

INTERIM REMEDIAL ACTION COMPLETION REPORT

YAKIMA VALLEY TRANSPORTATION CO. TROLLEY BARN SITE
404 SOUTH 3rd AVENUE
YAKIMA, WASHINGTON



Prepared for
CITY OF YAKIMA
June 30, 2015
Project No. 0818.03.01

Prepared by
Maul Foster & Alongi, Inc.
1329 N State Street, Suite 301, Bellingham WA 98225

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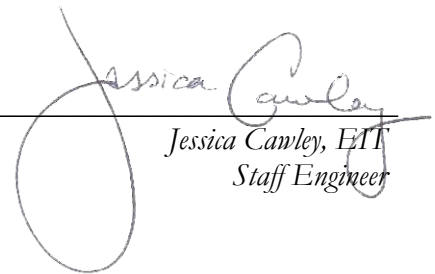
404 SOUTH 3RD AVENUE

YAKIMA, WASHINGTON

*The material and data in this report were prepared
under the supervision and direction of the undersigned.*

MAUL FOSTER & ALONGI, INC.

*Justin L. Clary, PE
Principal Engineer*



*Jessica Cawley, EIT
Staff Engineer*

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ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
the City	City of Yakima, Washington
COC	chemical of concern
CUL	cleanup level
Ecology	Washington State Department of Ecology
ESA	environmental site assessment
HCID	Hydrocarbon Identification
IO	IO Environmental and Infrastructure, Inc.
MFA	Maul Foster & Alongi, Inc.
MTCA	Model Toxics Control Act
NWTPH	Northwest Total Petroleum Hydrocarbons
PCS	petroleum-contaminated soil
PID	photoionization detector
the Property	404 South 3rd Avenue, Yakima, WA
SAP	sampling and analysis plan
the Site	Ecology Facility Site No. 9688850, Cleanup Site No. 2190
TCLP	toxicity characteristic leaching procedure
TPH	total petroleum hydrocarbons
USEPA	U.S. Environmental Protection Agency
USPCI	U.S. Pollution Control, Inc.
UST	underground storage tank
VOC	volatile organic compound
YVT	Yakima Valley Transportation Company
XRF	X-ray fluorescence

1 INTRODUCTION

On behalf of the City of Yakima, Washington (the City), Maul Foster & Alongi, Inc. (MFA) has prepared this report describing the interim remedial action conducted at the Yakima Valley Transportation Co. Trolley Barn site located at 404 South 3rd Avenue, Yakima, Washington (the Property). The Property includes a confirmed contaminated site, Washington State Department of Ecology (Ecology) Facility Site No. 9688850, Cleanup Site No. 2190 (the Site). The interim action was funded through an interagency agreement executed between Ecology and the City.

From June 1 to June 12, 2015, with oversight from MFA and Ecology staff, IO Environmental and Infrastructure, Inc. (IO) of Redmond, Washington performed soil excavation, residual contaminant capping, and associated tasks supporting environmental remediation of the Site.

2 BACKGROUND

2.1 Site Location

The physical address for the portion of the Site subject to the interim cleanup action is 404 South 3rd Avenue in Yakima, Washington, as shown in Figure 1. The Property, a 1.58-acre parcel (tax assessor parcel number 181324-44465) owned by the City of Yakima, is on the southwest corner of the intersection of West Pine Street and South 3rd Avenue, as shown in Figure 2. The adjacent property, a parking lot owned by the Central Washington Comprehensive Mental Health, is also part of the Site, although was not a part of the June 2015 interim remedial action. The Property is zoned Light Industrial District (M-1) and is located in section 24 of township 13 north and range 18 east of the Willamette Meridian.

2.2 Site History

The Yakima Valley Transportation Company (YVT) constructed, owned, and operated electric trains on the Property from 1907 until 1909, when YVT was purchased by the Union Pacific Railroad. The Union Pacific Railroad expanded the rail system as a feeder of freight operations until 1985. Soon after that, the City purchased the Property (Yakima Valley Trolleys, 2015). Volunteers of a non-profit, Yakima Valley Trolleys, maintain and continue operations of the electric trains on behalf of the City.

The Property is primarily used to house and maintain trolleys supporting Yakima Valley Trolleys' operation of the Yakima Electric Railway Museum, which is also located inside the Substation Building on the Property. There are currently three buildings on the Property, the Trolley Barn, the Substation Building, and a small stone shed. Formerly, another trolley barn, a coal bin, an above

ground storage tank and stock shed existed along the boundary between the two properties of the Site (see Figure 2). There were, at one time, at least three underground storage tanks (USTs) on the Site; U.S. Pollution Control, Inc. (USPCI) reported closure (via removal) of the USTs in 1990, and indicated evidence of leaking from at least two of the tanks (USPCI, 1990). The “Former UST Basin” shown in Figure 2 refers to the area surrounding what is referred to in the Trolley Barn UST Closure Site Assessment Report as Tank No. 6 (USPCI, 1990).

Site investigations began in 1991 during a property transfer evaluation, and were conducted again in 1993 during geotechnical investigations, and in 1996 during a Phase I environmental site assessment (ESA) at a property to the west of and adjacent to the Property (Shannon & Wilson, 1996). Two Phase II ESAs have since been conducted, the first in 1996 for the property adjacent to the Property to the west and the second in 2007 at the Site.

Ecology led soil and groundwater investigations conducted by GeoEngineers under the Eastern Washington Clean Sites Initiative. Soil sampling and monitoring well installation occurred in August 2014 (GeoEngineers, 2015). Ecology, with the assistance of GeoEngineers, analyzed shallow soil samples collected from throughout the Property in March 2015 for heavy metals, primarily lead and arsenic.

The City entered into an interagency agreement with Ecology in April 2015 to conduct an interim remedial action that occurred in June 2015 and is documented in this report.

2.3 Environmental Conditions

Historical subsurface investigations and remedial investigations conducted between 1990 and 2015 identified the following chemicals of concern (COCs) in soil and groundwater at the Site:

- Carcinogenic polycyclic aromatic hydrocarbons
- Diesel-range total petroleum hydrocarbons (TPH)
- Gasoline-range TPH
- Heavy Oil-range TPH
- Volatile organic compounds (VOCs): benzene, toluene, ethylbenzene, and xylenes (BTEX)
- Heavy metals: arsenic, lead, mercury, cadmium, and chromium
- Polychlorinated biphenyls

An interim remedial action was designed to address these COC exceedances in soil, as well as potential groundwater contamination sources in the vicinity of the Former UST Basin.

3 PRE-EXCAVATION SOIL CHARACTERIZATION

Based on prior investigation findings, three areas were identified by Ecology for completion of the interim remedial action. These areas are identified as the “Surface Soil Removal Area,” the “Heavy Metals Excavation Area,” and the “Former UST Basin,” as shown on Figure 2. The northeast and southeast corners of the Property were also designated as potential surface soil excavation areas, as directed by Ecology staff during initiation of the interim remedial action. Of these two potential excavation areas, only the northern portion of the Property, which is identified as “Additional Surface Soil Removal Area” in Figure 2, was also excavated under the interim remedial action to accommodate the gravel cap not exceeding the height of the adjacent rail tracks.

Five-point composite soil samples were collected prior to the interim remedial action to characterize the surface soil excavation areas (excavations 6 inches deep or less) for appropriate disposal. Discrete soil samples were also collected from a test pit excavated in the Former UST Basin to characterize the soil at different depths. Figure 3 identifies the collection locations of each characterization sample and the test pit, as well as confirmation sample collection locations described in further detail in Section 4.2. The soil samples were collected in accordance with the sampling and analysis plan (SAP) (MFA, 2015b), and analyzed by Friedman & Bruya, Inc. of Seattle, Washington by the toxicity characteristic leaching procedure (TCLP) extraction method (U.S. Environmental Protection Agency [USEPA] Method 1311) for lead, arsenic and, in some areas, mercury, depending on the historical presence of COCs. Appendix A contains the soil characterization laboratory reports and the associated data validation memorandum. Table 1 summarizes the soil characterization sample analytical results. All analytical results by TCLP for the COC metals indicate the soils met criteria for disposal at a limited purpose landfill, with exception to one sample collected from the southern-most portion of the Heavy Metals Excavation Area.

The Heavy Metals Excavation Area was divided into two subareas, and a 5-point composite sample was collected from each subarea and analyzed for TCLP-arsenic, -lead, and -mercury (designated as soil samples S-01 and S-02). Analytical results associated with soil sample S-01 exceeded the TCLP-lead regulatory criteria of 5 milligrams per liter, which required its designation as hazardous material, consistent with Title 40 Code of Federal Regulations Part 261.24.

The Surface Soil Removal Area was divided into four subareas, and a 5-point composite sample was collected from each subarea and analyzed for TCLP-arsenic and -lead (samples S-03 through S-06). Analytical results for all characterization soil samples collected from the Surface Soil Removal Area indicated metals TCLP concentrations below associated regulatory criteria for designation as hazardous material.

Prior to initiating remedial action activities in the Former UST Basin, a test pit was excavated and discrete soil samples were collected at various depths. The test pit was located approximately 57 feet south-southeast of the center of the railroad tracks on Pine Street and 34 feet north-northeast of the east face of the Trolley Barn, as directed by Ecology and historical maps (USPCI, 1990). Soil samples were collected from the test pit at depths of 0.5 feet, 3 feet, 5 feet, 7 feet, 9 feet, 11 feet, and

13 feet below ground surface (bgs). Photoionization detector (PID) readings ranged from 0.7 to 189 parts per million. Each sample (samples SP-1-S-6” through SP-1-S-13”) was analyzed for TCLP-arsenic and -lead, BTEX, and for gasoline-range and diesel-range TPH by Northwest Total Petroleum Hydrocarbons (NWTPH)-Gx, and NWTPH-Dx, respectively. All analytical results indicated COC concentrations were below the associated reporting limits.

One 5-point composite sample (S-07) was collected from the Additional Surface Soil Removal Area prior to initiating excavation in this area and analyzed for TCLP-arsenic and -lead. The analytical results associated with sample S-07 indicated metals TCLP concentrations below associated regulatory criteria for designation as hazardous material.

Another 5-point composite sample (S-08) was collected at the request of Ecology from an area immediately east of the Substation Building and analyzed for TCLP-arsenic and -lead (see Figure 3). The analytical results associated with sample S-08 indicated metals TCLP concentrations below associated regulatory criteria for designation as hazardous material. No further action associated with the interim remedial action was conducted in this area.

4 EXCAVATION OF CONTAMINATED SOIL

The interim remedial action included excavation of soils exceeding Model Toxics Control Act (MTCA) Method A cleanup levels (CULs), application of an in situ chemical oxidation and aerobic biodegradation enhancement compound in the Former UST Basin excavation, backfilling all excavations, and transporting the contaminated material off site for disposal. Prior to initiating excavation in an area, soil disposal from that specific area was coordinated with and approved by the Yakima Health Department based on the analytical results of the characterization samples described in Section 3. Photographs showing contaminated-material excavation, in situ treatment compound application, and backfilling activities are presented in Appendix B.

4.1 Site Preparation and Layout

Before any excavation activities occurred, silt fence was installed along the downgradient perimeter of planned excavation areas, where stormwater runoff had the potential to migrate off site. Straw wattles were installed to protect curb-opening storm inlets from sediment and debris. The general excavation limits were laid out by the contractor and approved by the engineer. Underground utilities at the Site were identified by a private utility locating company. A dust-control plan and a material safety data sheet for the in situ bioremediation product were also submitted to and approved by the Yakima Regional Clean Air Agency prior to initiating remedial action activities.

4.2 Excavation

As discussed in Section 3, separate areas were identified for remediation under the interim remedial action. The following subsections describe excavation activities specific to each of the areas.

4.2.1 Hazardous Material Excavation

The material in the Heavy Metals Excavation Area represented by characterization soil sample S-01 was designated as the “Hazardous Heavy Metals Area” and excavated to 1 foot bgs. All material originating from the area (approximately 110 tons) was transported in lined and covered trucks to and disposed of at the Chemical Waste Management of the Northwest Landfill in Arlington, Oregon, a Resource Conservation and Recovery Act Subtitle C permitted landfill. Copies of the hazardous-waste manifests are included in Appendix C. Field staff and contractors working in the Hazardous Heavy Metals Area wore particulate filter masks and Tyvek suits throughout excavation of this area. Due to haul truck access constraints, soil was transported using a loader from the Hazardous Heavy Metals Area to the Surface Soil Removal Area where it was stockpiled on plastic sheeting until loaded for off site transport and disposal.

Three confirmation soil samples (samples S-09 through S-11) were collected from the base of the Hazardous Heavy Metals Area excavation (see Figure 3). Samples were analyzed for the following:

- Lead by USEPA Method 6010B
- Arsenic by USEPA Method 6010B
- Cadmium by USEPA Method 6010B

Analytical results indicated that confirmation sample S-10 exceeded the associated MTCA Method A CUL for arsenic, and sample S-11 exceeded the CUL for lead. Table 2 presents the analytical results associated with the confirmation soil samples. In addition to collection of the three confirmation soil samples, Ecology staff conducted field screening of the excavation base with an X-ray fluorescence (XRF) instrument. XRF data are included in Appendix D. Figure 4 presents XRF analysis locations.

During excavation, a 10-gallon bucket was uncovered below the area. The bucket contained sawdust and appeared to house a water valve. The bucket and fixtures were left in place because they were below the excavation area. Yakima Valley Trolleys volunteers indicated that the valve may have been associated with utility connections installed during previous management. The excavation also uncovered a power line running under and across the excavation. The power was safely cut and tied off at the ends.

4.2.2 Non-Hazardous Material Excavation

Soil characterized for excavation that was not designated as a hazardous material was disposed of at the Anderson Landfill in Yakima, Washington. Approximately 465 tons were disposed of as petroleum-contaminated soil (PCS) in the PCS facility of the Anderson Landfill and approximately 1,123 tons were disposed of as non-PCS at the Anderson Limited Purpose Landfill. A copy of the truck disposal tickets is included in Appendix C.

4.2.2.1 Heavy Metals Excavation

The remainder of the Heavy Metals Excavation Area, characterized by sample S-02 and shown in Figure 3, was excavated to a depth of 6 inches. This area contained metals based upon previous

XRF field screening data collected by Ecology staff; however, analytical results associated with the sample did not exceed regulatory criteria for designation as hazardous material. Therefore, soil excavated from this portion of the Heavy Metal Excavation Area was disposed of at the Anderson Landfill in Yakima, Washington. No confirmation soil samples were collected from the base of the excavation; however, XRF data was collected by Ecology staff (Figure 4; Appendix D).

4.2.2.2 Surface Soil Removal Excavation

The top 6 inches of soil excavated from the Surface Soil Removal Area was directly loaded and transported to the Anderson Landfill in Yakima, Washington. No confirmation soil samples were collected from the base of the excavation; however, XRF data was collected by Ecology staff (Figure 4; Appendix D). Activities also included the removal of the concrete sidewalk along the eastern portion of the Site, which was taken to the Anderson Rock and Demolition Pits recycling facility in Yakima, Washington, to be recycled. Sidewalks outside the excavation bounds were saw cut.

4.2.2.3 Former UST Basin Excavation

Excavation associated with potential contaminant source removal in the Former UST Basin was extended to approximately 15 feet bgs, with the base of the excavation footprint ultimately being approximately 12 feet by 18 feet. The excavation boundary near the adjacent railroad tracks was sloped to protect the integrity of the tracks. The excavation also extended beyond an existing water service line, which was supported throughout excavation and backfilling activities.

The excavation was originally centered on the approximate location of the Former UST No. 6, as described in the 1990 UST closure report (USPCI, 1990). However, the excavation boundaries were shifted north upon identification of impacted soil in the northwest floor of the planned excavation area. Expansion of the excavation farther westward was limited by the slopes necessary to protect the tracks. The shift in excavation boundaries caused a reduction in the horizontal extent of the excavation to the east and resulted in the excavation area as shown on the as-built drawing provided in Appendix E.

PCS was identified during the excavation activities by field screening techniques for petroleum hydrocarbons and fuel-associated VOCs; screening methods included the following:

- Visual
- Olfactory
- PID

The atmosphere in the vicinity of the excavation was monitored with a PID to test for the presence of VOCs to determine the need for respiratory protection, in accordance with the health and safety plan (MFA, 2015a).

Characterization soil samples collected from the test pit installed prior to initiating excavation activities in the Former UST Basin indicated that PCS was nonhazardous. PCS was loaded directly into haul trucks and transported to Anderson's PCS facility in Yakima, Washington. Loose soil was

brushed off truck trailers before leaving the Site to prevent soil from falling off the truck during transit.

Approximately 75 cubic yards of soil from the western portion of the excavation area was deemed clean based on test pit soil sample analytical results and reused as backfill. The soil reused for backfill originated from depths ranging from 3 to 5 feet bgs.

Confirmation soil samples were collected from the floor and walls of the excavation (samples S-12 through S-19), as outlined in the SAP (MFA, 2015b). All confirmation samples were submitted to Friedman and Bruya, Inc., of Seattle, Washington, and were analyzed for the following:

- Petroleum hydrocarbons by NWTPH-Hydrocarbon Identification (HCID)
- Total metals: arsenic, lead, cadmium by USEPA Method 6020A

Confirmation samples were first analyzed for NWTPH-HCID to identify the presence of petroleum hydrocarbons and, if present, determine the range of the petroleum hydrocarbons for subsequent analysis. Based upon the NWTPH-HCID results, samples S-12, S-13, and S-15 were analyzed for diesel-range TPH by NWTPH-Dx. In addition, at the request of Ecology staff, confirmation samples S-12 through S-17 were analyzed for BTEX by USEPA Method 8021B. Table 2 summarizes laboratory analytical results for confirmation soil samples collected during the interim remedial action. Only one sample exceeded MTCA CULs for the analyses performed; sample S-15 exceeded MTCA CULs for diesel-range petroleum hydrocarbons. Figure 4 identifies the location of each confirmation soil sample.

4.2.2.4 Additional Surface Soil Removal Excavation

The top 2 inches of soil from the Additional Surface Soil Removal Area was scraped and directly hauled off site to the Anderson Landfill in Yakima, Washington. No confirmation soil samples were collected from the base of the excavation; however, XRF data was collected by Ecology staff (Figure 4; Appendix D). This included the removal of existing asphalt concrete north of the Trolley Barn; the concrete was taken to the Anderson Rock and Demolition Pits Recycling facility in Yakima, Washington.

4.3 Backfill

Following excavation and confirmation soil sample collection, a bioremediation compound was applied to the excavation base of the Former UST Basin (see Section 5 for more detail). The excavation was then backfilled with clean overburden and imported clean fill. Clean fill was imported from Anderson Rock and Demolition Pits in Yakima, Washington. A preliminary source evaluation and clean soil statement for import material that originated from the Anderson site are included in Appendix F.

Clean backfill was placed in the excavations and compacted in accordance with the project specifications. Excavations deeper than 6 inches were backfilled with 2-inch minus rock. The top 6 inches were backfilled with crushed surfacing base course, 1 ¼-inch minus. The final grade was

placed to match the existing grade, except for the Surface Soil Removal Area, which was compacted to 2 inches below the existing grade in anticipation of planned paving in this area.

4.4 Investigation-derived Waste Disposal

Three pre-existing 50-gallon drums located on the Site were also disposed of at the Anderson Landfill in Yakima, Washington, at the direction of Ecology staff. Two were empty and one contained soil cuttings resulting from a previous boring; the analytical data associated with a soil sample collected from this boring (sample HWA-MW1-Composite) indicated that all COC concentrations were below MTCA Method A CULs (Appendix G).

4.5 As-Built

PLSA Engineering and Surveying of Yakima, Washington surveyed the excavation limits upon notification of completion by the contractor. Vertical excavation extents were continuously measured by the contractor and were as noted in the above sections. The lateral extents of the excavation were recorded for the as-built drawing. The final as-built drawing is included as Appendix E.

5 IN SITU BIOREMEDIATION/ENHANCED AEROBIC BIODEGRADATION

5.1 AnoxEA® Treatment

In situ bioremediation included application of a Bioremediation Specialties product called AnoxEA, an electron acceptor amendment used to oxidize and provide nutrient sources for the bacterial degradation of hydrocarbons. AnoxEA was received from the manufacturer in dry powder form, which was applied directly at the manufacturer's recommended rate on the base of excavation in the Former UST Basin. The product was lightly sprayed with water after it was applied for dust control purposes.

6 GRAVEL CAP

The entire Property was capped with 2 to 6 inches of gravel; the only exceptions being in the thin strip east of the Trolley Barn, below immovable equipment, between rails or thin strips between rails, and east of the Substation Building (see Figure 5). The gravel used was a crushed surfacing base course, 1 ¼-inch minus; documentation that it was from a clean source is included in Appendix F. A Site Management Plan will be detailing operation and maintenance measures associated with the preservation of the cap, and an environmental covenant will be recorded against to two parcels upon

which the Site is located, prohibiting disturbance of the gravel cap, existing buildings, and current or future paving on the Property, unless approved by Ecology.

7 DECOMMISSIONING OF UNNAMED UST

An unnamed UST located in the Substation Building, believed by Yakima Valley Trolleys staff to have historically contained transformer oil, heating oil, or waste oil, was identified for decommissioning in-place during interim remedial action design. The exact size of the tank is also unknown. However, the UST in the Substation Building was deemed inaccessible during field activities, and therefore, was not decommissioned.

8 FINAL INSPECTION

The final inspection of the interim remedial action was completed on June 12, 2015. No unresolved issues or work items remained at that time.

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

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

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TABLES



Table 1
Soil Characterization Samples
Trolley Barn Site
City of Yakima
Yakima, Washington

Sample Name	MTCA	USEPA TCLP	S-01	S-02	S-03	S-04	S-05	S-06	S-07	S-08	SP-1-S-6"	SP-1-S-3'	SP-1-S-5'	SP-1-S-7'	SP-1-S-9'	SP-1-S-11'	SP-1-S-13
Sample Date	Method A	Allowable	4/30/2015	4/30/2015	4/30/2015	4/30/2015	4/30/2015	4/30/2015	6/3/2015	6/3/2015	6/5/2015	6/5/2015	6/5/2015	6/5/2015	6/5/2015	6/5/2015	6/5/2015
Sample Depth (ft bgs)	CUL	Limits	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	3	5	7	9	11	13
TCLP Metals by USEPA Method 6020A & 200.8 (mg/L)																	
Arsenic	NA	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Lead	NA	5	9.64	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Mercury	NA	0.2	0.1 U	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
BTEX Compounds by USEPA Method 8021B (mg/kg)																	
Benzene	0.03	NA	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	NA	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	7	NA	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Total Xylenes	9	NA	--	--	--	--	--	--	--	--	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
Total Petroleum Hydrocarbons by Methods NWTPH-Gx and NWTPH-DX (mg/kg)																	
Gasoline Range Hydrocarbons	30	NA	--	--	--	--	--	--	--	--	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diesel Range Hydrocarbons	2000	NA	--	--	--	--	--	--	--	--	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Motor Oil Range Hydrocarbons	2000	NA	--	--	--	--	--	--	--	--	250 U	250 U	250 U	250 U	250 U	250 U	250 U
NOTES: Detected results in bold font. Shaded values exceed MTCA Method A Cleanup Levels https://fortress.wa.gov/ecy/clarc/FocusSheets/Soil%20Methods%20B%20and%20A%20unrestricted.pdf -- = not analyzed ft bgs = feet below ground surface mg/kg = milligrams per kilogram mg/L = milligrams per liter TCLP = toxicity characteristic leaching procedure U = Analyte not detected at or above method reporting limit.																	

Table 2
Soil Confirmation Samples
Trolley Barn
City of Yakima
Yakima, Washington

Sample Name Sample Date Sample Depth (ft bgs)	MTCA Method A CUL	S-09	S-10	S-11	S-12	S-13	S-14	S-15	S-16	S-17	S-18	S-19
		6/5/2015	6/4/2015	6/4/2015	6/10/2015	6/10/2015	6/10/2015	6/10/2015	6/10/2015	6/10/2015	6/10/2015	6/10/2015
		1	1	1	15	15	11	15	10	12	12	10
Total Metals by USEPA Method 6020A & 200.8 (mg/kg)												
Arsenic	20	2.83	33	16.5	1.64	1.2	2.31	1.53	1.88	1.86	2.38	1.62
Cadmium	2	1 U	1 U	1.62	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Lead	250	25.2	85.8	335	6.46	4.57	25.9	4.41	5.42	6.73	3.72	8.12
BTEX Compounds by USEPA Method 8021B (mg/kg)												
Benzene	0.03	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--
Ethylbenzene	6	--	--	--	0.27	0.02 U	0.02 U	0.67	0.02 U	0.02 U	--	--
Toluene	7	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--
Total Xylenes	9	--	--	--	0.73	0.06 U	0.06 U	1.6	0.06 U	0.06 U	--	--
Total Petroleum Hydrocarbons by Methods NWTPH-Gx and NWTPH-DX (mg/kg)												
Gasoline Range Hydrocarbons	30	--	--	--	--	--	--	--	--	--	--	--
Diesel Range Hydrocarbons	2000	--	--	--	1800	450	--	4800	--	--	--	--
Motor Oil Range Hydrocarbons	2000	--	--	--	250 U	250 U	--	250 U	--	--	--	--
Total Petroleum Hydrocarbons by Method NWTPH-HCID (Presence/Absence)												
Gasoline Range Hydrocarbons	NA	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Hydrocarbons	NA	--	--	--	DETECT	DETECT	ND	DETECT	ND	ND	ND	ND
Motor Oil Range Hydrocarbons	NA	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
NOTES:												
Detected results in bold font.												
Shaded values exceed MTCA Method A Cleanup Levels												
https://fortress.wa.gov/ecy/clarc/FocusSheets/Soil%20Methods%20B%20and%20A%20unrestricted.pdf												
-- = not analyzed												
DETECT = analyte detected												
ft bgs = feet below ground surface												
mg/L = milligrams per liter												
mg/kg = milligrams per kilogram												
NA = not applicable												
ND = non-detect												
TCLP = toxicity characteristic leaching procedure												
U = Analyte not detected at or above method reporting limit.												

