Phase I Cleanup Action Report

Franke Tobey Jones
Master Plan Phase I
Tacoma, Washington

for
Franke Tobey Jones

May 18, 2020

GeoEngineers
Earth Science + Technology

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Master Plan Phase I
Tacoma, Washington

File No. 10068-002-02

May 18, 2020

Prepared for:

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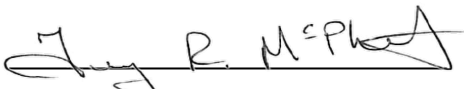

Terry R. McPhetridge, LG, LHG
Principal

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1.0 INTRODUCTION

This report summarizes the Phase I cleanup action completed at the Franke Tobey Jones (FTJ) facility expansion located at 5340 North Bristol Street in Tacoma, Washington. The FTJ facility is generally located north of Vassault Street and North Park Way in Tacoma, Washington (Pierce County parcel nos. 6390000413, 0221232025, 6930000393 and 6930000381). The FTJ facility location is shown on Figure 1, Vicinity Map. The existing FTJ facility layout and new Phase I buildings are shown on Figure 2.

The FTJ site is located within the Asarco Tacoma Smelter Plume (TSP) boundary known to contain arsenic- and lead-contaminated soil from air fallout related to Asarco's historic operations. The nature and extent of arsenic- and lead-contaminated soil are summarized in the Remedial Investigation and Cleanup Action Plan (GeoEngineers 2017). This cleanup report summarizes remedial actions taken during Phase I construction activities to address the arsenic- and lead-contaminated soil.

The cleanup was conducted in general accordance with the Cleanup Action Plan (CAP) approved by Ecology and Washington State Department of Ecology (Ecology) TSP Model Remedies Guidance (TSPMRG) document dated June 2012. Ecology's approval of the CAP and opinion that a no further remedial action determination will be granted upon completion of the cleanup is outlined in a letter addressed to Franke Tobey Jones dated August 30, 2017 (Ecology 2017).

1.1. FTJ Facility History and Current Use

The facility was originally developed in 1924 with an approximately 39,000-square foot residential building (Franke Tobey Jones) located on the eastern portion of the site based on information provided in Pierce County Assessor records. An additional 14 residential buildings and support structures were constructed within the complex over the next 80 years ranging in size between 2,000 and 51,000 square feet.

A house formerly located on the northeastern side of the facility was constructed in 1934 based on City of Tacoma records. This former house was not originally associated with the FTJ complex. The house was subsequently demolished following acquisition by FTJ in 2007.

Soil has been graded and moved around at the FTJ facility during each development stage to fill in areas that currently contain grass particularly on the eastern and the southern portions of the FTJ facility. The redistribution of fill on the site has buried the arsenic- and lead-contaminated soil deeper (up to 11 feet below ground surface [bgs] in areas) than typically encountered within the TSP (18 inches bgs).

1.2. FTJ Redevelopment

FTJ intends to expand their facility in two phases over 5 years. Phase I was implemented between 2017 and 2019. Phase II will be implemented in the future. Components of each phase are discussed further below based on our understanding at the time of this report.

The majority of the Phase I expansion was located on Pierce County parcel nos. 6390000413, 6930000393 and 6930000381 and consisted of the following:

- A new health care and memory care (HCMC) building was constructed along the eastern edge of the property. The HCMC building is two stories with a footprint of about 33,800 square feet. The lower level daylights to the east and is about 8 to 12 feet below grade on the west.
- A new apartment building (Bristol View Apartments) was constructed within the northeast corner of the property. The building is three stories with a footprint of about 14,270 square feet. The lower level daylights to the north and is embedded up to about 15 feet on the south.
- Other site improvements included retaining walls, infiltration vaults, underground utilities, and pavement areas.

A portion of the Phase I expansion was completed on Pierce County parcel no. 0221232025 and consisted of:

- A new cottage duplex was constructed along the western portion of the property. The duplex is one story, on-grade with an approximate footprint of 3,900 square feet.

Phase II expansion will occur on Pierce County parcel nos. 6390000413 and 0221232025 in the future with anticipated construction activities as follows:

- An independent living and assisted living (IL/AL) facility expansion that will be connected to the north side of the existing Lillian Pratt building. The northern portion of the existing Lillian Pratt building will be demolished to allow for the IL/AL expansion. The IL/AL expansion will be three stories with an additional at-grade parking lot. Total footprint for the IL/AL facility expansion will be about 63,600 square feet.
- Other site improvements include retaining walls, underground utilities, and pavement areas.

2.0 SUMMARY OF CLEANUP ACTION PLAN

The CAP objectives included mitigating risks to human health posed through direct contact (dermal, incidental inhalation or ingestion) by visitors, workers (including excavation workers), residents and other users with arsenic and lead in soil. The CAP developed for the project included TSPMRG model remedies of consolidation and capping, mixing, and capping in place. This cleanup action alternative meets the Model Toxics Control Act (MTCA) threshold requirements to protect human health and the environment, comply with cleanup standards, comply with applicable state and federal laws, and provide for compliance monitoring (Washington Administrative Code [WAC] 173-340-360[2][a]).

The following institutional controls will be implemented following the completion of Phase II construction activities:

- An operations and maintenance plan will be prepared with a manual showing the extent of the geotextile and known arsenic-contaminated soil. The manual will provide guidance to workers that may come in to contact with the lead- and arsenic-contaminated soil.
- Environmental restrictive covenants will be recorded with Pierce County and remain with the land until all contamination is cleaned up. The restrictive covenants notify future property owners that contamination remains at the site, identify the importance of maintaining the remedial cap, etc.

2.1. Cleanup Levels

Cleanup levels were developed for cleanup actions at the FTJ facility in accordance with MTCA for the protection of human health. The MTCA Cleanup Regulation states that MTCA Method A cleanup levels are protective of human health and are designed for cleanup actions that are relatively straightforward or involve only a few hazardous substances as described in 173-340-700(5)(a) and 173-340-704. As specified in WAC 173-340-704(1) and 173-340-704(1)(a), Method A unrestricted land use (ULU) cleanup levels may be used at sites that have few hazardous substances and that are undergoing a routine cleanup action as defined in WAC 173-340-200. Ecology also provides TSP Remediation Levels for arsenic and lead in soil related to the TSP in the TSPMRG as shown in the table below. A remediation level is the level of a hazardous substance in a medium, such as soil, at which certain cleanup actions may be necessary. The TSP Remediation Levels were utilized as part of the cleanup action during Phase I construction at FTJ.

Remedy	TSP Arsenic Remediation Level	TSP Lead Remediation Level
No Further Action	Average <20 mg/kg Maximum <40 mg/kg	Average <250 mg/kg Maximum <500 mg/kg
Consolidation or Capping In Place with Type 1 Cap	Average < 100mg/kg Maximum <200 mg/kg	Average <500 mg/kg Maximum <1,000 mg/kg

Notes:

Type 1 cap is a marker (geotextile construction fencing) with 1 foot of non-contaminated soil, or hardscape (building, path, asphalt roadway).

mg/kg = milligram per kilogram

3.0 SUMMARY OF REMEDIAL ACTIVITIES

The primary cleanup actions completed during Phase I construction are summarized below. Two remedial areas (Remedial Areas 1 and 2) were identified in the CAP as shown in Figure 2. Remedial Area 1 is located within the southern portion of the site and is identified as the area where arsenic-contaminated soil was consolidated including placement of a Type 1 cap. Remedial Area 2 is located within the remainder of the Phase I construction area and consists of areas where soil was mixed with non-contaminated soil with placement of a Type 1 cap. A summary of sampling activities for confirmation and stockpile soil and construction water are presented in Sections 3.1 through 3.3. The following is a description of the general remedial action process.

- One to 2 feet of arsenic-contaminated soil was excavated from Remedial Areas 1 and 2, stockpiled on plastic, and covered with plastic.
- Non-contaminated soil was excavated from Remedial Area 1 to a depth of 25 feet bgs to increase storage capacity. The non-contaminated soil was stockpiled on plastic, sampled and covered with plastic for later use as fill material on other portions of the site during construction (Stockpile 1).
- The stockpile generated from the surficial 2-feet was placed in Remedial Area 1 following excavation of the non-contaminated soil.
- A retaining wall was constructed around Remedial Area 1 to increase storage capacity.
- Approximately 4 to 6 inches of non-contaminated structural fill was placed on top of Remedial Area 2 for protection of subgrade during construction and to allow for mixing of arsenic-contaminated soil.

- Soil in Remedial Area 2 was excavated and mixed within Remedial Area 2 to meet site grades and install utilities. Soil that was deemed unsuitable for reuse for structural purposes was consolidated in Remedial Area 1. Mixed soil was stockpiled for subsequent sampling and chemical analysis to evaluate reuse as fill in Remedial Area 2 or placement in Remedial Area 1 (Stockpiles 2 through 4).
- Confirmation samples were collected for chemical analysis throughout Remedial Area 2 to document post-remedial conditions.
- A Type 1 cap was placed on top of Remedial Areas 1 and 2 consisting of hardscape or construction fencing and 1 foot of non-contaminated soil.

3.1. Confirmation Sample Results

Confirmation soil samples were collected and submitted for chemical analysis during construction activities to document post- remedial activity conditions. Confirmation sampling was performed prior to placement of the remedial cap.

Twenty soil samples were collected from the surface to approximately 0.5 feet bgs with four additional soil samples collected from 6 to 12 inches bgs across the construction site. Soil sample collection methodology was performed in general accordance with the CAP.

Data quality objectives for sample collection and analysis are outlined in the CAP. Sample collection, analysis and results are summarized in the following sections. A comparison of the soil analytical results to the TSP Remediation Levels is presented in Table 1.

3.1.1. Cottage Duplex

A total of three confirmation soil samples were collected for chemical analysis near the Cottage Duplex. Samples CT-CONF-1 and CT-CONF-2 were collected from the surface to 0.5 feet bgs and sample CT-CONF-2B was collected from 0.5 to 1 foot bgs.

Arsenic was either not detected or was detected at concentrations less than the average and maximum TSP Remediation Levels in the shallow soil samples (CT-CONF-1 and CT-CONF-2) collected from the surface to 0.5 feet bgs. Arsenic was detected at a concentration (62 milligrams per kilogram [mg/kg]) greater than the maximum TSP remediation level (40 mg/kg) in the soil sample collected from 0.5 to 1 foot bgs (CT-CONF-2B). Lead was detected at concentrations less than the TSP Remediation Levels in the three analyzed confirmation soil samples.

3.1.2. Bristol View Apartments

A total of eight confirmation soil samples were collected for chemical analysis near the Bristol View Apartments. Samples BV-CONF-1 through BV-CONF-7 were collected from the surface to 0.5 feet bgs and sample BV-CONF-6B was collected from 0.5 to 1 foot bgs. One sample identified in the CAP to be collected from the eastern portion of the Bristol View Apartments area following excavation activities was not collected because the Type 1 cap was already in place when we attempted to collect the sample.

Arsenic was detected at a concentration (42 mg/kg) greater than the maximum TSP Remediation Level (40 mg/kg) in one soil confirmation sample collected from the surface to 0.5 foot bgs (BV-CONF-5). Arsenic was either not detected or was detected at concentrations less than the average and maximum TSP

Remediation Levels in the remaining analyzed soil samples. Lead was detected at concentrations less than the TSP Remediation Levels in the analyzed soil samples.

3.1.3. Healthcare/Memory Care Building

A total of 12 confirmation soil samples were collected for chemical analysis near the HCMC. Samples HCMC-CONF-1 through HCMC-CONF-10 were collected from the surface to 0.5 feet bgs and samples HCMC--CONF-6B and HCMC-CONF-10B were collected from 0.5 to 1 foot bgs.

Arsenic was detected at concentrations greater than the 20 mg/kg but less than the maximum TSP Remediation Level (40 mg/kg) in four confirmation soil samples. The average arsenic concentration (15 mg/kg) in the ground surface to 0.5-foot interval (10 samples) is less than the average TSP Remediation level (20 mg/kg). The average arsenic concentration (24 mg/kg) in the 0.5- to 1-foot interval (two samples) is greater than the average TSP Remediation level (20 mg/kg).

Lead was detected at concentrations less than the TSP Remediation Levels in the analyzed soil samples.

3.2. Stockpile Sample Results

Surface excavated material was stockpiled and sampled during construction activities to evaluate reuse alternatives. BCPI generated four stockpiles of mixed or excavated soil of volumes of 4,000 cubic yards (2), 2,000 cubic yards (1) and 300 cubic yards (1). One 5-point composite soil sample per 500 cubic yards was collected and analyzed for arsenic and lead by United States Environmental Protection Agency (EPA) method 6010. A summary of the stockpile source, analytical results and final placement locations are presented in Table 2.

3.2.1. Stockpile 1

Stockpile 1 was generated by excavating soil between approximately 2 and 25 feet bgs within Remedial Area 1. The stockpile dimensions measured approximately 200 feet (length) by 50 feet (width) and 15 feet (height). The estimated quantity was 4,000 cubic yards.

Fourteen (14) five-point composite soil samples were collected from varying locations and depths within the stockpile. Arsenic was not detected in the analyzed soil samples. Lead was either not detected or was detected at a concentration less than the TSP Remediation Levels in the analyzed samples.

The soil from Stockpile 1 was reused on-site as non-contaminated fill during construction based on these analytical results.

3.2.2. Stockpile 2

Stockpile 2 was generated by excavating mixed soil within the HCMC building footprint for construction purposes. Stockpile 2 dimensions measured approximately 100 feet (length) by 40 feet (width) and ranged from 2 to 10 feet in height. The estimated quantity was 2,000 cubic yards.

Eight five-point composite soil samples were collected from varying locations and depths within the stockpile. The average (38.5 mg/kg) and the maximum arsenic detected concentration (68 mg/kg) were greater than the TSP Remediation Levels in Stockpile 2. Lead was detected at concentrations less than the TSP Remediation Levels in the analyzed samples.

The soil from Stockpile 2 was placed in Remedial Area 1 and capped with a Type 1 cap based on these analytical results.

3.2.3. Stockpile 3

Stockpile 3 was generated during excavation for streets and utilities surrounding the HCMC building. Stockpile 3 dimensions measured approximately 85 feet (length) by 20 feet (width) and approximately 10 to 15 feet in height. The estimated quantity was 4,000 cubic yards.

Eight five-point composite soil samples were collected from varying locations and depths within the stockpile. Arsenic was detected at concentrations greater than 20 mg/kg but less than the maximum TSP Remediation Level in two of the stockpile samples (FTJ-STK1 and FTJ-STK3-3). The average arsenic concentration (15.8 mg/kg) of the eight soil samples collected from Stockpile 3 was less than the average TSP (20 mg/kg). Lead was detected at concentrations less than the TSP Remediation Levels in the analyzed samples.

The soil from Stockpile 3 was reused on site as non-contaminated fill based on these analytical results.

3.2.4. Stockpile 4

Stockpile 4 was generated during excavation activities for the Bristol View Apartment building footprint. The top 2 feet of soil from the building footprint was excavated and placed directly into Remedial Area 1 without sampling. Additional soil excavated from the southwest corner of the building footprint was stockpiled in approximate dimensions of 60 feet (length) by 40 feet (width) and approximately 5 feet in height. The estimated quantity was 300 cubic yards.

Two five-point composite soil samples were collected from varying locations and depths within the stockpile. Arsenic was either not detected or was detected at a concentration less than the TSP Remediation Levels in the analyzed samples. Lead was either not detected or was detected at a concentration less than the TSP Remediation Levels in the analyzed samples.

The soil from Stockpile 4 was reused on site as non-contaminated fill based on these analytical results.

3.3. Construction Water

BCPI stored water generated during construction in temporary water tanks. BCPI collected water samples for chemical analysis to evaluate water conditions for subsequent disposal into the sanitary sewer under the sanitary discharge approval permit from the City of Tacoma. Analytical data and water disposal records are included in Appendix B.

