] 3 [ ] 2 [ ] 1 [ ] <1

Petroleum Hydrocarbon Analyses: [X] 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	EDC	BTEXn	Naphthalenes	Nitrate & Sulfate	Dissolved Mang-anese	Methane	Alkalinity						MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	MW-1-121913	12/19/13 1233	✓	✓	✓	✓	✓	✓	✓	✓						W	8		
2	MW-2-121913	↓ 1132	✓	✓	✓	✓	✓	✓	✓	✓						↓	↓		
3	MW-3-121913	↓ 1303	✓	✓	✓	✓	✓	✓	✓	✓						↓	↓		
4	MW-4-121913	↓ 0904	✓	✓	✓	✓	✓	✓	✓	✓						↓	↓		
5	MW-5-121913	↓ 1057	✓	✓	✓	✓	✓	✓	✓	✓						↓	↓		
6	DUPLICATE-1-121913	↓ 1234	✓	✓	✓	✓	✓	✓	✓	✓						↓	↓		
7																			
8																			
9																			
10																			

RELEASED BY: [signature]
PRINT NAME: Eliya Hogan FIRM: GEOENGINEERS DATE: 12/19/2013 TIME: 1557
RECEIVED BY: [signature]
PRINT NAME: Kim Heilman FIRM: FedEx DATE: 12/19/13 TIME: 1557

RELEASED BY:
PRINT NAME: FIRM: DATE: TIME:
RECEIVED BY: [signature]
PRINT NAME: Cat Stapleton FIRM: TestAmerica DATE: 12-20-13 TIME: 12:48

ADDITIONAL REMARKS:

TEMP: 3.6

PAGE 1 OF 1

TAL-1000 (0612)

TestAmerica Spokane
Sample Receipt Form

Work Order #SWL0118	Client GeoEngineers	Project: Frenchies
Date/Time Received: 12-20-13 12:48	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: _____

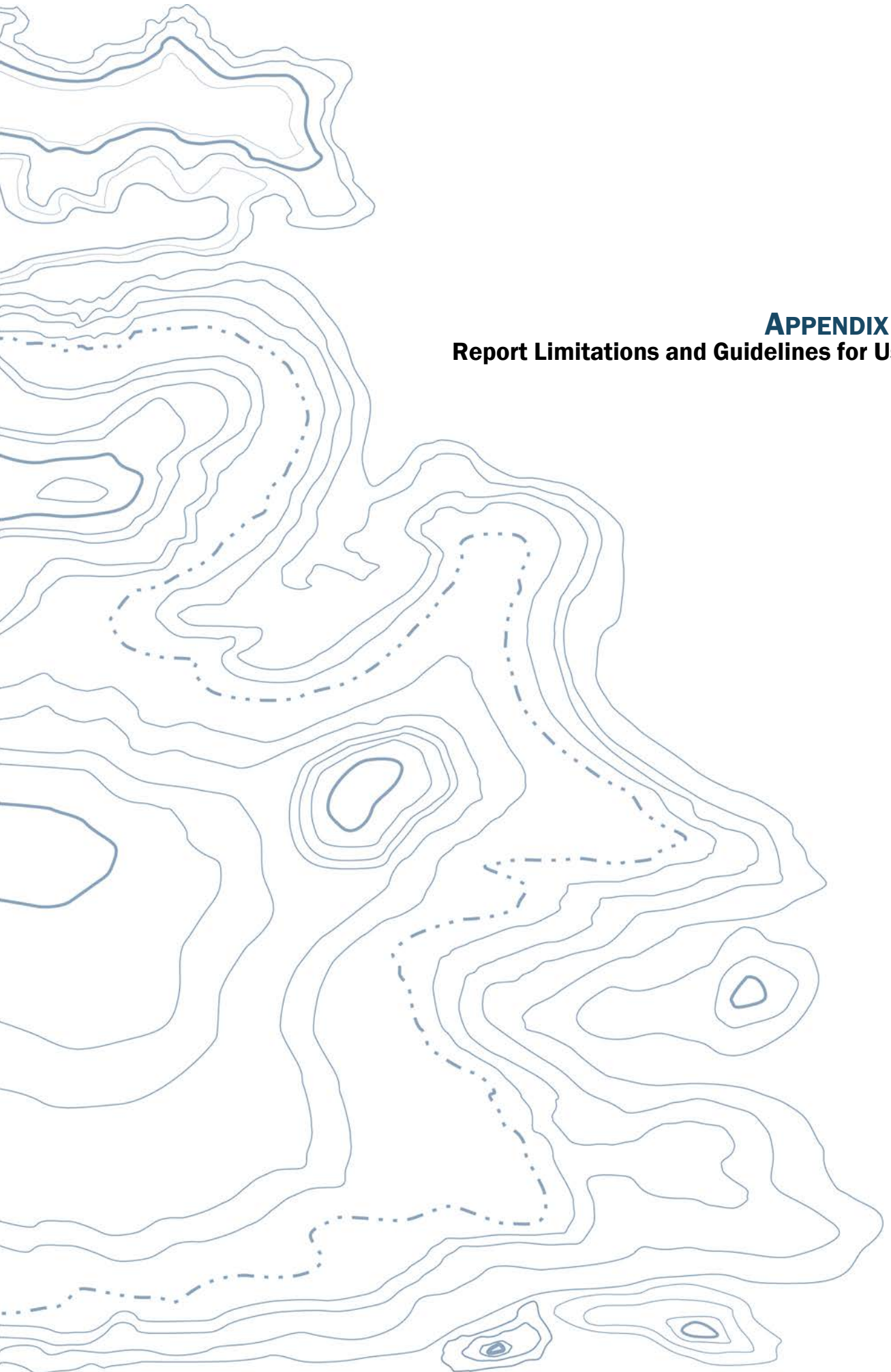
Temperature: 3.6 °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2)(acceptance criteria 0-6