FIGURES



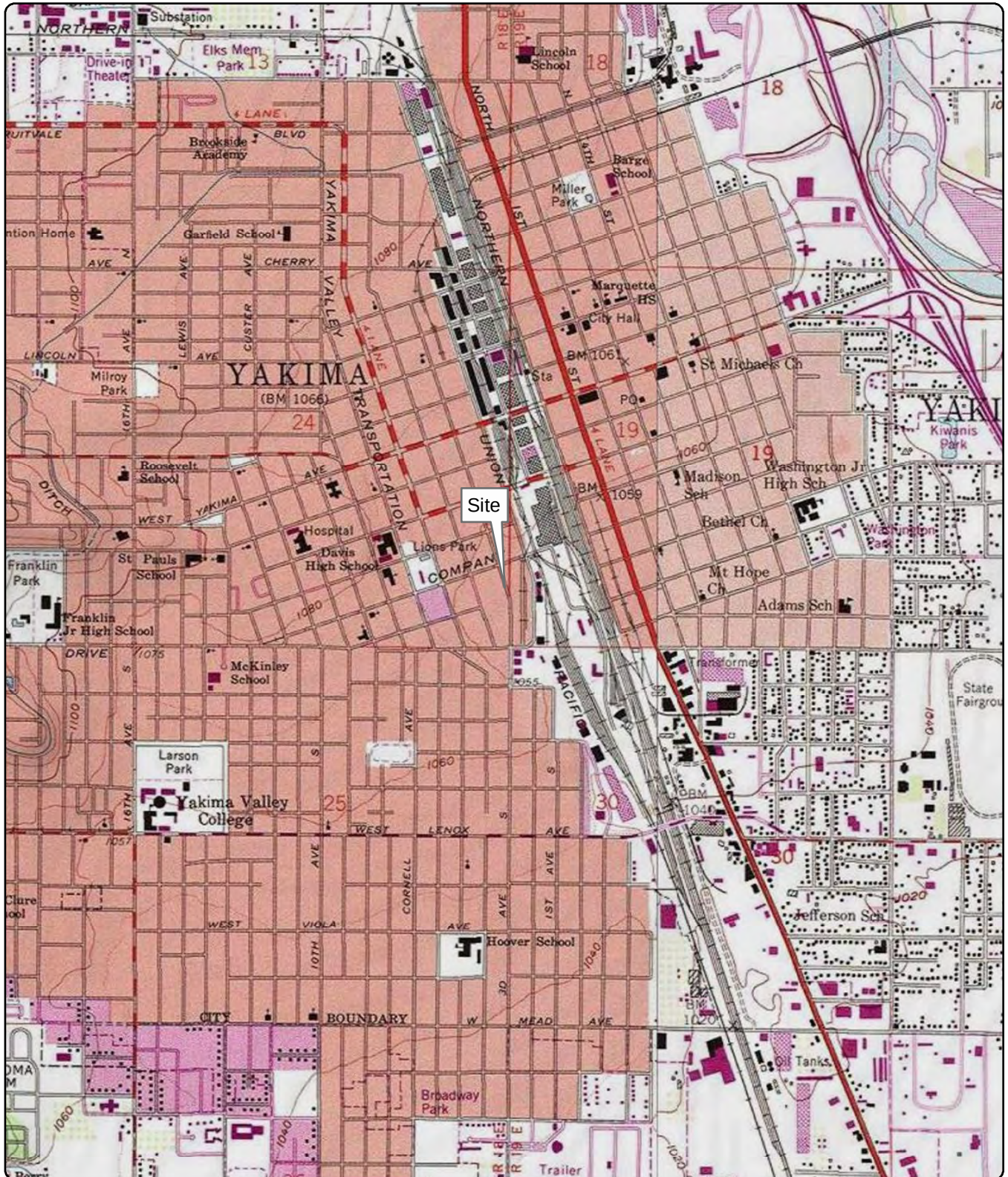


Figure 1
Site Location

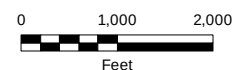
Trolley Barn Site
Yakima, Washington

Site Address: 404 S 3rd Ave, Yakima, Washington
Source: US Geological Survey (1990) 7.5-minute
topographic quadrangle: Yakima West
Section 24, Township 13 North, Range 18 East



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Path: X:\0818.03 City of Yakima - Trolley Barn\Projects\completionreport\Fig2_Site Features.mxd
Print Date: 6/30/2015
Approved By: J. Miller
Produced By: J. Miller
Project: 0818.03



Source: Aerial photograph obtained from Esri ArcGIS Online

Notes:
AST = aboveground storage tank
UST = underground storage tank

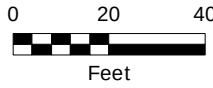
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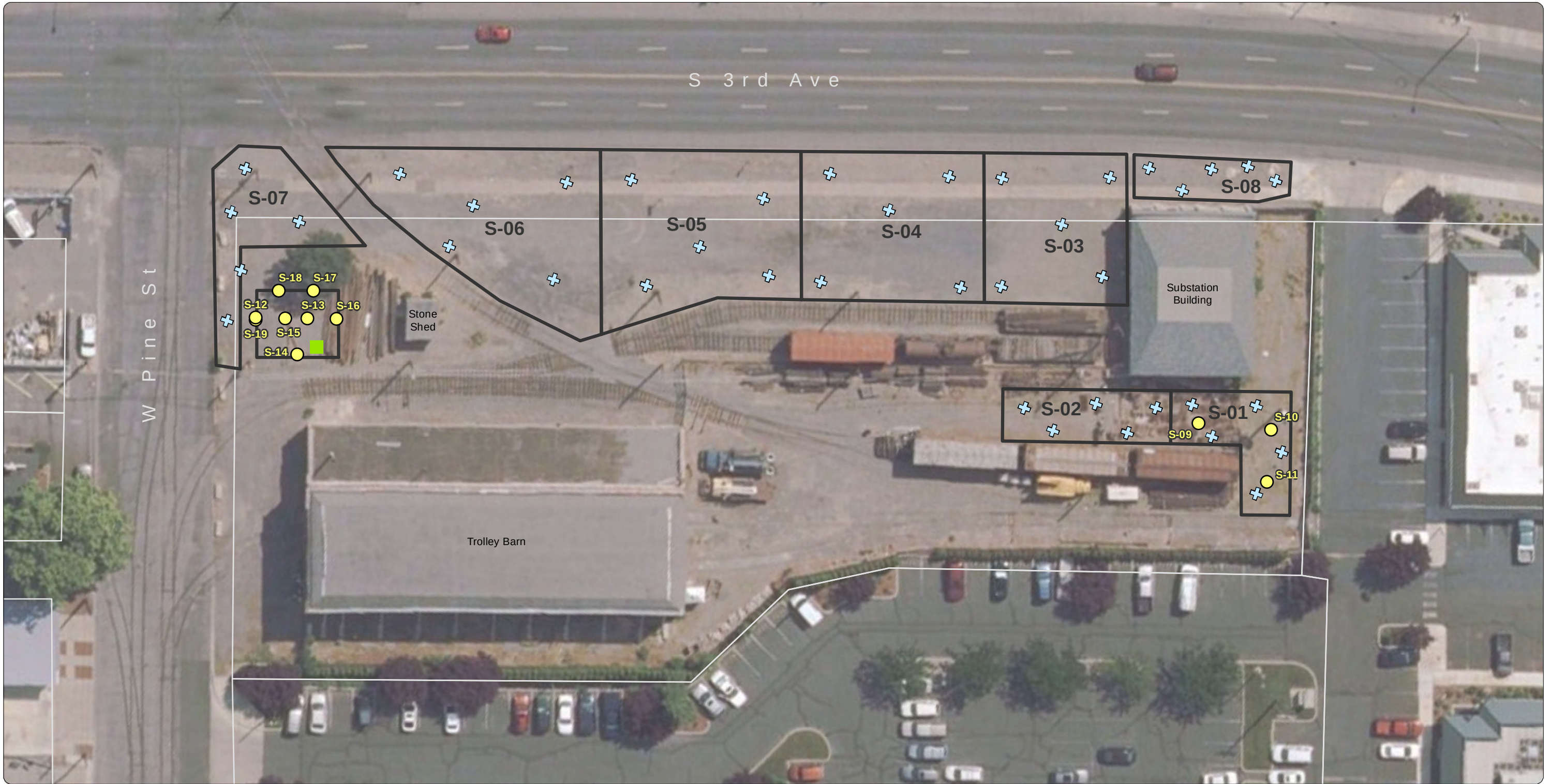
This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Legend

-  Monitoring Well (HWA GeoSciences, 2007)
-  Monitoring Wells (GeoEngineers, 2014)
-  Former Structure Footprints
-  Parcel Boundaries
-  Approximate Excavation Area

Figure 2
Site Features and
Areas of Interest
Trolley Barn Site
Yakima, Washington

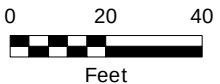




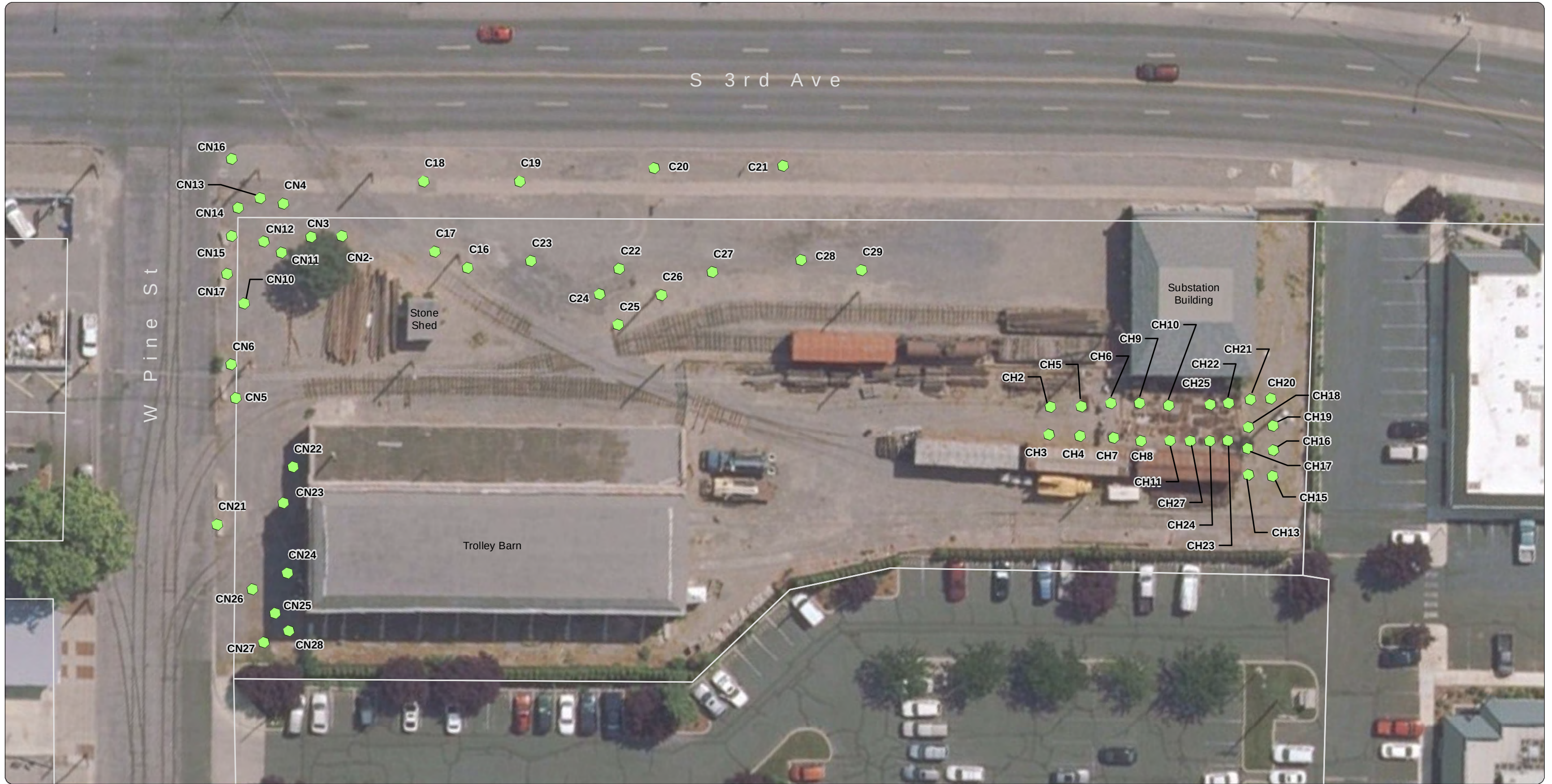
Source: Aerial photograph obtained from Esri ArcGIS Online

- Legend**
-  Post-Excavation Confirmation Sample Location
 -  Pre-Excavation, 5-point Composite Characterization Sample Location
 -  Pre-Excavation Test Pit Sample Location
 -  Sample Areas

Figure 3
MFA Soil Sample Locations
Trolley Barn Site
Yakima, Washington



Path: X:\0818.03 City of Yakima - Trolley Barn\Completion\Report\Fig4_XRF_Analysis_Locations.mxd
Print Date: 6/30/2015
Approved By: Jcawley
Produced By: Jmiller
Project: 0818.03



Source: Aerial photograph obtained from Esri ArcGIS Online

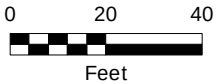
Figure 4
XRF Analysis Locations
Trolley Barn Site
Yakima, Washington

Legend

-  Post-excavation XRF Analysis Locations (June 2015)
-  Parcel Boundaries

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This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.



Path: X:\0818.03 City of Yakima - Trolley Barn\Projects\completionreport\Fig5_Gravel Cap.mxd
Print Date: 6/30/2015
Approved By: Jcawley
Produced By: Jmiller
Project: 0818.03



Source: Aerial photograph obtained from Esri ArcGIS Online

Legend

	Parcel Boundaries		4"
	1"-2"		4"-6"
	2"-4"		6"

Figure 5
Location of Gravel Cap

Trolley Barn Site
Yakima, Washington



APPENDIX A

LABORATORY REPORTS AND DATA VALIDATION MEMORANDUM



DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0818.03.01 | JUNE 25, 2015 | TROLLEY BARN

This report reviews the analytical results for soil samples collected by the Maul Foster & Alongi, Inc. (MFA) project team on the Trolley Barn site located at the corner of South 3rd Avenue and West Pine Street at 404 South 3rd Avenue in Yakima, Washington. The samples were collected in April and June 2015.

Friedman and Bruya, Inc. (FBI) performed the analyses. FBI report numbers 505036, 505036 additional, 506163, 506089, 506164 and 506246 were reviewed. The analyses performed and samples analyzed are listed below. Some analyses may not have been performed on all samples.

Analysis	Reference
Hydrocarbon Identification (HCID)	NWTPH-HCID
Diesel and Motor Oil	NWTPH-Dx
Gasoline	NWTPH-Gx
Total Metals	USEPA 6020A/200.8
TCLP Metals	USEPA 1311/6020/200.8
BTEX list Volatile Organic Compounds	USEPA 8021B

NWTPH = Northwest Total Petroleum Hydrocarbons

SIM = Selected Ion Monitoring

TCLP = Toxicity Characteristic Leaching Procedure

USEPA = U.S. Environmental Protection Agency

Samples Analyzed				
Report 505036	Report 506089	Report 506163	Report 506164	Report 506246
S-01	S-07	SP-1-S-11'	S-09	S-12
S-02	S-08	SP-1-S-13'	S-10	S-13
S-03	--	SP-1-S-3'	S-11	S-14
S-04	--	SP-1-S-6"	--	S-15
S-05	--	SP-1-S-7'	--	S-16
S-06	--	SP-1-S-9'	--	S-17
--	--	--	--	S-18
--	--	--	--	S-19

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2011, 2014a,b) and appropriate laboratory and method-specific guidelines (FBI, 2014; USEPA, 1986).

Data validation procedures were modified, as appropriate, to accommodate quality-control requirements for methods not specifically addressed by the USEPA procedures (e.g., NWTPH-Dx analysis).

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately, except for the following. Samples included in FBI report 505036 were received by the laboratory at 21 degrees Celsius. No action necessary for temperature exceedance of samples included in report 505036 as soil samples were only analyzed for TCLP metals.

All other samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch.

All laboratory method blanks were non-detect.

Trip Blanks

Trip blanks were not required for this sampling event because samples were not analyzed for volatile organic compounds.

Equipment Rinsate Blanks

Equipment rinsate blanks were not required for this sampling event, as all samples were collected using dedicated, single-use equipment.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance on individual samples. All surrogate recoveries were within acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) RESULTS

MS/MSD results are used to evaluate laboratory precision and accuracy.

Sample results with high analyte concentrations (more than four times the spiked concentration) were not qualified based on MS/MSD percent recovery or relative percent difference (RPD) exceedances.

Sample results associated with minor MS/MSD percent recovery or RPD exceedances were not qualified when all associated batch QC was deemed suitable.

All other MS/MSD recoveries and RPDs were within acceptance limits.

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. Laboratory duplicate results were only reported for Method NWTPH-Gx and BTEX compounds by USEPA Method 8021A. Duplicate evaluation wasn't applicable when original or laboratory duplicate results were non-detect. All RPDs for laboratory duplicates were within acceptance criteria.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE (LCS/LCSD) RESULTS

An LCS/LCSD is spiked with target analytes to provide information on laboratory precision and accuracy. The LCS/LCSD samples were extracted and analyzed at the required frequency, with the following exceptions.

All LCS analyte results were within acceptance limits for percent recovery. LCSD analysis was performed for methods NWTPH-Dx (aqueous) and USEPA Method 8082 in place of quality control MS/MSD samples.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. No field duplicate samples were collected for this sampling event.

CONTINUING CALIBRATION VERIFICATION (CCV) RESULTS

CCV results are used to demonstrate instrument precision and accuracy through the end of the sample batch. CCV results were not provided by FBI.

Based on follow-up conversations with FBI, all CCVs were within acceptance limits for percent recovery.

REPORTING LIMITS

FBI reported results to the reporting limit (RL). Samples requiring dilutions had adjusted RLs.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies.

Original chain of custody sheets didn't contain all analyses requests. FBI project management (PM) communicated with MFA PMs after sample receipt by laboratories. All analyses requested by MFA were correctly reported.

No additional issues were found.

REFERENCES

- FBI 2014. Quality Assurance Plan. Friedman & Bruya, Inc. Seattle, WA
- USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).
- USEPA. 2014a. USEPA contract laboratory program, national functional guidelines for inorganic superfund data review. EPA 540/R-013/001. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. August.
- USEPA. 2014b. USEPA contract laboratory program, national functional guidelines for Superfund organic methods data review. EPA 540/R-014/002. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. August.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

June 18, 2015

Justin Clary, Project Manager
Maul Foster Alongi
400 E Mill Plain Blvd, Suite 400
Vancouver, WA 98660

Dear Mr. Clary:

Included are the results from the testing of material submitted on June 5, 2015 from the 0818-03 Trolley Barn, F&BI 506164 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Jessica Cawley
MFA0618R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 5, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi 0818-03 Trolley Barn, F&BI 506164 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
506164 -01	S-09
506164 -02	S-10
506164 -03	S-11

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020A

Client ID:	S-09	Client:	Maul Foster Alongi
Date Received:	06/05/15	Project:	0818-03 Trolley Barn, F&BI 506164
Date Extracted:	06/10/15	Lab ID:	506164-01
Date Analyzed:	06/10/15	Data File:	506164-01.019
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	70	130
Holmium	100	70	130

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.83
Cadmium	<1
Lead	25.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020A

Client ID:	S-10	Client:	Maul Foster Alongi
Date Received:	06/05/15	Project:	0818-03 Trolley Barn, F&BI 506164
Date Extracted:	06/10/15	Lab ID:	506164-02
Date Analyzed:	06/10/15	Data File:	506164-02.020
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	70	130
Holmium	98	70	130

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.0
Cadmium	<1
Lead	85.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020A

Client ID:	S-11	Client:	Maul Foster Alongi
Date Received:	06/05/15	Project:	0818-03 Trolley Barn, F&BI 506164
Date Extracted:	06/10/15	Lab ID:	506164-03
Date Analyzed:	06/10/15	Data File:	506164-03.023
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	70	130
Holmium	96	70	130

Analyte:	Concentration mg/kg (ppm)
Arsenic	16.5
Cadmium	1.62
Lead	335

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020A

Client ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	0818-03 Trolley Barn, F&BI 506164
Date Extracted:	06/10/15	Lab ID:	I5-350 mb
Date Analyzed:	06/10/15	Data File:	I5-350 mb.017
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	96	70	130
Holmium	97	70	130

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Cadmium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/18/15

Date Received: 06/05/15

Project: 0818-03 Trolley Barn, F&BI 506164

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020A**

Laboratory Code: 506164-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	31.4	130 b	124 b	75-125	5 b
Cadmium	mg/kg (ppm)	10	<1	103	105	75-125	2
Lead	mg/kg (ppm)	50	81.5	48 b	72 b	75-125	40 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	100	80-120
Cadmium	mg/kg (ppm)	10	105	80-120
Lead	mg/kg (ppm)	50	104	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

June 11, 2015

Justin Clary, Project Manager
Maul Foster Alongi
400 E Mill Plain Blvd, Suite 400
Vancouver, WA 98660

Dear Mr. Clary:

Included are the results from the testing of material submitted on June 5, 2015 from the Trolley Barn 0818-03, F&BI 506163 project. There are 15 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Jessica Cawley
MFA0611R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 5, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Trolley Barn 0818-03, F&BI 506163

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
506163 -01	SP-1-S-6"
506163 -02	SP-1-S-3'
506163 -03	SP-1-S-5'
506163 -04	SP-1-S-7'
506163 -05	SP-1-S-9'
506163 -06	SP-1-S-11'
506163 -07	SP-1-S-13

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/11/15
 Date Received: 06/05/15
 Project: Trolley Barn 0818-03, F&BI 506163
 Date Extracted: 06/08/15
 Date Analyzed: 06/08/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
SP-1-S-6" 506163-01	<0.02	<0.02	<0.02	<0.06	<2	93
SP-1-S-3' 506163-02	<0.02	<0.02	<0.02	<0.06	<2	93
SP-1-S-5' 506163-03	<0.02	<0.02	<0.02	<0.06	<2	93
SP-1-S-7' 506163-04	<0.02	<0.02	<0.02	<0.06	<2	101
SP-1-S-9' 506163-05	<0.02	<0.02	<0.02	<0.06	<2	101
SP-1-S-11' 506163-06	<0.02	<0.02	<0.02	<0.06	<2	106
SP-1-S-13 506163-07	<0.02	<0.02	<0.02	<0.06	<2	110
Method Blank 05-1275 MB	<0.02	<0.02	<0.02	<0.06	<2	92

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/11/15

Date Received: 06/05/15

Project: Trolley Barn 0818-03, F&BI 506163

Date Extracted: 06/08/15

Date Analyzed: 06/08/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 48-168)
SP-1-S-6" 506163-01	<50	<250	115
SP-1-S-3' 506163-02	<50	<250	114
SP-1-S-5' 506163-03	<50	<250	109
SP-1-S-7' 506163-04	<50	<250	109
SP-1-S-9' 506163-05	<50	<250	108
SP-1-S-11' 506163-06	<50	<250	113
SP-1-S-13 506163-07	<50	<250	110
Method Blank 05-1065 MB	<50	<250	115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 6020A and 40 CFR PART 261

Client ID:	SP-1-S-6"	Client:	Maul Foster Alongi
Date Received:	06/05/15	Project:	Trolley Barn 0818-03, F&BI 506163
Date Extracted:	06/07/15	Lab ID:	506163-01
Date Analyzed:	06/08/15	Data File:	506163-01.040
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	97	70	130
Holmium	96	70	130

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 6020A and 40 CFR PART 261

Client ID:	SP-1-S-3'	Client:	Maul Foster Alongi
Date Received:	06/05/15	Project:	Trolley Barn 0818-03, F&BI 506163
Date Extracted:	06/07/15	Lab ID:	506163-02
Date Analyzed:	06/08/15	Data File:	506163-02.041
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	98	70	130
Holmium	98	70	130

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 6020A and 40 CFR PART 261

Client ID:	SP-1-S-5'	Client:	Maul Foster Alongi
Date Received:	06/05/15	Project:	Trolley Barn 0818-03, F&BI 506163
Date Extracted:	06/07/15	Lab ID:	506163-03
Date Analyzed:	06/08/15	Data File:	506163-03.042
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	97	70	130
Holmium	98	70	130

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 6020A and 40 CFR PART 261

Client ID:	SP-1-S-7'	Client:	Maul Foster Alongi
Date Received:	06/05/15	Project:	Trolley Barn 0818-03, F&BI 506163
Date Extracted:	06/07/15	Lab ID:	506163-04
Date Analyzed:	06/08/15	Data File:	506163-04.043
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	97	70	130
Holmium	97	70	130

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 6020A and 40 CFR PART 261

Client ID:	SP-1-S-9'	Client:	Maul Foster Alongi
Date Received:	06/05/15	Project:	Trolley Barn 0818-03, F&BI 506163
Date Extracted:	06/07/15	Lab ID:	506163-05
Date Analyzed:	06/08/15	Data File:	506163-05.044
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	97	70	130
Holmium	97	70	130

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 6020A and 40 CFR PART 261

Client ID:	SP-1-S-11'	Client:	Maul Foster Alongi
Date Received:	06/05/15	Project:	Trolley Barn 0818-03, F&BI 506163
Date Extracted:	06/07/15	Lab ID:	506163-06
Date Analyzed:	06/08/15	Data File:	506163-06.048
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	99	70	130
Holmium	99	70	130

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 6020A and 40 CFR PART 261

Client ID:	SP-1-S-13	Client:	Maul Foster Alongi
Date Received:	06/05/15	Project:	Trolley Barn 0818-03, F&BI 506163
Date Extracted:	06/07/15	Lab ID:	506163-07
Date Analyzed:	06/08/15	Data File:	506163-07.049
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	97	70	130
Holmium	97	70	130

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 6020A and 40 CFR PART 261

Client ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	NA	Project:	Trolley Barn 0818-03, F&BI 506163
Date Extracted:	06/07/15	Lab ID:	I5-343 mb
Date Analyzed:	06/08/15	Data File:	I5-343 mb.035
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	70	130
Holmium	93	70	130

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/11/15

Date Received: 06/05/15

Project: Trolley Barn 0818-03, F&BI 506163

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 506163-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	81	69-120
Toluene	mg/kg (ppm)	0.5	92	70-117
Ethylbenzene	mg/kg (ppm)	0.5	92	65-123
Xylenes	mg/kg (ppm)	1.5	91	66-120
Gasoline	mg/kg (ppm)	20	95	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/11/15

Date Received: 06/05/15

Project: Trolley Barn 0818-03, F&BI 506163

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 506159-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	109	112	73-135	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	105	74-139

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/11/15

Date Received: 06/05/15

Project: Trolley Barn 0818-03, F&BI 506163

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TCLP METALS USING
EPA METHOD 6020A AND 40 CFR PART 261**

Laboratory Code: 506114-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/L (ppm)	1.0	<1	111	110	50-150	1
Lead	mg/L (ppm)	1.0	<1	94	95	50-150	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/L (ppm)	1.0	109	70-130
Lead	mg/L (ppm)	1.0	94	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

ME 06/05/15 VS2/BI2
Page # of 1

Send Report To JUSTIN CLARY CC: JESSICA CAWLEY

Company MAUL FOSTER BALONGI

Address 400 E MILL PLAIN BLVD.

City, State, ZIP VANCOUVER, WA 98660

Phone # 360-984-8502 Fax # _____

SAMPLERS (*signature*)

PROJECT NAME/NO.

TROLLEY BARN 0818.03

PO#

REMARKS

REMARKS 5 CONTAINERS = 1(402) + 4(5035 wt)

Page #

C

TURNAROUND TIME

☐ Standard (2 Weeks)

☒ RUSH 24 hour

Rush charges authorized by

SAMPLE DISPOSAL

☐ **Dispose after 30 days**☐ Return samples

☒ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED											Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	TCLP-lead	TCLP-arsenic	NWTH	DOX (G)				
SP-1-S-6"	01 ^A	6/5/15	1140	S	5								X	X					*- per JC @ 6/5/15
SP-1-S-3'	02		1145	S	5								X	X					
SP-1-S-5'	03		1150	S	5								X	X					
SP-1-S-7'	04		1155	S	5								X	X					
SP-1-S-9'	05		1205	S	5								X	X					
SP-1-S-11'	06		1210	S	5								X	X					
SP-1-S-13	07	✓	1220	S	5								X	X					
																			3 °C

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph (206) 285-8282

Fax (206) 283-5044

FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	J. CAWLEY	MFA	6/5/15	1330
Received by: 	Mike Browne	IO	6/5/15	1330
Relinquished by: 	Mike Browne	IO	6/5/15	1735
Received by: 	Yelena Aravain	TSB, Inc.	6/5/15	1735

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

June 22, 2015

Justin Clary, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Mr. Clary:

Included are the results from the testing of material submitted on June 11, 2015 from the Trolley Barn 0818-03, F&BI 506246 project. There are 17 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Jessica Cawley
MFA0622R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 11, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Trolley Barn 0818-03, F&BI 506246 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
506246 -01	S-12
506246 -02	S-13
506246 -03	S-14
506246 -04	S-15
506246 -05	S-16
506246 -06	S-17
506246 -07	S-18
506246 -08	S-19

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/22/15
Date Received: 06/11/15
Project: Trolley Barn 0818-03, F&BI 506246
Date Extracted: 06/12/15
Date Analyzed: 06/12/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID
Results Reported as Not Detected (ND) or Detected (D)**

**THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE
WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION
WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT**

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
S-12 506246-01	ND	D	ND	119
S-13 506246-02	ND	D	ND	106
S-14 506246-03	ND	ND	ND	111
S-15 506246-04	ND	D	ND	114
S-16 506246-05	ND	ND	ND	111
S-17 506246-06	ND	ND	ND	106
S-18 506246-07	ND	ND	ND	105
S-19 506246-08	ND	ND	ND	108
Method Blank 05-1086 MB	ND	ND	ND	125

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/22/15

Date Received: 06/11/15

Project: Trolley Barn 0818-03, F&BI 506246

Date Extracted: 06/18/15

Date Analyzed: 06/18/15 and 06/19/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
USING METHOD 8021B**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
S-12 506246-01	<0.02	<0.02	0.27	0.73	110
S-13 506246-02	<0.02	<0.02	<0.02	<0.06	95
S-14 506246-03	<0.02	<0.02	<0.02	<0.06	95
S-15 506246-04	<0.02	<0.02	0.67	1.6	134
S-16 506246-05	<0.02	<0.02	<0.02	<0.06	95
S-17 506246-06	<0.02	<0.02	<0.02	<0.06	95
Method Blank 05-1291 MB2	<0.02	<0.02	<0.02	<0.06	97

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/22/15

Date Received: 06/11/15

Project: Trolley Barn 0818-03, F&BI 506246

Date Extracted: 06/17/15

Date Analyzed: 06/17/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Motor Oil Range</u>	<u>Surrogate</u>
Laboratory ID	(C ₁₀ -C ₂₅)	(C ₂₅ -C ₃₆)	(% Recovery)
			(Limit 56-165)
S-12	1,800	<250	98
506246-01			
S-13	450	<250	109
506246-02			
S-15	4,800	<250	110
506246-04			
Method Blank	<50	<250	107
05-1121 MB			

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-12	Client:	Maul Foster Alongi
Date Received:	06/11/15	Project:	Trolley Barn 0818-03, F&BI 506246
Date Extracted:	06/12/15	Lab ID:	506246-01
Date Analyzed:	06/12/15	Data File:	506246-01.047
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	85	60	125
Holmium	98	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.64
Cadmium	<1
Lead	6.46

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-13	Client:	Maul Foster Alongi
Date Received:	06/11/15	Project:	Trolley Barn 0818-03, F&BI 506246
Date Extracted:	06/12/15	Lab ID:	506246-02
Date Analyzed:	06/12/15	Data File:	506246-02.048
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	84	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.20
Cadmium	<1
Lead	4.57

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-14	Client:	Maul Foster Alongi
Date Received:	06/11/15	Project:	Trolley Barn 0818-03, F&BI 506246
Date Extracted:	06/12/15	Lab ID:	506246-03
Date Analyzed:	06/12/15	Data File:	506246-03.049
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	84	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.31
Cadmium	<1
Lead	25.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-15	Client:	Maul Foster Alongi
Date Received:	06/11/15	Project:	Trolley Barn 0818-03, F&BI 506246
Date Extracted:	06/12/15	Lab ID:	506246-04
Date Analyzed:	06/12/15	Data File:	506246-04.051
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	84	60	125
Holmium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.53
Cadmium	<1
Lead	4.41

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-16	Client:	Maul Foster Alongi
Date Received:	06/11/15	Project:	Trolley Barn 0818-03, F&BI 506246
Date Extracted:	06/12/15	Lab ID:	506246-05
Date Analyzed:	06/12/15	Data File:	506246-05.052
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	81	60	125
Holmium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.88
Cadmium	<1
Lead	5.42

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-17	Client:	Maul Foster Alongi
Date Received:	06/11/15	Project:	Trolley Barn 0818-03, F&BI 506246
Date Extracted:	06/12/15	Lab ID:	506246-06
Date Analyzed:	06/12/15	Data File:	506246-06.053
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	83	60	125
Holmium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.86
Cadmium	<1
Lead	6.73

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-18	Client:	Maul Foster Alongi
Date Received:	06/11/15	Project:	Trolley Barn 0818-03, F&BI 506246
Date Extracted:	06/12/15	Lab ID:	506246-07
Date Analyzed:	06/12/15	Data File:	506246-07.054
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	84	60	125
Holmium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.38
Cadmium	<1
Lead	3.72

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-19	Client:	Maul Foster Alongi
Date Received:	06/11/15	Project:	Trolley Barn 0818-03, F&BI 506246
Date Extracted:	06/12/15	Lab ID:	506246-08
Date Analyzed:	06/12/15	Data File:	506246-08.055
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	82	60	125
Holmium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.62
Cadmium	<1
Lead	8.12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	NA	Project:	Trolley Barn 0818-03, F&BI 506246
Date Extracted:	06/12/15	Lab ID:	I5-353 mb
Date Analyzed:	06/12/15	Data File:	I5-353 mb.031
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	95	60	125
Holmium	106	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Cadmium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/22/15

Date Received: 06/11/15

Project: Trolley Barn 0818-03, F&BI 506246

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
AND XYLENES
USING METHOD 8021B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	mg/kg (ppm)	0.5	99	86	69-120	14
Toluene	mg/kg (ppm)	0.5	100	101	70-117	1
Ethylbenzene	mg/kg (ppm)	0.5	101	101	65-123	0
Xylenes	mg/kg (ppm)	1.5	98	99	66-120	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/22/15

Date Received: 06/11/15

Project: Trolley Barn 0818-03, F&BI 506246

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 506246-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	400	110	114	63-146	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	110	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/22/15

Date Received: 06/11/15

Project: Trolley Barn 0818-03, F&BI 506246

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 506216-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	4.36	84	84	67-121	0
Cadmium	mg/kg (ppm)	10	<1	102	101	88-121	1
Lead	mg/kg (ppm)	50	5.99	102	100	59-148	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	96	83-113
Cadmium	mg/kg (ppm)	10	106	85-114
Lead	mg/kg (ppm)	50	108	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

506246

SAMPLE CHAIN OF CUSTODY

ME 06-11-15

BIZ / VS 2

Send Report To JUSTIN CLARY CC. JESSICA CAWLEYCompany MFAAddress 400 E MILL PLAIN, #400City, State, ZIP VANCOUVER, WA 98660Phone # 360-984-8502 Fax #SAMPLERS (signature) J. Cawley

PROJECT NAME/NO.