4.0 CONCLUSIONS

Phase I construction activities and associated remedial actions at the Franke Tobey Jones facility are complete. The majority of Phase I construction was completed on Pierce County parcel nos. 6390000413 6930000393 and 6930000381 with a small portion of the construction activities (cottage) completed on Pierce County parcel no. 0221232025. Arsenic- and lead-contaminated soil in the Phase I expansion areas was managed in general accordance with the CAP dated April 14, 2017 and TSPMRG. Arsenic-contaminated soil was excavated from Remedial Area 2 and consolidated within Remedial Area 1. The

remainder of the arsenic-contaminated soil in Remedial Area 2 was capped with a Type 1 cap. Non-contaminated soil from Remedial Area 1 and Remedial Area 2 was reused as fill on the site based on the soil stockpile analytical results.

Phase II expansion construction activities will occur in the future.

We are requesting a No Further Action (NFA) opinion from Ecology that the remediation efforts were performed in accordance with the CAP and results of the remediation efforts completed during Phase I construction are sufficient for an NFA. A restrictive covenant will be recorded as necessary with the legal description of the area where remedial action was completed.

5.0 LIMITATIONS

This Cleanup Action Report has been prepared for the exclusive use of Franke Tobey Jones. Any use of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and written authorization by GeoEngineers, Inc., shall be at the user's sole risk. Any unauthorized use of (or reliance on) this report shall release GeoEngineers, from any liability resulting from such use (or reliance). Within the limitations of scope, schedule, and budget, GeoEngineers, Inc.'s respective services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. GeoEngineers, Inc. assumes no responsibility for any consequence arising from any information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available.

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

6.0 REFERENCES

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Washington State Department of Ecology, 2013. "Model Toxics Control Act Statute and Regulation - Model Toxics Control Act Chapter 70.105D RCW, Uniform Environmental Covenants Act Chapter 64.70 RCW, MTCA Cleanup Regulation Chapter 173-340 WAC," January 1996, revised November 2013.

Washington State Department of Ecology, 2017. "Opinion on the Proposed Cleanup of a Property associated with the Asarco Tacoma Smelter Site" letter to Mr. Mark Gustafson, Franke Tobey Jones, August 30, 2017.

Table 1

Summary of Arsenic and Lead - Confirmation Samples

Franke Tobey Jones Master Plan Expansion Phase I

Tacoma, Washington

Sample Location	Sample ID[2]	Sample Depth (feet bgs)	Sample Date	Metals (mg/kg)[3]			Remedial Action
				Arsenic	Average Arsenic Concentration[4]	Lead	
Cottage Duplex	CT-CONF-1	0 to 0.5	3/28/2019	**14**	**13**	**11**	Type 1 Cap
	CT-CONF-2	0 to 0.5	3/28/2019	12 U		**11**	
	CT-CONF-2B	0.5 to 1	3/28/2019	**62**	**62**	**110**	
Bristol View Apartments	BV-CONF-1	0 to 0.5	6/7/2018	**7.1**	**11**	**9.4**	Type 1 Cap
	BV-CONF-2	0 to 0.5	6/7/2018	5.6 U		**6.7**	
	BV-CONF-3	0 to 0.5	6/7/2018	**8.4**		**11**	
	BV-CONF-4	0 to 0.5	6/7/2018	5.4 U		5.4 U	
	BV-CONF-5	0 to 0.5	6/7/2018	**42**		**52**	
	BV-CONF-6	0 to 0.5	6/11/2018	**5.7**		**6.7**	
	BV-CONF-7	0 to 0.5	6/11/2018	5.4 U		5.4 U	
	BV-CONF-6B	0.5 to 1	6/11/2018	5.6 U	**5.6**	5.6 U	
Healthcare/ Memory Care Building	HCMC-CONF-1	0 to 0.5	6/7/2018	5.4 U	**15**	**5.6**	Type 1 Cap
	HCMC-CONF-2	0 to 0.5	6/7/2018	**7.2**		**7.2**	
	HCMC-CONF-3	0 to 0.5	6/7/2018	**8.5**		**12**	
	HCMC-CONF-4	0 to 0.5	6/7/2018	**21**		**31**	
	HCMC-CONF-5	0 to 0.5	3/28/2019	12 U		6.0 U	
	HCMC-CONF-6	0 to 0.5	3/28/2019	12 U		5.8 U	
	HCMC-CONF-7	0 to 0.5	3/28/2019	**17**		**24**	
	HCMC-CONF-8	0 to 0.5	3/28/2019	**15**		**21**	
	HCMC-CONF-9	0 to 0.5	3/28/2019	**23**		**32**	
	HCMC-CONF-10	0 to 0.5	3/28/2019	**25**		**55**	
	HCMC-CONF-6B	0.5 to 1	3/28/2019	12 U	**24**	5.8 U	
	HCMC-CONF-10B	0.5 to 1	3/28/2019	**35**		**82**	
MTCA Method A ULU Cleanup Level				20	20	250	NA
Tacoma Smelter Plume Remediation Levels - No Further Action				Average <20 mg/kg Maximum <40 mg/kg		Average <250 mg/kg Maximum <500 mg/kg	NA

Notes:

[1] Chemical analysis performed by OnSite Environmental, Inc., of Redmond, Washington.

[2] Sample ID: Sample Location - sample type - sample number (Ex. BV-CONF-1)

[3] Metals were analyzed by U.S. Environmental Protection Agency (EPA) method 6010C.

[4] The average arsenic was calculated as the average of the detected concentration and the detection limit if arsenic was not detected.

bgs = below ground surface

MTCA = Model Toxics Control Act

< = less than

> = greater than

mg/kg = milligram per kilogram

NA = Not applicable

EPA = United States Environmental Protection Agency

U = Analyte was not detected at or greater than the listed reporting limit

Bold font type indicates the chemical of concern was detected at a concentration greater than laboratory reporting limit in the sample.

Bold font type and gray shading indicates that the detected concentration is greater than the TSP Remediation Levels for No Further Action

Table 2

Summary of Arsenic and Lead - Stockpile Samples

Franke Tobey Jones Master Plan Expansion Phase I

Tacoma, Washington

Sample Location	Sample ID[2]	Sample Date	Source of Stockpile	Metals (mg/kg)[3]			Final Disposition of Soil[4]
				Arsenic	Average Arsenic Concentration[4]	Lead	
Stockpile 1	FTJ-STK1-1	11/6/2017	Non-contaminated Soil Removed from Remedial Area 1	5.8 U	5.7	5.8 U	Reused On Site As Fill
	FTJ-STK1-2	11/6/2017		5.7 U		5.7 U	
	FTJ-STK1-3	11/6/2017		5.6 U		5.6 U	
	FTJ-STK1-4	11/6/2017		5.7 U		5.7 U	
	FTJ-STK1-5	11/6/2017		5.6 U		5.6 U	
	FTJ-STK1-6	11/6/2017		5.7 U		**8.4**	
	FTJ-STK1-7	11/6/2017		5.7 U		5.7 U	
	FTJ-STK1-8	11/6/2017		5.7 U		5.7 U	
	FTJ-STK1-9	11/6/2017		5.7 U		5.7 U	
	FTJ-STK1-10	11/6/2017		5.8 U		5.8 U	
	FTJ-STK1-11	11/6/2017		5.8 U		5.8 U	
	FTJ-STK1-12	11/6/2017		5.8 U		5.8 U	
	FTJ-STK1-13	11/6/2017		5.8 U		5.8 U	
	FTJ-STK1-14	11/6/2017		5.9 U		5.9 U	
Stockpile 2	FTJ-STK2-1	1/8/2018	Mixed Non-Contaminated and Contaminated Soil in area of HCMC Building	**19**	**38.5**	**20**	Remedial Area 1
	FTJ-STK2-2	1/8/2018		**39**		**48**	
	FTJ-STK2-3	1/8/2018		**16**		**22**	
	FTJ-STK2-4	1/8/2018		**36**		**48**	
	FTJ-STK2-5	1/8/2018		**38**		**36**	
	FTJ-STK2-6	1/8/2018		**68**		**63**	
	FTJ-STK2-7	1/8/2018		**60**		**57**	
	FTJ-STK2-8	1/8/2018		**32**		**47**	
Stockpile 3	FTJ-STK3-1	1/8/2018	Soil Exavated for Streets and Utilities Near HCMC Building	**28**	**15.8**	**35**	Reused On Site As Fill
	FTJ-STK3-2	1/8/2018		**7.4**		**8.9**	
	FTJ-STK3-3	1/8/2018		**27**		**64**	
	FTJ-STK3-4	1/8/2018		**14**		**32**	
	FTJ-STK3-5	1/8/2018		**12**		**22**	
	FTJ-STK3-6	1/8/2018		**9.7**		**20**	
	FTJ-STK3-7	1/8/2018		**13**		**26**	
	FTJ-STK3-8	1/8/2018		**15**		**24**	
Stockpile 4	BV-STK4-1	06/07/18	Bristol View Building Footprint	5.5 U	**6.0**	5.5 U	Reused On Site As Fill
	BV-STK4-2	06/07/18		**6.0**		**5.9**	
MTCA Method A ULU Cleanup Level				20	20	250	NA
Tacoma Smelter Plume Remediation Levels - No Further Action				Average <20 mg/kg Maximum <40 mg/kg		Average <250 mg/kg Maximum <500 mg/kg	NA

Notes:

[1] Chemical analysis performed by OnSite Environmental, Inc., of Redmond, Washington.

[2] Sample ID: Sample Location - sample type - sample number (Ex. BV-STK4-1)

[3] Metals were analyzed by U.S. Environmental Protection Agency (EPA) method 6010C.

[4] The average arsenic was calculated as the average of the detected concentration and the detection limit if arsenic was not detected.

bgs = below ground surface

MTCA = Model Toxics Control Act

< = less than

mg/kg = milligram per kilogram

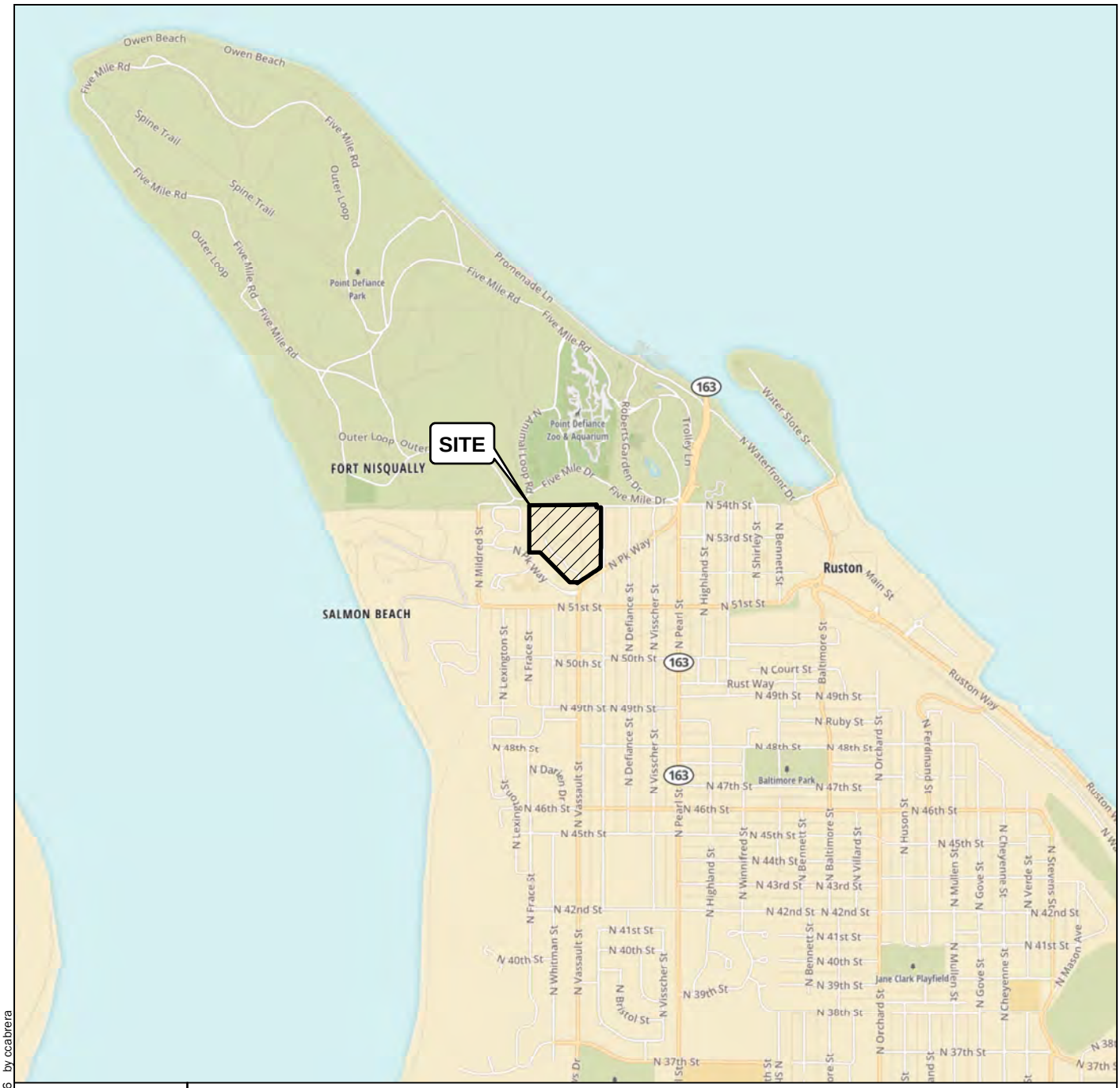
NA = Not applicable

EPA = United States Environmental Protection Agency

U = Analyte was not detected at or greater than the listed reporting limit

Bold font type indicates the chemical of concern was detected at a concentration greater than laboratory reporting limit in the sample.

Bold font type and gray shading indicates that the detected concentration is greater than the TSP Remediation Levels for No Further Action



Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Mapbox Open Street Map, 2016

Projection: NAD 1983 UTM Zone 10N

Vicinity Map

Franke Tobey Jones
Tacoma, Washington

GeoEngineers

Figure 1

P:\10\10068002\GIS\MXDs\10068002_F01_VM.mxd Date Exported: 12/07/16 by ccabrera

Legend

- Grey Text — Existing Site Features
- New Building Outline
- Pierce County Parcel Boundary
- Hardscape
- Existing Building Outline

Phase I Remedial Action

- Remedial Area 1
  Approximate Area Where Arsenic-Contaminated Soil Was Consolidated and Capped with Type 1 Cap
- Remedial Area 2
  Approximate Area Where 1 to 2 Feet of Soil Was Removed, Mixed/Regraded and Capped With Type 1 Cap
- Approximate Location of Confirmation Sample Collected From 0-to 6-Inches bgs Following Grading Activities. Red Color Indicates As > MTCA (20 mg/kg)
- Approximate Location of Confirmation Sample Collected from 6 to 12 Inches Following Grading Activities. Red Color Indicates As > MTCA (20 mg/kg)

N E S W

100 0 100
Feet

Notes:

1. bgs = below ground surface
2. > = greater than
3. mg/kg = milligram per kilogram
4. As = arsenic
5. Locations of all features shown are approximate.
6. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:
Base CAD files provided by ABHL on 04/14/17.

Phase 1 Remedial Action

Franke Tobey Jones
Tacoma, Washington

GeoEngineers

Figure 2

View facing east showing the 4 to 6-inches of structural fill placed following excavation of 1 to 2 feet of surficial soil within Remedial Area 2 (HCMC building) – November 8, 2017.

View facing south showing the west-facing slope of Stockpile 1 (STK1) – November 6, 2017.

Site Photographs	
Franke Tobey Jones Tacoma, Washington	
GeoEngineers	Figure 3

6/12/19 mb

10068-002-02

View facing southwest of Bristol View Apartments construction area– June 5, 2018.

View facing east of Bristol View Apartments showing the western retaining wall along N. Bristol Street– June 5, 2018.

Site Photographs	
Franke Tobey Jones Tacoma, Washington	
GeoEngineers	Figure 4

6/12/19 mb

10068-002-02

View facing east showing Stockpile 2 (STK2) – January 8, 2018.