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

Log-In Phase Date/Time: 12-20-13 13:02 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			Nitrate
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
Report Limitations and Guidelines for Use

APPENDIX C
REPORT LIMITATIONS AND GUIDELINES FOR USE[1]

This Appendix provides information to help you manage your risks with respect to the use of this report.

Environmental Services Are Performed for Specific Purposes, Persons and Projects

This report has been prepared for the exclusive use of the Washington State Department of Ecology (Ecology). This report is not intended for use by others, and the information contained herein is not applicable to other sites.

GeoEngineers structures our services to meet the specific needs of our clients. For example, an environmental site assessment study conducted for a property owner may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and project site. No one except Ecology should rely on this environmental report without first conferring with GeoEngineers. This report should not be applied for any purpose or project except the one originally contemplated.

This Environmental Report is Based on a Unique Set of Project-Specific Factors

This report has been prepared for the Frenchies Fill-N-Food site located at 106 East Moxee Avenue in Moxee, Washington. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, do not rely on this report if it was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

If important changes are made after the date of this report, GeoEngineers should be given the opportunity to review our interpretations and recommendations and provide written modifications or confirmation, as appropriate.

Reliance Conditions for Third Parties

Our report was prepared for the exclusive use of Ecology. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm and Ecology with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with

[1] Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences; www.asfe.org.

Ecology and generally accepted environmental practices in this area at the time this report was prepared.

Environmental Regulations are Always Evolving

Some substances may be present in the site vicinity in quantities or under conditions that may have led, or may lead, to contamination of the subject site, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. GeoEngineers cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substance, change or if more stringent environmental standards are developed in the future.

Uncertainty May Remain Even After This Phase II ESA is Completed

No ESA can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. Our interpretation of subsurface conditions in this study is based on field observations and chemical analytical data from widely-spaced sampling locations. It is always possible that contamination exists in areas that were not explored, sampled or analyzed.

Subsurface Conditions Can Change

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the site, by new releases of hazardous substances, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Always contact GeoEngineers before applying this report to determine if it is still applicable.

Soil and Groundwater End Use

The cleanup levels referenced in this report are site- and situation-specific. The cleanup levels may not be applicable for other sites or for other on-site uses of the affected media (soil and/or groundwater). Note that hazardous substances may be present in some of the site soil and/or groundwater at detectable concentrations that are less than the referenced cleanup levels. GeoEngineers should be contacted prior to the export of soil or groundwater from the subject site or reuse of the affected media on site to evaluate the potential for associated environmental liabilities. We cannot be responsible for potential environmental liability arising out of the transfer of soil and/or groundwater from the subject site to another location or its reuse on site in instances that we were not aware of or could not control.

Most Environmental Findings are Professional Opinions

Our interpretations of subsurface conditions are based on field observations and chemical analytical data from widely spaced sampling locations at the site. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied our professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ – sometimes significantly – from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

Do Not Redraw the Exploration Logs

Environmental scientists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in an environmental report should never be redrawn for inclusion in other design drawings. Only photographic or electronic reproductions are acceptable, but recognize that separating logs from the report can elevate risk.

Read These Provisions Closely

Some clients, design professionals and contractors may not recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are far less exact than other engineering and natural science disciplines. This lack of understanding can create unrealistic expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory "limitations" provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you are unclear how these "Report Limitations and Guidelines for Use" apply to your project or site.

Geotechnical, Geologic and Geoenvironmental Reports Should Not be Interchanged

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding a specific project.

Biological Pollutants

GeoEngineers' Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this report does not include any interpretations, recommendations, findings, or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants and no conclusions or inferences should be drawn regarding Biological Pollutants, as they may relate to this project. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts.

If Ecology desires these specialized services, they should be obtained from a consultant who offers services in this specialized field.

Have we delivered World Class Client Service?
Please let us know by visiting **www. geoengineers.com/feedback**.

GeoEngineers