PO#

TROUSY BARN / 0518.03REMARKS Will request BTEX & NWTPH-Gx or Dx depending on ACID results. Thank you.Page # 1 of 1

TURNAROUND TIME

☒ Standard (2 Weeks)☐ RUSH

Rush charges authorized by

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☒ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	60102 CASIMM LEAD ACENIC	NWTPH-HCID	NWTPH-Dx	BTEX	
S-12	01A-E	6/10/15	0915	S	5			TPH				X	X	*	✓	* - per JC
S-13	02T		0700											*	✓	6/16/15
S-14	03		0705												✓	me
S-15	04		0750											*	✓	✓ - per JC
S-16	05		0730												✓	6/17/15
S-17	06		0845												✓	M4.
S-18	07		0850													
S-19	08	✓	0900	✓	✓							✓	✓			
Samples received at <u>21</u> °C																

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>J. Cawley</u>	JESSICA CAWLEY	MFA	6/10/15	1330
Received by: <u>D. D.</u>	D O D	FBI	6-11-15	16:10
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

June 2, 2015

Justin Clary, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Mr. Clary:

Included are the additional results from the testing of material submitted on May 4, 2015 from the Trolley Barn 0818.03, F&BI 505036 project. There are 5 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Jessica Cawley
MFA0602R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 4, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Trolley Barn 0818.03, F&BI 505036 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
505036 -01	S-01
505036 -02	S-02
505036 -03	S-03
505036 -04	S-04
505036 -05	S-05
505036 -06	S-06

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:	S-02	Client:	Maul Foster Alongi
Date Received:	05/04/15	Project:	Trolley Barn 0818.03, F&BI 505036
Date Extracted:	05/11/15	Lab ID:	505036-02
Date Analyzed:	05/12/15	Data File:	505036-02.033
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	101	Limit:	Limit:
		60	125

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Mercury	<0.1	0.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	Trolley Barn 0818.03, F&BI 505036
Date Extracted:	05/11/15	Lab ID:	I5-294 mb
Date Analyzed:	05/12/15	Data File:	I5-294 mb.028
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	102	Limit:	Limit:
		60	125

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Mercury	<0.1	0.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/02/15

Date Received: 05/04/15

Project: Trolley Barn 0818.03, F&BI 505036

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TCLP METALS USING
EPA METHOD 200.8 AND 40 CFR PART 261**

Laboratory Code: 505036-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/L (ppm)	1.0	<0.1	93	94	50-150	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/L (ppm)	1.0	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

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ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

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pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

505038
Send Report To J. CLARY VAN V. VAN

Company MFA Jessica Cawley

Address _____ M4 5/6/15

City, State, ZIP _____

Phone # _____ Fax # _____

Email Address

SAMPLE CHAIN OF CUSTODY

ME 05/04/15 BI

SAMPLERS (signature)

PROJECT NAME/NO.

TROLLEY BARN

0818.03

PROJECT ADDRESS

404 W PINE ST.

Yakima, WA 98903

• ELECTRONIC DATA REQUESTED

Page # 1 of 1

TURNAROUND TIME

Standard Turnaround

• RUSH •

Rush charges authorized by:

SAMPLE DISPOSAL

- Dispose after 30 days

- Return samples

Will call with instructions

Samples Received at	°C
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90
10	100
11	110
12	120
13	130
14	140
15	150
16	160
17	170
18	180
19	190
20	200
21	210
22	220
23	230
24	240
25	250
26	260
27	270
28	280
29	290
30	300
31	310
32	320
33	330
34	340
35	350
36	360
37	370
38	380
39	390
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41	410
42	420
43	430
44	440
45	450
46	460
47	470
48	480
49	490
50	500
51	510
52	520
53	530
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68	680
69	690
70	700
71	710
72	720
73	730
74	740
75	750
76	760
77	770
78	780
79	790
80	800
81	810
82	820
83	830
84	840
85	850
86	860
87	870
88	880
89	890
90	900
91	910
92	920
93	930
94	940
95	950
96	960
97	970
98	980
99	990
100	1000

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	TCIP-LEAD	TCIP-ASTHMA	TCIP-Hg			
S-01	01	4/30/15	1530	S	1							✓	✓				✓-per JC
S-02	02	↓	1515	↓	↓							↓	↓				5/28/15 M4
S-03	03	↓	1800	↓	↓							↓	↓				✓-per JC
S-04	04	↓	1815	↓	↓							↓	↓				5/18/15 M4
S-05	05	↓	1830	↓	↓							↓	↓				
S-06	06	↓	1845	↓	↓							↓	↓				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COC\COC.DOC

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME _____

JESSICA CRAWLEY

Nhan Phan

COMPANY

MAIL FASTER ALONG

Fe B T

DATE _____

5/1/15

572411

TIME

1200 PM

1445

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 14, 2015

Justin Clary, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Mr. Clary:

Included are the results from the testing of material submitted on May 4, 2015 from the Trolley Barn 0818.03, F&BI 505036 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Jessica Cawley
MFA0514R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 4, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Trolley Barn 0818.03, F&BI 505036 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
505036 -01	S-01
505036 -02	S-02
505036 -03	S-03
505036 -04	S-04
505036 -05	S-05
505036 -06	S-06

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:	S-01	Client:	Maul Foster Alongi
Date Received:	05/04/15	Project:	Trolley Barn 0818.03, F&BI 505036
Date Extracted:	05/11/15	Lab ID:	505036-01
Date Analyzed:	05/12/15	Data File:	505036-01.030
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	106	60	125
Holmium	103	60	125

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	9.64	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:	S-02	Client:	Maul Foster Alongi
Date Received:	05/04/15	Project:	Trolley Barn 0818.03, F&BI 505036
Date Extracted:	05/11/15	Lab ID:	505036-02
Date Analyzed:	05/12/15	Data File:	505036-02.033
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	101	60	125
Holmium	101	60	125

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:	S-03	Client:	Maul Foster Alongi
Date Received:	05/04/15	Project:	Trolley Barn 0818.03, F&BI 505036
Date Extracted:	05/11/15	Lab ID:	505036-03
Date Analyzed:	05/12/15	Data File:	505036-03.034
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	102	60	125
Holmium	99	60	125

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:	S-04	Client:	Maul Foster Alongi
Date Received:	05/04/15	Project:	Trolley Barn 0818.03, F&BI 505036
Date Extracted:	05/11/15	Lab ID:	505036-04
Date Analyzed:	05/12/15	Data File:	505036-04.035
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	103	60	125
Holmium	101	60	125

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:	S-05	Client:	Maul Foster Alongi
Date Received:	05/04/15	Project:	Trolley Barn 0818.03, F&BI 505036
Date Extracted:	05/11/15	Lab ID:	505036-05
Date Analyzed:	05/12/15	Data File:	505036-05.036
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	101	60	125
Holmium	102	60	125

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:	S-06	Client:	Maul Foster Alongi
Date Received:	05/04/15	Project:	Trolley Barn 0818.03, F&BI 505036
Date Extracted:	05/11/15	Lab ID:	505036-06
Date Analyzed:	05/12/15	Data File:	505036-06.037
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	101	60	125
Holmium	101	60	125

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	Trolley Barn 0818.03, F&BI 505036
Date Extracted:	05/11/15	Lab ID:	I5-294 mb
Date Analyzed:	05/12/15	Data File:	I5-294 mb.028
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	106	60	125
Holmium	102	60	125

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/14/15

Date Received: 05/04/15

Project: Trolley Barn 0818.03, F&BI 505036

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TCLP METALS USING
EPA METHOD 200.8 AND 40 CFR PART 261**

Laboratory Code: 505036-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/L (ppm)	1.0	<1	98	99	50-150	1
Lead	mg/L (ppm)	1.0	9.64	99 b	77 b	50-150	25 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/L (ppm)	1.0	98	70-130
Lead	mg/L (ppm)	1.0	94	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

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ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

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lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

5-14 505036

SAMPLE CHAIN OF CUSTODY

ME 05/04/15

BT

Send Report To J. CLARY / YEN V. VAN
 Company MFA Jessica Cawley
 Address _____ ME 5/6/15
 City, State, ZIP _____
 Phone # _____ Fax # _____
 Email Address _____

SAMPLERS (signature) <u>J. Cawley</u>	
PROJECT NAME/NO. <u>TROLLEY BARN</u> <u>DB18.03</u>	PO # _____
PROJECT ADDRESS <u>404 W PINE ST.</u> <u>Yakima, WA 98903</u>	
• ELECTRONIC DATA REQUESTED	

Page # <u>1</u> of <u>1</u>
TURNAROUND TIME ☒ Standard Turnaround ☐ RUSH Rush charges authorized by: _____
SAMPLE DISPOSAL ☐ Dispose after 30 days ☐ Return samples ☒ Will call with instructions
Samples Received at _____ °C

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	TCIP-140	ABSTRACT			
S-01	01	4/30/15	1530	S	1							✓				
S-02	02	↓	1515	↓	↓							↓				
S-03	03	↓	1800	↓	↓							↓				
S-04	04	↓	1815	↓	↓							↓				
S-05	05	↓	1830	↓	↓							↓				
S-06	06	↓	1845	↓	↓							↓				

Samples received at 21 °C

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>J. Cawley</u>	JESSICA CAWLEY	MAIL FASTER AIDNGI	5/1/15	1200AM
Received by: <u>m. phan</u>	Nhan Phan	FE BT	5/2/15	1445
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

June 9, 2015

Justin Clary, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Mr. Clary:

Included are the results from the testing of material submitted on June 4, 2015 from the Trolley Barn/0818-03, F&BI 506089 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Jessica Cawley
MFA0609R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 4, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Trolley Barn/0818-03, F&BI 506089 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
506089 -01	S-07
506089 -02	S-08

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:	S-07	Client:	Maul Foster Alongi
Date Received:	06/04/15	Project:	Trolley Barn/0818-03, F&BI 506089
Date Extracted:	06/04/15	Lab ID:	506089-01
Date Analyzed:	06/05/15	Data File:	506089-01.015
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	95	60	125
Holmium	96	60	125

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:	S-08	Client:	Maul Foster Alongi
Date Received:	06/04/15	Project:	Trolley Barn/0818-03, F&BI 506089
Date Extracted:	06/04/15	Lab ID:	506089-02
Date Analyzed:	06/05/15	Data File:	506089-02.016
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	98	60	125
Holmium	100	60	125

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	Trolley Barn/0818-03, F&BI 506089
Date Extracted:	06/04/15	Lab ID:	I5-339 mb
Date Analyzed:	06/05/15	Data File:	I5-339 mb.010
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/L (ppm)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	97	60	125
Holmium	98	60	125

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0
Lead	<1	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/09/15

Date Received: 06/04/15

Project: Trolley Barn/0818-03, F&BI 506089

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TCLP METALS USING
EPA METHOD 200.8 AND 40 CFR PART 261**

Laboratory Code: 505379-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/L (ppm)	1.0	<1	105	106	50-150	1
Lead	mg/L (ppm)	1.0	<1	95	95	50-150	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/L (ppm)	1.0	105	70-130
Lead	mg/L (ppm)	1.0	96	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

$$B_{E1}/V_{S1}$$

Email Address jclary@maulfoster.com
jcawley@maulfoster.com

Page # 1 of 1

Samples Received at _____ °C

APPENDIX B

PHOTOGRAPHS





PHOTOGRAPHS

Project Name: Trolley Barn
Project Number: 0818.03.01
Location: 404 S. 3rd Avenue
Yakima, Washington

Photo No.

1

Description

Looking south,
excavation of Surface Soil
Removal Area.



Photo No.

2

Description

Looking west, excavation
depth of Surface Soil
Removal Area.





PHOTOGRAPHS

Project Name: Trolley Barn
Project Number: 0818.03.01
Location: 404 S. 3rd Avenue
Yakima, Washington

Photo No.

3

Description

IO attempt at unnamed
UST decommissioning in
Substation Building.

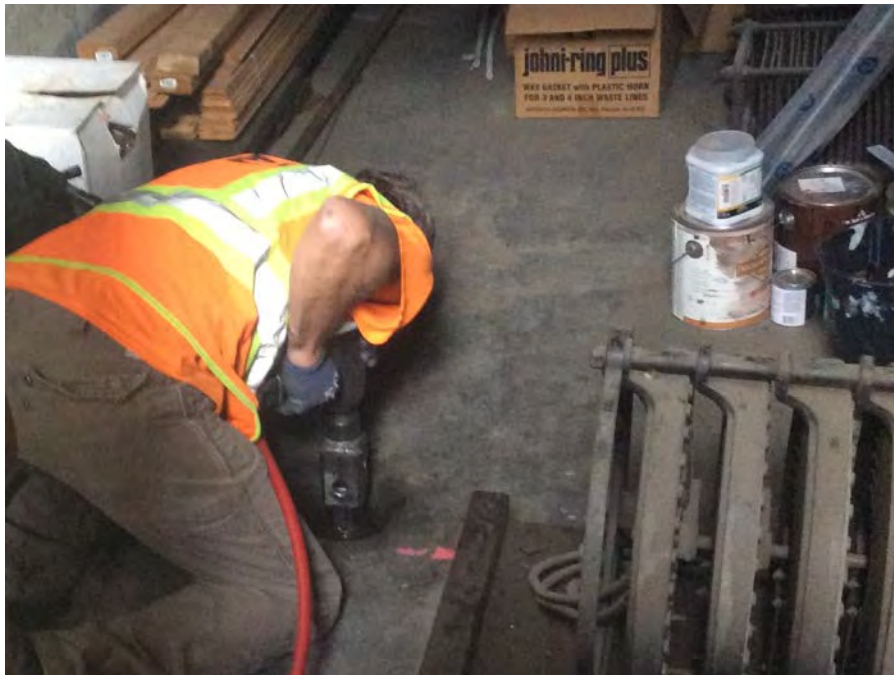


Photo No.

4

Description

Looking north-northeast,
IO measuring depth of
hazardous material
excavation. Soil is wetted
for dust control.





PHOTOGRAPHS

Project Name: Trolley Barn
Project Number: 0818.03.01
Location: 404 S. 3rd Avenue
Yakima, Washington

Photo No.

5

Description

Looking south, loader receiving hazardous soil to move to stockpile area for disposal.



Photo No.

6

Description

Looking south, stockpile of hazardous soil.





PHOTOGRAPHS

Project Name: Trolley Barn
Project Number: 0818.03.01
Location: 404 S. 3rd Avenue
Yakima, Washington

Photo No.

7

Description

Discovery of highly impacted soil from Former UST Basin.



Photo No.

8

Description

Looking northwest, application of AnoxEA® in Former UST Basin (left) and compaction of backfill in Former UST Basin (right).





PHOTOGRAPHS

Project Name: Trolley Barn
Project Number: 0818.03.01
Location: 404 S. 3rd Avenue
Yakima, Washington

Photo No.

9

Description

Looking east, gravel graded and compacted in Hazardous Soil Area (left).

Looking north, gravel cap west of Trolley Barn.



Photo No.

10

Description

Looking north, graded and compacted Surface Soil Removal Area.





PHOTOGRAPHS

Project Name: Trolley Barn
Project Number: 0818.03.01
Location: 404 S. 3rd Avenue
Yakima, Washington

Photo No.

11

Description

Looking north, inlet protection.



Photo No.

12

Description

Looking south, fence post replacement for one damaged during construction.



APPENDIX C

DISPOSAL RECORDS





**Chemical Waste Management
Of The Northwest**

17629 Cedar Springs Lane
Arlington, Oregon 97812
541-454-2643

EPA I.D.# ORDO89452353

LOAD NO. _____

MANIFEST DOC. NO. _____

INBOUND

T/D: 13:21:10 2015-06-08
ID: 440637 TRK ID: 51
108240 lb G

OUTBOUND

T/D: 13:58:12 2015-06-08
ID: 440637 TRK ID: 51
108240 lb G
40460 lb PT
67780 lb N

NET 33.89 TONS

GENERATOR _____



**Chemical Waste Management
Of The Northwest**

17629 Cedar Springs Lane
Arlington, Oregon 97812
541-454-2643
EPA I.D.# ORDO89452353

LOAD NO. _____

MANIFEST DOC. NO. _____

INBOUND
T/D: 13:22:09 2015-06-08
ID: 440638 TRK ID: 65
99700 lb G

OUTBOUND
T/D: 13:56:52 2015-06-08
ID: 440638 TRK ID: 65
99700 lb G
40740 lb PT
58960 lb N-

NET 29.48 TONS

GENERATOR _____



**Chemical Waste Management
Of The Northwest**

17629 Cedar Springs Lane
Arlington, Oregon 97812
541-454-2643
EPA I.D.# ORDO89452353

LOAD NO. _____

MANIFEST DOC. NO. _____

INBOUND
T/D: 13:32:03 2015-06-08
ID: 440640 TRK ID: 57
108220 lb G

OUTBOUND
T/D: 14:45:54 2015-06-08
ID: 440640 TRK ID: 57
108220 lb G
41240 lb PT
66980 lb N

NET 33.49 TONS

GENERATOR _____



**Chemical Waste Management
Of The Northwest**

17629 Cedar Springs Lane
Arlington, Oregon 97812
541-454-2643

EPA I.D.# ORDO89452353

LOAD NO. _____

MANIFEST DOC. NO. _____

INBOUND

T/D: 14:27:04 2015-06-08

ID: 440644 TRK ID: 61

68200 lb G

OUTBOUND

T/D: 15:10:58 2015-06-08

ID: 440644 TRK ID: 61

68200 lb G

41040 lb PT

27160 lb N

NET 13.58 TONS

GENERATOR _____

903-ARLINGTON, OR

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number WA0980986100		2. Page 1 of		3. Emergency Response Phone 1 (800)424-9300		4. Manifest Tracking Number 013472367 JJK									
		5. Generator's Name and Mailing Address TROLLEY BARN 104 SOUTH 3RD AVENUE YAKIMA WA 98902 Generator's Phone: (509)220-3278								Generator's Site Address (if different than mailing address)							
GENERATOR		6. Transporter 1 Company Name R TRANSPORT						U.S. EPA ID Number WAH000028338									
		7. Transporter 2 Company Name						U.S. EPA ID Number									
DESIGNATED FACILITY		8. Designated Facility Name and Site Address CHEMICAL WASTE MANAGEMENT, INC. 17629 CEDAR SPRINGS LANE ARLINGTON OR 97912-9709 Facility's Phone: (541)454-2843						U.S. EPA ID Number ORD099452353									
		9a. HM						9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type		11. Total Quantity		12. Unit Wt./Vol.		13. Waste Codes	
GENERATOR		1.		RG, UN3077, HAZARDOUS WASTE, SOLID, N.O.S., III (D008, LEAD SOILS)				1		DT		15000		P		D008	
		2.															
		3.															
		4.															
INT'L		14. Special Handling Instructions and Additional Information 1. PROFILE OR325903; LEAD CONTAMINATED SOILS(D008); RG=10LBS; ERG =171															
		15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.															
TRANSPORTER		Generator's/Offoror's Printed/Typed Name BRETT SHEFFIELD						Signature Brett Sheffield				Month Day Year 6 6 15					
		16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____															
DESIGNATED FACILITY		17. Transporter Acknowledgment of Receipt of Materials															
		Transporter 1 Printed/Typed Name John Anderson						Signature John Anderson				Month Day Year 6 8 15					
DESIGNATED FACILITY		Transporter 2 Printed/Typed Name						Signature				Month Day Year					
		18. Discrepancy															
DESIGNATED FACILITY		18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection Manifest Reference Number: _____															
		18b. Alternate Facility (or Generator) U.S. EPA ID Number															
DESIGNATED FACILITY		Facility's Phone: _____															
		18c. Signature of Alternate Facility (or Generator) Month Day Year															
DESIGNATED FACILITY		19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)															
		1.		2.		3.		4.									
DESIGNATED FACILITY		20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a															
		Printed/Typed Name						Signature				Month Day Year					

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number WAD980986100		2. Page 1 of 1		3. Emergency Response Phone (800)424-9300		4. Manifest Tracking Number 013472369 JJK			
		5. Generator's Name and Mailing Address TROLLEY BARN 404 SOUTH 3RD AVENUE YAKIMA WA 98902 Generator's Phone: (361) 291-3278								Generator's Site Address (if different than mailing address)	
6. Transporter 1 Company Name R TRANSPORT								U.S. EPA ID Number WAH000028338			
7. Transporter 2 Company Name								U.S. EPA ID Number			
8. Designated Facility Name and Site Address CHEMICAL WASTE MANAGEMENT, INC 17829 CEDAR SPRINGS LANE ARLINGTON OR 97912-9709 Facility's Phone: (541) 454-2613								U.S. EPA ID Number ORD099452353			
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
					No.	Type					
	1.	RQ UN3077 HAZARDOUS WASTE SOLID IN C 5.2 III (D008) LEAD SOILS			1	OT	472	P	D008		
	2.										
	3.										
	4.										
14. Special Handling Instructions and Additional Information 1. PROFILE OR325903, LEAD CONTAMINATED SOILS(D008); RQ=10LBS; ERG =171											
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.											
Generator's/Offoror's Printed/Typed Name BRETT SHEFFIELD					Signature Brett Sheffield			Month 6	Day 8	Year 15	
INT'L	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____										
	17. Transporter Acknowledgment of Receipt of Materials										
TRANSPORTER	Transporter 1 Printed/Typed Name Shane Henzlar					Signature Shane Henzlar			Month 6	Day 2	Year 15
	Transporter 2 Printed/Typed Name					Signature			Month	Day	Year
DESIGNATED FACILITY	18. Discrepancy										
	18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection										
	Manifest Reference Number:										
	18b. Alternate Facility (or Generator)								U.S. EPA ID Number		
	Facility's Phone:										
18c. Signature of Alternate Facility (or Generator)								Month	Day	Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)											
1.			2.			3.			4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a											
Printed/Typed Name					Signature			Month	Day	Year	

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number WA0980086J00	2. Page 1 of	3. Emergency Response Phone 1 (800)434-9300	4. Manifest Tracking Number 013472368 JJK		
5. Generator's Name and Mailing Address TROLLEY BARN 404 SOUTH 3RD AVENUE YAKIMA WA 98902 Generator's Phone: (509)280-3278		Generator's Site Address (if different than mailing address)					
6. Transporter 1 Company Name R TRANSPORT		U.S. EPA ID Number WAH000028338					
7. Transporter 2 Company Name		U.S. EPA ID Number					
8. Designated Facility Name and Site Address CHEMICAL WASTE MANAGEMENT, INC 17628 CEDAR SPRINGS LAKE ARLINGTON OR 97812-9709 Facility's Phone: (541)461-2813		U.S. EPA ID Number OR00089452353					
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
	1. RG UN3077, HAZARDOUS WASTE SOLID, N.O.S., III (D008, LEAD SOILS)	1	DT				
	2.						
	3.						
4.							
14. Special Handling Instructions and Additional Information 1. PROFILE OR325003, LEAD CONTAMINATED SOILS(D008), RG=10LBS; ERG =171							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offor's Printed/Typed Name BRETT SHEFFIELD		Signature Brett Sheffield			Month Day Year 6/8/15		
INTL	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:						
	17. Transporter Acknowledgment of Receipt of Materials						
TRANSPORTER	Transporter 1 Printed/Typed Name KAY SMITH		Signature Kay Smith			Month Day Year 6/8/15	
	Transporter 2 Printed/Typed Name		Signature			Month Day Year	
DESIGNATED FACILITY	18. Discrepancy						
	18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection						
	Manifest Reference Number:						
	18b. Alternate Facility (or Generator)		U.S. EPA ID Number				
	Facility's Phone:						
18c. Signature of Alternate Facility (or Generator)						Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1.		2.		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name		Signature			Month Day Year		

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number W4H000028138		2. Page 1 of		3. Emergency Response Phone (800) 424-3333		4. Manifest Tracking Number 013472366 JJK				
		5. Generator's Name and Mailing Address TROLLEY BARN 404 SOUTH 3RD AVENUE YAKIMA WA 98902 (821) 223-1270						Generator's Site Address (if different than mailing address)				
6. Transporter 1 Company Name R TRANSPORT		U.S. EPA ID Number W4H000028138										
7. Transporter 2 Company Name		U.S. EPA ID Number										
8. Designated Facility Name and Site Address CHEMICAL WASTE MANAGEMENT, INC. 17029 CEDAR SPRINGS LANE ARLINGTON OR 97012-0700		U.S. EPA ID Number ORD08B457353										
Facility's Phone: (503) 454-2843												
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
						No.	Type					
	1.	RQ UN3077 HAZARDOUS WASTE, SOLID, N.O.S. (D008, LEAD SOILS)				1	DT	1	P	D008		
	2.											
	3.											
	4.											
14. Special Handling Instructions and Additional Information 1 PROFILE OR325003, LEAD CONTAMINATED SOILS(D008); RQ=10LBS; ER3 =171												
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.												
Generator's/Offor's Printed/Typed Name BRETT SHEFFIELD						Signature Brett Sheffield		Month 6		Day Year 8 15		
INT'L	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____											
	17. Transporter Acknowledgment of Receipt of Materials											
TRANSPORTER	Transporter 1 Printed/Typed Name TVE LLC						Signature [Signature]		Month 6		Day Year 8 15	
	Transporter 2 Printed/Typed Name						Signature		Month		Day Year	
DESIGNATED FACILITY	18. Discrepancy											
	18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection											
	Manifest Reference Number: _____											
	18b. Alternate Facility (or Generator)						U.S. EPA ID Number					
	Facility's Phone: _____											
	18c. Signature of Alternate Facility (or Generator)								Month 		Day Year 	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)												
1.		2.		3.		4.						
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a												
Printed/Typed Name						Signature		Month 		Day Year 		

ANDERSON
ROCK & DEMOLITION PITS
YAKIMA, WASH.

75213

www.andersonrock.com

Petroleum Contaminated Soils Site - Topsoil - Shale - Crushed Rock

Name TO ENVIRO

Address

Received by

Date _____ Sold by _____

Phone _____ Home _____

Office

P.O. #

Job # Trolley Barn

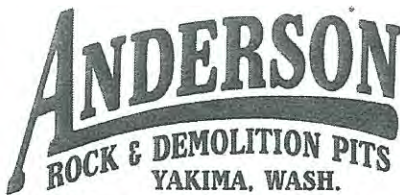
Hauled by *Anderson*

- A. Cured concrete
- B. Asphaltic materials
(does not include roofing)
- C. Brick and masonry
- D. Ceramic materials
- E. Glass
- F. Stainless Steel
- G. Aluminum
- H. Lime
- I. Dirt Rock
- J. Bldg. Demolition

DATE BILLED

OUT OF COUNTY?
☐ YES ☐ NO
 OUT OF CITY?
☐ YES ☐ NO

Truck Time



LOAD TICKET

75209

41 Rocky Top Road
Yakima, WA 98908

Bus. (509) 965-3621 • Fax (509) 965-8656
www.andersonrock.com

Petroleum Contaminated Soils Site - Topsoil - Shale - Crushed Rock

DELIVERIES

We make deliveries inside the curb line at customer's risk only and accept no responsibility whatsoever for damages resulting from such deliveries.

Received by

Date 6/2/15 Sold by

- | | |
|--|---------------------|
| A. Cured concrete | E. Glass |
| B. Asphaltic materials
(does not include roofing) | F. Stainless Steel |
| C. Brick and masonry | G. Aluminum |
| D. Ceramic materials | H. Lime |
| | I. Dirt Rock |
| | J. Bldg. Demolition |

Name EO Environmental

Address

Phone Home 1-425-577-1984

Office Jim

P.O. #

Job # Trolley Barn

Hauled by Anderson

WEIGHT TICKET #	TIME	TRUCK NO.	QUANTITY	PRODUCT	UNIT PRICE	AMOUNT
Start	8:00 ¹	9	1.75 Hr	Truck Time		
Start	9:15 ²	9+D	5.75			
Stop	3:00 ³					
Start	8:00 ⁴	54P	7 Hrs	Truck Time		
Stop	3:00 ⁵					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
		TOTAL				

DATE BILLED

CUSTOMER AGREES TO PAY (a) A LATE CHARGE OF 1.5% PER MONTH IF ACCOUNT IS NOT PAID WITHIN 10 DAYS OF INVOICE, AND (b) ATTORNEY'S FEE INCURRED IN COLLECTION.

OUT OF COUNTY?
☐ YES ☐ NO
OUT OF CITY?
☐ YES ☐ NO

PCS TICKET



LOAD TICKET

75208

41 Rocky Top Road
Yakima, WA 98908

Bus. (509) 965-3621 • Fax (509) 965-8656

www.andersonrock.com

Petroleum Contaminated Soils Site - Topsoil - Shale - Crushed Rock

DELIVERIES

We make deliveries inside the curb line at customer's risk only and accept no responsibility whatsoever for damages resulting from such deliveries.

Name TO EnvironmentalAddress 404 S. 3rd Ave.

Received by

Phone Home 1-425-577-1984Date 6/2/15 Sold byOffice Jim

- A. Cured concrete
B. Asphaltic materials
(does not include roofing)
C. Brick and masonry
D. Ceramic materials

- E. Glass
F. Stainless Steel
G. Aluminum
H. Lime
I. Dirt Rock
J. Bldg. Demolition

P.O. # 040-058-02Job # Trolley BarnHauled by Anderson

WEIGHT TICKET #	TIME	TRUCK NO.	QUANTITY	PRODUCT	UNIT PRICE	AMOUNT
126724	8:51	1 6	15.01	PCS		
126725	8:56	2 54P	30.35	PCS		
126729	10:00	3 54P	31.49	PCS		
126730	10:13	4 64P	32.64	PCS		
126734	10:57	5 54P	29.87	PCS		
126736	11:28	6 64P	32.14	PCS		
126738	11:57	7 54P	28.54	PCS		
126741	12:31	8 64P	32.56	PCS		
126743	12:51	9 54P	29.79	PCS		
126746	1:43	10 64P	35.06	PCS		
126747	1:54	11 54P	31.30	PCS		
126750	2:47	12 64P	28.80	PCS		
126751	2:55	54P	28.21	PCS		
			385.76			
		TOTAL				

DATE BILLED

CUSTOMER AGREES TO PAY (a) A LATE CHARGE OF 1.5% PER MONTH IF ACCOUNT IS NOT PAID WITHIN 10 DAYS OF INVOICE, AND (b) ATTORNEY'S FEE INCURRED IN COLLECTION.