View facing north-northeast showing Stockpile 3 (STK3) – January 8, 2018.

Site Photographs	
Franke Tobey Jones Tacoma, Washington	
GeoEngineers	Figure 5

6/12/19 mb

10068-002-02

View facing east of modified Type 1 cap– May 1 , 2019.

View facing northeast of modified Type 1 cap in area of HCMC-CONF-10B – May 1, 2019.

Site Photographs	
Franke Tobey Jones Tacoma, Washington	
GeoEngineers	Figure 6

6/12/19 mb

10068-002-02

APPENDIX A
Chemical Analytical Program

Data Validation Report

1101 Fawcett Avenue, Suite 200, Tacoma, Washington 98402, Telephone: 253.383.4940, Fax: 253.383.4923 www.geoengineers.com

Project: Franke Tobey Jones – Master Plan Expansion – Phase I Environmental Construction Observation Services
November 2017, January and June 2018, and March 2019 Soil Samples

GEI File No: 10068-002-02

Date: June 14, 2019

This report documents the results of a United States Environmental Protection Agency (USEPA)-defined Stage 2A data validation (USEPA Document 540-R-08-005; USEPA, 2009) of analytical data from the analyses of soil samples collected as part of the 2017, 2018, and 2019 sampling events, and the associated laboratory quality control (QC) samples. The samples were obtained from the Franke Tobey Jones facility located at 5340 North Bristol Street in Tacoma, Washington.

Objective and Quality Control Elements

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

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

The laboratory data was reviewed for the following QC elements:

- Data Package Completeness
- Chain-of-Custody Documentation
- Holding Times
- Method Blanks
- Matrix Spikes/Matrix Spike Duplicates
- Laboratory Duplicates

Validated Sample Delivery Groups

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

TABLE 1: SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

Laboratory SDG	Samples Validated
1711-085	FTJ-STK1-1, FTJ-STK1-2, FTJ-STK1-3, FTJ-STK1-4, FTJ-STK1-5, FTJ-STK1-6, FTJ-STK1-7, FTJ-STK1-8, FTJ-STK1-9, FTJ-STK1-10, FTJ-STK1-11, FTJ-STK1-12, FTJ-STK1-13, FTJ-STK1-14
1801-068	FTJ-STK2-1, FTJ-STK2-2, FTJ-STK2-3, FTJ-STK2-4, FTJ-STK2-5, FTJ-STK2-6, FTJ-STK2-7, FTJ-STK2-8, FTJ-STK3-1, FTJ-STK3-2, FTJ-STK3-3, FTJ-STK3-4, FTJ-STK3-5, FTJ-STK3-6, FTJ-STK3-7, FTJ-STK3-8
1806-078	BV-CONF-1, BV-CONF-2, BV-CONF-3, BV-CONF-4, BV-CONF-5, BV-STK4-1, BV-STK4-2, HCMC-CONF-1, HCMC-CONF-2, HCMC-CONF-3, HCMC-CONF-4
1806-078B	
1806-121	BV-Conf-6, BV-Conf-6B, BV-Conf-7
1903-301	BV-Conf-6, BV-Conf-7, BV-Conf-7B, CT-Conf-1, CT-Conf-2, CT-Conf-2B, HCMC-Conf-5, HCMC-Conf-6, HCMC-Conf-6B, HCMC-Conf-7, HCMC-Conf-8, HCMC-Conf-9, HCMC-Conf-10, HCMC-Conf-10B

Chemical Analysis Performed

OnSite Environmental, Inc. (OnSite), located in Redmond, Washington, performed laboratory analyses on the samples using the following methods:

- Total Metals by Methods EPA6010C or EPA6010D

Data Validation Summary

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

Data Package Completeness

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

Chain-of-Custody Documentation

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

Holding Times

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for each analysis.

Method Blanks

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

Matrix Spikes/Matrix Spike Duplicates

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

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

Laboratory Duplicates

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

Overall Assessment

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

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

References

U.S. Environmental Protection Agency (USEPA). “Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use,” EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (USEPA). “Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review,” EPA-540-R-2017-001. January 2017.

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 8, 2017

Tricia DeOme
GeoEngineers, Inc.
1101 Fawcett Avenue South, Suite 200
Tacoma, WA 98402

Re: Analytical Data for Project 10068-002-02
Laboratory Reference No. 1711-085

Dear Tricia:

Enclosed are the analytical results and associated quality control data for samples submitted on November 6, 2017.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: November 8, 2017
Samples Submitted: November 6, 2017
Laboratory Reference: 1711-085
Project: 10068-002-02

Case Narrative

Samples were collected on November 6, 2017 and received by the laboratory on November 6, 2017. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: November 8, 2017
Samples Submitted: November 6, 2017
Laboratory Reference: 1711-085
Project: 10068-002-02

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
FTJ-STK1-1	11-085-01	Soil	11-6-17	11-6-17	
FTJ-STK1-2	11-085-02	Soil	11-6-17	11-6-17	
FTJ-STK1-3	11-085-03	Soil	11-6-17	11-6-17	
FTJ-STK1-4	11-085-04	Soil	11-6-17	11-6-17	
FTJ-STK1-5	11-085-05	Soil	11-6-17	11-6-17	
FTJ-STK1-6	11-085-06	Soil	11-6-17	11-6-17	
FTJ-STK1-7	11-085-07	Soil	11-6-17	11-6-17	
FTJ-STK1-8	11-085-08	Soil	11-6-17	11-6-17	
FTJ-STK1-9	11-085-09	Soil	11-6-17	11-6-17	
FTJ-STK1-10	11-085-10	Soil	11-6-17	11-6-17	
FTJ-STK1-11	11-085-11	Soil	11-6-17	11-6-17	
FTJ-STK1-12	11-085-12	Soil	11-6-17	11-6-17	
FTJ-STK1-13	11-085-13	Soil	11-6-17	11-6-17	
FTJ-STK1-14	11-085-14	Soil	11-6-17	11-6-17	

Date of Report: November 8, 2017
Samples Submitted: November 6, 2017
Laboratory Reference: 1711-085
Project: 10068-002-02

TOTAL METALS
EPA 6010C

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	11-085-01					
Client ID:	**FTJ-STK1-1**					
Arsenic	**ND**	5.8	6010C	11-7-17	11-7-17	
Lead	**ND**	5.8	6010C	11-7-17	11-7-17	
Lab ID:	11-085-02					
Client ID:	**FTJ-STK1-2**					
Arsenic	**ND**	5.7	6010C	11-7-17	11-7-17	
Lead	**ND**	5.7	6010C	11-7-17	11-7-17	
Lab ID:	11-085-03					
Client ID:	**FTJ-STK1-3**					
Arsenic	**ND**	5.6	6010C	11-7-17	11-7-17	
Lead	**ND**	5.6	6010C	11-7-17	11-7-17	
Lab ID:	11-085-04					
Client ID:	**FTJ-STK1-4**					
Arsenic	**ND**	5.7	6010C	11-7-17	11-7-17	
Lead	**ND**	5.7	6010C	11-7-17	11-7-17	
Lab ID:	11-085-05					
Client ID:	**FTJ-STK1-5**					
Arsenic	**ND**	5.6	6010C	11-7-17	11-7-17	
Lead	**ND**	5.6	6010C	11-7-17	11-7-17	
Lab ID:	11-085-06					
Client ID:	**FTJ-STK1-6**					
Arsenic	**ND**	5.7	6010C	11-7-17	11-7-17	
Lead	**8.4**	5.7	6010C	11-7-17	11-7-17	

Date of Report: November 8, 2017
Samples Submitted: November 6, 2017
Laboratory Reference: 1711-085
Project: 10068-002-02

TOTAL METALS
EPA 6010C

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	11-085-07					
Client ID:	**FTJ-STK1-7**					
Arsenic	**ND**	5.7	6010C	11-7-17	11-7-17	
Lead	**ND**	5.7	6010C	11-7-17	11-7-17	
Lab ID:	11-085-08					
Client ID:	**FTJ-STK1-8**					
Arsenic	**ND**	5.7	6010C	11-7-17	11-7-17	
Lead	**ND**	5.7	6010C	11-7-17	11-7-17	
Lab ID:	11-085-09					
Client ID:	**FTJ-STK1-9**					
Arsenic	**ND**	5.7	6010C	11-7-17	11-7-17	
Lead	**ND**	5.7	6010C	11-7-17	11-7-17	
Lab ID:	11-085-10					
Client ID:	**FTJ-STK1-10**					
Arsenic	**ND**	5.8	6010C	11-7-17	11-7-17	
Lead	**ND**	5.8	6010C	11-7-17	11-7-17	
Lab ID:	11-085-11					
Client ID:	**FTJ-STK1-11**					
Arsenic	**ND**	5.8	6010C	11-7-17	11-7-17	
Lead	**ND**	5.8	6010C	11-7-17	11-7-17	
Lab ID:	11-085-12					
Client ID:	**FTJ-STK1-12**					
Arsenic	**ND**	5.8	6010C	11-7-17	11-7-17	
Lead	**ND**	5.8	6010C	11-7-17	11-7-17	

Date of Report: November 8, 2017
Samples Submitted: November 6, 2017
Laboratory Reference: 1711-085
Project: 10068-002-02

TOTAL METALS
EPA 6010C

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	11-085-13					
Client ID:	**FTJ-STK1-13**					
Arsenic	**ND**	5.8	6010C	11-7-17	11-7-17	
Lead	**ND**	5.8	6010C	11-7-17	11-7-17	
Lab ID:	11-085-14					
Client ID:	**FTJ-STK1-14**					
Arsenic	**ND**	5.9	6010C	11-7-17	11-7-17	
Lead	**ND**	5.9	6010C	11-7-17	11-7-17	

Date of Report: November 8, 2017
Samples Submitted: November 6, 2017
Laboratory Reference: 1711-085
Project: 10068-002-02

TOTAL METALS
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted:	11-7-17
Date Analyzed:	11-7-17
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB1107SM2

Analyte	Method	Result	PQL
Arsenic	6010C	**ND**	5.0
Lead	6010C	**ND**	5.0

Date of Report: November 8, 2017
Samples Submitted: November 6, 2017
Laboratory Reference: 1711-085
Project: 10068-002-02

TOTAL METALS
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 11-7-17
Date Analyzed: 11-7-17

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 11-085-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	**ND**	**ND**	NA	5.0	
Lead	**ND**	**ND**	NA	5.0	

Date of Report: November 8, 2017
Samples Submitted: November 6, 2017
Laboratory Reference: 1711-085
Project: 10068-002-02

TOTAL METALS
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 11-7-17
Date Analyzed: 11-7-17

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 11-085-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	**94.2**	94	**93.7**	94	1	
Lead	250	**229**	92	**230**	92	0	

Date of Report: November 8, 2017
Samples Submitted: November 6, 2017
Laboratory Reference: 1711-085
Project: 10068-002-02

% MOISTURE

Date Analyzed: 11-7-17

Client ID	Lab ID	% Moisture
FTJ-STK1-1	11-085-01	13
FTJ-STK1-2	11-085-02	13
FTJ-STK1-3	11-085-03	11
FTJ-STK1-4	11-085-04	12
FTJ-STK1-5	11-085-05	11
FTJ-STK1-6	11-085-06	13
FTJ-STK1-7	11-085-07	12
FTJ-STK1-8	11-085-08	13
FTJ-STK1-9	11-085-09	13
FTJ-STK1-10	11-085-10	14
FTJ-STK1-11	11-085-11	13
FTJ-STK1-12	11-085-12	14
FTJ-STK1-13	11-085-13	14
FTJ-STK1-14	11-085-14	15

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 2

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 11-085

Company: GEI
Project Number: 10068-002-02
Project Name: FRANKE TOBEY JONES
Project Manager: AARON WAGONNER & TERESA DEOME
Sampled by: ERIC KNOEDLER

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Low-level As *	Pb			% Moisture
1	FTJ-STK1-1	11/6/17	1250	Soil	1																		X	X			
2	FTJ-STK1-2		1300																				X	X			
3	FTJ-STK1-3		1305																				X	X			
4	FTJ-STK1-4		1310																				X	X			
5	FTJ-STK1-5		1315																				X	X			
6	FTJ-STK1-6		1320																				X	X			
7	FTJ-STK1-7		1325																				X	X			
8	FTJ-STK1-8		1330																				X	X			
9	FTJ-STK1-9		1335																				X	X			
10	FTJ-STK1-10		1340																				X	X			

	Signature	Company	Date	Time
Relinquished		GEI	11/6/17	
Received		Alpha Courier	11.6.17	1634
Relinquished		Alpha Courier	11.6.17	1750
Received		CSC	11/6/17	1750
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
*As DETECTION LIMIT 7mg/kg

Data Package: Standard ☒ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEI
Project Number: 10068-002-02
Project Name: FRANKE TOBEY JONES
Project Manager: A. WAGONER & T. DEOME
Sampled by: E. KNUDSEN

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☒ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 11-085

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Low-Level As *	Pb			% Moisture
11	FTJ-STK1-11	11/6/17	1345	SOIL	1																		X	X			X
12	FTJ-STK1-12		1355																				X	X			X
13	FTJ-STK1-13		1410																				X	X			X
14	FTJ-STK1-14		1415																				X	X			X

	Signature	Company	Date	Time
Relinquished		GEI	11/6/17	
Received		Alpha Courier	11.6.17	1634
Relinquished		Alpha Courier	11.6.17	1750
Received		CORE	11/6/17	1750
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

* As detection limit 7mg/kg

Data Package: Standard ☒ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

January 11, 2018

Tricia DeOme
GeoEngineers, Inc.
1101 Fawcett Avenue South, Suite 200
Tacoma, WA 98402

Re: Analytical Data for Project 10068-002-02
Laboratory Reference No. 1801-068

Dear Tricia:

Enclosed are the analytical results and associated quality control data for samples submitted on January 8, 2018.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: January 11, 2018
Samples Submitted: January 8, 2018
Laboratory Reference: 1801-068
Project: 10068-002-02

Case Narrative

Samples were collected on January 8, 2018 and received by the laboratory on January 8, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: January 11, 2018
Samples Submitted: January 8, 2018
Laboratory Reference: 1801-068
Project: 10068-002-02

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
FTJ-STK2-1	01-068-01	Soil	1-8-18	1-8-18	
FTJ-STK2-2	01-068-02	Soil	1-8-18	1-8-18	
FTJ-STK2-3	01-068-03	Soil	1-8-18	1-8-18	
FTJ-STK2-4	01-068-04	Soil	1-8-18	1-8-18	
FTJ-STK2-8	01-068-05	Soil	1-8-18	1-8-18	
FTJ-STK2-5	01-068-06	Soil	1-8-18	1-8-18	
FTJ-STK2-6	01-068-07	Soil	1-8-18	1-8-18	
FTJ-STK2-7	01-068-08	Soil	1-8-18	1-8-18	
FTJ-STK3-1	01-068-09	Soil	1-8-18	1-8-18	
FTJ-STK3-2	01-068-10	Soil	1-8-18	1-8-18	
FTJ-STK3-3	01-068-11	Soil	1-8-18	1-8-18	
FTJ-STK3-4	01-068-12	Soil	1-8-18	1-8-18	
FTJ-STK3-5	01-068-13	Soil	1-8-18	1-8-18	
FTJ-STK3-6	01-068-14	Soil	1-8-18	1-8-18	
FTJ-STK3-7	01-068-15	Soil	1-8-18	1-8-18	
FTJ-STK3-8	01-068-16	Soil	1-8-18	1-8-18	

Date of Report: January 11, 2018
Samples Submitted: January 8, 2018
Laboratory Reference: 1801-068
Project: 10068-002-02

TOTAL METALS
EPA 6010C

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-068-01					
Client ID:	**FTJ-STK2-1**					
Arsenic	**19**	6.0	6010C	1-9-18	1-9-18	
Lead	**20**	6.0	6010C	1-9-18	1-9-18	
Lab ID:	01-068-02					
Client ID:	**FTJ-STK2-2**					
Arsenic	**39**	6.4	6010C	1-9-18	1-9-18	
Lead	**48**	6.4	6010C	1-9-18	1-9-18	
Lab ID:	01-068-03					
Client ID:	**FTJ-STK2-3**					
Arsenic	**16**	6.3	6010C	1-9-18	1-9-18	
Lead	**22**	6.3	6010C	1-9-18	1-9-18	
Lab ID:	01-068-04					
Client ID:	**FTJ-STK2-4**					
Arsenic	**36**	6.3	6010C	1-9-18	1-9-18	
Lead	**48**	6.3	6010C	1-9-18	1-9-18	
Lab ID:	01-068-05					
Client ID:	**FTJ-STK2-8**					
Arsenic	**32**	6.4	6010C	1-9-18	1-9-18	
Lead	**47**	6.4	6010C	1-9-18	1-9-18	
Lab ID:	01-068-06					
Client ID:	**FTJ-STK2-5**					
Arsenic	**38**	6.3	6010C	1-9-18	1-9-18	
Lead	**36**	6.3	6010C	1-9-18	1-9-18	

Date of Report: January 11, 2018
Samples Submitted: January 8, 2018
Laboratory Reference: 1801-068
Project: 10068-002-02

TOTAL METALS
EPA 6010C

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-068-07					
Client ID:	**FTJ-STK2-6**					
Arsenic	**68**	6.6	6010C	1-9-18	1-9-18	
Lead	**63**	6.6	6010C	1-9-18	1-9-18	
Lab ID:	01-068-08					
Client ID:	**FTJ-STK2-7**					
Arsenic	**60**	6.7	6010C	1-9-18	1-9-18	
Lead	**57**	6.7	6010C	1-9-18	1-9-18	
Lab ID:	01-068-09					
Client ID:	**FTJ-STK3-1**					
Arsenic	**28**	6.1	6010C	1-9-18	1-9-18	
Lead	**35**	6.1	6010C	1-9-18	1-9-18	
Lab ID:	01-068-10					
Client ID:	**FTJ-STK3-2**					
Arsenic	**7.4**	6.1	6010C	1-9-18	1-9-18	
Lead	**8.9**	6.1	6010C	1-9-18	1-9-18	
Lab ID:	01-068-11					
Client ID:	**FTJ-STK3-3**					
Arsenic	**27**	6.2	6010C	1-9-18	1-9-18	
Lead	**64**	6.2	6010C	1-9-18	1-9-18	
Lab ID:	01-068-12					
Client ID:	**FTJ-STK3-4**					
Arsenic	**14**	6.0	6010C	1-9-18	1-9-18	
Lead	**32**	6.0	6010C	1-9-18	1-9-18	

Date of Report: January 11, 2018
Samples Submitted: January 8, 2018
Laboratory Reference: 1801-068
Project: 10068-002-02

TOTAL METALS
EPA 6010C

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-068-13					
Client ID:	**FTJ-STK3-5**					
Arsenic	**12**	6.1	6010C	1-9-18	1-9-18	
Lead	**22**	6.1	6010C	1-9-18	1-9-18	
Lab ID:	01-068-14					
Client ID:	**FTJ-STK3-6**					
Arsenic	**9.7**	6.2	6010C	1-9-18	1-9-18	
Lead	**20**	6.2	6010C	1-9-18	1-9-18	
Lab ID:	01-068-15					
Client ID:	**FTJ-STK3-7**					
Arsenic	**13**	6.0	6010C	1-9-18	1-9-18	
Lead	**26**	6.0	6010C	1-9-18	1-9-18	
Lab ID:	01-068-16					
Client ID:	**FTJ-STK3-8**					
Arsenic	**15**	5.8	6010C	1-9-18	1-9-18	
Lead	**24**	5.8	6010C	1-9-18	1-9-18	

Date of Report: January 11, 2018
Samples Submitted: January 8, 2018
Laboratory Reference: 1801-068
Project: 10068-002-02

TOTAL METALS
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted: 1-9-18
Date Analyzed: 1-9-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0109SM1

Analyte	Method	Result	PQL
Arsenic	6010C	**ND**	5.0
Lead	6010C	**ND**	5.0

Date of Report: January 11, 2018
Samples Submitted: January 8, 2018
Laboratory Reference: 1801-068
Project: 10068-002-02

TOTAL METALS
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 1-9-18
Date Analyzed: 1-9-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 01-065-02

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	**ND**	**ND**	NA	5.0	
Lead	**ND**	**ND**	NA	5.0	

Date of Report: January 11, 2018
Samples Submitted: January 8, 2018
Laboratory Reference: 1801-068
Project: 10068-002-02

TOTAL METALS
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 1-9-18
Date Analyzed: 1-9-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 01-065-02

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	**95.6**	96	**96.7**	97	1	
Lead	250	**231**	92	**231**	92	0	

Date of Report: January 11, 2018
Samples Submitted: January 8, 2018
Laboratory Reference: 1801-068
Project: 10068-002-02

% MOISTURE

Date Analyzed: 1-9-18

Client ID	Lab ID	% Moisture
FTJ-STK2-1	01-068-01	17
FTJ-STK2-2	01-068-02	22
FTJ-STK2-3	01-068-03	21
FTJ-STK2-4	01-068-04	20
FTJ-STK2-8	01-068-05	22
FTJ-STK2-5	01-068-06	20
FTJ-STK2-6	01-068-07	25
FTJ-STK2-7	01-068-08	26
FTJ-STK3-1	01-068-09	18
FTJ-STK3-2	01-068-10	18
FTJ-STK3-3	01-068-11	19
FTJ-STK3-4	01-068-12	17
FTJ-STK3-5	01-068-13	18
FTJ-STK3-6	01-068-14	19
FTJ-STK3-7	01-068-15	17
FTJ-STK3-8	01-068-16	13

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 10068-002-02
Project Name: Franke Tobey Jones
Project Manager: Aaron Waagonner & Teresa DeOme
Sampled by: Eric Knoedler

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☒ 3 Days
- ☐ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 01-068

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Low-level As *	Pb			% Moisture
1	FTJ-STK2-1	1/8/18	0925	Soil	1																		X	X			
2	FTJ-STK2-2		0935																				X	X			
3	FTJ-STK2-3		0940																				X	X			
4	FTJ-STK2-4		0945																				X	X			
5	FTJ-STK2-4B		1010																				X	X			
6	FTJ-STK2-5		0950																				X	X			
7	FTJ-STK2-6		0955																				X	X			
8	FTJ-STK2-7		1005																				X	X			
9	FTJ-STK3-1		1100																				X	X			
10	FTJ-STK3-2		1105																				X	X			

	Signature	Company	Date	Time
Relinquished		GET	1/8/18	
Received		alpha	1-8-18	2:10
Relinquished		alpha	1-8-18	3:16
Received		OSE	1/8/18	1516
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

*As detection level 7 mg/kg

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company:

Project Number: 10068-002-02

Project Name: FRANKE TOBEY JONES

Project Manager:

Sampled by:

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☑ 3 Days
- ☐ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 01-068

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Low-level As*	Pb			% Moisture
11	FTJ-STK3-3	1/8/18	1110	Soil	1																		X	X			16
12	FTJ-STK3-4		1115																				X	X			
13	FTJ-STK3-5		1120																				X	X			
14	FTJ-STK3-6		1125																				X	X			
15	FTJ-STK3-7		1130																				X	X			
16	FTJ-STK3-8		1135																				X	X			1

	Signature	Company	Date	Time
Relinquished		GEI	1/8/18	
Received		Alpha	1-8-18	2:10
Relinquished		alpha	1-8-18	3:16
Received		GEI	1/8/18	1516
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

*As DETECTION LIMIT 7 mg/kg

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

June 18, 2018

Tricia DeOme
GeoEngineers, Inc.
1101 Fawcett Avenue South, Suite 200
Tacoma, WA 98402

Re: Analytical Data for Project 10068-002-02
Laboratory Reference No. 1806-078

Dear Tricia:

Enclosed are the analytical results and associated quality control data for samples submitted on June 7, 2018.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: June 18, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078
Project: 10068-002-02

Case Narrative

Samples were collected on June 7, 2018 and received by the laboratory on June 7, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: June 18, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078
Project: 10068-002-02

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
BV-STK4-1	06-078-01	Soil	6-7-18	6-7-18	
BV-STK4-2	06-078-02	Soil	6-7-18	6-7-18	
BV-CONF-1	06-078-03	Soil	6-7-18	6-7-18	
BV-CONF-2	06-078-04	Soil	6-7-18	6-7-18	
BV-CONF-3	06-078-05	Soil	6-7-18	6-7-18	
BV-CONF-4	06-078-06	Soil	6-7-18	6-7-18	
BV-CONF-5	06-078-07	Soil	6-7-18	6-7-18	
HCMC-CONF-1	06-078-08	Soil	6-7-18	6-7-18	
HCMC-CONF-2	06-078-09	Soil	6-7-18	6-7-18	
HCMC-CONF-3	06-078-10	Soil	6-7-18	6-7-18	
HCMC-CONF-4	06-078-11	Soil	6-7-18	6-7-18	

Date of Report: June 18, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078
Project: 10068-002-02

TOTAL ARSENIC
EPA 6010D

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	06-078-01					
Client ID:	**BV-STK4-1**					
Arsenic	**ND**	5.5	6010D	6-8-18	6-8-18	
Lab ID:	06-078-02					
Client ID:	**BV-STK4-2**					
Arsenic	**6.0**	5.5	6010D	6-8-18	6-8-18	

Date of Report: June 18, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078
Project: 10068-002-02

TOTAL ARSENIC
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BV-CONF-1**					
Laboratory ID:	06-078-03					
Arsenic	**7.1**	5.4	EPA 6010D	6-12-18	6-12-18	
Client ID:	**BV-CONF-2**					
Laboratory ID:	06-078-04					
Arsenic	**ND**	5.6	EPA 6010D	6-12-18	6-12-18	
Client ID:	**BV-CONF-3**					
Laboratory ID:	06-078-05					
Arsenic	**8.4**	5.5	EPA 6010D	6-12-18	6-12-18	
Client ID:	**BV-CONF-4**					
Laboratory ID:	06-078-06					
Arsenic	**ND**	5.4	EPA 6010D	6-12-18	6-12-18	
Client ID:	**BV-CONF-5**					
Laboratory ID:	06-078-07					
Arsenic	**42**	5.7	EPA 6010D	6-12-18	6-12-18	
Client ID:	**HCMC-CONF-1**					
Laboratory ID:	06-078-08					
Arsenic	**ND**	5.4	EPA 6010D	6-12-18	6-12-18	
Client ID:	**HCMC-CONF-2**					
Laboratory ID:	06-078-09					
Arsenic	**7.2**	6.2	EPA 6010D	6-12-18	6-12-18	
Client ID:	**HCMC-CONF-3**					
Laboratory ID:	06-078-10					
Arsenic	**8.5**	5.9	EPA 6010D	6-12-18	6-12-18	

Date of Report: June 18, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078
Project: 10068-002-02

TOTAL ARSENIC
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**HCMC-CONF-4**					
Laboratory ID:	06-078-11					
Arsenic	**21**	5.7	EPA 6010D	6-12-18	6-12-18	

Date of Report: June 18, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078
Project: 10068-002-02

TOTAL ARSENIC
EPA 6010D
METHOD BLANK QUALITY CONTROL

Date Extracted:	6-8-18
Date Analyzed:	6-8-18
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0608SM2

Analyte	Method	Result	PQL
Arsenic	6010D	**ND**	5.0

Date of Report: June 18, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078
Project: 10068-002-02

TOTAL ARSENIC
EPA 6010D
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0612SM2					
Arsenic	**ND**	10	EPA 6010D	6-12-18	6-12-18	

Date of Report: June 18, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078
Project: 10068-002-02

TOTAL ARSENIC
EPA 6010D
DUPLICATE QUALITY CONTROL

Date Extracted: 6-8-18
Date Analyzed: 6-8-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 06-078-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	**ND**	**ND**	NA	5.0	

Date of Report: June 18, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078
Project: 10068-002-02

TOTAL ARSENIC
EPA 6010D
DUPLICATE QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	06-078-04									
	ORIG	DUP								
Arsenic	**ND**	**ND**	NA	NA		NA	NA	NA	20	

Date of Report: June 18, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078
Project: 10068-002-02

TOTAL ARSENIC
EPA 6010D
MS/MSD QUALITY CONTROL

Date Extracted: 6-8-18
Date Analyzed: 6-8-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 06-078-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	**97.9**	98	**101**	101	4	

Date of Report: June 18, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078
Project: 10068-002-02

TOTAL ARSENIC
EPA 6010D
MS/MSD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	06-078-04										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**100**	**101**	100	100	ND	**100**	**101**	75-125	1	20	

Date of Report: June 18, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078
Project: 10068-002-02

% MOISTURE

Date Analyzed: 6-8-18

Client ID	Lab ID	% Moisture
BV-STK4-1	06-078-01	9
BV-STK4-2	06-078-02	10
BV-CONF-1	06-078-03	7
BV-CONF-2	06-078-04	11
BV-CONF-3	06-078-05	10
BV-CONF-4	06-078-06	7
BV-CONF-5	06-078-07	12
HCMC-CONF-1	06-078-08	7
HCMC-CONF-2	06-078-09	19
HCMC-CONF-3	06-078-10	15
HCMC-CONF-4	06-078-11	12

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEI
Project Number: 100628-002-02
Project Name: FTJ
Project Manager: TRICIA DEOME
Sampled by: ERIC KNOEDLER

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☒ Standard (7 Days) (TPH analysis 5 Days)
- ☒ PLS SEE NOTES (other)

Laboratory Number: 06-078

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	As				% Moisture
* 1	BV-STK4-1	6/7/18	1055	SOIL	1																		X				10
* 2	BV-STK4-2	"	1105	"	1																		X				"
3	BV-CONF-1	"	1115	"	1																		X				"
4	BV-CONF-2	"	1120	"	1																		X				"
5	BV-CONF-3	"	1125	"	1																		X				"
6	BV-CONF-4	"	1135	"	1																		X				"
7	BV-CONF-5	"	1140	"	1																		X				"
8	HEMC-CONF-1	"	1210	"	1																		X				"
9	HEMC-CONF-2	"	1215	"	1																		X				"
10	HEMC-CONF-3	"	1220	"	1																		X				"

	Signature	Company	Date	Time
Relinquished		GEI	6/7/18	4:35 pm
Received	Van	SPOK	6/7/18	4:35
Relinquished	Van	SPOK	6/7/18	1800
Received		CRS	6/7/18	1800
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

LOW-LEVEL (7 mg/kg) As
* 2-DAY TAT

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEI
Project Number: 10068-002-02
Project Name: FTJ
Project Manager: TRICIA DEOME
Sampled by: ERIC KNOEDLER

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☒ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 06-078

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	As					% Moisture
11	HCMC-CONF-4	6/7/18	1230	SOIL	1																	X					10

	Signature	Company	Date	Time
Relinquished		GEI	6/7/18	4:35pm
Received	Van	spdy	6/7/18	4135
Relinquished	Van	spdy	6/7/18	1800
Received		OSE	6/7/18	1800
Relinquished				
Received				

Comments/Special Instructions

Low-level (7 mg/kg) As

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐ _____

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

June 27, 2018

Tricia DeOme
GeoEngineers, Inc.
1101 Fawcett Avenue South, Suite 200
Tacoma, WA 98402

Re: Analytical Data for Project 10068-002-02
Laboratory Reference No. 1806-078B

Dear Tricia:

Enclosed are the analytical results and associated quality control data for samples submitted on June 7, 2018.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: June 27, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078B
Project: 10068-002-02

Case Narrative

Samples were collected on June 7, 2018 and received by the laboratory on June 7, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: June 27, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078B
Project: 10068-002-02