OUT OF COUNTY?
☐ YES ☐ NO
OUT OF CITY?
☐ YES ☐ NO

Truck Time



LOAD TICKET

75237

41 Rocky Top Road
Yakima, WA 98908

Bus. (509) 965-3621 • Fax (509) 965-8656
www.andersonrock.com

Petroleum Contaminated Soils Site - Topsoil - Shale - Crushed Rock

DELIVERIES

We make deliveries inside the curb line at customer's risk only and accept no responsibility whatsoever for damages resulting from such deliveries.

Name IO Environmental

Address 404 S. 3rd Ave

Received by

Phone Home

Date 6/3/15 Sold by

Office

- A. Cured concrete
- B. Asphaltic materials (does not include roofing)
- C. Brick and masonry
- D. Ceramic materials

- E. Glass
- F. Stainless Steel
- G. Aluminum
- H. Lime
- I. Dirt Rock
- J. Bldg. Demolition

P.O. # 040-058-02

Job # Trolley Barn

Hauled by

WEIGHT TICKET #	TIME	TRUCK NO.	QUANTITY	PRODUCT	UNIT PRICE	AMOUNT
Start	7:15	1	5.75	Truck Time		
Stop	10:30	2				
		3				
Start	7:15	4	6.75	Truck Time		
Stop	12:30	5				
		6				
Start - Solo	10:30	7	5.50	Truck Time - Solo		
Stop	4:00	8				
		9				
Start - Solo	12:30	10	3.50	Truck Time - Solo		
Stop	4:00	11				
		12				
TOTAL						

DATE BILLED

CUSTOMER AGREES TO PAY (a) A LATE CHARGE OF 1.5% PER MONTH IF ACCOUNT IS NOT PAID WITHIN 10 DAYS OF INVOICE, AND (b) ATTORNEY'S FEE INCURRED IN COLLECTION.

OUT OF COUNTY?

☐ YES ☐ NO

OUT OF CITY?

☐ YES ☐ NO

LOAD TICKET

41 Rocky Top Road
Yakima, WA 98908

Bus. (509) 965-3621 • Fax (509) 965-8656
www.andersonrock.com



Petroleum Contaminated Soils Site - Topsoil - Shale - Crushed Rock

DELIVERIES

We make deliveries inside the curb line at customer's risk only and accept no responsibility whatsoever for damages resulting from such deliveries.

Name IO Environmental

Address 4104 S. 3rd Ave

Received by

Date _____ Sold by _____

Phone Home

Office

- A. Cured concrete
- B. Asphaltic materials
(does not include roofing)
- C. Brick and masonry
- D. Ceramic materials

- E. Glass
- F. Stainless Steel
- G. Aluminum
- H. Lime
- I. Dirt Rock
- J. Bldg. Demolition

P.O. # 040-058-02

Job # Trolley Barn

Hauled by *Anderson*

WEIGHT TICKET #	TIME	TRUCK NO.	QUANTITY	PRODUCT	UNIT PRICE	AMOUNT
126774	10:31	1	5	15.43	1 1/4 mins	
126779	11:43	2	5	15.55	1 1/4 mins	
126783	12:30	3	6	15.54	1 1/4 mins	
126784	12:44	4	5	15.51	1 1/4 mins	
126789	1:50	5	6	15.98	1 1/4 mins	
126790	1:53	6	5	15.62	1 1/4 mins	
126793	2:49	7	6	15.75	1 1/4 mins	
126796	3:04	8	5	15.64	1 1/4 mins	
		9		125.05		
		10				
		11				
		12				
		TOTAL				

DATE BILLED

CUSTOMER AGREES TO PAY (a) A LATE CHARGE OF 1.5% PER MONTH IF ACCOUNT IS NOT PAID WITHIN 10 DAYS OF INVOICE, AND (b) ATTORNEY'S FEE INCURRED IN COLLECTION.

OUT OF COUNTY?

OUT OF CITY?
☐ YES ☐ NO

ANDERSON
ROCK & DEMOLITION PITS
YAKIMA, WASH.

№ 75261

Bus. (509) 965-3621 • Fax (509) 965-8656

Petroleum Contaminated Soils Site - Topsoil - Shale - Crushed Rock

Address 409 S. 3rd Ave.

Office

Job #

WEIGHT TICKET #	TIME	TRUCK NO.	QUANTITY	PRODUCT	UNIT PRICE	AMOUNT
126791	2:35	1	6	15.07	PCS	
126794	2:50	2	5	15.27	PCS	
126798	3:43	3	6	14.31	PCS	
126799	3:58	4	5	14.89	PCS	
		5				
		6	59.54			
		7				
		8				
		9				
		10				
		11				
		12				
		TOTAL				

OUT OF COUNTY?
☐ YES ☐ NO
 OUT OF CITY?
☐ YES ☐ NO

PCS TICKET

385.76



LOAD TICKET

75240

41 Rocky Top Road
Yakima, WA 98908

Bus. (509) 965-3621 • Fax (509) 965-8656

www.andersonrock.com

Petroleum Contaminated Soils Site - Topsoil - Shale - Crushed Rock

DELIVERIES

We make deliveries inside the curb line at customer's risk only and accept no responsibility whatsoever for damages resulting from such deliveries.

Name IO EnvironmentalAddress 404 S. 3rd Ave.

Received by

Phone HomeDate 6/3/15 Sold by

Office

- A. Cured concrete
B. Asphaltic materials
(does not include roofing)
C. Brick and masonry
D. Ceramic materials

- E. Glass
F. Stainless Steel
G. Aluminum
H. Lime
I. Dirt Rock
J. Bldg. Demolition

P.O. # 040-058-02

Job #

Hauled by Anderson

WEIGHT TICKET #	TIME	TRUCK NO.	QUANTITY	PRODUCT	UNIT PRICE	AMOUNT
126762	8:01	1 64P	26.76	PCS		
126763	8:09	2 54P	29.43	PCS		
126767	9:02	3 64P	32.94	PCS		
126768	9:07	4 54P	31.70	PCS		
126771	10:05	5 64P	34.16	PCS		
126773	10:13	6 54P	30.75	PCS		
126776	11:12	7 64P	32.13	PCS		
126777	11:29	8 5	13.69	PCS		
126781	12:16	9 6	39.51	PCS		
126782	12:33	10 5	12.76	PCS		
126787	1:37	11 6	13.95	PCS		
126788	1:42	12 5	15.46	PCS		
			<u>313.44</u>			
		TOTAL				

DATE BILLED

CUSTOMER AGREES TO PAY (a) A LATE CHARGE OF 1.5% PER MONTH IF ACCOUNT IS NOT PAID WITHIN 10 DAYS OF INVOICE, AND (b) ATTORNEY'S FEE INCURRED IN COLLECTION.

OUT OF COUNTY?
☐ YES ☐ NO
OUT OF CITY?
☐ YES ☐ NO

ANDERSON
ROCK & DEMOLITION PITS
YAKIMA, WASH.

№ 75270

Bus. (509) 965-3621 • Fax (509) 965-8656
www.andersonrock.com

We make deliveries inside the curb line at customer's risk only and accept no responsibility whatsoever for damages resulting from such deliveries.

Name IO Environment

Address 404 S. 3rd Ave

Received by

Date _____ Sold by _____

Date 6/4/15

- A. Cured concrete
- B. Asphaltic materials
(does not include roofing)
- C. Brick and masonry
- D. Ceramic materials

- E. Glass
- F. Stainless Steel
- G. Aluminum
- H. Lime
- I. Dirt Rock
- J. Bldg. Demolition

Phone Home

Office

P.O. #

Job # Trolley Barn

Hauled by Anderson

WEIGHT TICKET #	TIME	TRUCK NO.	QUANTITY	PRODUCT	UNIT PRICE	AMOUNT
Start - Solo Stop	7:15 12:15	1 5	5	Truck Time		
		3				
		4				
Start Stop	7:45 9:00	5 G&P	1.25 Hrs.	Truck Time		
		6				
		7				
Start - solo stop	9:00 12:00	8 6	3.0 Hrs.	Truck Time		
		9				
		10				
		11				
		12				
TOTAL						

DATE BILLED

NO TAX

CUSTOMER AGREES TO PAY (a) A LATE CHARGE OF 1.5% PER MONTH IF ACCOUNT IS NOT PAID WITHIN 10 DAYS OF INVOICE, AND (b) ATTORNEY'S FEE INCURRED IN COLLECTION.

OUT OF COUNTY?

☐ YES ☐ NO
OUT OF CITY?
☐ YES ☐ NO

758.74 ton



Petroleum Contaminated Soils Site - Topsoil - Shale - Crushed Rock

Bus. (509) 965-3621 • Fax (509) 965-8656
www.andersonrock.com

Name 70 Environmental

Address 404 S. 3rd Ave

Date _____ Sold by _____

Date 6/4/15

A. Cured concrete
B. Asphaltic materials
(does not include roofing)

C. Brick and masonry
D. Ceramic materials

- E. Glass
- F. Stainless Steel
- G. Aluminum
- H. Lime
- I. Dirt Rock
- J. Bldg. Demolition

Phone Home

Office

P.O. #

Job # Trolley Barn

Hauled by Anderson

DATE BILLED

No Tax

CUSTOMER AGREES TO PAY (a) A LATE CHARGE OF 1.5% PER MONTH IF ACCOUNT IS NOT PAID WITHIN 10 DAYS OF INVOICE, AND (b) ATTORNEY'S FEE INCURRED IN COLLECTION.

OUT OF COUNTY?

☐ YES ☐ NO
OUT OF CITY?
☐ YES ☐ NO

ANDERSON
ROCK & DEMOLITION PITS
YAKIMA, WASH.

No. 75271

www.andersonrock.com

Petroleum Contaminated Soils Site - Topsoil - Shale - Crushed Rock

Name IO Environmental

Address 404 S. 3rd Ave

Date _____ Sold by _____

Date 6/4/13

- E. Glass
- F. Stainless Steel
- G. Aluminum
- H. Lime
- I. Dirt Rock
- J. Bldg. Demolition

Phone Home

[Home](#)

Office

P.O. #

Job # Trolley Barn

Hauled by Anderson

DATE BILLED

NO TAX

OUT OF COUNTY?

☐ YES ☐ NO
OUT OF CITY?
☐ YES ☐ NO

☐ YES ☐ NO
OUT OF CITY?
☐ YES ☐ NO

☐ YES ☐ NO
OUT OF CITY?
☐ YES ☐ NO



No. 75288

41 Rocky Top Road
Yakima, WA 98908

Bus. (509) 965-3621 • Fax (509) 965-8656

www.andersonrock.com

DELIVERIES

We make deliveries inside the curb line at customer's risk only and accept no responsibility whatsoever for damages resulting from such deliveries.

Name TO Environmental

Address 404 S. 3rd Ave

1-425-502-1479-mike

Phone

Home 1-425-591-8223

Office Take

P.O. # 040-058-02

Job # Trolley Barn

Hauled by Anderson

Received by

Date _____

Sold by

6/30/15

- A. Cured concrete
- B. Asphaltic materials
(does not include roofing)
- C. Brick and masonry
- D. Ceramic materials

- E. Glass
- F. Stainless Steel
- G. Aluminum
- H. Lime
- I. Dirt Rock
- J. Bldg. Demolition

DATE BILLED

CUSTOMER AGREES TO PAY (a) A LATE CHARGE OF 1.5% PER MONTH IF ACCOUNT IS NOT PAID WITHIN 10 DAYS OF INVOICE, AND (b) ATTORNEY'S FEE INCURRED IN COLLECTION.

OUT OF COUNTY?

☐ YES ☐ NO
OUT OF CITY?
☐ YES ☐ NO

Truck time



LOAD TICKET

No 75332

41 Rocky Top Road
Yakima, WA 98908

Bus. (509) 965-3621 • Fax (509) 965-8656
www.andersonrock.com

Petroleum Contaminated Soils Site - Topsoil - Shale - Crushed Rock

DELIVERIES We make deliveries inside the curb line at customer's risk only and accept no responsibility whatsoever for damages resulting from such deliveries.		Name <u>IO Environmental</u>
Received by _____		Address <u>404 S. 3rd Ave</u>
Date <u>6/9/15</u> Sold by _____		<u>1-425-582-1479-mike</u>
A. Cured concrete B. Asphaltic materials (does not include roofing) C. Brick and masonry D. Ceramic materials		Phone Home <u>1-425-591-8223</u>
E. Glass F. Stainless Steel G. Aluminum H. Lime I. Dirt Rock J. Bldg. Demolition		Office <u>Jake</u>
		P.O. # <u>040-058-02</u>
		Job # <u>Trolley Barn</u>
		Hauled by <u>Anderson</u>

WEIGHT TICKET #	TIME	TRUCK NO.	QUANTITY	PRODUCT	UNIT PRICE	AMOUNT
Start	7:00	1	6.4 P	9.0 hrs. Truck Time	120 ⁰⁰	
Stop	4:00	2				
		3				
		4				
		5				
Start	7:15	6	9.4 P	8.5 hrs. Truck Time	120 ⁰⁰	
Stop	3:45	7				
		8				
		9				
Start	1:30	10	5.4 P	2.5 hrs. Truck Time	120 ⁰⁰	
Stop	4:00	11				
		12				
		TOTAL				

DATE BILLED

CUSTOMER AGREES TO PAY (a) A LATE CHARGE OF 1.5% PER MONTH IF ACCOUNT IS NOT PAID WITHIN 10 DAYS OF INVOICE, AND (b) ATTORNEY'S FEE INCURRED IN COLLECTION.

OUT OF COUNTY?
☐ YES ☐ NO
 OUT OF CITY?
☐ YES ☐ NO

☐ YES ☐ NO
OUT OF CITY?
☐ YES ☐ NO

☐ YES ☐ NO

APPENDIX D

X-RAY FLUORESCENCE DATA



Yakima Valley Transportation Co. Trolley Barn Site

Washington Dept. of Ecology

XRF Data - June 2015

Facility Site No. 9688850

City of Yakima

Yakima, Washington

Cleanup Site No. 2190

MTCA Method A CUL		20 mg/kg		250 mg/kg		2 mg/kg		2 mg/kg	
Sample ID - Depth (in.)	Date	As (mg/kg)	As +/-	Pb (mg/kg)	Pb +/-	Cd (mg/kg)	Cd +/-	Hg (mg/kg)	Hg +/-
C16-6	6/4/2015	<LOD	8	<LOD	11	<LOD	49	<LOD	14
C17-6	6/4/2015	12	4	22	4	<LOD	49	<LOD	16
C18-6	6/4/2015	<LOD	10	29	5	<LOD	48	<LOD	14
C19-6	6/4/2015	<LOD	9	12	4	<LOD	48	<LOD	14
C20-6	6/4/2015	<LOD	16	113	7	<LOD	48	<LOD	16
C21-6	6/4/2015	<LOD	16	106	7	<LOD	50	<LOD	16
C22-6	6/4/2015	11	3	<LOD	12	<LOD	49	<LOD	15
C23-6	6/4/2015	<LOD	15	71	6	<LOD	52	<LOD	17
C24-6	6/4/2015	<LOD	9	<LOD	12	<LOD	47	<LOD	15
C25-6	6/4/2015	14	3	15	4	<LOD	48	<LOD	15
C26-6	6/4/2015	14	4	60	5	<LOD	46	<LOD	15
C27-6	6/4/2015	<LOD	12	32	5	<LOD	49	<LOD	18
C28-6	6/4/2015	<LOD	9	15	4	<LOD	50	<LOD	15
C29-6	6/4/2015	<LOD	9	13	4	<LOD	47	<LOD	15
CH2-8	6/5/2015	22	5	111	7	<LOD	48	<LOD	14
CH3-8	6/5/2015	76	14	974	21	<LOD	49	<LOD	20
CH4-8	6/5/2015	44	11	547	15	<LOD	50	<LOD	19
CH5-8	6/5/2015	54	13	647	17	<LOD	52	<LOD	18
CH6-8	6/5/2015	36	5	62	6	<LOD	49	<LOD	17
CH7-8	6/5/2015	52	13	746	18	<LOD	50	<LOD	19
CH8-8	6/5/2015	35	5	56	6	<LOD	53	<LOD	17
CH9-8	6/5/2015	31	4	21	4	<LOD	48	<LOD	13
CH10-12	6/5/2015	44	4	28	4	<LOD	47	<LOD	15
CH11-12	6/5/2015	<LOD	19	168	8	<LOD	49	<LOD	16
CH13-12	6/5/2015	54	8	248	10	<LOD	51	<LOD	18
CH15-12	6/5/2015	53	9	332	11	<LOD	49	<LOD	18
CH16-12	6/5/2015	<LOD	8	<LOD	11	<LOD	49	<LOD	15
CH17-12	6/5/2015	46	7	170	9	<LOD	52	<LOD	16
CH18-12	6/5/2015	27	8	299	11	<LOD	49	<LOD	15

NOTES:

< LOD = less than level of detection

Shaded values exceed MTCA Method A Cleanup Levels (CULs)

Bold values may exceed MTCA Method A CULs based on tolerance

<https://fortress.wa.gov/ecy/clarc/FocusSheets/Soil%20Methods%20B%20and%20A%20unrestricted.pdf>

mg/kg = milligrams per kilogram

± = sampling device tolerance

Yakima Valley Transportation Co. Trolley Barn Site

Washington Dept. of Ecology

XRF Data - June 2015

Facility Site No. 9688850

City of Yakima

Yakima, Washington

Cleanup Site No. 2190

MTCA Method A CUL		20 mg/kg		250 mg/kg		2 mg/kg		2 mg/kg	
Sample ID - Depth (in.)	Date	As (mg/kg)	As +/-	Pb (mg/kg)	Pb +/-	Cd (mg/kg)	Cd +/-	Hg (mg/kg)	Hg +/-
CH19-12	6/5/2015	<LOD	10	22	4	<LOD	49	<LOD	16
CH20-12	6/5/2015	45	7	159	8	<LOD	52	<LOD	17
CH21-12	6/5/2015	54	4	<LOD	11	<LOD	47	<LOD	16
CH22-12	6/5/2015	<LOD	47	1286	24	<LOD	48	<LOD	20
CH23-12	6/5/2015	<LOD	10	14	4	<LOD	51	<LOD	15
CH24-12	6/5/2015	<LOD	10	29	4	<LOD	48	<LOD	15
CH25-12	6/5/2015	<LOD	11	29	4	<LOD	46	<LOD	14
CH27-12	6/5/2015	117	17	1304	26	<LOD	50	<LOD	21
CN2-6	6/11/2015	<LOD	10	26	4	<LOD	48	<LOD	15
CN3-6	6/11/2015	<LOD	12	37	5	<LOD	50	<LOD	15
CN4-4	6/11/2015	<LOD	20	190	9	<LOD	48	<LOD	15
CN8-4	6/11/2015	<LOD	12	39	5	<LOD	51	<LOD	14
CN9-6	6/11/2015	<LOD	32	490	15	<LOD	52	<LOD	20
CN10-6	6/11/2015	<LOD	14	80	6	<LOD	50	<LOD	15
CN11-6	6/11/2015	<LOD	21	223	9	<LOD	48	<LOD	18
CN12-6	6/11/2015	<LOD	17	137	7	<LOD	48	<LOD	16
CN13-4	6/11/2015	<LOD	9	16	4	<LOD	48	<LOD	16
CN14-4	6/11/2015	<LOD	33	543	15	<LOD	52	<LOD	18
CN15-4	6/11/2015	<LOD	10	24	4	<LOD	49	<LOD	14
CN16-4	6/11/2015	17	6	118	7	<LOD	48	<LOD	16
CN17-6	6/11/2015	<LOD	12	44	5	<LOD	49	<LOD	16
CN21-4	6/11/2015	<LOD	24	173	11	<LOD	63	<LOD	18
CN22-4	6/11/2015	<LOD	25	328	11	<LOD	48	<LOD	18
CN23-4	6/11/2015	<LOD	17	103	7	<LOD	50	<LOD	17
CN24-4	6/11/2015	<LOD	22	205	9	<LOD	51	<LOD	18
CN25-4	6/11/2015	71	18	1172	27	<LOD	56	<LOD	23
CN26-4	6/11/2015	<LOD	39	519	18	<LOD	62	<LOD	25
CN27-4	6/11/2015	<LOD	20	119	9	<LOD	59	<LOD	18
CN28-4	6/11/2015	<LOD	21	165	9	<LOD	54	<LOD	18

NOTES:

< LOD = less than level of detection

Shaded values exceed MTCA Method A Cleanup Levels (CULs)

Bold values may exceed MTCA Method A CULs based on tolerance

<https://fortress.wa.gov/ecy/clarc/FocusSheets/Soil%20Methods%20B%20and%20A%20unrestricted.pdf>

mg/kg = milligrams per kilogram

± = sampling device tolerance

APPENDIX E

AS-BUILT SURVEY



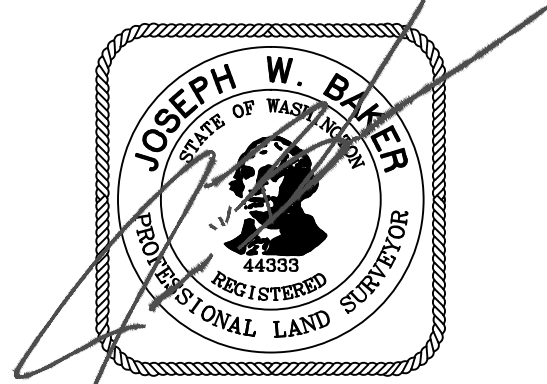


SURVEY DATUM DERIVED FROM GPS OBSERVATION USING THE WASHINGTON STATE REFERENCE NETWORK.

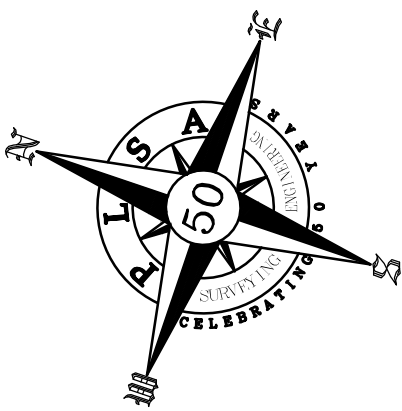
THE SURVEY DATUM FOR THIS SURVEY IS U.S. STATE PLANE 1983, NAD 1983, GEOID 12A, ZONE WASHINGTON NORTH 4601. ELEVATION DATUM IS NAVD 88.

A PORTION OF THIS SURVEY WAS PERFORMED WITH LEICA GS14 WITH THE WASHINGTON STATE REFERENCE NETWORK (WSRN) USING REAL TIME KINEMATIC (RTK) PROCEDURES.

A PORTION OF THIS SURVEY WAS PERFORMED WITH LEICA MS50 USING FIELD TRAVERSE PROCEDURES.



6/19/15



20 0 20 FEET
SCALE: 1" = 20'

	PLSA		ENGINEERING-SURVEYING-PLANNING	
			1120 WEST LINCOLN AVENUE	
			YAKIMA, WASHINGTON 98902	
			(509) 575-6990	
TOPOGRAPHIC SURVEY		DRAWN BY: JOE		
OF PARCEL NO. 181324 - 44465		DATE: 6/18/2015		
— PREPARED FOR —		JOB NO. 15149		
IO ENVIRONMENTAL		SHEET NO.		
SE 1/4, SE 1/4, SEC. 24, T-13 N, R-18 E, WM		1 OF 1		

APPENDIX F

PRELIMINARY SOURCE EVALUATION AND CLEAN SOIL STATEMENT





May 5, 2015

RE: Tiger Oil 24th & Nob Hill

To Whom It May Concern:

We here at Anderson Rock & Demolition Pits, believe our products to be free of any contaminants of any kind.

Thank you

A handwritten signature in blue ink that reads "Wendy McConnell". The signature is fluid and cursive, with a large loop at the end.

Wendy McConnell – Office Manager

Anderson Rock & Demolition Pits



**Washington State
Department of Transportation**

Lynn Peterson
Secretary of Transportation

State Materials Laboratory
PO Box 47365
Olympia, WA 98504-7365
360-709-5400 / FAX: 360-709-5585
TTY: 1-800-833-6388
www.wsdot.wa.gov

December 4, 2013

Ron Anderson
Anderson Rock & Demolition Pits
41 Rocky Top Road
Yakima, WA 98908
(509) 965-3621

Re: Preliminary Source Evaluation, ASA2013125

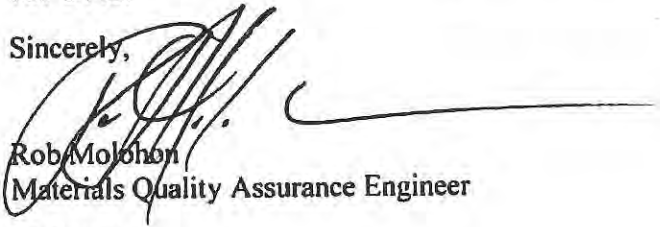
Dear Mr. Anderson:

This letter is to inform you that preliminary testing for Mineral Aggregate applications has been completed on the sample taken from the site designated as QS-E-344, also known as Anderson Pit, in Yakima County, Washington. The sample tested passed the requirements for the Riprap, Quarry Spalls and Rock for Rock Wall applications as indicated in Section 9-13 of the Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge, and Municipal Construction (2012).

The enclosed Aggregate Source Approval (ASA) Report lists specific approved uses for the aggregate from this site. The Aggregate Source Approval database is available on the Internet at: <http://www.wsdot.wa.gov/biz/mats/asa/asaSearch.cfm>

The reports and all backup data will remain on file at the WSDOT Materials Laboratory. If there are any questions concerning this matter, please contact Garrett Webster at (360) 709-5442.

Sincerely,



Rob Molohon
Materials Quality Assurance Engineer

RM: gsw
Enclosure

cc via e-mail: K. Williams – Construction Materials Engineer
B. Briggs – Assistant Construction Materials Engineer – Admin
M. Polodna – Structural Materials Engineer
P. Gonseth – South Central Region Materials Engineer
R. Anderson – Anderson Rock & Demolition Pits
(andersonrock1@live.com)



Washington State
Department of Transportation

WSDOT MATERIALS LAB

12/04/2013

Aggregate Source Approval Report

Owner: Anderson Rock and Demolition Pits
Lessee:
Located in: SW1/4 NW1/4 Section 10 T13N R17E

Aggregate Source: QS-E-344
Known as: Anderson Pit
County: Yakima

Remarks:

Results for Riprap, Quarry Spalls and Rock for Rock Wall: Bulk Sp. G (SSD): 2.855, Bulk Sp G: 2.817, App Sp G: 2.927, Abs(%): 1.33, LA: 16, Deg: 75. Expires 12/04/2014 (gsw)

Pit Run Materials:

At the discretion of the Project Engineer, preliminary samples for Gradation and Sand Equivalent tests may be performed to determine if the material does in fact meet the specification for the intended use:

Backfill for Rock Wall	Backfill for Sand Drains	Bedding Material for Rigid Pipe
Bedding Material for Thermoplastic Pipe	Blending Sand	Foundation Material for Classes A, B or C
Gravel Backfill for Drains and Drywells	Gravel Backfill for Foundation Class B	Gravel Backfill for Pipe Zone Bedding
Gravel Backfill for Walls	Gravel Borrow	Sand Drainage Blanket
Select or Common Borrow		

No Preliminary Tests are required to be performed by the State Materials Lab

Gravel Base:	Test Date:	Expiration Date:
Drainage:	R Value:	Swell Pressure:

Contact the Regional Materials Office to request PRELIMINARY SAMPLES be acquired. Evaluation and approval of this site as a source of GRAVEL BASE is required prior to use.

Mineral Agg. and Surfacing:	Test Date: 04/18/2011	Expiration Date: 04/18/2016
Absorption:	Apparent Sp. G.:	Bulk Sp. G. (SSD): 2.882
Deg: 78	LA: 17	Bulk Sp. G.:

Currently approved as a source of aggregate for:

ATB	Ballast	BST Crushed Cover Stone
BST Crushed Screenings	Crushed Surfacing Base Course	Crushed Surfacing Key Stone
Crushed Surfacing Top Course	Gravel Backfill for Foundation Class A	HMA Other Courses
HMA Wearing Course	Maintenance Rock	Permeable Ballast

Acceptance tests need to be performed as necessary.

Portland Cement Concrete Aggregates:	Test Date:	Expiration Date:
ASR - 14 Day:	ASR - One Year:	CCA Absorption:
FCA Absorption:	FCA Organics:	FCA Sp. G.:
Mortar Strength:	Petrographic Analysis:	CCA Sp.G.:
		LA:

Contact the Regional Materials Office to request PRELIMINARY SAMPLES be acquired. Evaluation and approval of this site as a source of AGGREGATES for PCC is required prior to use.

Riprap and Quarry Spalls:	Test Date:	Expiration Date:
----------------------------------	------------	------------------

Please see Remarks for Riprap and Quarry Spalls results.

Contact the Regional Materials Office to request PRELIMINARY SAMPLES be acquired. Evaluation and approval of this site as a source of RIP RAP AND QUARRY SPALLS is required prior to use.

Distribution: Physical Testing _____ Project Engineer _____ Region Operations _____ Region Materials _____

Aggregate Source Approval System



Washington State
Department of Transportation

WSDOT MATERIALS LAB

12/22/2014

Aggregate Source Approval Report

Owner: Anderson Rock and Demolition Pits
Lessee:
Located in: SW1/4 NW1/4 Section 10 T13N R17E

Aggregate Source: QS-E-344
Known as: Anderson Pit
County: Yakima

Remarks:

Results for Riprap, Quarry Spalls and Rock for Rock Wall: Bulk Sp. G (SSD): 2.842 Bulk Sp G:2.800, App Sp G: 2.923, Abs(%): 1.50, LA: 16, Deg: 72. Expires 12/22/2015 (MEJ)

Pit Run Materials:

At the discretion of the Project Engineer, preliminary samples for Gradation and Sand Equivalent tests may be performed to determine if the material does in fact meet the specification for the intended use:

Backfill for Rock Wall	Backfill for Sand Drains	Bedding Material for Rigid Pipe
Bedding Material for Thermoplastic Pipe	Foundation Material for Classes A, B or C	Gravel Backfill for Drains and Drywells
Gravel Backfill for Foundation Class B	Gravel Backfill for Pipe Zone Bedding	Gravel Backfill for Walls
Gravel Borrow	Sand Drainage Blanket	Select or Common Borrow

No Preliminary Tests are required to be performed by the State Materials Lab

Gravel Base:

Drainage:

Test Date:
R Value:

Expiration Date:
Swell Pressure:

Contact the Regional Materials Office to request PRELIMINARY SAMPLES be acquired. Evaluation and approval of this site as a source of GRAVEL BASE is required prior to use.