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
BV-STK4-1	06-078-01	Soil	6-7-18	6-7-18	
BV-STK4-2	06-078-02	Soil	6-7-18	6-7-18	
BV-CONF-1	06-078-03	Soil	6-7-18	6-7-18	
BV-CONF-2	06-078-04	Soil	6-7-18	6-7-18	
BV-CONF-3	06-078-05	Soil	6-7-18	6-7-18	
BV-CONF-4	06-078-06	Soil	6-7-18	6-7-18	
BV-CONF-5	06-078-07	Soil	6-7-18	6-7-18	
HCMC-CONF-1	06-078-08	Soil	6-7-18	6-7-18	
HCMC-CONF-2	06-078-09	Soil	6-7-18	6-7-18	
HCMC-CONF-3	06-078-10	Soil	6-7-18	6-7-18	
HCMC-CONF-4	06-078-11	Soil	6-7-18	6-7-18	

Date of Report: June 27, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078B
Project: 10068-002-02

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BV-STK4-1**					
Laboratory ID:	06-078-01					
Lead	**ND**	5.5	EPA 6010D	6-8-18	6-8-18	
Client ID:	**BV-STK4-2**					
Laboratory ID:	06-078-02					
Lead	**5.9**	5.5	EPA 6010D	6-8-18	6-8-18	
Client ID:	**BV-CONF-1**					
Laboratory ID:	06-078-03					
Lead	**9.4**	5.4	EPA 6010D	6-12-18	6-12-18	
Client ID:	**BV-CONF-2**					
Laboratory ID:	06-078-04					
Lead	**6.7**	5.6	EPA 6010D	6-12-18	6-12-18	
Client ID:	**BV-CONF-3**					
Laboratory ID:	06-078-05					
Lead	**11**	5.5	EPA 6010D	6-12-18	6-12-18	
Client ID:	**BV-CONF-4**					
Laboratory ID:	06-078-06					
Lead	**ND**	5.4	EPA 6010D	6-12-18	6-12-18	
Client ID:	**BV-CONF-5**					
Laboratory ID:	06-078-07					
Lead	**52**	5.7	EPA 6010D	6-12-18	6-12-18	
Client ID:	**HCMC-CONF-1**					
Laboratory ID:	06-078-08					
Lead	**5.6**	5.4	EPA 6010D	6-12-18	6-12-18	

Date of Report: June 27, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078B
Project: 10068-002-02

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**HCMC-CONF-2**					
Laboratory ID:	06-078-09					
Lead	**7.2**	6.2	EPA 6010D	6-12-18	6-12-18	
Client ID:	**HCMC-CONF-3**					
Laboratory ID:	06-078-10					
Lead	**12**	5.9	EPA 6010D	6-12-18	6-12-18	
Client ID:	**HCMC-CONF-4**					
Laboratory ID:	06-078-11					
Lead	**31**	5.7	EPA 6010D	6-12-18	6-12-18	

Date of Report: June 27, 2018
Samples Submitted: June 7, 2018
Laboratory Reference: 1806-078B
Project: 10068-002-02

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0608SM2					
Lead	**ND**	5.0	EPA 6010D	6-8-18	6-8-18	
Laboratory ID:	MB0612SM2					
Lead	**ND**	5.0	EPA 6010D	6-12-18	6-12-18	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	06-078-01										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Laboratory ID:	06-078-04										
	ORIG	DUP									
Lead	**6.00**	**5.80**	NA	NA		NA		NA	3	20	
MATRIX SPIKES											
Laboratory ID:	06-078-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**254**	**267**	250	250	ND	**102**	**107**	75-125	5	20	
Laboratory ID:	06-078-04										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**241**	**245**	250	250	6.00	**94**	**95**	75-125	2	20	

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 2

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEI
Project Number: 100608-002-02
Project Name: FTJ
Project Manager: TRICIA DEOME
Sampled by: ERIC KNOEDLER

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☒ PLS SEE NOTES (other)

Laboratory Number: 06-078

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
* 1	BV-STK4-1	6/7/18	1055	SOIL	1
* 2	BV-STK4-2		1105		1
3	BV-CONF-1		1115		1
4	BV-CONF-2		1120		1
5	BV-CONF-3		1125		1
6	BV-CONF-4		1135		1
7	BV-CONF-5		1140		1
8	HEME-CONF-1		1210		1
9	HEME-CONF-2		1215		1
10	HEME-CONF-3		1220		1

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	As		TOTAL LEAD		% Moisture
* 1																		X		⊗		8
* 2																		X		⊗		
3																		X		⊗		
4																		X		⊗		
5																		X		⊗		
6																		X		⊗		
7																		X		⊗		
8																		X		⊗		
9																		X		⊗		
10																		X		⊗		

	Signature	Company	Date	Time
Relinquished		GEI	6/7/18	4:35 pm
Received	Van	SPOK	6/7/18	4:35
Relinquished	Van	SPOK	6/7/18	1800
Received		CRS	6/7/18	1800
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
Low-Level (7 mg/kg) As
* 2-DAY TAT
⊗ Added 6/27/18. DB (1 day)

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEI
Project Number: 10068-002-02
Project Name: FTJ
Project Manager: TRICIA DEOME
Sampled by: ERIC KNOEDLER

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☒ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 06-078

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	As		TOTAL LEAD			% Moisture
11	HCMC-CONF-4	6/7/18	1230	SOIL	1																	X		X			15

	Signature	Company	Date	Time
Relinquished		GEI	6/7/18	4:35pm
Received	Van	5pdy	6/7/18	4:35
Relinquished	Van	5pdy	6/7/18	1800
Received		CORE	6/7/18	1800
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Low-level (7 mg/kg) As

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐ _____

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

June 20, 2018

Tricia DeOme
GeoEngineers, Inc.
1101 Fawcett Avenue South, Suite 200
Tacoma, WA 98402

Re: Analytical Data for Project 10068-002-02
Laboratory Reference No. 1806-121

Dear Tricia:

Enclosed are the analytical results and associated quality control data for samples submitted on June 12, 2018.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: June 20, 2018
Samples Submitted: June 12, 2018
Laboratory Reference: 1806-121
Project: 10068-002-02

Case Narrative

Samples were collected on June 11, 2018 and received by the laboratory on June 12, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: June 20, 2018
Samples Submitted: June 12, 2018
Laboratory Reference: 1806-121
Project: 10068-002-02

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
BV-Conf-6	06-121-01	Soil	6-11-18	6-12-18	
BV-Conf-6B	06-121-02	Soil	6-11-18	6-12-18	
BV-Conf-7	06-121-03	Soil	6-11-18	6-12-18	

Date of Report: June 20, 2018
Samples Submitted: June 12, 2018
Laboratory Reference: 1806-121
Project: 10068-002-02

TOTAL METALS
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BV-Conf-6**					
Laboratory ID:	06-121-01					
Arsenic	**5.7**	5.7	EPA 6010D	6-18-18	6-18-18	
Lead	**6.7**	5.7	EPA 6010D	6-18-18	6-18-18	
Client ID:	**BV-Conf-6B**					
Laboratory ID:	06-121-02					
Arsenic	**ND**	5.6	EPA 6010D	6-18-18	6-18-18	
Lead	**ND**	5.6	EPA 6010D	6-18-18	6-18-18	
Client ID:	**BV-Conf-7**					
Laboratory ID:	06-121-03					
Arsenic	**ND**	5.4	EPA 6010D	6-18-18	6-18-18	
Lead	**ND**	5.4	EPA 6010D	6-18-18	6-18-18	

Date of Report: June 20, 2018
Samples Submitted: June 12, 2018
Laboratory Reference: 1806-121
Project: 10068-002-02

TOTAL METALS
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0618SM1					
Arsenic	**ND**	5.0	EPA 6010D	6-18-18	6-18-18	
Lead	**ND**	5.0	EPA 6010D	6-18-18	6-18-18	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	06-121-03										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	06-121-03										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**99.9**	**102**	100	100	ND	**100**	**102**	75-125	2	20	
Lead	**245**	**251**	250	250	ND	**98**	**100**	75-125	3	20	

Date of Report: June 20, 2018
Samples Submitted: June 12, 2018
Laboratory Reference: 1806-121
Project: 10068-002-02

% MOISTURE

Date Analyzed: 6-18-18

Client ID	Lab ID	% Moisture
BV-Conf-6	06-121-01	12
BV-Conf-6B	06-121-02	10
BV-Conf-7	06-121-03	8

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 06-121

Company: GEI
Project Number: 10068-002-02
Project Name: Franke Tobey Jones
Project Manager: Tricia DeOme
Sampled by: RC

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Lead + Arsenic				% Moisture
1	BV-conf-6	6/11/18	1350	S	5																		X				18
2	BV-conf-6B	6/11/18	1355	S	5																		X				1
3	BV-conf-7	6/11/18	1410	S	5																		X				

	Signature	Company	Date	Time
Relinquished		GEI	6/12/18	10:30
Received	Eileen Clark	Alpha	6/12/18	10:30
Relinquished	Eileen Clark	Alpha	6/12/18	12:40
Received			6/12/18	1240
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
Detection limit 7mg/kg

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

April 9, 2019

Tricia DeOme
GeoEngineers, Inc.
1101 Fawcett Avenue South, Suite 200
Tacoma, WA 98402

Re: Analytical Data for Project 10068-002-02
Laboratory Reference No. 1903-301

Dear Tricia:

Enclosed are the analytical results and associated quality control data for samples submitted on March 29, 2019.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: April 9, 2019
Samples Submitted: March 29, 2019
Laboratory Reference: 1903-301
Project: 10068-002-02

Case Narrative

Samples were collected on March 28, 2019 and received by the laboratory on March 29, 2019. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: April 9, 2019
Samples Submitted: March 29, 2019
Laboratory Reference: 1903-301
Project: 10068-002-02

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
HCMC-Conf-5	03-301-01	Soil	3-28-19	3-29-19	
HCMC-Conf-6	03-301-02	Soil	3-28-19	3-29-19	
HCMC-Conf-6B	03-301-03	Soil	3-28-19	3-29-19	
HCMC-Conf-7	03-301-04	Soil	3-28-19	3-29-19	
HCMC-Conf-8	03-301-05	Soil	3-28-19	3-29-19	
HCMC-Conf-9	03-301-06	Soil	3-28-19	3-29-19	
HCMC-Conf-10	03-301-07	Soil	3-28-19	3-29-19	
HCMC-Conf-10B	03-301-08	Soil	3-28-19	3-29-19	
BV-Conf-6	03-301-09	Soil	3-28-19	3-29-19	
BV-Conf-7	03-301-10	Soil	3-28-19	3-29-19	
BV-Conf-7B	03-301-11	Soil	3-28-19	3-29-19	
CT-Conf-1	03-301-12	Soil	3-28-19	3-29-19	
CT-Conf-2	03-301-13	Soil	3-28-19	3-29-19	
CT-Conf-2B	03-301-14	Soil	3-28-19	3-29-19	

Date of Report: April 9, 2019
Samples Submitted: March 29, 2019
Laboratory Reference: 1903-301
Project: 10068-002-02

TOTAL METALS
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**HCMC-Conf-5**					
Laboratory ID:	03-301-01					
Arsenic	**ND**	12	EPA 6010D	4-8-19	4-8-19	
Lead	**ND**	6.0	EPA 6010D	4-8-19	4-8-19	
Client ID:	**HCMC-Conf-6**					
Laboratory ID:	03-301-02					
Arsenic	**ND**	12	EPA 6010D	4-8-19	4-8-19	
Lead	**ND**	5.8	EPA 6010D	4-8-19	4-8-19	
Client ID:	**HCMC-Conf-6B**					
Laboratory ID:	03-301-03					
Arsenic	**ND**	12	EPA 6010D	4-8-19	4-8-19	
Lead	**ND**	5.8	EPA 6010D	4-8-19	4-8-19	
Client ID:	**HCMC-Conf-7**					
Laboratory ID:	03-301-04					
Arsenic	**17**	13	EPA 6010D	4-8-19	4-8-19	
Lead	**24**	6.4	EPA 6010D	4-8-19	4-8-19	
Client ID:	**HCMC-Conf-8**					
Laboratory ID:	03-301-05					
Arsenic	**15**	11	EPA 6010D	4-8-19	4-8-19	
Lead	**21**	5.7	EPA 6010D	4-8-19	4-8-19	
Client ID:	**HCMC-Conf-9**					
Laboratory ID:	03-301-06					
Arsenic	**23**	12	EPA 6010D	4-8-19	4-8-19	
Lead	**32**	5.9	EPA 6010D	4-8-19	4-8-19	
Client ID:	**HCMC-Conf-10**					
Laboratory ID:	03-301-07					
Arsenic	**25**	12	EPA 6010D	4-8-19	4-8-19	
Lead	**55**	6.0	EPA 6010D	4-8-19	4-8-19	

Date of Report: April 9, 2019
Samples Submitted: March 29, 2019
Laboratory Reference: 1903-301
Project: 10068-002-02

TOTAL METALS
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**HCMC-Conf-10B**					
Laboratory ID:	03-301-08					
Arsenic	**35**	12	EPA 6010D	4-8-19	4-8-19	
Lead	**82**	6.1	EPA 6010D	4-8-19	4-8-19	
Client ID:	**BV-Conf-6**					
Laboratory ID:	03-301-09					
Arsenic	**ND**	12	EPA 6010D	4-8-19	4-8-19	
Lead	**ND**	5.9	EPA 6010D	4-8-19	4-8-19	
Client ID:	**BV-Conf-7**					
Laboratory ID:	03-301-10					
Arsenic	**ND**	12	EPA 6010D	4-8-19	4-8-19	
Lead	**ND**	6.0	EPA 6010D	4-8-19	4-8-19	
Client ID:	**BV-Conf-7B**					
Laboratory ID:	03-301-11					
Arsenic	**ND**	11	EPA 6010D	4-8-19	4-8-19	
Lead	**ND**	5.7	EPA 6010D	4-8-19	4-8-19	
Client ID:	**CT-Conf-1**					
Laboratory ID:	03-301-12					
Arsenic	**14**	11	EPA 6010D	4-8-19	4-8-19	
Lead	**11**	5.7	EPA 6010D	4-8-19	4-8-19	
Client ID:	**CT-Conf-2**					
Laboratory ID:	03-301-13					
Arsenic	**ND**	12	EPA 6010D	4-8-19	4-8-19	
Lead	**11**	6.1	EPA 6010D	4-8-19	4-8-19	
Client ID:	**CT-Conf-2B**					
Laboratory ID:	03-301-14					
Arsenic	**62**	13	EPA 6010D	4-8-19	4-8-19	
Lead	**110**	6.6	EPA 6010D	4-8-19	4-8-19	

Date of Report: April 9, 2019
Samples Submitted: March 29, 2019
Laboratory Reference: 1903-301
Project: 10068-002-02

TOTAL METALS
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0408SM1					
Arsenic	**ND**	10	EPA 6010D	4-8-19	4-8-19	
Lead	**ND**	5.0	EPA 6010D	4-8-19	4-8-19	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	03-301-02										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	03-301-02										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**97.6**	**95.0**	100	100	ND	**98**	**95**	75-125	3	20	
Lead	**222**	**224**	250	250	ND	**89**	**90**	75-125	1	20	

Date of Report: April 9, 2019
Samples Submitted: March 29, 2019
Laboratory Reference: 1903-301
Project: 10068-002-02

% MOISTURE

Date Analyzed: 4-5-19

Client ID	Lab ID	% Moisture
HCMC-Conf-5	03-301-01	17
HCMC-Conf-6	03-301-02	14
HCMC-Conf-6B	03-301-03	14
HCMC-Conf-7	03-301-04	22
HCMC-Conf-8	03-301-05	13
HCMC-Conf-9	03-301-06	15
HCMC-Conf-10	03-301-07	16
HCMC-Conf-10B	03-301-08	18
BV-Conf-6	03-301-09	16
BV-Conf-7	03-301-10	16
BV-Conf-7B	03-301-11	13
CT-Conf-1	03-301-12	12
CT-Conf-2	03-301-13	18
CT-Conf-2B	03-301-14	24

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEI
Project Number: T0068-002-02
Project Name: FTJ
Project Manager: Tricia DeOme
Sampled by: RC

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☒ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 03-301

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	HCMC-conf-5	3/28/19	0930	S	1
2	HCMC-conf-6		0937		1
3	HCMC-conf-6B		0938		1
4	HCMC-conf-7		0940		1
5	HCMC-conf-8		0943		1
6	HCMC-conf-9		0950		1
7	HCMC-conf-10		0952		1
8	HCMC-conf-10B		0953		1
9	BV-conf-6		0958		1
10	BV-conf-7		1000		1

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Lead + Arsenic				% Moisture
1																		X				X
2																		X				
3																		X				
4																		X				
5																		X				
6																		X				
7																		X				
8																		X				
9																		X				
10																		X				

	Signature	Company	Date	Time
Relinquished	[signature]	GEI	3/29/19	10:30
Received	[signature]	Spdy	3/29/19	10:30
Relinquished	[signature]	Spdy	3/29/19	1500
Received	[signature]	OSE	3/29/19	1500
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEI
Project Number: 10068-002-02
Project Name: FTJ
Project Manager: Tricia Deome
Sampled by: RC

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Laboratory Number: 03-301

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Lead + Arsenic				% Moisture
11	BV-conf-7B	3/28/19	1001	S	1																		X				X
12	CT-conf-1	↓	1008	↓	1																		X				
13	CT-conf-2		1010		1																		X				
14	CT-conf-2B		1011		1																		X				

	Signature	Company	Date	Time
Relinquished	[signature]	GEI	3/29/19	1030
Received	[signature]	SPLV	3/29/19	1030
Relinquished	[signature]	SPLV	3/29/19	1500
Received	[signature]	OSE	3/29/19	1500
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

APPENDIX B
BCPI Construction Water Chemical Analytical Data and Disposal Records

SPECTRA Laboratories ...Where experience matters

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

01/31/2018

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: David Tetreault

P.O.#: 11714
Project: Franke Tobey Jones
Client ID: FTJ6
Sample Matrix: Wastewater
Date Sampled: 01/26/2018
Date Received: 01/26/2018
Spectra Project: 2018010827
Spectra Number: 1
Rush

Analyte	Result	Units	Method
HEM-SGT in Water	< 5.0	mg/L	EPA 1664-B
Arsenic	< 0.025	mg/L	EPA 200.7
Barium	0.022	mg/L	EPA 200.7
Cadmium	< 0.003	mg/L	EPA 200.7
Chromium	< 0.007	mg/L	EPA 200.7
Copper	0.038	mg/L	EPA 200.7
Lead	< 0.025	mg/L	EPA 200.7
Molybdenum	< 0.005	mg/L	EPA 200.7
Nickel	< 0.015	mg/L	EPA 200.7
Selenium	< 0.025	mg/L	EPA 200.7
Silver	< 0.007	mg/L	EPA 200.7
Zinc	0.021	mg/L	EPA 200.7
Mercury	< 0.0005	mg/L	EPA 245.1
1,1,1-Trichloroethane	<1	µg/L	EPA 624
1,1,2,2-Tetrachloroethane	<1	µg/L	EPA 624
1,1,2-Trichloroethane	<1	µg/L	EPA 624
1,1-Dichloroethane	<1	µg/L	EPA 624
1,1-Dichloroethene	<1	µg/L	EPA 624
1,2,4-Trichlorobenzene	<1	µg/L	EPA 624

Analyte	Result	Units	Method
1,2-Dichlorobenzene	<1	µg/L	EPA 624
1,2-Dichloroethane	<1	µg/L	EPA 624
1,2-Dichloropropane	<1	µg/L	EPA 624
1,3-Dichlorobenzene	<1	µg/L	EPA 624
1,4-Dichlorobenzene	<1	µg/L	EPA 624
2-Chloroethylvinyl Ether	<10	µg/L	EPA 624
Acrolein	<10	µg/L	EPA 624
Acrylonitrile	<10	µg/L	EPA 624
Benzene	<1	µg/L	EPA 624
Bromodichloromethane	<1	µg/L	EPA 624
Bromoform	<1	µg/L	EPA 624
Carbon Tetrachloride	<1	µg/L	EPA 624
Chlorobenzene	<1	µg/L	EPA 624
Chlorodibromomethane	<1	µg/L	EPA 624
Chloroethane	<1	µg/L	EPA 624
Chloroform	<1	µg/L	EPA 624
Chloromethane	<1	µg/L	EPA 624
Ethylbenzene	<1	µg/L	EPA 624
Hexachlorobutadiene	<1	µg/L	EPA 624

Surrogate	Recovery	Method
Dibromofluoromethane	98	EPA 624
1,2-Dichloroethane-d4	100	EPA 624
Toluene-d8	99	EPA 624
4-Bromofluorobenzene	100	EPA 624
2-Fluorophenol	63	EPA 625
Phenol-d6	72	EPA 625
Nitrobenzene-d5	54	EPA 625

Surrogate	Recovery	Method
2-Fluorobiphenyl	24	EPA 625
2,4,6-Tribromophenol	75	EPA 625
p-Terphenyl-d14	63	EPA 625

SPECTRA LABORATORIES

Jeffrey Cooper, Laboratory Manager

z14exsur/jjb

SPECTRA Laboratories ...Where experience matters

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

01/31/2018

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: David Tetreault

P.O.#: 11714
Project: Franke Tobey Jones
Client ID: FTJ6
Sample Matrix: Wastewater
Date Sampled: 01/26/2018
Date Received: 01/26/2018
Spectra Project: 2018010827
Spectra Number: 1
Rush

Analyte	Result	Units	Method
Methyl bromide	<1	µg/L	EPA 624
Methylene chloride	<5	µg/L	EPA 624
Naphthalene	<1	µg/L	EPA 624
Tetrachloroethene	<1	µg/L	EPA 624
Toluene	<1	µg/L	EPA 624
Total Xylenes	<2	µg/L	EPA 624
Trichloroethene	<1	µg/L	EPA 624
Vinyl chloride	<1	µg/L	EPA 624
cis-1,3-Dichloropropene	<1	µg/L	EPA 624
trans-1,2-Dichloroethene	<1	µg/L	EPA 624
trans-1,3-Dichloropropene	<1	µg/L	EPA 624
1,2 diphenylhydrazine	<2.5	µg/L	EPA 625
1,2,4-Trichlorobenzene	<2.5	µg/L	EPA 625
1,2-Dichlorobenzene	<2.5	µg/L	EPA 625
1,3-Dichlorobenzene	<2.5	µg/L	EPA 625
1,4-Dichlorobenzene	<2.5	µg/L	EPA 625
2,4,6-Trichlorophenol	<2.5	µg/L	EPA 625
2,4-Dichlorophenol	<2.5	µg/L	EPA 625
2,4-Dimethylphenol	<2.5	µg/L	EPA 625

Analyte	Result	Units	Method
2,4-Dinitrophenol	<10	µg/L	EPA 625
2,4-Dinitrotoluene	<2.5	µg/L	EPA 625
2,6-Dinitrotoluene	<2.5	µg/L	EPA 625
2-Chloronaphthalene	<2.5	µg/L	EPA 625
2-Chlorophenol	<2.5	µg/L	EPA 625
2-Nitrophenol	<2.5	µg/L	EPA 625
3,3-Dichlorobenzidine	<20	µg/L	EPA 625
4,6-Dinitro-2-Methylphenol	<10	µg/L	EPA 625
4-Bromophenyl-phenylether	<2.5	µg/L	EPA 625
4-Chloro-3-Methylphenol	<2.5	µg/L	EPA 625
4-Chlorophenyl-phenylether	<2.5	µg/L	EPA 625
4-Nitrophenol	<2.5	µg/L	EPA 625
Acenaphthene	<1.0	µg/L	EPA 625
Acenaphthylene	<1.0	µg/L	EPA 625
Anthracene	<1.0	µg/L	EPA 625
Benzidine	<20	µg/L	EPA 625
Benzo(a)Anthracene	<1.0	µg/L	EPA 625
Benzo(a)Pyrene	<1.0	µg/L	EPA 625
Benzo(b)Fluoranthene	<1.0	µg/L	EPA 625

Surrogate	Recovery	Method
Dibromofluoromethane	98	EPA 624
1,2-Dichloroethane-d4	100	EPA 624
Toluene-d8	99	EPA 624
4-Bromofluorobenzene	100	EPA 624
2-Fluorophenol	63	EPA 625
Phenol-d6	72	EPA 625
Nitrobenzene-d5	54	EPA 625

Surrogate	Recovery	Method
2-Fluorobiphenyl	24	EPA 625
2,4,6-Tribromophenol	75	EPA 625
p-Terphenyl-d14	63	EPA 625

SPECTRA LABORATORIES

Jeffrey Cooper, Laboratory Manager

a14exsur/jjb

SPECTRA Laboratories ...Where experience matters

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01/31/2018

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: David Tetreault

P.O.#: 11714
Project: Franke Tobey Jones
Client ID: FTJ6
Sample Matrix: Wastewater
Date Sampled: 01/26/2018
Date Received: 01/26/2018
Spectra Project: 2018010827
Spectra Number: 1
Rush

Analyte	Result	Units	Method
Benzo(ghi)Perylene	<1.0	µg/L	EPA 625
Benzo(k)Fluoranthene	<1.0	µg/L	EPA 625
Bis(2-Chloroethyl)Ether	<2.5	µg/L	EPA 625
Butylbenzylphthalate	<2.5	µg/L	EPA 625
Chrysene	<1.0	µg/L	EPA 625
Di-n-Butylphthalate	<2.5	µg/L	EPA 625
Di-n-Octyl Phthalate	<2.5	µg/L	EPA 625
Dibenzo(a,h)Anthracene	<1.0	µg/L	EPA 625
Diethylphthalate	<2.5	µg/L	EPA 625
Dimethyl Phthalate	<2.5	µg/L	EPA 625
Fluoranthene	<1.0	µg/L	EPA 625
Fluorene	<1.0	µg/L	EPA 625
Hexachlorobenzene	<2.5	µg/L	EPA 625
Hexachlorobutadiene	<2.5	µg/L	EPA 625
Hexachlorocyclopentadiene	<2.5	µg/L	EPA 625
Hexachloroethane	<2.5	µg/L	EPA 625
Indeno(1,2,3-cd)Pyrene	<1.0	µg/L	EPA 625
Isophorone	<2.5	µg/L	EPA 625
N-Nitroso-Di-n-Propylamine	<2.5	µg/L	EPA 625
N-Nitrosodiphenylamine	<2.5	µg/L	EPA 625
N-nitrosodimethylamine	<2.5	µg/L	EPA 625
Naphthalene	<1.0	µg/L	EPA 625
Nitrobenzene	<2.5	µg/L	EPA 625
Pentachlorophenol	<2.5	µg/L	EPA 625
Phenanthrene	<1.0	µg/L	EPA 625
Phenol	<2.5	µg/L	EPA 625
Pyrene	<1.0	µg/L	EPA 625
bis(2-Chloroethoxy)Methane	<2.5	µg/L	EPA 625
bis(2-Ethylhexyl)Phthalate	<2.5	µg/L	EPA 625
bis(2-chloroisopropyl)Ether	<2.5	µg/L	EPA 625
Total Suspended Solids	45	mg/L	SM 2540 D
Total Cyanide	<0.01	mg/L	SM 4500-CN^- E
pH	6.04	pH	SM 4500-H+ B

Surrogate	Recovery	Method
Dibromofluoromethane	98	EPA 624
1,2-Dichloroethane-d4	100	EPA 624
Toluene-d8	99	EPA 624
4-Bromofluorobenzene	100	EPA 624
2-Fluorophenol	63	EPA 625
Phenol-d6	72	EPA 625
Nitrobenzene-d5	54	EPA 625

Surrogate	Recovery	Method
2-Fluorobiphenyl	24	EPA 625
2,4,6-Tribromophenol	75	EPA 625
p-Terphenyl-d14	63	EPA 625

SPECTRA LABORATORIES

Jeffrey Cooper, Laboratory Manager

a14exsur/jjb

SPECTRA Laboratories
2221 Ross Way, Tacoma, WA 98421
(253) 272-4850 Fax (253) 572-9838
www.spectra-lab.com info@spectra-lab.com

SPECIAL INSTRUCTIONS/COMMENTS:
Metals - Arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, silver, zinc, barium

* Free Cyanide if Total Cyanide is above 0.2

Return Samples Y ___ N ___ Page ___ of ___

CHAIN of CUSTODY

SPECTRA PROJECT # 2018010827

STANDARD ☐ RUSH X

CLIENT: BPCI Accrete Construction ADDRESS: 801 valley ave nw suite a puyallp wa 98371 ADDRESS CHANGE ☐

PROJECT: FRANKE TOBEY JONES

CONTACT: LACY LEVINE

SAMPLED BY: TOM SIMS

PHONE: 2534058575 FAX:

e-MAIL: Prefer FAX ☐ or e-MAIL ☒

PURCHASE ORDER #: 11714

	SAMPLE ID	DATE SAMPLED	TIME SAMPLED	MATRIX	NUMBER OF CONTAINERS	HYDROCARBONS: NWTPH-HCID	BTEX	BTEX/NWTPH-G	NWTPH-G	NWTPH-Dx	1664 SGT-HEM (TPH)	1664 HEM (FOG)	ORGANICS: 8260/624 VOA	8260 CHLOR SOLVENTS	8270/625 SEMI VOA	8270 PAH/PNA	8082/608 PCB	TTO - Both 624 & 625	METALS: TOTAL METALS RCRA 8	TOTAL METALS (SPECIFY)	Hexavalent Chromium	TCLP METALS RCRA 8	TCLP METALS (SPECIFY)	OTHER: PH 9040/9045	TX/TOX 9076	TURBIDITY	FLASH POINT	BOD	SOLIDS (SPECIFY) TSS	Total Cyanide	Free Cyanide				
1	FTJ6	1.26.18	2:15	WW	8						X							X		X	X			X					X	X	X*				
2																																			
3																																			
4																																			
5																																			
6																																			
7																																			
8																																			
9																																			
0																																			

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY		Lacy Levine	BPCI	1.26.18	2:30
RECEIVED BY	Marie Holt	MARIE HOLT	Spectra	1-26-18	2:41
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 1 1/2 % per month interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other costs of collection regardless of whether suit is filed in Pierce Co., WA venue. *Spectra Analytical, LLC*

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02/06/2018

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: David Tetreault

P.O.#: 11714
Project: Franke Tobey Jones
Client ID: FTJ7
Sample Matrix: Wastewater
Date Sampled: 02/02/2018
Date Received: 02/02/2018
Spectra Project: 2018020042
Spectra Number: 1
Rush

Analyte	Result	Units	Method
HEM-SGT in Water	<5.0	mg/L	EPA 1664-B
Arsenic	< 0.025	mg/L	EPA 200.7
Barium	0.018	mg/L	EPA 200.7
Cadmium	< 0.003	mg/L	EPA 200.7
Chromium	< 0.007	mg/L	EPA 200.7
Copper	0.016	mg/L	EPA 200.7
Lead	< 0.025	mg/L	EPA 200.7
Molybdenum	< 0.005	mg/L	EPA 200.7
Nickel	< 0.015	mg/L	EPA 200.7
Selenium	< 0.025	mg/L	EPA 200.7
Silver	< 0.007	mg/L	EPA 200.7
Zinc	0.012	mg/L	EPA 200.7
Mercury	<0.0005	mg/L	EPA 245.1
1,1,1-Trichloroethane	<1	µg/L	EPA 624
1,1,2,2-Tetrachloroethane	<1	µg/L	EPA 624
1,1,2-Trichloroethane	<1	µg/L	EPA 624
1,1-Dichloroethane	<1	µg/L	EPA 624
1,1-Dichloroethene	<1	µg/L	EPA 624
1,2,4-Trichlorobenzene	<1	µg/L	EPA 624