Mineral Agg. and Surfacing:

Absorption:
Deg: 76

Apparent Sp. G.:
LA: 17

Test Date: 04/18/2011

Bulk Sp. G. (SSD): 2.882

Expiration Date: 04/18/2016

Bulk Sp. G.:

Currently approved as a source of aggregate for:

ATB	Ballast	BST Crushed Cover Stone
BST Crushed Screenings	Crushed Surfacing Base Course	Crushed Surfacing Key Stone
Crushed Surfacing Top Course	Gravel Backfill for Foundation Class A	HMA Other Courses
HMA Wearing Course	Maintenance Rock	Permeable Ballast

Acceptance tests need to be performed as necessary.

Portland Cement Concrete Aggregates:

ASR - 14 Day :
FCA Absorption:
Mortar Strength:

ASR - One Year:
FCA Organics:
Petrographic Analysis:

Test Date:

CCA Absorption:
FCA Sp. G:

Expiration Date:

CCA Sp. G:
LA:

Contact the Regional Materials Office to request PRELIMINARY SAMPLES be acquired. Evaluation and approval of this site as a source of AGGREGATES for PCC is required prior to use.

Riprap and Quarry Spalls:

Test Date:

Expiration Date:

Please see Remarks for Riprap and Quarry Spalls results.

Contact the Regional Materials Office to request PRELIMINARY SAMPLES be acquired. Evaluation and approval of this site as a source of RIP RAP AND QUARRY SPALLS is required prior to use.

Distribution: Physical Testing _____ Project Engineer _____ Region Operations _____ Region Materials _____

Aggregate Source Approval System

APPENDIX G

DRUM ANALYTICAL DATA



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: SXH0089

Client Project/Site: 0504-101-01

Client Project Description: Trolley Barn

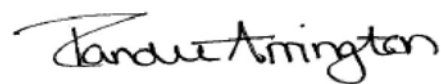
For:

Geo Engineers - Spokane

523 East Second Ave.

Spokane, WA 99202

Attn: Scott Lathen



Authorized for release by:

9/2/2014 4:30:30 PM

Randee Arrington, Project Manager

(509)924-9200

Randee.Arrington@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

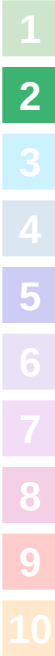


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Method Summary	54
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Sample Summary

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SXH0089-02	GEI-MW1 (12.5-13.5')	Soil	08/12/14 14:45	08/14/14 10:00
SXH0089-04	GEI-MW2 (12-13')	Soil	08/13/14 11:10	08/14/14 10:00
SXH0089-06	GEI-MW3 (12-13')	Soil	08/12/14 08:30	08/14/14 10:00
SXH0089-07	GEI-B1 (2-3')	Soil	08/11/14 15:10	08/14/14 10:00
SXH0089-08	GEI-B1 (12-13')	Soil	08/11/14 15:40	08/14/14 10:00
SXH0089-10	GEI-B2 (13-14')	Soil	08/11/14 12:20	08/14/14 10:00
SXH0089-12	GEI-B3 (7-8')	Soil	08/11/14 10:55	08/14/14 10:00
SXH0089-13	GEI-B4 (2-3')	Soil	08/11/14 16:20	08/14/14 10:00
SXH0089-14	GEI-B4 (7-8')	Soil	08/11/14 16:10	08/14/14 10:00
SXH0089-15	GEI-B5 (2-3')	Soil	08/11/14 10:00	08/14/14 10:00
SXH0089-16	GEI-B5 (7-8')	Soil	08/11/14 10:10	08/14/14 10:00
SXH0089-17	GEI-B6 (2-3')	Soil	08/11/14 14:05	08/14/14 10:00
SXH0089-19	GEI-B6 (13-14')	Soil	08/11/14 14:25	08/14/14 10:00
SXH0089-21	GEI-B7 (13-14')	Soil	08/11/14 08:45	08/14/14 10:00
SXH0089-23	GEI-B8 (14-15')	Soil	08/11/14 12:15	08/14/14 10:00
SXH0089-25	GEI-B9 (13-14')	Soil	08/11/14 14:10	08/14/14 10:00
SXH0089-26	Duplicate 1	Soil	08/11/14 08:00	08/14/14 10:00
SXH0089-27	Duplicate 2	Soil	08/11/14 08:00	08/14/14 10:00
SXH0089-28	HWA-MW1-Composite	Soil	08/12/14 14:45	08/14/14 10:00

Definitions/Glossary

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Qualifiers

Semivolatiles

Qualifier	Qualifier Description
R2	The RPD exceeded the acceptance limit.
M7	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
Z2	Surrogate recovery was above the acceptance limits. Data not impacted.
RL1	Reporting limit raised due to sample matrix effects.

Fuels

Qualifier	Qualifier Description
R4	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
Q6	Results in the diesel organics range are primarily due to overlap from a heavy oil range product.

Metals

Qualifier	Qualifier Description
R4	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
M2	The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
R3	The RPD exceeded the acceptance limit due to sample matrix effects.
R	The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.
RL3	Reporting limit raised due to high concentrations of non-target analytes.

Glossary

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

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-MW1 (12.5-13.5')

Lab Sample ID: SXH0089-02

Date Collected: 08/12/14 14:45

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 96.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0627		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:14	1.00
Hexane	ND		0.125		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:14	1.00
Benzene	ND		0.0188		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:14	1.00
1,2-Dichloroethane (EDC)	ND		0.125		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:14	1.00
Trichloroethene	ND		0.0313		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:14	1.00
Toluene	ND		0.125		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:14	1.00
Tetrachloroethene	ND		0.0501		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:14	1.00
Ethylbenzene	ND		0.125		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:14	1.00
m,p-Xylene	ND		0.501		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:14	1.00
o-Xylene	ND		0.251		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:14	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	99.5		80 - 120	08/15/14 08:49	08/15/14 11:14	1.00
1,2-dichloroethane-d4	97.7		74.7 - 120	08/15/14 08:49	08/15/14 11:14	1.00
Toluene-d8	103		78.5 - 125	08/15/14 08:49	08/15/14 11:14	1.00
4-bromofluorobenzene	100		69.8 - 140	08/15/14 08:49	08/15/14 11:14	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.842		ug/kg dry	☼	08/15/14 10:04	08/15/14 13:26	1.00
1,2-Dibromo-3-chloropropane	ND		0.842		ug/kg dry	☼	08/15/14 10:04	08/15/14 13:26	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		8.68		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:17	1.00
PCB-1221	ND		8.68		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:17	1.00
PCB-1232	ND		8.68		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:17	1.00
PCB-1242	ND		8.68		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:17	1.00
PCB-1248	ND		8.68		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:17	1.00
PCB-1254	ND		8.68		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:17	1.00
PCB-1260	ND		8.68		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:17	1.00
PCB-1268	ND		8.68		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:17	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	104		46.2 - 210	08/19/14 08:36	08/19/14 16:17	1.00
Decachlorobiphenyl	118		65.6 - 186	08/19/14 08:36	08/19/14 16:17	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		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
2-Methylnaphthalene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
1-Methylnaphthalene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Acenaphthylene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Acenaphthene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Fluorene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Phenanthrene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Anthracene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Fluoranthene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Pyrene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Benzo (a) anthracene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-MW1 (12.5-13.5')

Lab Sample ID: SXH0089-02

Date Collected: 08/12/14 14:45

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 96.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Benzo (b) fluoranthene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Benzo (k) fluoranthene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Benzo (a) pyrene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Dibenzo (a,h) anthracene	ND		0.0117		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00
Benzo (ghi) perylene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 17:58	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	84.4		36.3 - 152	08/21/14 08:39	08/21/14 17:58	1.00
2-FBP	89.2		30.2 - 135	08/21/14 08:39	08/21/14 17:58	1.00
p-Terphenyl-d14	117		65.1 - 134	08/21/14 08:39	08/21/14 17:58	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		41		mg/kg dry	☼	08/15/14 11:27	08/15/14 21:07	1.0
Diesel Range Hydrocarbons	ND		100		mg/kg dry	☼	08/15/14 11:27	08/15/14 21:07	1.0
Heavy Oil Range Hydrocarbons	ND		100		mg/kg dry	☼	08/15/14 11:27	08/15/14 21:07	1.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	92.3		50 - 150	08/15/14 11:27	08/15/14 21:07	1.0
2-FBP	93.4		50 - 150	08/15/14 11:27	08/15/14 21:07	1.0
p-Terphenyl-d14	104		50 - 150	08/15/14 11:27	08/15/14 21:07	1.0

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
Arsenic	3.43		2.53		mg/kg dry	☼	08/18/14 09:11	08/27/14 17:37	2.00
Cadmium	ND	RL3	0.404		mg/kg dry	☼	08/18/14 09:11	08/27/14 17:37	2.00
Chromium	17.1		1.01		mg/kg dry	☼	08/18/14 09:11	08/27/14 17:37	2.00
Lead	4.16		2.53		mg/kg dry	☼	08/18/14 09:11	08/27/14 17:37	2.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		47.2		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:15	1.00

Client Sample ID: GEI-MW2 (12-13')

Lab Sample ID: SXH0089-04

Date Collected: 08/13/14 11:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 94.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0528		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:37	1.00
Hexane	ND		0.106		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:37	1.00
Benzene	ND		0.0158		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:37	1.00
1,2-Dichloroethane (EDC)	ND		0.106		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:37	1.00
Trichloroethene	ND		0.0264		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:37	1.00
Toluene	ND		0.106		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:37	1.00
Tetrachloroethene	ND		0.0422		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:37	1.00
Ethylbenzene	ND		0.106		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:37	1.00
m,p-Xylene	ND		0.422		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:37	1.00
o-Xylene	ND		0.211		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:37	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-MW2 (12-13')

Lab Sample ID: SXH0089-04

Date Collected: 08/13/14 11:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 94.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	102		80 - 120	08/15/14 08:49	08/15/14 11:37	1.00
1,2-dichloroethane-d4	99.3		74.7 - 120	08/15/14 08:49	08/15/14 11:37	1.00
Toluene-d8	102		78.5 - 125	08/15/14 08:49	08/15/14 11:37	1.00
4-bromofluorobenzene	102		69.8 - 140	08/15/14 08:49	08/15/14 11:37	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.934		ug/kg dry	☼	08/15/14 10:04	08/15/14 13:41	1.00
1,2-Dibromo-3-chloropropane	ND		0.934		ug/kg dry	☼	08/15/14 10:04	08/15/14 13:41	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:38	1.00
PCB-1221	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:38	1.00
PCB-1232	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:38	1.00
PCB-1242	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:38	1.00
PCB-1248	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:38	1.00
PCB-1254	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:38	1.00
PCB-1260	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:38	1.00
PCB-1268	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 16:38	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	104		46.2 - 210	08/19/14 08:36	08/19/14 16:38	1.00
Decachlorobiphenyl	117		65.6 - 186	08/19/14 08:36	08/19/14 16:38	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		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
2-Methylnaphthalene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
1-Methylnaphthalene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Acenaphthylene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Acenaphthene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Fluorene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Phenanthrene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Anthracene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Fluoranthene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Pyrene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Benzo (a) anthracene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Chrysene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Benzo (b) fluoranthene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Benzo (k) fluoranthene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Benzo (a) pyrene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Dibenzo (a,h) anthracene	ND		0.0117		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00
Benzo (ghi) perylene	ND		0.0195		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:20	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	83.4		36.3 - 152	08/21/14 08:39	08/21/14 18:20	1.00
2-FBP	82.2		30.2 - 135	08/21/14 08:39	08/21/14 18:20	1.00
p-Terphenyl-d14	111		65.1 - 134	08/21/14 08:39	08/21/14 18:20	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-MW2 (12-13')

Lab Sample ID: SXH0089-04

Date Collected: 08/13/14 11:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 94.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		34		mg/kg dry	☼	08/15/14 11:27	08/15/14 21:31	1.0
Diesel Range Hydrocarbons	ND		85		mg/kg dry	☼	08/15/14 11:27	08/15/14 21:31	1.0
Heavy Oil Range Hydrocarbons	ND		85		mg/kg dry	☼	08/15/14 11:27	08/15/14 21:31	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-BFB (FID)	88.7		50 - 150				08/15/14 11:27	08/15/14 21:31	1.0
2-FBP	90.2		50 - 150				08/15/14 11:27	08/15/14 21:31	1.0
p-Terphenyl-d14	100		50 - 150				08/15/14 11:27	08/15/14 21:31	1.0

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
Arsenic	3.23		1.39		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:29	1.00
Cadmium	ND		0.223		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:29	1.00
Chromium	11.5		0.556		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:29	1.00
Lead	2.96		1.39		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:29	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		43.1		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:24	1.00

Client Sample ID: GEI-MW3 (12-13')

Lab Sample ID: SXH0089-06

Date Collected: 08/12/14 08:30

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0641		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:59	1.00
Hexane	ND		0.128		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:59	1.00
Benzene	ND		0.0192		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:59	1.00
1,2-Dichloroethane (EDC)	ND		0.128		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:59	1.00
Trichloroethene	ND		0.0320		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:59	1.00
Toluene	ND		0.128		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:59	1.00
Tetrachloroethene	ND		0.0513		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:59	1.00
Ethylbenzene	ND		0.128		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:59	1.00
m,p-Xylene	ND		0.513		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:59	1.00
o-Xylene	ND		0.256		mg/kg dry	☼	08/15/14 08:49	08/15/14 11:59	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	99.1		80 - 120				08/15/14 08:49	08/15/14 11:59	1.00
1,2-dichloroethane-d4	99.4		74.7 - 120				08/15/14 08:49	08/15/14 11:59	1.00
Toluene-d8	103		78.5 - 125				08/15/14 08:49	08/15/14 11:59	1.00
4-bromofluorobenzene	99.5		69.8 - 140				08/15/14 08:49	08/15/14 11:59	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.867		ug/kg dry	☼	08/15/14 10:04	08/15/14 13:55	1.00
1,2-Dibromo-3-chloropropane	ND		0.867		ug/kg dry	☼	08/15/14 10:04	08/15/14 13:55	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		9.57		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:00	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-MW3 (12-13')

Lab Sample ID: SXH0089-06

Date Collected: 08/12/14 08:30

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.2

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1221	ND		9.57		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:00	1.00
PCB-1232	ND		9.57		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:00	1.00
PCB-1242	ND		9.57		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:00	1.00
PCB-1248	ND		9.57		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:00	1.00
PCB-1254	ND		9.57		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:00	1.00
PCB-1260	ND		9.57		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:00	1.00
PCB-1268	ND		9.57		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:00	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	110		46.2 - 210	08/19/14 08:36	08/19/14 17:00	1.00
Decachlorobiphenyl	118		65.6 - 186	08/19/14 08:36	08/19/14 17:00	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		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
2-Methylnaphthalene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
1-Methylnaphthalene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Acenaphthylene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Acenaphthene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Fluorene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Phenanthrene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Anthracene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Fluoranthene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Pyrene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Benzo (a) anthracene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Chrysene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Benzo (b) fluoranthene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Benzo (k) fluoranthene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Benzo (a) pyrene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Dibenzo (a,h) anthracene	ND		0.0118		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00
Benzo (ghi) perylene	ND		0.0196		mg/kg dry	☼	08/21/14 08:39	08/21/14 18:43	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	80.2		36.3 - 152	08/21/14 08:39	08/21/14 18:43	1.00
2-FBP	78.6		30.2 - 135	08/21/14 08:39	08/21/14 18:43	1.00
p-Terphenyl-d14	100		65.1 - 134	08/21/14 08:39	08/21/14 18:43	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		37		mg/kg dry	☼	08/15/14 11:27	08/15/14 21:55	1.0
Diesel Range Hydrocarbons	ND		92		mg/kg dry	☼	08/15/14 11:27	08/15/14 21:55	1.0
Heavy Oil Range Hydrocarbons	ND		92		mg/kg dry	☼	08/15/14 11:27	08/15/14 21:55	1.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	90.3		50 - 150	08/15/14 11:27	08/15/14 21:55	1.0
2-FBP	91.8		50 - 150	08/15/14 11:27	08/15/14 21:55	1.0
p-Terphenyl-d14	99.2		50 - 150	08/15/14 11:27	08/15/14 21:55	1.0

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-MW3 (12-13')

Lab Sample ID: SXH0089-06

Date Collected: 08/12/14 08:30

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.65		1.34		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:33	1.00
Cadmium	ND		0.215		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:33	1.00
Chromium	11.3		0.536		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:33	1.00
Lead	4.51		1.34		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:33	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		37.9		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:26	1.00

Client Sample ID: GEI-B1 (2-3')

Lab Sample ID: SXH0089-07

Date Collected: 08/11/14 15:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0866		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:22	1.00
Hexane	ND		0.173		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:22	1.00
Benzene	ND		0.0260		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:22	1.00
1,2-Dichloroethane (EDC)	ND		0.173		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:22	1.00
Trichloroethene	ND		0.0433		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:22	1.00
Toluene	ND		0.173		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:22	1.00
Tetrachloroethene	ND		0.0693		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:22	1.00
Ethylbenzene	ND		0.173		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:22	1.00
m,p-Xylene	ND		0.693		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:22	1.00
o-Xylene	ND		0.346		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:22	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	95.5		80 - 120	08/15/14 08:49	08/15/14 12:22	1.00
1,2-dichloroethane-d4	94.3		74.7 - 120	08/15/14 08:49	08/15/14 12:22	1.00
Toluene-d8	105		78.5 - 125	08/15/14 08:49	08/15/14 12:22	1.00
4-bromofluorobenzene	101		69.8 - 140	08/15/14 08:49	08/15/14 12:22	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		5.86		ug/kg dry	☼	08/15/14 10:04	08/15/14 14:09	5.00
1,2-Dibromo-3-chloropropane	ND		5.86		ug/kg dry	☼	08/15/14 10:04	08/15/14 14:09	5.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		110		ug/kg dry	☼	08/19/14 08:36	08/20/14 11:49	10.0
PCB-1221	ND		110		ug/kg dry	☼	08/19/14 08:36	08/20/14 11:49	10.0
PCB-1232	ND		110		ug/kg dry	☼	08/19/14 08:36	08/20/14 11:49	10.0
PCB-1242	ND		110		ug/kg dry	☼	08/19/14 08:36	08/20/14 11:49	10.0
PCB-1248	ND		110		ug/kg dry	☼	08/19/14 08:36	08/20/14 11:49	10.0
PCB-1254	ND		110		ug/kg dry	☼	08/19/14 08:36	08/20/14 11:49	10.0
PCB-1260	188		110		ug/kg dry	☼	08/19/14 08:36	08/20/14 11:49	10.0
PCB-1268	ND		110		ug/kg dry	☼	08/19/14 08:36	08/20/14 11:49	10.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	91.2		46.2 - 210	08/19/14 08:36	08/20/14 11:49	10.0
Decachlorobiphenyl	78.4		65.6 - 186	08/19/14 08:36	08/20/14 11:49	10.0

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B1 (2-3')

Lab Sample ID: SXH0089-07

Date Collected: 08/11/14 15:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
2-Methylnaphthalene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
1-Methylnaphthalene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Acenaphthylene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Acenaphthene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Fluorene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Phenanthrene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Anthracene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Fluoranthene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Pyrene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Benzo (a) anthracene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Chrysene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Benzo (b) fluoranthene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Benzo (k) fluoranthene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Benzo (a) pyrene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Indeno (1,2,3-cd) pyrene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Dibenzo (a,h) anthracene	ND	RL1	0.873		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0
Benzo (ghi) perylene	ND	RL1	1.46		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:05	20.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	68.0	RL1	36.3 - 152	08/21/14 08:39	08/21/14 19:05	20.0
2-FBP	72.0	RL1	30.2 - 135	08/21/14 08:39	08/21/14 19:05	20.0
p-Terphenyl-d14	88.0	RL1	65.1 - 134	08/21/14 08:39	08/21/14 19:05	20.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Hydrocarbons	3950	Q6	391		mg/kg dry	☼	08/25/14 13:21	08/26/14 09:29	20.0
Heavy Oil Range Hydrocarbons	15000		979		mg/kg dry	☼	08/25/14 13:21	08/26/14 09:29	20.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	103		50 - 150	08/25/14 13:21	08/26/14 09:29	20.0
n-Triacontane-d62	126		50 - 150	08/25/14 13:21	08/26/14 09:29	20.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		120		mg/kg dry	☼	08/15/14 11:27	08/15/14 22:19	1.0
Diesel Range Hydrocarbons	3100	Q6	290		mg/kg dry	☼	08/15/14 11:27	08/15/14 22:19	1.0
Heavy Oil Range Hydrocarbons	15000		290		mg/kg dry	☼	08/15/14 11:27	08/15/14 22:19	1.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	100		50 - 150	08/15/14 11:27	08/15/14 22:19	1.0
2-FBP	106		50 - 150	08/15/14 11:27	08/15/14 22:19	1.0
p-Terphenyl-d14	102		50 - 150	08/15/14 11:27	08/15/14 22:19	1.0

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
Arsenic	9.66		1.57		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:37	1.00
Cadmium	2.60		0.252		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:37	1.00
Chromium	20.2		0.629		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:37	1.00
Lead	806		1.57		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:37	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B1 (2-3')

Date Collected: 08/11/14 15:10

Date Received: 08/14/14 10:00

Lab Sample ID: SXH0089-07

Matrix: Soil

Percent Solids: 84.5

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	512		47.2		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:29	1.00

Client Sample ID: GEI-B1 (12-13')

Date Collected: 08/11/14 15:40

Date Received: 08/14/14 10:00

Lab Sample ID: SXH0089-08

Matrix: Soil

Percent Solids: 92.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Hydrocarbons	ND		10.7		mg/kg dry	☼	08/25/14 13:21	08/25/14 18:41	1.00
Heavy Oil Range Hydrocarbons	ND		26.8		mg/kg dry	☼	08/25/14 13:21	08/25/14 18:41	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	112		50 - 150				08/25/14 13:21	08/25/14 18:41	1.00
<i>n</i> -Triacontane-d62	114		50 - 150				08/25/14 13:21	08/25/14 18:41	1.00

Client Sample ID: GEI-B2 (13-14')

Date Collected: 08/11/14 12:20

Date Received: 08/14/14 10:00

Lab Sample ID: SXH0089-10

Matrix: Soil

Percent Solids: 93.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0522		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:44	1.00
Hexane	ND		0.104		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:44	1.00
Benzene	ND		0.0156		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:44	1.00
1,2-Dichloroethane (EDC)	ND		0.104		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:44	1.00
Trichloroethene	ND		0.0261		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:44	1.00
Toluene	ND		0.104		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:44	1.00
Tetrachloroethene	ND		0.0417		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:44	1.00
Ethylbenzene	ND		0.104		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:44	1.00
m,p-Xylene	ND		0.417		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:44	1.00
o-Xylene	ND		0.209		mg/kg dry	☼	08/15/14 08:49	08/15/14 12:44	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>Dibromofluoromethane</i>	101		80 - 120				08/15/14 08:49	08/15/14 12:44	1.00
<i>1,2-dichloroethane-d4</i>	99.0		74.7 - 120				08/15/14 08:49	08/15/14 12:44	1.00
<i>Toluene-d8</i>	102		78.5 - 125				08/15/14 08:49	08/15/14 12:44	1.00
<i>4-bromofluorobenzene</i>	100		69.8 - 140				08/15/14 08:49	08/15/14 12:44	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.945		ug/kg dry	☼	08/15/14 10:04	08/15/14 14:24	1.00
1,2-Dibromo-3-chloropropane	ND		0.945		ug/kg dry	☼	08/15/14 10:04	08/15/14 14:24	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		9.67		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:42	1.00
PCB-1221	ND		9.67		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:42	1.00
PCB-1232	ND		9.67		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:42	1.00
PCB-1242	ND		9.67		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:42	1.00
PCB-1248	ND		9.67		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:42	1.00
PCB-1254	ND		9.67		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:42	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B2 (13-14')

Lab Sample ID: SXH0089-10

Date Collected: 08/11/14 12:20

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.2

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	ND		9.67		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:42	1.00
PCB-1268	ND		9.67		ug/kg dry	☼	08/19/14 08:36	08/19/14 17:42	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	102		46.2 - 210				08/19/14 08:36	08/19/14 17:42	1.00
Decachlorobiphenyl	106		65.6 - 186				08/19/14 08:36	08/19/14 17:42	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		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
2-Methylnaphthalene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
1-Methylnaphthalene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Acenaphthylene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Acenaphthene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Fluorene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Phenanthrene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Anthracene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Fluoranthene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Pyrene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Benzo (a) anthracene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Chrysene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Benzo (b) fluoranthene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Benzo (k) fluoranthene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Benzo (a) pyrene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Dibenzo (a,h) anthracene	ND		0.0121		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Benzo (ghi) perylene	ND		0.0202		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:28	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	87.6		36.3 - 152				08/21/14 08:39	08/21/14 19:28	1.00
2-FBP	82.6		30.2 - 135				08/21/14 08:39	08/21/14 19:28	1.00
p-Terphenyl-d14	105		65.1 - 134				08/21/14 08:39	08/21/14 19:28	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		41		mg/kg dry	☼	08/15/14 11:27	08/15/14 23:08	1.0
Diesel Range Hydrocarbons	ND		100		mg/kg dry	☼	08/15/14 11:27	08/15/14 23:08	1.0
Heavy Oil Range Hydrocarbons	ND		100		mg/kg dry	☼	08/15/14 11:27	08/15/14 23:08	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-BFB (FID)	88.5		50 - 150				08/15/14 11:27	08/15/14 23:08	1.0
2-FBP	96.2		50 - 150				08/15/14 11:27	08/15/14 23:08	1.0
p-Terphenyl-d14	106		50 - 150				08/15/14 11:27	08/15/14 23:08	1.0

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
Arsenic	3.06		1.28		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:41	1.00
Cadmium	ND		0.204		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:41	1.00
Chromium	14.9		0.511		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:41	1.00
Lead	4.72		1.28		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:41	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B2 (13-14')

Lab Sample ID: SXH0089-10

Date Collected: 08/11/14 12:20

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.2

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		37.3		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:31	1.00

Client Sample ID: GEI-B3 (7-8')

Lab Sample ID: SXH0089-12

Date Collected: 08/11/14 10:55

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 95.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0586		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:06	1.00
Hexane	ND		0.117		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:06	1.00
Benzene	ND		0.0176		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:06	1.00
1,2-Dichloroethane (EDC)	ND		0.117		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:06	1.00
Trichloroethene	ND		0.0293		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:06	1.00
Toluene	ND		0.117		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:06	1.00
Tetrachloroethene	ND		0.0469		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:06	1.00
Ethylbenzene	ND		0.117		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:06	1.00
m,p-Xylene	ND		0.469		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:06	1.00
o-Xylene	ND		0.234		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:06	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	101		80 - 120	08/15/14 08:49	08/15/14 13:06	1.00
1,2-dichloroethane-d4	99.9		74.7 - 120	08/15/14 08:49	08/15/14 13:06	1.00
Toluene-d8	103		78.5 - 125	08/15/14 08:49	08/15/14 13:06	1.00
4-bromofluorobenzene	101		69.8 - 140	08/15/14 08:49	08/15/14 13:06	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.853		ug/kg dry	☼	08/15/14 10:04	08/15/14 14:38	1.00
1,2-Dibromo-3-chloropropane	ND		0.853		ug/kg dry	☼	08/15/14 10:04	08/15/14 14:38	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.4		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:03	1.00
PCB-1221	ND		10.4		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:03	1.00
PCB-1232	ND		10.4		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:03	1.00
PCB-1242	ND		10.4		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:03	1.00
PCB-1248	ND		10.4		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:03	1.00
PCB-1254	ND		10.4		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:03	1.00
PCB-1260	ND		10.4		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:03	1.00
PCB-1268	ND		10.4		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:03	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	110		46.2 - 210	08/19/14 08:36	08/19/14 18:03	1.00
Decachlorobiphenyl	117		65.6 - 186	08/19/14 08:36	08/19/14 18:03	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	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
2-Methylnaphthalene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
1-Methylnaphthalene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Acenaphthylene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B3 (7-8')

Lab Sample ID: SXH0089-12

Date Collected: 08/11/14 10:55

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 95.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Fluorene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Phenanthrene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Anthracene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Fluoranthene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Pyrene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Benzo (a) anthracene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Chrysene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Benzo (b) fluoranthene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Benzo (k) fluoranthene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Benzo (a) pyrene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Dibenzo (a,h) anthracene	ND		0.0111		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00
Benzo (ghi) perylene	ND		0.0184		mg/kg dry	☼	08/21/14 08:39	08/21/14 19:50	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	81.2		36.3 - 152	08/21/14 08:39	08/21/14 19:50	1.00
2-FBP	79.2		30.2 - 135	08/21/14 08:39	08/21/14 19:50	1.00
p-Terphenyl-d14	102		65.1 - 134	08/21/14 08:39	08/21/14 19:50	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		38		mg/kg dry	☼	08/15/14 11:27	08/15/14 23:32	1.0
Diesel Range Hydrocarbons	ND		95		mg/kg dry	☼	08/15/14 11:27	08/15/14 23:32	1.0
Heavy Oil Range Hydrocarbons	ND		95		mg/kg dry	☼	08/15/14 11:27	08/15/14 23:32	1.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	89.5		50 - 150	08/15/14 11:27	08/15/14 23:32	1.0
2-FBP	96.5		50 - 150	08/15/14 11:27	08/15/14 23:32	1.0
p-Terphenyl-d14	108		50 - 150	08/15/14 11:27	08/15/14 23:32	1.0

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
Arsenic	2.66		1.23		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:45	1.00
Cadmium	ND		0.197		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:45	1.00
Chromium	14.8		0.492		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:45	1.00
Lead	3.04		1.23		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:45	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		42.4		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:38	1.00

Client Sample ID: GEI-B4 (2-3')

Lab Sample ID: SXH0089-13

Date Collected: 08/11/14 16:20

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 92.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14.3		2.64		mg/kg dry	☼	08/27/14 13:45	08/28/14 08:12	2.00
Barium	277		1.06		mg/kg dry	☼	08/27/14 13:45	08/28/14 08:12	2.00
Cadmium	6.78		0.423		mg/kg dry	☼	08/27/14 13:45	08/28/14 08:12	2.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B4 (2-3')