Analyte	Result	Units	Method
1,2-Dichlorobenzene	<1	µg/L	EPA 624
1,2-Dichloroethane	<1	µg/L	EPA 624
1,2-Dichloropropane	<1	µg/L	EPA 624
1,3-Dichlorobenzene	<1	µg/L	EPA 624
1,4-Dichlorobenzene	<1	µg/L	EPA 624
2-Chloroethylvinyl Ether	<10	µg/L	EPA 624
Acrolein	<10	µg/L	EPA 624
Acrylonitrile	<10	µg/L	EPA 624
Benzene	<1	µg/L	EPA 624
Bromodichloromethane	<1	µg/L	EPA 624
Bromoform	<1	µg/L	EPA 624
Carbon Tetrachloride	<1	µg/L	EPA 624
Chlorobenzene	<1	µg/L	EPA 624
Chlorodibromomethane	<1	µg/L	EPA 624
Chloroethane	<1	µg/L	EPA 624
Chloroform	<1	µg/L	EPA 624
Chloromethane	<1	µg/L	EPA 624
Ethylbenzene	<1	µg/L	EPA 624
Hexachlorobutadiene	<1	µg/L	EPA 624

Surrogate	Recovery	Method
Dibromofluoromethane	115	EPA 624
1,2-Dichloroethane-d4	105	EPA 624
Toluene-d8	104	EPA 624
4-Bromofluorobenzene	109	EPA 624
2-Fluorophenol	61	EPA 625
Phenol-d6	65	EPA 625
Nitrobenzene-d5	62	EPA 625

Surrogate	Recovery	Method
2-Fluorobiphenyl	56	EPA 625
2,4,6-Tribromophenol	70	EPA 625
p-Terphenyl-d14	60	EPA 625

SPECTRA LABORATORIES

Jeffrey Cooper, Laboratory Manager

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02/06/2018

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: David Tetreault

P.O.#: 11714
Project: Franke Tobey Jones
Client ID: FTJ7
Sample Matrix: Wastewater
Date Sampled: 02/02/2018
Date Received: 02/02/2018
Spectra Project: 2018020042
Spectra Number: 1
Rush

Analyte	Result	Units	Method
Methyl bromide	<1	µg/L	EPA 624
Methylene chloride	<5	µg/L	EPA 624
Naphthalene	<1	µg/L	EPA 624
Tetrachloroethene	<1	µg/L	EPA 624
Toluene	<1	µg/L	EPA 624
Total Xylenes	<2	µg/L	EPA 624
Trichloroethene	<1	µg/L	EPA 624
Vinyl chloride	<1	µg/L	EPA 624
cis-1,3-Dichloropropene	<1	µg/L	EPA 624
trans-1,2-Dichloroethene	<1	µg/L	EPA 624
trans-1,3-Dichloropropene	<1	µg/L	EPA 624
1,2 diphenylhydrazine	<2.5	µg/L	EPA 625
1,2,4-Trichlorobenzene	<2.5	µg/L	EPA 625
1,2-Dichlorobenzene	<2.5	µg/L	EPA 625
1,3-Dichlorobenzene	<2.5	µg/L	EPA 625
1,4-Dichlorobenzene	<2.5	µg/L	EPA 625
2,4,6-Trichlorophenol	<2.5	µg/L	EPA 625
2,4-Dichlorophenol	<2.5	µg/L	EPA 625
2,4-Dimethylphenol	<2.5	µg/L	EPA 625

Analyte	Result	Units	Method
2,4-Dinitrophenol	<10	µg/L	EPA 625
2,4-Dinitrotoluene	<2.5	µg/L	EPA 625
2,6-Dinitrotoluene	<2.5	µg/L	EPA 625
2-Chloronaphthalene	<2.5	µg/L	EPA 625
2-Chlorophenol	<2.5	µg/L	EPA 625
2-Nitrophenol	<2.5	µg/L	EPA 625
3,3-Dichlorobenzidine	<20	µg/L	EPA 625
4,6-Dinitro-2-Methylphenol	<10	µg/L	EPA 625
4-Bromophenyl-phenylether	<2.5	µg/L	EPA 625
4-Chloro-3-Methylphenol	<2.5	µg/L	EPA 625
4-Chlorophenyl-phenylether	<2.5	µg/L	EPA 625
4-Nitrophenol	<2.5	µg/L	EPA 625
Acenaphthene	<1	µg/L	EPA 625
Acenaphthylene	<1	µg/L	EPA 625
Anthracene	<1	µg/L	EPA 625
Benzidine	<20	µg/L	EPA 625
Benzo(a)Anthracene	<1	µg/L	EPA 625
Benzo(a)Pyrene	<1	µg/L	EPA 625
Benzo(b)Fluoranthene	<1	µg/L	EPA 625

Surrogate	Recovery	Method
Dibromofluoromethane	115	EPA 624
1,2-Dichloroethane-d4	105	EPA 624
Toluene-d8	104	EPA 624
4-Bromofluorobenzene	109	EPA 624
2-Fluorophenol	61	EPA 625
Phenol-d6	65	EPA 625
Nitrobenzene-d5	62	EPA 625

Surrogate	Recovery	Method
2-Fluorobiphenyl	56	EPA 625
2,4,6-Tribromophenol	70	EPA 625
p-Terphenyl-d14	60	EPA 625

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Jeffrey Cooper, Laboratory Manager

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02/06/2018

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: David Tetreault

P.O.#: 11714
Project: Franke Tobey Jones
Client ID: FTJ7
Sample Matrix: Wastewater
Date Sampled: 02/02/2018
Date Received: 02/02/2018
Spectra Project: 2018020042
Spectra Number: 1
Rush

Analyte	Result	Units	Method
Benzo(ghi)Perylene	<1	µg/L	EPA 625
Benzo(k)Fluoranthene	<1	µg/L	EPA 625
Bis(2-Chloroethyl)Ether	<2.5	µg/L	EPA 625
Butylbenzylphthalate	<2.5	µg/L	EPA 625
Chrysene	<1	µg/L	EPA 625
Di-n-Butylphthalate	<2.5	µg/L	EPA 625
Di-n-Octyl Phthalate	<2.5	µg/L	EPA 625
Dibenzo(a,h)Anthracene	<1	µg/L	EPA 625
Diethylphthalate	<2.5	µg/L	EPA 625
Dimethyl Phthalate	<2.5	µg/L	EPA 625
Fluoranthene	<1	µg/L	EPA 625
Fluorene	<1	µg/L	EPA 625
Hexachlorobenzene	<2.5	µg/L	EPA 625
Hexachlorobutadiene	<2.5	µg/L	EPA 625
Hexachlorocyclopentadiene	<2.5	µg/L	EPA 625
Hexachloroethane	<2.5	µg/L	EPA 625
Indeno(1,2,3-cd)Pyrene	<1	µg/L	EPA 625
Isophorone	<2.5	µg/L	EPA 625
N-Nitroso-Di-n-Propylamine	<2.5	µg/L	EPA 625
N-Nitrosodiphenylamine	<2.5	µg/L	EPA 625
N-nitrosodimethylamine	<2.5	µg/L	EPA 625
Naphthalene	<1	µg/L	EPA 625
Nitrobenzene	<2.5	µg/L	EPA 625
Pentachlorophenol	<2.5	µg/L	EPA 625
Phenanthrene	<1	µg/L	EPA 625
Phenol	<2.5	µg/L	EPA 625
Pyrene	<1	µg/L	EPA 625
bis(2-Chloroethoxy)Methane	<2.5	µg/L	EPA 625
bis(2-Ethylhexyl)Phthalate	<2.5	µg/L	EPA 625
bis(2-chloroisopropyl)Ether	<2.5	µg/L	EPA 625
Total Suspended Solids	9.0	mg/L	SM 2540 D
Total Cyanide	<0.01	mg/L	SM 4500-CN^- E
pH	6.23	pH	SM 4500-H+ B

Surrogate	Recovery	Method
Dibromofluoromethane	115	EPA 624
1,2-Dichloroethane-d4	105	EPA 624
Toluene-d8	104	EPA 624
4-Bromofluorobenzene	109	EPA 624
2-Fluorophenol	61	EPA 625
Phenol-d6	65	EPA 625
Nitrobenzene-d5	62	EPA 625

Surrogate	Recovery	Method
2-Fluorobiphenyl	56	EPA 625
2,4,6-Tribromophenol	70	EPA 625
p-Terphenyl-d14	60	EPA 625

SPECTRA LABORATORIES

Jeffrey Cooper, Laboratory Manager

a14exsur/snw

SPECTRA Laboratories

2221 Ross Way, Tacoma, WA 98421
(253) 272-4850 Fax (253) 572-9838
www.spectra-lab.com info@spectra-lab.com

SPECIAL INSTRUCTIONS/COMMENTS:

Metals - Arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, silver, zinc, barium

*** Free Cyanide if Total Cyanide is above 0.2**

Return Samples Y N Page of

CHAIN of CUSTODY

SPECTRA PROJECT # 1218020042

STANDARD ☐ **RUSH** X

CLIENT: BPCI Accrete Construction ADDRESS: 801 valley ave nw suite a puyallp wa 98371 ADDRESS CHANGE ☐

PROJECT: FRANKE TOBEY JONES

CONTACT: LACY LEVINE

SAMPLED BY: TOM SIMS

PHONE: 2534058575 FAX:

e-MAIL: Prefer FAX ☐ or e-MAIL ☒

PURCHASE ORDER #: 11714

	SAMPLE ID	DATE SAMPLED	TIME SAMPLED	MATRIX	NUMBER OF CONTAINERS	HYDROCARBONS							ORGANICS						METALS						OTHER											
						NWTPH-HCID	BTEX	BTEX/NWTPH-G	NWTPH-G	NWTPH-Dx	1664 SGT-HEM (TPH)	1664 HEM (FOG)		8260/624 VOA	8260 CHLOR SOLVENTS	8270/625 SEMI VOA	8270 PAH/PNA	8082/608 PCB	TTO - Both 624 & 625	TOTAL METALS RCRA 8	TOTAL METALS (SPECIFY)	Hexavalent Chromium	TCLP METALS RCRA 8	TCLP METALS (SPECIFY)	PH 9040/9045	TX/TOX 9076	TURBIDITY	FLASH POINT	BOD	SOLIDS (SPECIFY) TSS	Total Cyanide	Free Cyanide				
1	FTJ7	2.2.18	2:15	WW	9						X							X		X	X			X					X	X	X*				
2																																			
3																																			
4																																			
5																																			
6																																			
7																																			
8																																			
9																																			
0																																			

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY		Lacy Levine	BPCI Accrete Const	2.2.18	1:00
RECEIVED BY		Lori Hamilton	Spectra	2-2-18	1325 1300
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 1 1/2 % per month interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other costs of collection regardless of whether suit is filed in Pierce Co., WA venue. *Spectra Analytical, LLC*

SPECIAL AUTHORIZATION
TO
DISCHARGE TO THE CITY OF
TACOMA'S
SANITARY SEWER SYSTEM

In accordance with Tacoma Municipal Code section 12.08.365 and subject to the conditions contained in Chapter 12.08 and in this Authorization, the entity specified herein is authorized to discharge to the City of Tacoma's (City) *sanitary sewer system*:

17 - 012 — 7-24-17
SAD No. — Received by — Date

Accrete Construction LLC Michael Choleton, (253) 286-3900
Authorized Discharger, Company Representative, Phone No.

801 Valley Avenue NW, Puyallup, WA 98371
Address of Company, Street, City, State, ZIP

Frank Tobey Jones
Name of Property Owner (if different), Phone number

5340 N Bristol St, Tacoma, WA 98407
Address of Property Owner, Street, City, State, ZIP

5340 N Bristol, Tacoma
Address of Discharge Location, Street, City

A. PURPOSE OF DISCHARGE:

Accrete Construction LLC will be constructing new buildings on the Frank Tobey Jones Property located at 5340 N Bristol. This property is located inside the Asarco Smelter Plume boundary and known to contain lead and arsenic contaminated soil. Contact stormwater during construction not suitable for discharge to storm, will be captured and stored in tank(s) and held for sampling. If water meets City of Tacoma's local limits for the sanitary sewer, tanked water will be discharged to sanitary sewer.

B. DISCHARGE CONDITIONS:

1. Flow Limitations and Monitoring Requirements:

   The Authorized Discharger, Accrete Construction LLC, is required to meter all discharge flows. All flows will be recorded in a log book at the construction site for City inspector review. The Authorized Discharger shall control the flow of water into the downstream system to ensure that the capacity of the City's sanitary sewer system is not exceeded as a result of the additional flows caused by the discharge. If an exceedance occurs, the discharge must be immediately discontinued and the City notified at (253) 591-5595. Discharges to the City's municipal sanitary sewer system will be on a **batch** discharge basis between the hours of 7:30 am to 5:00 pm only after permission has been granted by the City. If the Authorized Discharger requests to discharge outside of these hours, the City must be contacted and permission granted. The discharge flow rate will be limited to **20gpm.**

2. Quality Limitations and Monitoring Requirements:

The following discharge limitations must be met in order to discharge to the municipal sanitary sewer system:

City of Tacoma Municipal Code – Chapter 12.08.020; Chapter 12.08.040; and 40 CFR Part 136.3

POLLUTANT	DISCHARGE LIMIT		APPROVED ANALYTICAL METHOD		
			EPA Method	*Standard Method*	*ASTM*
Total Arsenic	0.1	mg/L	200.5; 200.7; 200.8; 200.9		
Total Cadmium	0.25	mg/L	200.5; 200.7; 200.8		
Total Chromium	1.0	mg/L	200.5; 200.7; 200.8; 200.9		
Hexavalent Chromium	0.25	mg/L			
Total Copper	1.0	mg/L	200.5; 200.7; 200.8; 200.9		
Total Cyanide	0.64	mg/L		4500B; 4500C	
Free Cyanide	0.2	mg/L			D7237-10; D4282-02
Total Lead	0.4	mg/L	200.5; 200.7; 200.8; 200.9		
Total Mercury	0.05	mg/L	245.1; 245.2; 245.7; 1631E		
Total Molybdenum	1.0	mg/L	200.5; 200.7; 200.8		
Total Nickel	1.0	mg/L	200.5; 200.7; 200.8; 200.9		
Total Selenium	0.1	mg/L	200.5; 200.7; 200.8; 200.9		
Total Silver	0.2	mg/L	200.5; 200.7; 200.8; 200.9		
Total Zinc	2.0	mg/L	200.5; 200.7; 200.8; 282.2		
Total Barium	10	mg/L	200.5; 200.7; 200.8; 282.2		
Total Petroleum Hydrocarbons	50	mg/L	1664A; 1664B *(measured as silica gel treated, hexane extractable materials (SGT-HEM)*		
pH	5.5 - 11.0		150.2	4500H^+B-2000	
Total Suspended Solids	225*	mg/L		2540 D – 1997	
Total Toxic Organics**	2.13	mg/L	624; 625		
BETX***	10	mg/L	624		

*The Total Suspended Solids value of 225 mg/L is a benchmark. Any amount over and above may be used for billing purposes. **The Sum of all Total toxic organics with 0.1 mg/L or greater cannot exceed 2.13 mg/L. ***Benzene may not exceed 0.5 mg/L.

The Authorized Discharger must obtain samples and receive analytical data prior to requesting permission to discharge. After the sample analysis has been completed and the results indicate no violations of the parameters above, permission to discharge may be requested from Source Control at SAD@cityoftacoma.org. Analytical results must be included in the discharge request. **Discharging without prior permission from Source Control is prohibited.**

The Authorized Discharger must observe the discharge for unusual color, odor and/or sheen. If any of these conditions are present, the discharge must be immediately discontinued and the City of Tacoma notified at (253) 591-5595.