Lab Sample ID: SXH0089-13

Date Collected: 08/11/14 16:20

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 92.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	18.4		1.06		mg/kg dry	☼	08/27/14 13:45	08/28/14 08:12	2.00
Lead	865		2.64		mg/kg dry	☼	08/27/14 13:45	08/28/14 08:12	2.00
Selenium	ND		5.29		mg/kg dry	☼	08/27/14 13:45	08/28/14 08:12	2.00
Silver	ND	RL3	1.06		mg/kg dry	☼	08/27/14 13:45	08/28/14 08:12	2.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	203		37.9		ug/kg dry	☼	08/28/14 07:09	08/28/14 14:29	1.00

Client Sample ID: GEI-B4 (7-8')

Lab Sample ID: SXH0089-14

Date Collected: 08/11/14 16:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 97.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0610		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:29	1.00
Hexane	ND		0.122		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:29	1.00
Benzene	ND		0.0183		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:29	1.00
1,2-Dichloroethane (EDC)	ND		0.122		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:29	1.00
Trichloroethene	ND		0.0305		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:29	1.00
Toluene	ND		0.122		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:29	1.00
Tetrachloroethene	ND		0.0488		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:29	1.00
Ethylbenzene	ND		0.122		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:29	1.00
m,p-Xylene	ND		0.488		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:29	1.00
o-Xylene	ND		0.244		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:29	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	101		80 - 120	08/15/14 08:49	08/15/14 13:29	1.00
1,2-dichloroethane-d4	99.5		74.7 - 120	08/15/14 08:49	08/15/14 13:29	1.00
Toluene-d8	104		78.5 - 125	08/15/14 08:49	08/15/14 13:29	1.00
4-bromofluorobenzene	101		69.8 - 140	08/15/14 08:49	08/15/14 13:29	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.765		ug/kg dry	☼	08/15/14 10:04	08/15/14 15:07	1.00
1,2-Dibromo-3-chloropropane	ND		0.765		ug/kg dry	☼	08/15/14 10:04	08/15/14 15:07	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		9.64		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:46	1.00
PCB-1221	ND		9.64		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:46	1.00
PCB-1232	ND		9.64		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:46	1.00
PCB-1242	ND		9.64		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:46	1.00
PCB-1248	ND		9.64		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:46	1.00
PCB-1254	ND		9.64		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:46	1.00
PCB-1260	ND		9.64		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:46	1.00
PCB-1268	ND		9.64		ug/kg dry	☼	08/19/14 08:36	08/19/14 18:46	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	132		46.2 - 210	08/19/14 08:36	08/19/14 18:46	1.00
Decachlorobiphenyl	119		65.6 - 186	08/19/14 08:36	08/19/14 18:46	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B4 (7-8')

Lab Sample ID: SXH0089-14

Date Collected: 08/11/14 16:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 97.3

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		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
2-Methylnaphthalene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
1-Methylnaphthalene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Acenaphthylene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Acenaphthene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Fluorene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Phenanthrene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Anthracene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Fluoranthene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Pyrene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Benzo (a) anthracene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Chrysene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Benzo (b) fluoranthene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Benzo (k) fluoranthene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Benzo (a) pyrene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Dibenzo (a,h) anthracene	ND		0.0115		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00
Benzo (ghi) perylene	ND		0.0191		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:13	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	73.0		36.3 - 152	08/21/14 08:39	08/21/14 20:13	1.00
2-FBP	71.0		30.2 - 135	08/21/14 08:39	08/21/14 20:13	1.00
p-Terphenyl-d14	101		65.1 - 134	08/21/14 08:39	08/21/14 20:13	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		31		mg/kg dry	☼	08/15/14 11:27	08/15/14 23:56	1.0
Diesel Range Hydrocarbons	ND		78		mg/kg dry	☼	08/15/14 11:27	08/15/14 23:56	1.0
Heavy Oil Range Hydrocarbons	ND		78		mg/kg dry	☼	08/15/14 11:27	08/15/14 23:56	1.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	89.3		50 - 150	08/15/14 11:27	08/15/14 23:56	1.0
2-FBP	94.8		50 - 150	08/15/14 11:27	08/15/14 23:56	1.0
p-Terphenyl-d14	105		50 - 150	08/15/14 11:27	08/15/14 23:56	1.0

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
Arsenic	4.40		1.21		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:49	1.00
Cadmium	ND		0.194		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:49	1.00
Chromium	13.5		0.485		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:49	1.00
Lead	2.20		1.21		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:49	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		49.0		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:40	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B5 (2-3')

Lab Sample ID: SXH0089-15

Date Collected: 08/11/14 10:00

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 91.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.46		1.17		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:30	1.00
Barium	60.4		0.468		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:30	1.00
Cadmium	ND		0.187		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:30	1.00
Chromium	7.33		0.468		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:30	1.00
Lead	24.8		1.17		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:30	1.00
Selenium	ND		2.34		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:30	1.00
Silver	ND		0.468		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:30	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	48.8		48.1		ug/kg dry	☼	08/28/14 07:09	08/28/14 14:38	1.00

Client Sample ID: GEI-B5 (7-8')

Lab Sample ID: SXH0089-16

Date Collected: 08/11/14 10:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 91.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0623		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:51	1.00
Hexane	ND		0.125		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:51	1.00
Benzene	ND		0.0187		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:51	1.00
1,2-Dichloroethane (EDC)	ND		0.125		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:51	1.00
Trichloroethene	ND		0.0311		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:51	1.00
Toluene	ND		0.125		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:51	1.00
Tetrachloroethene	ND		0.0498		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:51	1.00
Ethylbenzene	ND		0.125		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:51	1.00
m,p-Xylene	ND		0.498		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:51	1.00
o-Xylene	ND		0.249		mg/kg dry	☼	08/15/14 08:49	08/15/14 13:51	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	98.7		80 - 120	08/15/14 08:49	08/15/14 13:51	1.00
1,2-dichloroethane-d4	98.9		74.7 - 120	08/15/14 08:49	08/15/14 13:51	1.00
Toluene-d8	102		78.5 - 125	08/15/14 08:49	08/15/14 13:51	1.00
4-bromofluorobenzene	98.3		69.8 - 140	08/15/14 08:49	08/15/14 13:51	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.978		ug/kg dry	☼	08/15/14 10:04	08/15/14 15:21	1.00
1,2-Dibromo-3-chloropropane	ND		0.978		ug/kg dry	☼	08/15/14 10:04	08/15/14 15:21	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:07	1.00
PCB-1221	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:07	1.00
PCB-1232	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:07	1.00
PCB-1242	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:07	1.00
PCB-1248	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:07	1.00
PCB-1254	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/20/14 11:07	1.00
PCB-1260	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:07	1.00
PCB-1268	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:07	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B5 (7-8')

Lab Sample ID: SXH0089-16

Date Collected: 08/11/14 10:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 91.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	134		46.2 - 210	08/19/14 08:36	08/19/14 19:07	1.00
Decachlorobiphenyl	114		65.6 - 186	08/19/14 08:36	08/19/14 19:07	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		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
2-Methylnaphthalene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
1-Methylnaphthalene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Acenaphthylene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Acenaphthene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Fluorene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Phenanthrene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Anthracene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Fluoranthene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Pyrene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Benzo (a) anthracene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Chrysene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Benzo (b) fluoranthene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Benzo (k) fluoranthene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Benzo (a) pyrene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Dibenzo (a,h) anthracene	ND		0.0129		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00
Benzo (ghi) perylene	ND		0.0215		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:35	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	73.4		36.3 - 152	08/21/14 08:39	08/21/14 20:35	1.00
2-FBP	78.0		30.2 - 135	08/21/14 08:39	08/21/14 20:35	1.00
p-Terphenyl-d14	108		65.1 - 134	08/21/14 08:39	08/21/14 20:35	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		37		mg/kg dry	☼	08/15/14 11:27	08/16/14 00:20	1.0
Diesel Range Hydrocarbons	ND		93		mg/kg dry	☼	08/15/14 11:27	08/16/14 00:20	1.0
Heavy Oil Range Hydrocarbons	ND		93		mg/kg dry	☼	08/15/14 11:27	08/16/14 00:20	1.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	90.0		50 - 150	08/15/14 11:27	08/16/14 00:20	1.0
2-FBP	96.9		50 - 150	08/15/14 11:27	08/16/14 00:20	1.0
p-Terphenyl-d14	106		50 - 150	08/15/14 11:27	08/16/14 00:20	1.0

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
Arsenic	2.77		2.41		mg/kg dry	☼	08/18/14 09:11	08/27/14 17:41	2.00
Cadmium	ND	RL3	0.386		mg/kg dry	☼	08/18/14 09:11	08/27/14 17:41	2.00
Chromium	16.6		0.964		mg/kg dry	☼	08/18/14 09:11	08/27/14 17:41	2.00
Lead	3.68		2.41		mg/kg dry	☼	08/18/14 09:11	08/27/14 17:41	2.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	194		48.1		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:42	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B6 (2-3')

Lab Sample ID: SXH0089-17

Date Collected: 08/11/14 14:05

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 90.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13.4		1.31		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:34	1.00
Barium	93.4		0.524		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:34	1.00
Cadmium	1.24		0.210		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:34	1.00
Chromium	13.2		0.524		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:34	1.00
Lead	343		1.31		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:34	1.00
Selenium	ND		2.62		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:34	1.00
Silver	ND		0.524		mg/kg dry	☼	08/27/14 13:45	08/29/14 11:34	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	126		41.7		ug/kg dry	☼	08/28/14 07:09	08/28/14 14:41	1.00

Client Sample ID: GEI-B6 (13-14')

Lab Sample ID: SXH0089-19

Date Collected: 08/11/14 14:25

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 95.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0605		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:14	1.00
Hexane	ND		0.121		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:14	1.00
Benzene	ND		0.0182		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:14	1.00
1,2-Dichloroethane (EDC)	ND		0.121		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:14	1.00
Trichloroethene	ND		0.0303		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:14	1.00
Toluene	ND		0.121		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:14	1.00
Tetrachloroethene	ND		0.0484		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:14	1.00
Ethylbenzene	ND		0.121		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:14	1.00
m,p-Xylene	ND		0.484		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:14	1.00
o-Xylene	ND		0.242		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:14	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	101		80 - 120	08/15/14 08:49	08/15/14 14:14	1.00
1,2-dichloroethane-d4	102		74.7 - 120	08/15/14 08:49	08/15/14 14:14	1.00
Toluene-d8	101		78.5 - 125	08/15/14 08:49	08/15/14 14:14	1.00
4-bromofluorobenzene	101		69.8 - 140	08/15/14 08:49	08/15/14 14:14	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.929		ug/kg dry	☼	08/15/14 10:04	08/15/14 15:36	1.00
1,2-Dibromo-3-chloropropane	ND		0.929		ug/kg dry	☼	08/15/14 10:04	08/15/14 15:36	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:28	1.00
PCB-1221	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:28	1.00
PCB-1232	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:28	1.00
PCB-1242	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:28	1.00
PCB-1248	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:28	1.00
PCB-1254	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/20/14 11:28	1.00
PCB-1260	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:28	1.00
PCB-1268	ND		10.3		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:28	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B6 (13-14')

Lab Sample ID: SXH0089-19

Date Collected: 08/11/14 14:25

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 95.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	102		46.2 - 210	08/19/14 08:36	08/19/14 19:28	1.00
Decachlorobiphenyl	113		65.6 - 186	08/19/14 08:36	08/19/14 19:28	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		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
2-Methylnaphthalene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
1-Methylnaphthalene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Acenaphthylene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Acenaphthene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Fluorene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Phenanthrene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Anthracene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Fluoranthene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Pyrene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Benzo (a) anthracene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Chrysene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Benzo (b) fluoranthene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Benzo (k) fluoranthene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Benzo (a) pyrene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Dibenzo (a,h) anthracene	ND		0.0124		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00
Benzo (ghi) perylene	ND		0.0207		mg/kg dry	☼	08/21/14 08:39	08/21/14 20:58	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	84.2		36.3 - 152	08/21/14 08:39	08/21/14 20:58	1.00
2-FBP	88.2		30.2 - 135	08/21/14 08:39	08/21/14 20:58	1.00
p-Terphenyl-d14	120		65.1 - 134	08/21/14 08:39	08/21/14 20:58	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		38		mg/kg dry	☼	08/15/14 11:27	08/16/14 00:44	1.0
Diesel Range Hydrocarbons	ND		96		mg/kg dry	☼	08/15/14 11:27	08/16/14 00:44	1.0
Heavy Oil Range Hydrocarbons	ND		96		mg/kg dry	☼	08/15/14 11:27	08/16/14 00:44	1.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	89.2		50 - 150	08/15/14 11:27	08/16/14 00:44	1.0
2-FBP	95.6		50 - 150	08/15/14 11:27	08/16/14 00:44	1.0
p-Terphenyl-d14	106		50 - 150	08/15/14 11:27	08/16/14 00:44	1.0

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
Arsenic	3.39		1.37		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:57	1.00
Cadmium	ND		0.219		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:57	1.00
Chromium	15.7		0.547		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:57	1.00
Lead	4.77		1.37		mg/kg dry	☼	08/18/14 09:11	08/27/14 15:57	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		41.0		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:45	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B7 (13-14')

Lab Sample ID: SXH0089-21

Date Collected: 08/11/14 08:45

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0750		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:36	1.00
Hexane	ND		0.150		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:36	1.00
Benzene	ND		0.0225		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:36	1.00
1,2-Dichloroethane (EDC)	ND		0.150		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:36	1.00
Trichloroethene	ND		0.0375		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:36	1.00
Toluene	ND		0.150		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:36	1.00
Tetrachloroethene	ND		0.0600		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:36	1.00
Ethylbenzene	ND		0.150		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:36	1.00
m,p-Xylene	ND		0.600		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:36	1.00
o-Xylene	ND		0.300		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:36	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	100		80 - 120	08/15/14 08:49	08/15/14 14:36	1.00
1,2-dichloroethane-d4	97.9		74.7 - 120	08/15/14 08:49	08/15/14 14:36	1.00
Toluene-d8	102		78.5 - 125	08/15/14 08:49	08/15/14 14:36	1.00
4-bromofluorobenzene	103		69.8 - 140	08/15/14 08:49	08/15/14 14:36	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		1.05		ug/kg dry	☼	08/15/14 10:04	08/15/14 15:50	1.00
1,2-Dibromo-3-chloropropane	ND		1.05		ug/kg dry	☼	08/15/14 10:04	08/15/14 15:50	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		9.29		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:49	1.00
PCB-1221	ND		9.29		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:49	1.00
PCB-1232	ND		9.29		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:49	1.00
PCB-1242	ND		9.29		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:49	1.00
PCB-1248	ND		9.29		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:49	1.00
PCB-1254	ND		9.29		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:49	1.00
PCB-1260	ND		9.29		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:49	1.00
PCB-1268	ND		9.29		ug/kg dry	☼	08/19/14 08:36	08/19/14 19:49	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	130		46.2 - 210	08/19/14 08:36	08/19/14 19:49	1.00
Decachlorobiphenyl	117		65.6 - 186	08/19/14 08:36	08/19/14 19:49	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		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
2-Methylnaphthalene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
1-Methylnaphthalene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Acenaphthylene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Acenaphthene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Fluorene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Phenanthrene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Anthracene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Fluoranthene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Pyrene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Benzo (a) anthracene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Chrysene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B7 (13-14')

Lab Sample ID: SXH0089-21

Date Collected: 08/11/14 08:45

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo (b) fluoranthene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Benzo (k) fluoranthene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Benzo (a) pyrene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Dibenzo (a,h) anthracene	ND		0.0118		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00
Benzo (ghi) perylene	ND		0.0197		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:20	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	67.4		36.3 - 152	08/21/14 08:39	08/21/14 21:20	1.00
2-FBP	65.0		30.2 - 135	08/21/14 08:39	08/21/14 21:20	1.00
p-Terphenyl-d14	118		65.1 - 134	08/21/14 08:39	08/21/14 21:20	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		41		mg/kg dry	☼	08/15/14 11:27	08/16/14 01:08	1.0
Diesel Range Hydrocarbons	ND		100		mg/kg dry	☼	08/15/14 11:27	08/16/14 01:08	1.0
Heavy Oil Range Hydrocarbons	ND		100		mg/kg dry	☼	08/15/14 11:27	08/16/14 01:08	1.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	94.7		50 - 150	08/15/14 11:27	08/16/14 01:08	1.0
2-FBP	98.8		50 - 150	08/15/14 11:27	08/16/14 01:08	1.0
p-Terphenyl-d14	110		50 - 150	08/15/14 11:27	08/16/14 01:08	1.0

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
Arsenic	3.41		1.36		mg/kg dry	☼	08/18/14 09:11	08/27/14 16:01	1.00
Cadmium	ND		0.217		mg/kg dry	☼	08/18/14 09:11	08/27/14 16:01	1.00
Chromium	15.1		0.543		mg/kg dry	☼	08/18/14 09:11	08/27/14 16:01	1.00
Lead	3.71		1.36		mg/kg dry	☼	08/18/14 09:11	08/27/14 16:01	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		48.1		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:47	1.00

Client Sample ID: GEI-B8 (14-15')

Lab Sample ID: SXH0089-23

Date Collected: 08/11/14 12:15

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0661		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:58	1.00
Hexane	ND		0.132		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:58	1.00
Benzene	ND		0.0198		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:58	1.00
1,2-Dichloroethane (EDC)	ND		0.132		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:58	1.00
Trichloroethene	ND		0.0330		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:58	1.00
Toluene	ND		0.132		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:58	1.00
Tetrachloroethene	ND		0.0528		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:58	1.00
Ethylbenzene	ND		0.132		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:58	1.00
m,p-Xylene	ND		0.528		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:58	1.00
o-Xylene	ND		0.264		mg/kg dry	☼	08/15/14 08:49	08/15/14 14:58	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B8 (14-15')

Lab Sample ID: SXH0089-23

Date Collected: 08/11/14 12:15

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	99.9		80 - 120	08/15/14 08:49	08/15/14 14:58	1.00
1,2-dichloroethane-d4	100		74.7 - 120	08/15/14 08:49	08/15/14 14:58	1.00
Toluene-d8	102		78.5 - 125	08/15/14 08:49	08/15/14 14:58	1.00
4-bromofluorobenzene	103		69.8 - 140	08/15/14 08:49	08/15/14 14:58	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		1.01		ug/kg dry	☼	08/15/14 10:04	08/15/14 16:04	1.00
1,2-Dibromo-3-chloropropane	ND		1.01		ug/kg dry	☼	08/15/14 10:04	08/15/14 16:04	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		9.46		ug/kg dry	☼	08/19/14 08:36	08/20/14 12:49	1.00
PCB-1221	ND		9.46		ug/kg dry	☼	08/19/14 08:36	08/20/14 12:49	1.00
PCB-1232	ND		9.46		ug/kg dry	☼	08/19/14 08:36	08/20/14 12:49	1.00
PCB-1242	ND		9.46		ug/kg dry	☼	08/19/14 08:36	08/20/14 12:49	1.00
PCB-1248	ND		9.46		ug/kg dry	☼	08/19/14 08:36	08/20/14 12:49	1.00
PCB-1254	ND		9.46		ug/kg dry	☼	08/19/14 08:36	08/20/14 12:49	1.00
PCB-1260	ND		9.46		ug/kg dry	☼	08/19/14 08:36	08/20/14 12:49	1.00
PCB-1268	ND		9.46		ug/kg dry	☼	08/19/14 08:36	08/20/14 12:49	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	100		46.2 - 210	08/19/14 08:36	08/20/14 12:49	1.00
Decachlorobiphenyl	119		65.6 - 186	08/19/14 08:36	08/20/14 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		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
2-Methylnaphthalene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
1-Methylnaphthalene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Acenaphthylene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Acenaphthene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Fluorene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Phenanthrene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Anthracene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Fluoranthene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Pyrene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Benzo (a) anthracene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Chrysene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Benzo (b) fluoranthene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Benzo (k) fluoranthene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Benzo (a) pyrene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Dibenzo (a,h) anthracene	ND		0.0120		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00
Benzo (ghi) perylene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 21:43	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	51.8		36.3 - 152	08/21/14 08:39	08/21/14 21:43	1.00
2-FBP	55.4		30.2 - 135	08/21/14 08:39	08/21/14 21:43	1.00
p-Terphenyl-d14	103		65.1 - 134	08/21/14 08:39	08/21/14 21:43	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B8 (14-15')

Lab Sample ID: SXH0089-23

Date Collected: 08/11/14 12:15

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		36		mg/kg dry	☼	08/15/14 11:27	08/16/14 01:32	1.0
Diesel Range Hydrocarbons	ND		90		mg/kg dry	☼	08/15/14 11:27	08/16/14 01:32	1.0
Heavy Oil Range Hydrocarbons	ND		90		mg/kg dry	☼	08/15/14 11:27	08/16/14 01:32	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-BFB (FID)	92.4		50 - 150				08/15/14 11:27	08/16/14 01:32	1.0
2-FBP	99.8		50 - 150				08/15/14 11:27	08/16/14 01:32	1.0
p-Terphenyl-d14	108		50 - 150				08/15/14 11:27	08/16/14 01:32	1.0

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
Arsenic	1.86		1.22		mg/kg dry	☼	08/18/14 09:11	08/27/14 16:14	1.00
Cadmium	ND		0.195		mg/kg dry	☼	08/18/14 09:11	08/27/14 16:14	1.00
Chromium	9.40		0.487		mg/kg dry	☼	08/18/14 09:11	08/27/14 16:14	1.00
Lead	3.81		1.22		mg/kg dry	☼	08/18/14 09:11	08/27/14 16:14	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		36.8		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:49	1.00

Client Sample ID: GEI-B9 (13-14')

Lab Sample ID: SXH0089-25

Date Collected: 08/11/14 14:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 96.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0490		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:20	1.00
Hexane	ND		0.0980		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:20	1.00
Benzene	ND		0.0147		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:20	1.00
1,2-Dichloroethane (EDC)	ND		0.0980		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:20	1.00
Trichloroethene	ND		0.0245		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:20	1.00
Toluene	ND		0.0980		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:20	1.00
Tetrachloroethene	ND		0.0392		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:20	1.00
Ethylbenzene	ND		0.0980		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:20	1.00
m,p-Xylene	ND		0.392		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:20	1.00
o-Xylene	ND		0.196		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:20	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	100		80 - 120				08/15/14 08:49	08/15/14 15:20	1.00
1,2-dichloroethane-d4	100		74.7 - 120				08/15/14 08:49	08/15/14 15:20	1.00
Toluene-d8	101		78.5 - 125				08/15/14 08:49	08/15/14 15:20	1.00
4-bromofluorobenzene	101		69.8 - 140				08/15/14 08:49	08/15/14 15:20	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.922		ug/kg dry	☼	08/15/14 10:04	08/15/14 16:19	1.00
1,2-Dibromo-3-chloropropane	ND		0.922		ug/kg dry	☼	08/15/14 10:04	08/15/14 16:19	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:32	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B9 (13-14')

Lab Sample ID: SXH0089-25

Date Collected: 08/11/14 14:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 96.5

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1221	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:32	1.00
PCB-1232	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:32	1.00
PCB-1242	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:32	1.00
PCB-1248	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:32	1.00
PCB-1254	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:32	1.00
PCB-1260	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:32	1.00
PCB-1268	ND		10.1		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:32	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	127		46.2 - 210	08/19/14 08:36	08/19/14 20:32	1.00
Decachlorobiphenyl	121		65.6 - 186	08/19/14 08:36	08/19/14 20:32	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		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
2-Methylnaphthalene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
1-Methylnaphthalene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Acenaphthylene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Acenaphthene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Fluorene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Phenanthrene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Anthracene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Fluoranthene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Pyrene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Benzo (a) anthracene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Chrysene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Benzo (b) fluoranthene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Benzo (k) fluoranthene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Benzo (a) pyrene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Dibenzo (a,h) anthracene	ND		0.0111		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00
Benzo (ghi) perylene	ND		0.0185		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:05	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	78.2		36.3 - 152	08/21/14 08:39	08/21/14 22:05	1.00
2-FBP	75.2		30.2 - 135	08/21/14 08:39	08/21/14 22:05	1.00
p-Terphenyl-d14	118		65.1 - 134	08/21/14 08:39	08/21/14 22:05	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		34		mg/kg dry	☼	08/15/14 11:27	08/16/14 01:56	1.0
Diesel Range Hydrocarbons	ND		85		mg/kg dry	☼	08/15/14 11:27	08/16/14 01:56	1.0
Heavy Oil Range Hydrocarbons	ND		85		mg/kg dry	☼	08/15/14 11:27	08/16/14 01:56	1.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	95.1		50 - 150	08/15/14 11:27	08/16/14 01:56	1.0
2-FBP	102		50 - 150	08/15/14 11:27	08/16/14 01:56	1.0
p-Terphenyl-d14	112		50 - 150	08/15/14 11:27	08/16/14 01:56	1.0

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B9 (13-14')

Lab Sample ID: SXH0089-25

Date Collected: 08/11/14 14:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 96.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.92		1.26		mg/kg dry	☼	08/18/14 09:11	08/27/14 16:18	1.00
Cadmium	ND		0.201		mg/kg dry	☼	08/18/14 09:11	08/27/14 16:18	1.00
Chromium	9.33		0.503		mg/kg dry	☼	08/18/14 09:11	08/27/14 16:18	1.00
Lead	3.48		1.26		mg/kg dry	☼	08/18/14 09:11	08/27/14 16:18	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		47.2		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:52	1.00

Client Sample ID: Duplicate 1

Lab Sample ID: SXH0089-26

Date Collected: 08/11/14 08:00

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 96.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0534		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:43	1.00
Hexane	ND		0.107		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:43	1.00
Benzene	ND		0.0160		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:43	1.00
1,2-Dichloroethane (EDC)	ND		0.107		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:43	1.00
Trichloroethene	ND		0.0267		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:43	1.00
Toluene	ND		0.107		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:43	1.00
Tetrachloroethene	ND		0.0427		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:43	1.00
Ethylbenzene	ND		0.107		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:43	1.00
m,p-Xylene	ND		0.427		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:43	1.00
o-Xylene	ND		0.214		mg/kg dry	☼	08/15/14 08:49	08/15/14 15:43	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	100		80 - 120	08/15/14 08:49	08/15/14 15:43	1.00
1,2-dichloroethane-d4	99.5		74.7 - 120	08/15/14 08:49	08/15/14 15:43	1.00
Toluene-d8	103		78.5 - 125	08/15/14 08:49	08/15/14 15:43	1.00
4-bromofluorobenzene	102		69.8 - 140	08/15/14 08:49	08/15/14 15:43	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.857		ug/kg dry	☼	08/15/14 10:04	08/15/14 16:33	1.00
1,2-Dibromo-3-chloropropane	ND		0.857		ug/kg dry	☼	08/15/14 10:04	08/15/14 16:33	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		8.96		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:53	1.00
PCB-1221	ND		8.96		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:53	1.00
PCB-1232	ND		8.96		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:53	1.00
PCB-1242	ND		8.96		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:53	1.00
PCB-1248	ND		8.96		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:53	1.00
PCB-1254	ND		8.96		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:53	1.00
PCB-1260	ND		8.96		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:53	1.00
PCB-1268	ND		8.96		ug/kg dry	☼	08/19/14 08:36	08/19/14 20:53	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	120		46.2 - 210	08/19/14 08:36	08/19/14 20:53	1.00
Decachlorobiphenyl	122		65.6 - 186	08/19/14 08:36	08/19/14 20:53	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: Duplicate 1

Lab Sample ID: SXH0089-26

Date Collected: 08/11/14 08:00

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 96.4

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		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
2-Methylnaphthalene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
1-Methylnaphthalene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Acenaphthylene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Acenaphthene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Fluorene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Phenanthrene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Anthracene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Fluoranthene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Pyrene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Benzo (a) anthracene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Chrysene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Benzo (b) fluoranthene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Benzo (k) fluoranthene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Benzo (a) pyrene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Dibenzo (a,h) anthracene	ND		0.0120		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00
Benzo (ghi) perylene	ND		0.0200		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:27	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	84.6		36.3 - 152	08/21/14 08:39	08/21/14 22:27	1.00
2-FBP	81.8		30.2 - 135	08/21/14 08:39	08/21/14 22:27	1.00
p-Terphenyl-d14	110		65.1 - 134	08/21/14 08:39	08/21/14 22:27	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		34		mg/kg dry	☼	08/15/14 11:27	08/16/14 02:20	1.0
Diesel Range Hydrocarbons	ND		86		mg/kg dry	☼	08/15/14 11:27	08/16/14 02:20	1.0
Heavy Oil Range Hydrocarbons	ND		86		mg/kg dry	☼	08/15/14 11:27	08/16/14 02:20	1.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	91.9		50 - 150	08/15/14 11:27	08/16/14 02:20	1.0
2-FBP	97.5		50 - 150	08/15/14 11:27	08/16/14 02:20	1.0
p-Terphenyl-d14	109		50 - 150	08/15/14 11:27	08/16/14 02:20	1.0

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
Arsenic	6.50		1.25		mg/kg dry	☼	08/21/14 14:35	08/22/14 12:47	1.00
Cadmium	ND		0.199		mg/kg dry	☼	08/21/14 14:35	08/22/14 12:47	1.00
Chromium	15.2		0.499		mg/kg dry	☼	08/21/14 14:35	08/22/14 12:47	1.00
Lead	1.40		1.25		mg/kg dry	☼	08/21/14 14:35	08/22/14 12:47	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		43.9		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:54	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: Duplicate 2

Lab Sample ID: SXH0089-27

Date Collected: 08/11/14 08:00

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0740		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:05	1.00
Hexane	ND		0.148		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:05	1.00
Benzene	ND		0.0222		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:05	1.00
1,2-Dichloroethane (EDC)	ND		0.148		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:05	1.00
Trichloroethene	ND		0.0370		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:05	1.00
Toluene	ND		0.148		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:05	1.00
Tetrachloroethene	ND		0.0592		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:05	1.00
Ethylbenzene	ND		0.148		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:05	1.00
m,p-Xylene	ND		0.592		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:05	1.00
o-Xylene	ND		0.296		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:05	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	103		80 - 120	08/15/14 08:49	08/15/14 16:05	1.00
1,2-dichloroethane-d4	102		74.7 - 120	08/15/14 08:49	08/15/14 16:05	1.00
Toluene-d8	103		78.5 - 125	08/15/14 08:49	08/15/14 16:05	1.00
4-bromofluorobenzene	101		69.8 - 140	08/15/14 08:49	08/15/14 16:05	1.00

Method: EPA 8011 - EDB by EPA Method 8011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		1.08		ug/kg dry	☼	08/15/14 10:04	08/15/14 16:47	1.00

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		8.86		ug/kg dry	☼	08/19/14 08:36	08/19/14 21:14	1.00
PCB-1221	ND		8.86		ug/kg dry	☼	08/19/14 08:36	08/19/14 21:14	1.00
PCB-1232	ND		8.86		ug/kg dry	☼	08/19/14 08:36	08/19/14 21:14	1.00
PCB-1242	ND		8.86		ug/kg dry	☼	08/19/14 08:36	08/19/14 21:14	1.00
PCB-1248	ND		8.86		ug/kg dry	☼	08/19/14 08:36	08/19/14 21:14	1.00
PCB-1254	ND		8.86		ug/kg dry	☼	08/19/14 08:36	08/19/14 21:14	1.00
PCB-1260	ND		8.86		ug/kg dry	☼	08/19/14 08:36	08/19/14 21:14	1.00
PCB-1268	ND		8.86		ug/kg dry	☼	08/19/14 08:36	08/19/14 21:14	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	99.1		46.2 - 210	08/19/14 08:36	08/19/14 21:14	1.00
Decachlorobiphenyl	114		65.6 - 186	08/19/14 08:36	08/19/14 21:14	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		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
2-Methylnaphthalene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
1-Methylnaphthalene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Acenaphthylene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Acenaphthene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Fluorene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Phenanthrene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Anthracene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Fluoranthene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Pyrene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Benzo (a) anthracene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Chrysene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Benzo (b) fluoranthene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: Duplicate 2

Lab Sample ID: SXH0089-27

Date Collected: 08/11/14 08:00

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo (k) fluoranthene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Benzo (a) pyrene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Dibenzo (a,h) anthracene	ND		0.0119		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Benzo (ghi) perylene	ND		0.0198		mg/kg dry	☼	08/21/14 08:39	08/21/14 22:50	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	79.6		36.3 - 152				08/21/14 08:39	08/21/14 22:50	1.00
2-FBP	82.6		30.2 - 135				08/21/14 08:39	08/21/14 22:50	1.00
p-Terphenyl-d14	111		65.1 - 134				08/21/14 08:39	08/21/14 22:50	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		37		mg/kg dry	☼	08/15/14 11:27	08/16/14 02:44	1.0
Diesel Range Hydrocarbons	ND		92		mg/kg dry	☼	08/15/14 11:27	08/16/14 02:44	1.0
Heavy Oil Range Hydrocarbons	ND		92		mg/kg dry	☼	08/15/14 11:27	08/16/14 02:44	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-BFB (FID)	87.8		50 - 150				08/15/14 11:27	08/16/14 02:44	1.0
2-FBP	94.7		50 - 150				08/15/14 11:27	08/16/14 02:44	1.0
p-Terphenyl-d14	104		50 - 150				08/15/14 11:27	08/16/14 02:44	1.0

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
Arsenic	1.40		1.37		mg/kg dry	☼	08/21/14 14:35	08/27/14 16:22	1.00
Cadmium	ND		0.220		mg/kg dry	☼	08/21/14 14:35	08/27/14 16:22	1.00
Chromium	8.83		0.550		mg/kg dry	☼	08/21/14 14:35	08/27/14 16:22	1.00
Lead	3.11		1.37		mg/kg dry	☼	08/21/14 14:35	08/27/14 16:22	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		49.0		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:56	1.00

Client Sample ID: HWA-MW1-Composite

Lab Sample ID: SXH0089-28

Date Collected: 08/12/14 14:45

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 94

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0343		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:27	1.00
Benzene	ND		0.0171		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:27	1.00
Toluene	ND		0.114		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:27	1.00
Ethylbenzene	ND		0.114		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:27	1.00
m,p-Xylene	ND		0.457		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:27	1.00
o-Xylene	ND		0.229		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:27	1.00
1,2-Dichloroethane (EDC)	ND		0.114		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:27	1.00
Xylenes (total)	ND		0.686		mg/kg dry	☼	08/15/14 08:49	08/15/14 16:27	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	99.2		80 - 120				08/15/14 08:49	08/15/14 16:27	1.00
1,2-dichloroethane-d4	101		74.7 - 120				08/15/14 08:49	08/15/14 16:27	1.00

TestAmerica Spokane

Client Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: HWA-MW1-Composite

Lab Sample ID: SXH0089-28

Date Collected: 08/12/14 14:45

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 94

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8	102		78.5 - 125	08/15/14 08:49	08/15/14 16:27	1.00
4-bromofluorobenzene	101		69.8 - 140	08/15/14 08:49	08/15/14 16:27	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		33		mg/kg dry	☼	08/15/14 11:27	08/16/14 03:08	1.0
Diesel Range Hydrocarbons	ND		83		mg/kg dry	☼	08/15/14 11:27	08/16/14 03:08	1.0
Heavy Oil Range Hydrocarbons	ND		83		mg/kg dry	☼	08/15/14 11:27	08/16/14 03:08	1.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	89.1		50 - 150	08/15/14 11:27	08/16/14 03:08	1.0
2-FBP	97.0		50 - 150	08/15/14 11:27	08/16/14 03:08	1.0
p-Terphenyl-d14	108		50 - 150	08/15/14 11:27	08/16/14 03:08	1.0

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
Arsenic	2.33		1.22		mg/kg dry	☼	08/21/14 14:35	08/27/14 16:25	1.00
Cadmium	ND		0.195		mg/kg dry	☼	08/21/14 14:35	08/27/14 16:25	1.00
Chromium	11.2		0.488		mg/kg dry	☼	08/21/14 14:35	08/27/14 16:25	1.00
Lead	3.13		1.22		mg/kg dry	☼	08/21/14 14:35	08/27/14 16:25	1.00

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		37.9		ug/kg dry	☼	08/28/14 07:10	08/28/14 15:59	1.00

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Lab Sample ID: 14H0077-BLK1

Matrix: Soil

Analysis Batch: 14H0077

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0077_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0300		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
Benzene	ND		0.0150		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
Toluene	ND		0.100		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
Ethylbenzene	ND		0.100		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
m,p-Xylene	ND		0.400		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
o-Xylene	ND		0.200		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
1,2-Dichloroethane (EDC)	ND		0.100		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
Xylenes (total)	ND		0.600		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	104		80 - 120	08/15/14 08:49	08/15/14 10:29	1.00
1,2-dichloroethane-d4	101		74.7 - 120	08/15/14 08:49	08/15/14 10:29	1.00
Toluene-d8	101		78.5 - 125	08/15/14 08:49	08/15/14 10:29	1.00
4-bromofluorobenzene	99.8		69.8 - 140	08/15/14 08:49	08/15/14 10:29	1.00

Lab Sample ID: 14H0077-BS1

Matrix: Soil

Analysis Batch: 14H0077

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0077_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Methyl tert-butyl ether	0.500	0.484		mg/kg wet		96.8	60 - 140
Benzene	0.500	0.475		mg/kg wet		95.0	75.8 - 123
Toluene	0.500	0.496		mg/kg wet		99.2	76.6 - 125
Ethylbenzene	0.500	0.496		mg/kg wet		99.1	77.3 - 121
m,p-Xylene	0.500	0.498		mg/kg wet		99.5	77.7 - 124
o-Xylene	0.500	0.506		mg/kg wet		101	76.7 - 129
Naphthalene	0.500	0.399		mg/kg wet		79.8	55.1 - 142
Xylenes (total)	1.00	1.00		mg/kg wet		100	76.5 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane	103		80 - 120
1,2-dichloroethane-d4	104		74.7 - 120
Toluene-d8	101		78.5 - 125
4-bromofluorobenzene	97.3		69.8 - 140

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

Lab Sample ID: 14H0077-BLK1

Matrix: Soil

Analysis Batch: 14H0077

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0077_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0500		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
Hexane	ND		0.100		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
Benzene	ND		0.0150		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
1,2-Dichloroethane (EDC)	ND		0.100		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
Trichloroethene	ND		0.0250		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

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

Lab Sample ID: 14H0077-BLK1

Matrix: Soil

Analysis Batch: 14H0077

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0077_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.100		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
Tetrachloroethene	ND		0.0400		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
Ethylbenzene	ND		0.100		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
m,p-Xylene	ND		0.400		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00
o-Xylene	ND		0.200		mg/kg wet		08/15/14 08:49	08/15/14 10:29	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	104		80 - 120	08/15/14 08:49	08/15/14 10:29	1.00
1,2-dichloroethane-d4	101		74.7 - 120	08/15/14 08:49	08/15/14 10:29	1.00
Toluene-d8	101		78.5 - 125	08/15/14 08:49	08/15/14 10:29	1.00
4-bromofluorobenzene	99.8		69.8 - 140	08/15/14 08:49	08/15/14 10:29	1.00

Lab Sample ID: 14H0077-BS1

Matrix: Soil

Analysis Batch: 14H0077

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0077_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	0.500	0.484		mg/kg wet		96.8	60 - 140
Hexane	0.500	0.486		mg/kg wet		97.2	77 - 130
Benzene	0.500	0.475		mg/kg wet		95.0	75.8 - 123
1,2-Dichloroethane (EDC)	0.500	0.516		mg/kg wet		103	71.1 - 142
Trichloroethene	0.500	0.488		mg/kg wet		97.6	78.5 - 134
Toluene	0.500	0.496		mg/kg wet		99.2	76.6 - 125
Tetrachloroethene	0.500	0.512		mg/kg wet		102	80 - 127
Ethylbenzene	0.500	0.496		mg/kg wet		99.1	77.3 - 121
m,p-Xylene	0.500	0.498		mg/kg wet		99.5	77.7 - 124
o-Xylene	0.500	0.506		mg/kg wet		101	76.7 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane	103		80 - 120
1,2-dichloroethane-d4	104		74.7 - 120
Toluene-d8	101		78.5 - 125
4-bromofluorobenzene	97.3		69.8 - 140

Method: EPA 8011 - EDB by EPA Method 8011

Lab Sample ID: 14H0079-BLK1

Matrix: Soil

Analysis Batch: 14H0079

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0079_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		1.00		ug/kg wet		08/15/14 10:04	08/15/14 12:29	1.00

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Method: EPA 8011 - EDB by EPA Method 8011 (Continued)

Lab Sample ID: 14H0079-BS1

Matrix: Soil

Analysis Batch: 14H0079

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0079_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	5.00	3.42		ug/kg wet		68.5	60 - 140

Lab Sample ID: 14H0079-BS2

Matrix: Soil

Analysis Batch: 14H0079

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0079_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	5.00	4.68		ug/kg wet		93.6	60 - 140

Lab Sample ID: 14H0079-MS1

Matrix: Soil

Analysis Batch: 14H0079

Client Sample ID: Duplicate 2

Prep Type: Total

Prep Batch: 14H0079_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	ND		4.84	5.16		ug/kg dry	☼	107	60 - 140

Lab Sample ID: 14H0079-MSD1

Matrix: Soil

Analysis Batch: 14H0079

Client Sample ID: Duplicate 2

Prep Type: Total

Prep Batch: 14H0079_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromoethane	ND		6.56	7.19	R2	ug/kg dry	☼	110	60 - 140	32.9	20

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Lab Sample ID: 14H0093-BLK1

Matrix: Soil

Analysis Batch: 14H0093

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0093_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.0		ug/kg wet		08/19/14 08:36	08/19/14 14:54	1.00
PCB-1221	ND		10.0		ug/kg wet		08/19/14 08:36	08/19/14 14:54	1.00
PCB-1232	ND		10.0		ug/kg wet		08/19/14 08:36	08/19/14 14:54	1.00
PCB-1242	ND		10.0		ug/kg wet		08/19/14 08:36	08/19/14 14:54	1.00
PCB-1248	ND		10.0		ug/kg wet		08/19/14 08:36	08/19/14 14:54	1.00
PCB-1254	ND		10.0		ug/kg wet		08/19/14 08:36	08/19/14 14:54	1.00
PCB-1260	ND		10.0		ug/kg wet		08/19/14 08:36	08/19/14 14:54	1.00
PCB-1268	ND		10.0		ug/kg wet		08/19/14 08:36	08/19/14 14:54	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	103		46.2 - 210	08/19/14 08:36	08/19/14 14:54	1.00
Decachlorobiphenyl	112		65.6 - 186	08/19/14 08:36	08/19/14 14:54	1.00

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Lab Sample ID: 14H0093-BLK2

Matrix: Soil

Analysis Batch: 14H0093

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0093_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.0		ug/kg wet		08/19/14 08:36	08/20/14 12:28	1.00
PCB-1221	ND		10.0		ug/kg wet		08/19/14 08:36	08/20/14 12:28	1.00
PCB-1232	ND		10.0		ug/kg wet		08/19/14 08:36	08/20/14 12:28	1.00
PCB-1242	ND		10.0		ug/kg wet		08/19/14 08:36	08/20/14 12:28	1.00
PCB-1248	ND		10.0		ug/kg wet		08/19/14 08:36	08/20/14 12:28	1.00
PCB-1254	ND		10.0		ug/kg wet		08/19/14 08:36	08/20/14 12:28	1.00
PCB-1260	ND		10.0		ug/kg wet		08/19/14 08:36	08/20/14 12:28	1.00
PCB-1268	ND		10.0		ug/kg wet		08/19/14 08:36	08/20/14 12:28	1.00
Surrogate	Blank %Recovery	Blank Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	109		46.2 - 210				08/19/14 08:36	08/20/14 12:28	1.00
Decachlorobiphenyl	147		65.6 - 186				08/19/14 08:36	08/20/14 12:28	1.00

Lab Sample ID: 14H0093-BS1

Matrix: Soil

Analysis Batch: 14H0093

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0093_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	33.3	40.9		ug/kg wet		123	44.4 - 180
PCB-1260	33.3	41.0		ug/kg wet		123	60.3 - 169
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
TCX	112		46.2 - 210				
Decachlorobiphenyl	114		65.6 - 186				

Lab Sample ID: 14H0093-BS2

Matrix: Soil

Analysis Batch: 14H0093

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0093_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	33.3	38.7		ug/kg wet		116	44.4 - 180
PCB-1260	33.3	38.2		ug/kg wet		115	60.3 - 169
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
TCX	107		46.2 - 210				
Decachlorobiphenyl	111		65.6 - 186				

Lab Sample ID: 14H0093-MS1

Matrix: Soil

Analysis Batch: 14H0093

Client Sample ID: GEI-MW1 (12.5-13.5')

Prep Type: Total

Prep Batch: 14H0093_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
PCB-1016	ND		31.4	38.0		ug/kg dry	☼	121	50.6 - 145
PCB-1260	ND		31.4	37.2		ug/kg dry	☼	119	57.6 - 120
Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits						
TCX	110		46.2 - 210						

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Lab Sample ID: 14H0093-MS1

Matrix: Soil

Analysis Batch: 14H0093

Client Sample ID: GEI-MW1 (12.5-13.5')

Prep Type: Total

Prep Batch: 14H0093_P

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
Decachlorobiphenyl	112		65.6 - 186

Lab Sample ID: 14H0093-MSD1

Matrix: Soil

Analysis Batch: 14H0093

Client Sample ID: GEI-MW1 (12.5-13.5')

Prep Type: Total

Prep Batch: 14H0093_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	ND		31.5	38.5		ug/kg dry	☼	122	50.6 - 145	1.36	40
PCB-1260	ND		31.5	38.8	M7	ug/kg dry	☼	123	57.6 - 120	4.01	27.4

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
TCX	105		46.2 - 210
Decachlorobiphenyl	115		65.6 - 186

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

Lab Sample ID: 14H0115-BLK1

Matrix: Soil

Analysis Batch: 14H0115

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0115_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
2-Methylnaphthalene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
1-Methylnaphthalene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Acenaphthylene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Acenaphthene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Fluorene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Phenanthrene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Anthracene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Fluoranthene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Pyrene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Benzo (a) anthracene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Chrysene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Benzo (b) fluoranthene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Benzo (k) fluoranthene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Benzo (a) pyrene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Dibenzo (a,h) anthracene	ND		0.0120		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00
Benzo (ghi) perylene	ND		0.0200		mg/kg wet		08/21/14 08:39	08/21/14 16:27	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	100		36.3 - 152	08/21/14 08:39	08/21/14 16:27	1.00
2-FBP	96.2		30.2 - 135	08/21/14 08:39	08/21/14 16:27	1.00
p-Terphenyl-d14	139	Z2	65.1 - 134	08/21/14 08:39	08/21/14 16:27	1.00

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

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

Lab Sample ID: 14H0115-BS1

Matrix: Soil

Analysis Batch: 14H0115

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0115_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	0.267	0.203		mg/kg wet		76.0	62.7 - 120
Fluorene	0.267	0.247		mg/kg wet		92.5	67.9 - 124
Chrysene	0.267	0.249		mg/kg wet		93.5	68.2 - 132
Indeno (1,2,3-cd) pyrene	0.267	0.273		mg/kg wet		102	52.6 - 149

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	95.2		36.3 - 152
2-FBP	91.6		30.2 - 135
p-Terphenyl-d14	122		65.1 - 134

Lab Sample ID: 14H0115-MS1

Matrix: Soil

Analysis Batch: 14H0115

Client Sample ID: GEI-MW1 (12.5-13.5')

Prep Type: Total

Prep Batch: 14H0115_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	ND		0.275	0.219		mg/kg dry	✱	79.5	30 - 120
Fluorene	ND		0.275	0.219		mg/kg dry	✱	79.5	30 - 140
Chrysene	ND		0.275	0.241		mg/kg dry	✱	87.5	30 - 133
Indeno (1,2,3-cd) pyrene	ND		0.275	0.242		mg/kg dry	✱	88.0	30 - 140

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
Nitrobenzene-d5	77.8		36.3 - 152
2-FBP	80.2		30.2 - 135
p-Terphenyl-d14	102		65.1 - 134

Lab Sample ID: 14H0115-MSD1

Matrix: Soil

Analysis Batch: 14H0115

Client Sample ID: GEI-MW1 (12.5-13.5')

Prep Type: Total

Prep Batch: 14H0115_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Naphthalene	ND		0.261	0.196		mg/kg dry	✱	75.0	30 - 120	11.0	35
Fluorene	ND		0.261	0.200		mg/kg dry	✱	76.5	30 - 140	9.00	35
Chrysene	ND		0.261	0.216		mg/kg dry	✱	82.5	30 - 133	11.0	35
Indeno (1,2,3-cd) pyrene	ND		0.261	0.209		mg/kg dry	✱	80.0	30 - 140	14.7	35

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
Nitrobenzene-d5	77.6		36.3 - 152
2-FBP	77.8		30.2 - 135
p-Terphenyl-d14	101		65.1 - 134

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

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

Lab Sample ID: 14H0139-BLK1

Matrix: Soil

Analysis Batch: 14H0139

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0139_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Hydrocarbons	ND		10.0		mg/kg wet		08/25/14 13:21	08/25/14 17:08	1.00
Heavy Oil Range Hydrocarbons	ND		25.0		mg/kg wet		08/25/14 13:21	08/25/14 17:08	1.00
Surrogate	Blank %Recovery	Blank Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	104		50 - 150				08/25/14 13:21	08/25/14 17:08	1.00
<i>n</i> -Triacontane-d62	106		50 - 150				08/25/14 13:21	08/25/14 17:08	1.00

Lab Sample ID: 14H0139-BS1

Matrix: Soil

Analysis Batch: 14H0139

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0139_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Hydrocarbons	66.7	60.8		mg/kg wet		91.2	50 - 150
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl	112		50 - 150				
<i>n</i> -Triacontane-d62	105		50 - 150				

Lab Sample ID: 14H0139-DUP1

Matrix: Soil

Analysis Batch: 14H0139

Client Sample ID: Duplicate

Prep Type: Total

Prep Batch: 14H0139_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	Limit
Diesel Range Hydrocarbons	ND		ND		mg/kg dry	☼		40
Heavy Oil Range Hydrocarbons	ND		ND		mg/kg dry	☼		40
Surrogate	Duplicate %Recovery	Duplicate Qualifier	Limits					
<i>o</i> -Terphenyl	109		50 - 150					
<i>n</i> -Triacontane-d62	109		50 - 150					

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

Lab Sample ID: 14H0081-BLK1

Matrix: Soil

Analysis Batch: 14H0081

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0081_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		40		mg/kg wet		08/15/14 11:27	08/15/14 19:53	1.00
Diesel Range Hydrocarbons	ND		100		mg/kg wet		08/15/14 11:27	08/15/14 19:53	1.00
Heavy Oil Range Hydrocarbons	ND		100		mg/kg wet		08/15/14 11:27	08/15/14 19:53	1.00
Surrogate	Blank %Recovery	Blank Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-BFB (FID)	93.7		50 - 150				08/15/14 11:27	08/15/14 19:53	1.00
2-FBP	94.7		50 - 150				08/15/14 11:27	08/15/14 19:53	1.00
<i>p</i> -Terphenyl-d14	103		50 - 150				08/15/14 11:27	08/15/14 19:53	1.00

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

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

Lab Sample ID: 14H0081-DUP1

Matrix: Soil

Analysis Batch: 14H0081

Client Sample ID: GEI-MW2 (12-13')

Prep Type: Total

Prep Batch: 14H0081_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	Limit
Gasoline Range Hydrocarbons	5.78		ND	R4	mg/kg dry	☼	200	25
Diesel Range Hydrocarbons	10.5		10.4		mg/kg dry	☼	0.762	25
Heavy Oil Range Hydrocarbons	1.01		1.42	R4	mg/kg dry	☼	33.5	25
Surrogate	Duplicate %Recovery	Duplicate Qualifier	Limits					
4-BFB (FID)	94.2		50 - 150					
2-FBP	95.2		50 - 150					
p-Terphenyl-d14	106		50 - 150					

Lab Sample ID: 14H0081-DUP2

Matrix: Soil

Analysis Batch: 14H0081

Client Sample ID: GEI-MW3 (12-13')

Prep Type: Total

Prep Batch: 14H0081_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	Limit
Gasoline Range Hydrocarbons	5.16		3.27	R4	mg/kg dry	☼	45.0	25
Diesel Range Hydrocarbons	10.7		16.8	R4	mg/kg dry	☼	44.2	25
Heavy Oil Range Hydrocarbons	1.65		3.17	R4	mg/kg dry	☼	63.4	25
Surrogate	Duplicate %Recovery	Duplicate Qualifier	Limits					
4-BFB (FID)	98.1		50 - 150					
2-FBP	99.9		50 - 150					
p-Terphenyl-d14	107		50 - 150					

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

Lab Sample ID: 14H0088-BLK1

Matrix: Soil

Analysis Batch: 14H0088

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0088_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.25		mg/kg wet		08/18/14 09:11	08/26/14 09:43	1.00
Cadmium	ND		0.200		mg/kg wet		08/18/14 09:11	08/26/14 09:43	1.00
Chromium	ND		0.500		mg/kg wet		08/18/14 09:11	08/26/14 09:43	1.00
Lead	ND		1.25		mg/kg wet		08/18/14 09:11	08/26/14 09:43	1.00

Lab Sample ID: 14H0088-BS1

Matrix: Soil

Analysis Batch: 14H0088

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0088_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	49.5		mg/kg wet		99.1	80 - 120
Cadmium	50.0	48.9		mg/kg wet		97.8	80 - 120
Chromium	50.0	49.9		mg/kg wet		99.7	80 - 120
Lead	50.0	50.5		mg/kg wet		101	80 - 120

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

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

(Continued)

Lab Sample ID: 14H0088-MS1

Matrix: Soil

Analysis Batch: 14H0088

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 14H0088_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	3.80		54.2	50.7		mg/kg dry	☼	86.5	75 - 125
Cadmium	0.160		54.2	48.3		mg/kg dry	☼	88.7	75 - 125
Chromium	14.4		54.2	63.5		mg/kg dry	☼	90.5	75 - 125
Lead	5.31		54.2	49.8		mg/kg dry	☼	82.0	75 - 125

Lab Sample ID: 14H0088-MSD1

Matrix: Soil

Analysis Batch: 14H0088

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 14H0088_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	3.80		53.7	51.3		mg/kg dry	☼	88.4	75 - 125	1.07	20
Cadmium	0.160		53.7	49.1		mg/kg dry	☼	91.1	75 - 125	1.64	20
Chromium	14.4		53.7	57.3		mg/kg dry	☼	79.9	75 - 125	10.2	20
Lead	5.31		53.7	51.6		mg/kg dry	☼	86.2	75 - 125	3.59	20

Lab Sample ID: 14H0088-DUP1

Matrix: Soil

Analysis Batch: 14H0088

Client Sample ID: Duplicate

Prep Type: Total

Prep Batch: 14H0088_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Arsenic	3.80		3.07	R4	mg/kg dry	☼	21.1	20
Cadmium	0.160		0.134		mg/kg dry	☼	17.9	20
Chromium	14.4		12.1		mg/kg dry	☼	17.7	20
Lead	5.31		4.84		mg/kg dry	☼	9.09	20

Lab Sample ID: 14H0122-BLK1

Matrix: Soil

Analysis Batch: 14H0122

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0122_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.25		mg/kg wet		08/21/14 14:35	08/22/14 11:47	1.00
Cadmium	ND		0.200		mg/kg wet		08/21/14 14:35	08/22/14 11:47	1.00
Chromium	ND		0.500		mg/kg wet		08/21/14 14:35	08/22/14 11:47	1.00
Lead	ND		1.25		mg/kg wet		08/21/14 14:35	08/22/14 11:47	1.00

Lab Sample ID: 14H0122-BS1

Matrix: Soil

Analysis Batch: 14H0122

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0122_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	48.8		mg/kg wet		97.7	80 - 120
Cadmium	50.0	49.3		mg/kg wet		98.5	80 - 120
Chromium	50.0	50.1		mg/kg wet		100	80 - 120
Lead	50.0	48.9		mg/kg wet		97.7	80 - 120

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

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

(Continued)

Lab Sample ID: 14H0122-MS1

Matrix: Soil

Analysis Batch: 14H0122

Client Sample ID: Duplicate 1

Prep Type: Total

Prep Batch: 14H0122_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	6.50		50.9	52.5		mg/kg dry	☼	90.5	75 - 125
Cadmium	0.0964		50.9	47.5		mg/kg dry	☼	93.2	75 - 125
Chromium	15.2		50.9	61.1		mg/kg dry	☼	90.4	75 - 125
Lead	1.40		50.9	45.5		mg/kg dry	☼	86.7	75 - 125

Lab Sample ID: 14H0122-MSD1

Matrix: Soil

Analysis Batch: 14H0122

Client Sample ID: Duplicate 1

Prep Type: Total

Prep Batch: 14H0122_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	6.50		51.4	54.5		mg/kg dry	☼	93.4	75 - 125	3.56	20
Cadmium	0.0964		51.4	49.4		mg/kg dry	☼	96.0	75 - 125	4.03	20
Chromium	15.2		51.4	63.9		mg/kg dry	☼	94.9	75 - 125	4.48	20
Lead	1.40		51.4	47.2		mg/kg dry	☼	89.1	75 - 125	3.62	20

Lab Sample ID: 14H0122-DUP1

Matrix: Soil

Analysis Batch: 14H0122

Client Sample ID: Duplicate 1

Prep Type: Total

Prep Batch: 14H0122_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Arsenic	6.50		5.70		mg/kg dry	☼	13.2	20
Cadmium	0.0964		ND		mg/kg dry	☼		20
Chromium	15.2		15.9		mg/kg dry	☼	4.88	20
Lead	1.40		1.02	R4	mg/kg dry	☼	30.9	20

Lab Sample ID: 14H0160-BLK1

Matrix: Other (S)

Analysis Batch: 14H0160

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0160_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.25		mg/kg wet		08/27/14 13:45	08/28/14 06:51	1.00
Barium	ND		0.500		mg/kg wet		08/27/14 13:45	08/28/14 06:51	1.00
Cadmium	ND		0.200		mg/kg wet		08/27/14 13:45	08/28/14 06:51	1.00
Chromium	ND		0.500		mg/kg wet		08/27/14 13:45	08/28/14 06:51	1.00
Lead	ND		1.25		mg/kg wet		08/27/14 13:45	08/28/14 06:51	1.00
Selenium	ND		2.50		mg/kg wet		08/27/14 13:45	08/28/14 06:51	1.00
Silver	ND		0.500		mg/kg wet		08/27/14 13:45	08/28/14 06:51	1.00

Lab Sample ID: 14H0160-BS1

Matrix: Other (S)

Analysis Batch: 14H0160

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0160_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	49.2		mg/kg wet		98.4	80 - 120
Barium	50.0	50.5		mg/kg wet		101	80 - 120
Cadmium	50.0	50.0		mg/kg wet		100	80 - 120
Chromium	50.0	49.7		mg/kg wet		99.5	80 - 120
Lead	50.0	49.4		mg/kg wet		98.8	80 - 120

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

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

(Continued)

Lab Sample ID: 14H0160-BS1

Matrix: Other (S)

Analysis Batch: 14H0160

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0160_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	500	471		mg/kg wet		94.2	80 - 120
Silver	50.0	49.6		mg/kg wet		99.1	80 - 120

Lab Sample ID: 14H0160-MS1

Matrix: Other (S)

Analysis Batch: 14H0160

Client Sample ID: GEI-B4 (2-3')

Prep Type: Total

Prep Batch: 14H0160_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	14.3		53.4	67.8		mg/kg dry	✱	100	75 - 125
Barium	277		53.4	349	M1	mg/kg dry	✱	135	75 - 125
Cadmium	6.78		53.4	58.3		mg/kg dry	✱	96.4	75 - 125
Chromium	18.4		53.4	68.9		mg/kg dry	✱	94.5	75 - 125
Lead	865		53.4	1030	M1	mg/kg dry	✱	300	75 - 125
Selenium	ND		534	478		mg/kg dry	✱	89.6	75 - 125
Silver	ND	RL3	53.4	46.4		mg/kg dry	✱	86.8	75 - 125

Lab Sample ID: 14H0160-MSD1

Matrix: Other (S)

Analysis Batch: 14H0160

Client Sample ID: GEI-B4 (2-3')

Prep Type: Total

Prep Batch: 14H0160_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	14.3		53.9	66.7		mg/kg dry	✱	97.1	75 - 125	1.72	20
Barium	277		53.9	332		mg/kg dry	✱	101	75 - 125	5.23	20
Cadmium	6.78		53.9	58.3		mg/kg dry	✱	95.5	75 - 125	0.039	20
Chromium	18.4		53.9	67.8		mg/kg dry	✱	91.4	75 - 125	1.69	20
Lead	865		53.9	895	M2	mg/kg dry	✱	54.7	75 - 125	13.6	20
Selenium	ND		539	486		mg/kg dry	✱	90.1	75 - 125	1.52	20
Silver	ND	RL3	53.9	45.6		mg/kg dry	✱	84.6	75 - 125	1.66	20

Lab Sample ID: 14H0160-DUP1

Matrix: Other (S)

Analysis Batch: 14H0160

Client Sample ID: GEI-B4 (2-3')

Prep Type: Total

Prep Batch: 14H0160_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Arsenic	14.3		14.2		mg/kg dry	✱	0.475	20
Barium	277		356	R4	mg/kg dry	✱	24.8	20
Cadmium	6.78		6.92		mg/kg dry	✱	2.10	20
Chromium	18.4		24.7	R4	mg/kg dry	✱	29.0	20
Lead	865		870		mg/kg dry	✱	0.552	20
Selenium	ND		ND		mg/kg dry	✱		20
Silver	ND	RL3	ND		mg/kg dry	✱		20

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods

Lab Sample ID: 14H0162-BLK1

Matrix: Soil

Analysis Batch: 14H0162

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0162_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		50.0		ug/kg wet		08/28/14 07:09	08/28/14 14:27	1.00

Lab Sample ID: 14H0162-BS1

Matrix: Soil

Analysis Batch: 14H0162

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0162_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	200	203		ug/kg wet		102	80 - 120

Lab Sample ID: 14H0162-MS1

Matrix: Soil

Analysis Batch: 14H0162

Client Sample ID: GEI-B4 (2-3')

Prep Type: Total

Prep Batch: 14H0162_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	203		230	553	M1	ug/kg dry	✱	152	80 - 120

Lab Sample ID: 14H0162-MSD1

Matrix: Soil

Analysis Batch: 14H0162

Client Sample ID: GEI-B4 (2-3')

Prep Type: Total

Prep Batch: 14H0162_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	203		186	396	R	ug/kg dry	✱	104	80 - 120	33.1	20

Lab Sample ID: 14H0162-DUP1

Matrix: Soil

Analysis Batch: 14H0162

Client Sample ID: GEI-B4 (2-3')

Prep Type: Total

Prep Batch: 14H0162_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Mercury	203		529	R3	ug/kg dry	✱	88.9	40

Lab Sample ID: 14H0163-BLK1

Matrix: Soil

Analysis Batch: 14H0163

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14H0163_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		50.0		ug/kg wet		08/28/14 07:10	08/28/14 15:13	1.00

Lab Sample ID: 14H0163-BS1

Matrix: Soil

Analysis Batch: 14H0163

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14H0163_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	200	195		ug/kg wet		97.5	80 - 120

Lab Sample ID: 14H0163-MS1

Matrix: Soil

Analysis Batch: 14H0163

Client Sample ID: GEI-MW1 (12.5-13.5')

Prep Type: Total

Prep Batch: 14H0163_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	22.4		221	249		ug/kg dry	✱	102	80 - 120

TestAmerica Spokane

QC Sample Results

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Lab Sample ID: 14H0163-MSD1
Matrix: Soil
Analysis Batch: 14H0163

Client Sample ID: GEI-MW1 (12.5-13.5')
Prep Type: Total
Prep Batch: 14H0163_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	22.4		248	270		ug/kg dry	☼	100	80 - 120	8.08	20

Lab Sample ID: 14H0163-DUP1
Matrix: Soil
Analysis Batch: 14H0163

Client Sample ID: GEI-MW1 (12.5-13.5')
Prep Type: Total
Prep Batch: 14H0163_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Mercury	22.4		32.4		ug/kg dry	☼	36.6	40

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-MW1 (12.5-13.5')

Date Collected: 08/12/14 14:45

Date Received: 08/14/14 10:00

Lab Sample ID: SXH0089-02

Matrix: Soil
Percent Solids: 96.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.17	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 11:14	CBW	TAL SPK
Total	Prep	EPA 3580		0.809	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 13:26	NMI	TAL SPK
Total	Prep	EPA 3550B		0.834	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/19/14 16:17	NMI	TAL SPK
Total	Prep	EPA 3550B		1.87	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 17:58	NMI	TAL SPK
Total	Prep	EPA 3580		0.99	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/15/14 21:07	NMI	TAL SPK
Total	Prep	EPA 3050B		0.971	14H0088_P	08/18/14 09:11	JSP	TAL SPK
Total	Analysis	EPA 6010C		2.00	14H0088	08/27/14 17:37	ICP	TAL SPK
Total	Prep	EPA 7471		0.943	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:15	ZZZ	TAL SPK

Client Sample ID: GEI-MW2 (12-13')

Date Collected: 08/13/14 11:10

Date Received: 08/14/14 10:00

Lab Sample ID: SXH0089-04

Matrix: Soil
Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.945	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 11:37	CBW	TAL SPK
Total	Prep	EPA 3580		0.883	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 13:41	NMI	TAL SPK
Total	Prep	EPA 3550B		0.971	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/19/14 16:38	NMI	TAL SPK
Total	Prep	EPA 3550B		1.85	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 18:20	NMI	TAL SPK
Total	Prep	EPA 3580		0.80	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/15/14 21:31	NMI	TAL SPK
Total	Prep	EPA 3050B		1.05	14H0088_P	08/18/14 09:11	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0088	08/27/14 15:29	ICP	TAL SPK
Total	Prep	EPA 7471		0.862	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:24	ZZZ	TAL SPK

Client Sample ID: GEI-MW3 (12-13')

Date Collected: 08/12/14 08:30

Date Received: 08/14/14 10:00

Lab Sample ID: SXH0089-06

Matrix: Soil
Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.13	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 11:59	CBW	TAL SPK
Total	Prep	EPA 3580		0.808	14H0079_P	08/15/14 10:04	NI	TAL SPK

TestAmerica Spokane

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-MW3 (12-13')

Lab Sample ID: SXH0089-06

Date Collected: 08/12/14 08:30

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 13:55	NMI	TAL SPK
Total	Prep	EPA 3550B		0.892	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/19/14 17:00	NMI	TAL SPK
Total	Prep	EPA 3550B		1.83	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 18:43	NMI	TAL SPK
Total	Prep	EPA 3580		0.86	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/15/14 21:55	NMI	TAL SPK
Total	Prep	EPA 3050B		1.00	14H0088_P	08/18/14 09:11	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0088	08/27/14 15:33	ICP	TAL SPK
Total	Prep	EPA 7471		0.758	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:26	ZZZ	TAL SPK

Client Sample ID: GEI-B1 (2-3')

Lab Sample ID: SXH0089-07

Date Collected: 08/11/14 15:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.31	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 12:22	CBW	TAL SPK
Total	Prep	EPA 3580		0.990	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		5.00	14H0079	08/15/14 14:09	NMI	TAL SPK
Total	Prep	EPA 3550B		0.925	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		10.0	14H0093	08/20/14 11:49	NMI	TAL SPK
Total	Prep	EPA 3550B		6.15	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		20.0	14H0115	08/21/14 19:05	NMI	TAL SPK
Total	Prep	EPA 3550B		1.65	14H0139_P	08/25/14 13:21	MS	TAL SPK
Total	Analysis	NWTPH-Dx		20.0	14H0139	08/26/14 09:29	NMI	TAL SPK
Total	Prep	EPA 3580		2.5	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/15/14 22:19	NMI	TAL SPK
Total	Prep	EPA 3050B		1.06	14H0088_P	08/18/14 09:11	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0088	08/27/14 15:37	ICP	TAL SPK
Total	Prep	EPA 7471		0.943	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:29	ZZZ	TAL SPK

Client Sample ID: GEI-B1 (12-13')

Lab Sample ID: SXH0089-08

Date Collected: 08/11/14 15:40

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.992	14H0139_P	08/25/14 13:21	MS	TAL SPK
Total	Analysis	NWTPH-Dx		1.00	14H0139	08/25/14 18:41	NMI	TAL SPK
Total	Prep	Wet Chem		1.00	14H0147_P	08/25/14 14:30	NI	TAL SPK
Total	Analysis	TA SOP		1.00	14H0147	08/26/14 10:36	NI	TAL SPK

TestAmerica Spokane

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B2 (13-14')

Lab Sample ID: SXH0089-10

Date Collected: 08/11/14 12:20

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.904	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 12:44	CBW	TAL SPK
Total	Prep	EPA 3580		0.880	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 14:24	NMI	TAL SPK
Total	Prep	EPA 3550B		0.901	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/19/14 17:42	NMI	TAL SPK
Total	Prep	EPA 3550B		1.88	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 19:28	NMI	TAL SPK
Total	Prep	EPA 3580		0.95	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/15/14 23:08	NMI	TAL SPK
Total	Prep	EPA 3050B		0.952	14H0088_P	08/18/14 09:11	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0088	08/27/14 15:41	ICP	TAL SPK
Total	Prep	EPA 7471		0.746	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:31	ZZZ	TAL SPK

Client Sample ID: GEI-B3 (7-8')

Lab Sample ID: SXH0089-12

Date Collected: 08/11/14 10:55

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 95.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.08	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 13:06	CBW	TAL SPK
Total	Prep	EPA 3580		0.818	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 14:38	NMI	TAL SPK
Total	Prep	EPA 3550B		1.00	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/19/14 18:03	NMI	TAL SPK
Total	Prep	EPA 3550B		1.77	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 19:50	NMI	TAL SPK
Total	Prep	EPA 3580		0.91	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/15/14 23:32	NMI	TAL SPK
Total	Prep	EPA 3050B		0.943	14H0088_P	08/18/14 09:11	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0088	08/27/14 15:45	ICP	TAL SPK
Total	Prep	EPA 7471		0.847	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:38	ZZZ	TAL SPK

Client Sample ID: GEI-B4 (2-3')

Lab Sample ID: SXH0089-13

Date Collected: 08/11/14 16:20

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3050B		0.980	14H0160_P	08/27/14 13:45	JSP	TAL SPK
Total	Analysis	EPA 6010C		2.00	14H0160	08/28/14 08:12	ICP	TAL SPK
Total	Prep	EPA 7471		0.758	14H0162_P	08/28/14 07:09	JSP	TAL SPK

TestAmerica Spokane

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B4 (2-3')

Lab Sample ID: SXH0089-13

Date Collected: 08/11/14 16:20

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	EPA 7471B		1.00	14H0162	08/28/14 14:29	ZZZ	TAL SPK
Total	Prep	Wet Chem		1.00	14I0008_P	08/27/14 16:25	NI	TAL SPK
Total	Analysis	TA SOP		1.00	14I0008	09/02/14 16:07	NI	TAL SPK

Client Sample ID: GEI-B4 (7-8')

Lab Sample ID: SXH0089-14

Date Collected: 08/11/14 16:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 97.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.16	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 13:29	CBW	TAL SPK
Total	Prep	EPA 3580		0.745	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 15:07	NMI	TAL SPK
Total	Prep	EPA 3550B		0.938	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/19/14 18:46	NMI	TAL SPK
Total	Prep	EPA 3550B		1.86	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 20:13	NMI	TAL SPK
Total	Prep	EPA 3580		0.76	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/15/14 23:56	NMI	TAL SPK
Total	Prep	EPA 3050B		0.943	14H0088_P	08/18/14 09:11	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0088	08/27/14 15:49	ICP	TAL SPK
Total	Prep	EPA 7471		0.980	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:40	ZZZ	TAL SPK

Client Sample ID: GEI-B5 (2-3')

Lab Sample ID: SXH0089-15

Date Collected: 08/11/14 10:00

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3050B		0.855	14H0160_P	08/27/14 13:45	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0160	08/29/14 11:30	ICP	TAL SPK
Total	Prep	EPA 7471		0.962	14H0162_P	08/28/14 07:09	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0162	08/28/14 14:38	ZZZ	TAL SPK

Client Sample ID: GEI-B5 (7-8')

Lab Sample ID: SXH0089-16

Date Collected: 08/11/14 10:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.06	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 13:51	CBW	TAL SPK
Total	Prep	EPA 3580		0.898	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 15:21	NMI	TAL SPK

TestAmerica Spokane

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B5 (7-8')

Lab Sample ID: SXH0089-16

Date Collected: 08/11/14 10:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.924	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/19/14 19:07	NMI	TAL SPK
Total	Prep	EPA 3550B		0.924	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/20/14 11:07	NMI	TAL SPK
Total	Prep	EPA 3550B		1.97	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 20:35	NMI	TAL SPK
Total	Prep	EPA 3580		0.85	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/16/14 00:20	NMI	TAL SPK
Total	Prep	EPA 3050B		0.885	14H0088_P	08/18/14 09:11	JSP	TAL SPK
Total	Analysis	EPA 6010C		2.00	14H0088	08/27/14 17:41	ICP	TAL SPK
Total	Prep	EPA 7471		0.962	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:42	ZZZ	TAL SPK

Client Sample ID: GEI-B6 (2-3')

Lab Sample ID: SXH0089-17

Date Collected: 08/11/14 14:05

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3050B		0.952	14H0160_P	08/27/14 13:45	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0160	08/29/14 11:34	ICP	TAL SPK
Total	Prep	EPA 7471		0.833	14H0162_P	08/28/14 07:09	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0162	08/28/14 14:41	ZZZ	TAL SPK

Client Sample ID: GEI-B6 (13-14')

Lab Sample ID: SXH0089-19

Date Collected: 08/11/14 14:25

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 95.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.11	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 14:14	CBW	TAL SPK
Total	Prep	EPA 3580		0.885	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 15:36	NMI	TAL SPK
Total	Prep	EPA 3550B		0.981	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/19/14 19:28	NMI	TAL SPK
Total	Prep	EPA 3550B		0.981	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/20/14 11:28	NMI	TAL SPK
Total	Prep	EPA 3550B		1.98	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 20:58	NMI	TAL SPK
Total	Prep	EPA 3580		0.91	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/16/14 00:44	NMI	TAL SPK
Total	Prep	EPA 3050B		1.04	14H0088_P	08/18/14 09:11	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0088	08/27/14 15:57	ICP	TAL SPK
Total	Prep	EPA 7471		0.820	14H0163_P	08/28/14 07:10	JSP	TAL SPK

TestAmerica Spokane

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B6 (13-14')

Lab Sample ID: SXH0089-19

Date Collected: 08/11/14 14:25

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 95.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:45	ZZZ	TAL SPK

Client Sample ID: GEI-B7 (13-14')

Lab Sample ID: SXH0089-21

Date Collected: 08/11/14 08:45

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.35	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 14:36	CBW	TAL SPK
Total	Prep	EPA 3580		0.989	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 15:50	NMI	TAL SPK
Total	Prep	EPA 3550B		0.873	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/19/14 19:49	NMI	TAL SPK
Total	Prep	EPA 3550B		1.85	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 21:20	NMI	TAL SPK
Total	Prep	EPA 3580		0.97	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/16/14 01:08	NMI	TAL SPK
Total	Prep	EPA 3050B		1.02	14H0088_P	08/18/14 09:11	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0088	08/27/14 16:01	ICP	TAL SPK
Total	Prep	EPA 7471		0.962	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:47	ZZZ	TAL SPK

Client Sample ID: GEI-B8 (14-15')

Lab Sample ID: SXH0089-23

Date Collected: 08/11/14 12:15

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 93.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.17	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 14:58	CBW	TAL SPK
Total	Prep	EPA 3580		0.943	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 16:04	NMI	TAL SPK
Total	Prep	EPA 3550B		0.882	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/20/14 12:49	NMI	TAL SPK
Total	Prep	EPA 3550B		1.86	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 21:43	NMI	TAL SPK
Total	Prep	EPA 3580		0.84	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/16/14 01:32	NMI	TAL SPK
Total	Prep	EPA 3050B		0.909	14H0088_P	08/18/14 09:11	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0088	08/27/14 16:14	ICP	TAL SPK
Total	Prep	EPA 7471		0.735	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:49	ZZZ	TAL SPK

TestAmerica Spokane

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: GEI-B9 (13-14')

Lab Sample ID: SXH0089-25

Date Collected: 08/11/14 14:10

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.911	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 15:20	CBW	TAL SPK
Total	Prep	EPA 3580		0.890	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 16:19	NMI	TAL SPK
Total	Prep	EPA 3550B		0.976	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/19/14 20:32	NMI	TAL SPK
Total	Prep	EPA 3550B		1.79	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 22:05	NMI	TAL SPK
Total	Prep	EPA 3580		0.82	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/16/14 01:56	NMI	TAL SPK
Total	Prep	EPA 3050B		0.971	14H0088_P	08/18/14 09:11	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0088	08/27/14 16:18	ICP	TAL SPK
Total	Prep	EPA 7471		0.943	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:52	ZZZ	TAL SPK

Client Sample ID: Duplicate 1

Lab Sample ID: SXH0089-26

Date Collected: 08/11/14 08:00

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.994	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 15:43	CBW	TAL SPK
Total	Prep	EPA 3580		0.826	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 16:33	NMI	TAL SPK
Total	Prep	EPA 3550B		0.864	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/19/14 20:53	NMI	TAL SPK
Total	Prep	EPA 3550B		1.93	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 22:27	NMI	TAL SPK
Total	Prep	EPA 3580		0.83	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/16/14 02:20	NMI	TAL SPK
Total	Prep	EPA 3050B		0.962	14H0122_P	08/21/14 14:35	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0122	08/22/14 12:47	ICP	TAL SPK
Total	Prep	EPA 7471		0.877	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:54	ZZZ	TAL SPK
Total	Prep	Wet Chem		1.00	14H0090_P	08/15/14 12:40	NI	TAL SPK
Total	Analysis	TA SOP		1.00	14H0090	08/18/14 10:06	NI	TAL SPK

Client Sample ID: Duplicate 2

Lab Sample ID: SXH0089-27

Date Collected: 08/11/14 08:00

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.28	14H0077_P	08/15/14 08:49	CBW	TAL SPK

TestAmerica Spokane

Lab Chronicle

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Client Sample ID: Duplicate 2

Lab Sample ID: SXH0089-27

Date Collected: 08/11/14 08:00

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 16:05	CBW	TAL SPK
Total	Prep	EPA 3580		0.992	14H0079_P	08/15/14 10:04	NI	TAL SPK
Total	Analysis	EPA 8011		1.00	14H0079	08/15/14 16:47	NMI	TAL SPK
Total	Prep	EPA 3550B		0.814	14H0093_P	08/19/14 08:36	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14H0093	08/19/14 21:14	NMI	TAL SPK
Total	Prep	EPA 3550B		1.82	14H0115_P	08/21/14 08:39	NI	TAL SPK
Total	Analysis	EPA 8270D		1.00	14H0115	08/21/14 22:50	NMI	TAL SPK
Total	Prep	EPA 3580		0.85	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/16/14 02:44	NMI	TAL SPK
Total	Prep	EPA 3050B		1.01	14H0122_P	08/21/14 14:35	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0122	08/27/14 16:22	ICP	TAL SPK
Total	Prep	EPA 7471		0.980	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:56	ZZZ	TAL SPK

Client Sample ID: HWA-MW1-Composite

Lab Sample ID: SXH0089-28

Date Collected: 08/12/14 14:45

Matrix: Soil

Date Received: 08/14/14 10:00

Percent Solids: 94

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.01	14H0077_P	08/15/14 08:49	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	14H0077	08/15/14 16:27	CBW	TAL SPK
Total	Prep	EPA 3580		0.78	14H0081_P	08/15/14 11:27	NI	TAL SPK
Total	Analysis	NWTPH-HCID		1.0	14H0081	08/16/14 03:08	NMI	TAL SPK
Total	Prep	EPA 3050B		0.917	14H0122_P	08/21/14 14:35	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14H0122	08/27/14 16:25	ICP	TAL SPK
Total	Prep	EPA 7471		0.758	14H0163_P	08/28/14 07:10	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14H0163	08/28/14 15:59	ZZZ	TAL SPK

Laboratory References:

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

TestAmerica Spokane

Certification Summary

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Laboratory: TestAmerica Spokane

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

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

Method Summary

Client: Geo Engineers - Spokane
Project/Site: 0504-101-01

TestAmerica Job ID: SXH0089

Method	Method Description	Protocol	Laboratory
EPA 8260C	Volatile Organic Compounds by EPA Methods 5035/8260C		TAL SPK
EPA 8260C	Volatile Organic Compounds by EPA Method 8260C		TAL SPK
EPA 8011	EDB by EPA Method 8011		TAL SPK
EPA 8082A	Polychlorinated Biphenyls by EPA Method 8082		TAL SPK
EPA 8270D	Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring		TAL SPK
NWTPH-Dx	Semivolatile Petroleum Products by NWTPH-Dx		TAL SPK
NWTPH-HCID	Hydrocarbon Identification by NWTPH-HCID		TAL SPK
EPA 6010C	Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B		TAL SPK
EPA 7471B	Total Metals by EPA 6010/7000 Series Methods		TAL SPK
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK

Protocol References:

Laboratory References:

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

5755 8th Street East, Tacoma, WA 98424-1317
11922 E. First Ave., Spokane WA 99206-5302
9405 SW Nimbus Ave., Beaverton, OR 97008-7145
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047
509-924-9200 FAX 924-9290
503-906-9200 FAX 906-9210
907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: SX40089

CLIENT: GEGENGINEERS		INVOICE TO:		TURNAROUND REQUEST	
REPORT TO: SCOTT LATHEN		ADDRESS: 523 E. SHELBY AVE., SPOKANE, WA 99202		In Business Days *	
PHONE: 309 303 3125 FAX:		PROJECT NAME: Tealney Basin		Organic & Inorganic Analyses	
PROJECT NUMBER: 0504-101-01		P.O. NUMBER:		Petroleum Hydrocarbon Analyses	
SAMPLED BY: Aaron Teederley		PRESERVATIVE		SPEC. NO.	
CLIENT SAMPLE IDENTIFICATION		REQUESTED ANALYSES		OTHER Specify:	
SAMPLING DATE/TIME	DEPTH	MTL	WATER	SOIL	ROCK
1. GEI-MW1 (9-10')	8/12/14	1400			
2. GEI-MW1 (12.5-13.5')	8/12/14	1445			
3. GEI-MW2 (4-5')	8/13/14	1015			
4. GEI-MW2 (12-13')	8/13/14	1110			
5. GEI-MW3 (2-3')	8/12/14	0800			
6. GEI-MW3 (12-13')	8/12/14	0830			
7. GEI-B1 (2-3')	8/11/14	1510			
8. GEI-B1 (12-13')	8/11/14	1540			
9. GEI-B2 (4-5')	8/11/14	1125			
10. GEI-B2 (13-14')	8/11/14	1220			

RECEIVED BY:	DATE:	PRINT NAME:	DATE:	PRINT NAME:
Cal Stapleton	9/13/14	Cal Stapleton	9/13/14	Cal Stapleton
	1500		1500	

RELEASED BY:	DATE:	PRINT NAME:	DATE:	PRINT NAME:
Aaron Teederley	8/27/14	Aaron Teederley	8/27/14	Aaron Teederley

ADDITIONAL REMARKS:	TEMP:	PAGE:
	100	1 OF 3

5755 8th Street East, Tacoma, WA 98424-1317
 11922 E. First Ave., Spokane WA 99206-5302
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047
 509-924-9200 FAX 924-9290
 503-906-9200 FAX 906-9210
 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: **SX40089**

CLIENT:		INVOICE TO:		TURNAROUND REQUEST	
REPORT TO: ADDRESS:				in Business Days *	
PHONE:		P.O. NUMBER:		☒ 10 ☐ 7 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ <1 STD.	
PROJECT NAME: Teener Bacon		PRESERVATIVE		Organic & Inorganic Analyses ☒ 10 ☐ 7 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ <1 STD.	
PROJECT NUMBER: 0504-101-01				Petroleum Hydrocarbon Analyses ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ <1 STD.	
SAMPLED BY: Aaron Frederick		REQUESTED ANALYSES		OTHER Specify: ☐	
CLIENT SAMPLE IDENTIFICATION		SAMPLING DATE/TIME		* Turnaround Requests less than standard may incur Rush Charges.	
1. GEI-B3 (3.5-4.5') 2. GEI-B3 (7-8') 3. GEI-B4 (2-3') 4. GEI-B4 (7-8') 5. GEI-B5 (2-3') 6. GEI-B5 (7-8') 7. GEI-B6 (2-3') 8. GEI-B6 (7-8') 9. GEI-B6 (13-14') 10. GEI-B7 (4-5')		8/11/14 1045 8/11/14 1055 8/11/14 1620 8/11/14 1610 8/11/14 1000 8/11/14 1010 8/11/14 1405 8/11/14 1410 8/11/14 1425 8/13/14 0800		MATRIX (W, S, O) S S S S S S S S S S # OF CONT. 3 3 3 3 3 3 3 3 3 3 LOCATION/COMMENTS Hold Hold Hold Hold Hold Hold Hold Hold Hold Hold TA WO ID TA WO ID	
RELEASED BY: Aaron Frederick		DATE: 8/13/14		DATE: 8/14/14	
PRINT NAME: Aaron Frederick		TIME: 1500		TIME: 10:00	
RELEASED BY:		DATE:		DATE:	
PRINT NAME:		TIME:		TIME:	
ADDITIONAL REMARKS:		FIRM:		FIRM:	
		TEST:		PAGE 2 OF 3	

5755 8th Street East, Tacoma, WA 98424-1317
11922 E. First Ave., Spokane WA 99206-5302
9405 SW Nimbus Ave., Beaverton, OR 97008-7145
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310	FAX 922-5047	☐
509-924-9200	FAX 924-9290	☒
503-906-9200	FAX 906-9210	☐
907-563-9200	FAX 563-9210	☐

CHAIN OF CUSTODY REPORT

Work Order #: SX40089

CLIENT: REPORT TO: ADDRESS:		INVOICE TO:		TURNAROUND REQUEST in Business Days *									
PROJECT NAME: Trouley Barn PROJECT NUMBER: 0804-101-01		P.O. NUMBER:		Organic & Inorganic Analyses Petroleum Hydrocarbon Analyses 10 STD. 7 5 4 3 2 1 <1 5 4 3 2 1 <1 STD.									
SAMPLED BY: Aaron Frederick		P.O. NUMBER:		Organic & Inorganic Analyses Petroleum Hydrocarbon Analyses 10 STD. 7 5 4 3 2 1 <1 5 4 3 2 1 <1 STD.									
CLIENT SAMPLE IDENTIFICATION		SAMPLING DATE/TIME		REQUESTED ANALYSES									
1. GEI-B8 (13-14) 8/13/14 0845		8/13/14 1500		RECEIVED BY: Det. Stogdun DATE: 8/14/14 PRINT NAME: TESTMAN CO. TIME: 10:00									
2. GEI-B8 (7-8) 8/12/14 1140		8/12/14 1500		RECEIVED BY: Det. Stogdun DATE: 8/14/14 PRINT NAME: TESTMAN CO. TIME: 10:00									
3. GEI-B8 (14-15) 8/12/14 1215		8/12/14 1500		RECEIVED BY: Det. Stogdun DATE: 8/14/14 PRINT NAME: TESTMAN CO. TIME: 10:00									
4. GEI-B9 (7-8) 8/13/14 1400		8/13/14 1500		RECEIVED BY: Det. Stogdun DATE: 8/14/14 PRINT NAME: TESTMAN CO. TIME: 10:00									
5. GEI-B9 (13-14) 8/13/14 1410		8/13/14 1500		RECEIVED BY: Det. Stogdun DATE: 8/14/14 PRINT NAME: TESTMAN CO. TIME: 10:00									
6. Duplicate 1 8/11/14 0800		8/11/14 1500		RECEIVED BY: Det. Stogdun DATE: 8/14/14 PRINT NAME: TESTMAN CO. TIME: 10:00									
7. Duplicate 2 8/12/14 0800		8/12/14 1500		RECEIVED BY: Det. Stogdun DATE: 8/14/14 PRINT NAME: TESTMAN CO. TIME: 10:00									
8. HUA-MUL-Composite 8/13/14 0900		8/13/14 1500		RECEIVED BY: Det. Stogdun DATE: 8/14/14 PRINT NAME: TESTMAN CO. TIME: 10:00									
9.		8/13/14 1500		RECEIVED BY: Det. Stogdun DATE: 8/14/14 PRINT NAME: TESTMAN CO. TIME: 10:00									
10.		8/13/14 1500		RECEIVED BY: Det. Stogdun DATE: 8/14/14 PRINT NAME: TESTMAN CO. TIME: 10:00									
RELEASED BY: Aaron Frederick		DATE: 8/13/14		RECEIVED BY: Det. Stogdun DATE: 8/14/14									
PRINT NAME: Aaron Frederick		TIME: 1500		PRINT NAME: TESTMAN CO. TIME: 10:00									
RELEASED BY: Aaron Frederick		DATE: 8/13/14		RECEIVED BY: Det. Stogdun DATE: 8/14/14									
PRINT NAME: Aaron Frederick		TIME: 1500		PRINT NAME: TESTMAN CO. TIME: 10:00									
ADDITIONAL REMARKS:		FIRM: GEI		FIRM: TESTMAN CO.									

TAL-1000 (0612)

**TestAmerica Spokane
Sample Receipt Form**

Work Order #: SXH0089	Client: GeoEngineers	Project: Trolley Barn		
Date/Time Received: 8-14-14		By: CS		
Samples Delivered By: ☒ Shipping Service ☐ Courier ☐ Client ☐ Other: _____				
List Air Bill Number(s) or Attach a photocopy of the Air Bill:				
Receipt Phase	Yes	No	NA	Comments
Were samples received in a cooler:	X			
Custody Seals are present and intact:			X	
Are CoC documents present:	X			
Necessary signatures:	X			
Thermal Preservation Type: ☐ Blue Ice ☐ Gel Ice ☒ Real Ice ☐ Dry Ice ☐ None ☐ Other: _____				
Temperature: 4.6 °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	Yes	No	NA	Comments
Date/Time: 8-14-14 11:23 By: CS				
Are sample labels affixed and completed for each container	X			
Samples containers were received intact:	X			
Do sample IDs match the CoC	X			
Appropriate sample containers were received for tests requested	X			
Are sample volumes adequate for tests requested	X			
Appropriate preservatives were used for the tests requested	X			
pH of inorganic samples checked and is within method specification	X			
Are VOC samples free of bubbles >6mm (1/4" diameter)			X	
Are dissolved parameters field filtered			X	
Do any samples need to be filtered or preserved by the lab			X	
Does this project require quick turnaround analysis		X		
Are there any short hold time tests (see chart below)		X		
Are any samples within 2 days of or past expiration		X		
Was the CoC scanned	X			
Were there Non-conformance issues at login		X		
If yes, was a CAR generated #			X	

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

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