C. DISCHARGE LOCATION:

City of Tacoma municipal sanitary MH 6757783

D. OTHER CONDITIONS:

1. The Authorized Discharger must possess a valid NPDES permit from the Department of Ecology and/or the Environmental Protection Agency, if applicable, and operate in compliance with that permit as determined by the issuing agency
2. The City of Tacoma reserves all of the powers set forth in Chapter 12.08 TMC, as well as any other applicable powers granted by the Tacoma Municipal Code, state and/or federal law to enforce the terms of the Authorization, and to regulate the use of its municipal sewer system including, but not limited to, seeking supplemental charges under TMC 12.08.610.
3. The Authorized Discharger must pay the applicable fees and maintain payments as provided for in Tacoma Municipal Code Chapter 12.08.
4. The Authorized Discharger must cease discharge when:
   a. A violation is suspected or detected, of any of the discharge conditions specified in B. above; or
   b. When directed to by the City.
5. The Authorized Discharger may be required to reduce the flow rate of the discharge, or cease discharging during heavy rainfall events which may over burden the sanitary sewer system.
6. The Authorized Discharger must deliver a letter to the City at the office of Environmental Compliance Support, 2201 Portland Ave, Tacoma, 98421, (FAX (253) 502-2295) within 5 calendar days of any exceedance of the discharge conditions specified in B. above, explaining the limitations exceeded, the cause, the measures taken to mitigate it and to prevent reoccurrence.
7. The Authorized Discharger must submit a new application and pay an application fee for discharges that exceed twelve (12) months in duration.
8. This Special Approved Discharge (SAD) authorization is issued solely to the Authorized Discharger named in section one above. Authorization to discharge to the City's sanitary sewer system is not transferrable without the City's written consent.

E. BILLING:

The Authorized Discharger must keep records of each batch discharge, monitoring results, volume, date and time in a log book kept on site for inspector review. The discharge records must also be submitted to the City of Tacoma for billing purposes on a monthly basis. Monthly reporting is due by the 15th of each following month. If no discharge occurred then a report stating that there was no discharge must be submitted. The Authorized Discharger must notify this office, in writing, upon project completion for final billing.

F. ENFORCEMENT:

Violations of this Authorization or of Tacoma Municipal Code Chapter 12.08 may be subject to Notices of Violation w/Civil penalties of up to $5000.00 per violation per day.

G. TERM OF AUTHORIZATION:

This Special Approved Discharge Authorization expires one year from the date of issuance. To extend this SAD, please submit an application at least one month prior to expiration.

ON BEHALF OF THE CITY OF TACOMA:

6-30-17
Dated

Dan C. Thompson, Ph.D.
Business Operations Division Manager
Environmental Services

The 24-hour emergency telephone number for City of Tacoma Sewer Transmission Operation and Maintenance is (253) 591-5595. The regular business hours (Mon-Fri 8:00 A.M. to 4:30 P.M.) number is (253) 591-5588. FAX (253) 502-2295

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12/21/2017

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: David Tetreault

Project:	Franke Tobey Jones
Client ID:	FTJ3
Sample Matrix:	Water
Date Sampled:	12/20/2017
Date Received:	12/20/2017
Spectra Project:	2017120523
Spectra Number:	1
	Rush

Analyte	Result	Units	Method
Arsenic	< 0.05	mg/L	EPA 200.7
Total Suspended Solids	10	mg/L	SM 2540 D

SPECTRA LABORATORIES

Jeffrey Cooper, Laboratory Manager

a6/krd

SPECTRA Laboratories
2221 Ross Way, Tacoma, WA 98421
(253) 272-4850 Fax (253) 572-9838
www.spectra-lab.com info@spectra-lab.com

SPECIAL INSTRUCTIONS/COMMENTS:
Arsenic and TSS ✓ ✓

* Free Cyanide if Total Cyanide is above 0.2

Return Samples Y N Page of

CHAIN of CUSTODY

SPECTRA PROJECT # 1071210523

STANDARD ☐ RUSH X

CLIENT: BPCI Accrete Construction ADDRESS: 801 Valley Ave NW Suite A Puyallup, WA 98371 ADDRESS CHANGE ☐

PROJECT: Franke Tobey Jones

CONTACT: Lacy Levine

SAMPLED BY: Tom Sims

PHONE: 2534058575 FAX:

e-MAIL: lacy@bpci.net Prefer FAX ☐ or e-MAIL ☒

PURCHASE ORDER #: 11714

	SAMPLE ID	DATE SAMPLED	TIME SAMPLED	MATRIX	NUMBER OF CONTAINERS	HYDROCARBONS: NWTPH-HCID	BTEX	BTEX/NWTPH-G	NWTPH-G	NWTPH-Dx	1664 SGT-HEM (TPH)	1664 HEM (FOG)	ORGANICS: 8260/624 VOA	8260 CHLOR SOLVENTS	8270/625 SEMI VOA	8270 PAH/PNA	8082/608 PCB	TTO - Both 624 & 625	METALS: TOTAL METALS RCRA 8	TOTAL METALS (SPECIFY)	Hexavalent Chromium	TCLP METALS RCRA 8	TCLP METALS (SPECIFY)	OTHER: PH 9040/9045	TX/TOX 9076	TURBIDITY	FLASH POINT	BOD	SOLIDS (SPECIFY) TSS	Total Cyanide	Free Cyanide
1	FTJ3	12.20.17	8:30		2															X									X		
2																															
3																															
4																															
5																															
6																															
7																															
8																															
9																															
0																															

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY		Lacy Levine	BPCI Accrete Construction	12.20.17	832
RECEIVED BY		Kaitlyn Reilly	Spectra	12.20.17	8:32
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 1 1/2 % per month interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other costs of collection regardless of whether suit is filed in Pierce Co., WA venue. *Spectra Analytical, LLC*

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01/31/2018

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: David Tetreault

P.O.#: 11714
Project: Franke Tobey Jones
Client ID: FTJ6
Sample Matrix: Wastewater
Date Sampled: 01/26/2018
Date Received: 01/26/2018
Spectra Project: 2018010827
Spectra Number: 1
Rush

Analyte	Result	Units	Method	Analyte	Result	Units	Method
HEM-SGT in Water	< 5.0	mg/L	EPA 1664-B	1,2-Dichlorobenzene	<1	µg/L	EPA 624
Arsenic	< 0.025	mg/L	EPA 200.7	1,2-Dichloroethane	<1	µg/L	EPA 624
Barium	0.022	mg/L	EPA 200.7	1,2-Dichloropropane	<1	µg/L	EPA 624
Cadmium	< 0.003	mg/L	EPA 200.7	1,3-Dichlorobenzene	<1	µg/L	EPA 624
Chromium	< 0.007	mg/L	EPA 200.7	1,4-Dichlorobenzene	<1	µg/L	EPA 624
Copper	0.038	mg/L	EPA 200.7	2-Chloroethylvinyl Ether	<10	µg/L	EPA 624
Lead	< 0.025	mg/L	EPA 200.7	Acrolein	<10	µg/L	EPA 624
Molybdenum	< 0.005	mg/L	EPA 200.7	Acrylonitrile	<10	µg/L	EPA 624
Nickel	< 0.015	mg/L	EPA 200.7	Benzene	<1	µg/L	EPA 624
Selenium	< 0.025	mg/L	EPA 200.7	Bromodichloromethane	<1	µg/L	EPA 624
Silver	< 0.007	mg/L	EPA 200.7	Bromoform	<1	µg/L	EPA 624
Zinc	0.021	mg/L	EPA 200.7	Carbon Tetrachloride	<1	µg/L	EPA 624
Mercury	< 0.0005	mg/L	EPA 245.1	Chlorobenzene	<1	µg/L	EPA 624
1,1,1-Trichloroethane	<1	µg/L	EPA 624	Chlorodibromomethane	<1	µg/L	EPA 624
1,1,2,2-Tetrachloroethane	<1	µg/L	EPA 624	Chloroethane	<1	µg/L	EPA 624
1,1,2-Trichloroethane	<1	µg/L	EPA 624	Chloroform	<1	µg/L	EPA 624
1,1-Dichloroethane	<1	µg/L	EPA 624	Chloromethane	<1	µg/L	EPA 624
1,1-Dichloroethene	<1	µg/L	EPA 624	Ethylbenzene	<1	µg/L	EPA 624
1,2,4-Trichlorobenzene	<1	µg/L	EPA 624	Hexachlorobutadiene	<1	µg/L	EPA 624

Surrogate	Recovery	Method
Dibromofluoromethane	98	EPA 624
1,2-Dichloroethane-d4	100	EPA 624
Toluene-d8	99	EPA 624
4-Bromofluorobenzene	100	EPA 624
2-Fluorophenol	63	EPA 625
Phenol-d6	72	EPA 625
Nitrobenzene-d5	54	EPA 625

Surrogate	Recovery	Method
2-Fluorobiphenyl	24	EPA 625
2,4,6-Tribromophenol	75	EPA 625
p-Terphenyl-d14	63	EPA 625

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Jeffrey Cooper, Laboratory Manager

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01/31/2018

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: David Tetreault

P.O.#: 11714
Project: Franke Tobey Jones
Client ID: FTJ6
Sample Matrix: Wastewater
Date Sampled: 01/26/2018
Date Received: 01/26/2018
Spectra Project: 2018010827
Spectra Number: 1
Rush

Analyte	Result	Units	Method
Methyl bromide	<1	µg/L	EPA 624
Methylene chloride	<5	µg/L	EPA 624
Naphthalene	<1	µg/L	EPA 624
Tetrachloroethene	<1	µg/L	EPA 624
Toluene	<1	µg/L	EPA 624
Total Xylenes	<2	µg/L	EPA 624
Trichloroethene	<1	µg/L	EPA 624
Vinyl chloride	<1	µg/L	EPA 624
cis-1,3-Dichloropropene	<1	µg/L	EPA 624
trans-1,2-Dichloroethene	<1	µg/L	EPA 624
trans-1,3-Dichloropropene	<1	µg/L	EPA 624
1,2 diphenylhydrazine	<2.5	µg/L	EPA 625
1,2,4-Trichlorobenzene	<2.5	µg/L	EPA 625
1,2-Dichlorobenzene	<2.5	µg/L	EPA 625
1,3-Dichlorobenzene	<2.5	µg/L	EPA 625
1,4-Dichlorobenzene	<2.5	µg/L	EPA 625
2,4,6-Trichlorophenol	<2.5	µg/L	EPA 625
2,4-Dichlorophenol	<2.5	µg/L	EPA 625
2,4-Dimethylphenol	<2.5	µg/L	EPA 625

Analyte	Result	Units	Method
2,4-Dinitrophenol	<10	µg/L	EPA 625
2,4-Dinitrotoluene	<2.5	µg/L	EPA 625
2,6-Dinitrotoluene	<2.5	µg/L	EPA 625
2-Chloronaphthalene	<2.5	µg/L	EPA 625
2-Chlorophenol	<2.5	µg/L	EPA 625
2-Nitrophenol	<2.5	µg/L	EPA 625
3,3-Dichlorobenzidine	<20	µg/L	EPA 625
4,6-Dinitro-2-Methylphenol	<10	µg/L	EPA 625
4-Bromophenyl-phenylether	<2.5	µg/L	EPA 625
4-Chloro-3-Methylphenol	<2.5	µg/L	EPA 625
4-Chlorophenyl-phenylether	<2.5	µg/L	EPA 625
4-Nitrophenol	<2.5	µg/L	EPA 625
Acenaphthene	<1.0	µg/L	EPA 625
Acenaphthylene	<1.0	µg/L	EPA 625
Anthracene	<1.0	µg/L	EPA 625
Benzidine	<20	µg/L	EPA 625
Benzo(a)Anthracene	<1.0	µg/L	EPA 625
Benzo(a)Pyrene	<1.0	µg/L	EPA 625
Benzo(b)Fluoranthene	<1.0	µg/L	EPA 625

Surrogate	Recovery	Method
Dibromofluoromethane	98	EPA 624
1,2-Dichloroethane-d4	100	EPA 624
Toluene-d8	99	EPA 624
4-Bromofluorobenzene	100	EPA 624
2-Fluorophenol	63	EPA 625
Phenol-d6	72	EPA 625
Nitrobenzene-d5	54	EPA 625

Surrogate	Recovery	Method
2-Fluorobiphenyl	24	EPA 625
2,4,6-Tribromophenol	75	EPA 625
p-Terphenyl-d14	63	EPA 625

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Jeffrey Cooper, Laboratory Manager

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01/31/2018

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: David Tetreault

P.O.#: 11714
Project: Franke Tobey Jones
Client ID: FTJ6
Sample Matrix: Wastewater
Date Sampled: 01/26/2018
Date Received: 01/26/2018
Spectra Project: 2018010827
Spectra Number: 1
Rush

Analyte	Result	Units	Method
Benzo(ghi)Perylene	<1.0	µg/L	EPA 625
Benzo(k)Fluoranthene	<1.0	µg/L	EPA 625
Bis(2-Chloroethyl)Ether	<2.5	µg/L	EPA 625
Butylbenzylphthalate	<2.5	µg/L	EPA 625
Chrysene	<1.0	µg/L	EPA 625
Di-n-Butylphthalate	<2.5	µg/L	EPA 625
Di-n-Octyl Phthalate	<2.5	µg/L	EPA 625
Dibenzo(a,h)Anthracene	<1.0	µg/L	EPA 625
Diethylphthalate	<2.5	µg/L	EPA 625
Dimethyl Phthalate	<2.5	µg/L	EPA 625
Fluoranthene	<1.0	µg/L	EPA 625
Fluorene	<1.0	µg/L	EPA 625
Hexachlorobenzene	<2.5	µg/L	EPA 625
Hexachlorobutadiene	<2.5	µg/L	EPA 625
Hexachlorocyclopentadiene	<2.5	µg/L	EPA 625
Hexachloroethane	<2.5	µg/L	EPA 625
Indeno(1,2,3-cd)Pyrene	<1.0	µg/L	EPA 625
Isophorone	<2.5	µg/L	EPA 625
N-Nitroso-Di-n-Propylamine	<2.5	µg/L	EPA 625
N-Nitrosodiphenylamine	<2.5	µg/L	EPA 625
N-nitrosodimethylamine	<2.5	µg/L	EPA 625
Naphthalene	<1.0	µg/L	EPA 625
Nitrobenzene	<2.5	µg/L	EPA 625
Pentachlorophenol	<2.5	µg/L	EPA 625
Phenanthrene	<1.0	µg/L	EPA 625
Phenol	<2.5	µg/L	EPA 625
Pyrene	<1.0	µg/L	EPA 625
bis(2-Chloroethoxy)Methane	<2.5	µg/L	EPA 625
bis(2-Ethylhexyl)Phthalate	<2.5	µg/L	EPA 625
bis(2-chloroisopropyl)Ether	<2.5	µg/L	EPA 625
Total Suspended Solids	45	mg/L	SM 2540 D
Total Cyanide	<0.01	mg/L	SM 4500-CN⁻ E
pH	6.04	pH	SM 4500-H+ B

Surrogate	Recovery	Method
Dibromofluoromethane	98	EPA 624
1,2-Dichloroethane-d4	100	EPA 624
Toluene-d8	99	EPA 624
4-Bromofluorobenzene	100	EPA 624
2-Fluorophenol	63	EPA 625
Phenol-d6	72	EPA 625
Nitrobenzene-d5	54	EPA 625

Surrogate	Recovery	Method
2-Fluorobiphenyl	24	EPA 625
2,4,6-Tribromophenol	75	EPA 625
p-Terphenyl-d14	63	EPA 625

SPECTRA LABORATORIES

Jeffrey Cooper, Laboratory Manager

a14exsur/jjb

SPECTRA Laboratories
2221 Ross Way, Tacoma, WA 98421
(253) 272-4850 Fax (253) 572-9838
www.spectra-lab.com info@spectra-lab.com

SPECIAL INSTRUCTIONS/COMMENTS:
Metals - Arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, silver, zinc, barium

* Free Cyanide if Total Cyanide is above 0.2

Return Samples Y ___ N ___ Page ___ of ___

CHAIN of CUSTODY

SPECTRA PROJECT # 2018010827

STANDARD [ ] RUSH [X]

CLIENT: BPCI Accrete Construction
ADDRESS: 801 valley ave nw suite a puyallp wa 98371
ADDRESS CHANGE [ ]

PROJECT: FRANKE TOBEY JONES
CONTACT: LACY LEVINE
SAMPLED BY: TOM SIMS
PHONE: 2534058575 FAX:
e-MAIL: Prefer FAX [ ] or e-MAIL [X]
PURCHASE ORDER #: 11714

	SAMPLE ID	DATE SAMPLED	TIME SAMPLED	MATRIX	NUMBER OF CONTAINERS	HYDROCARBONS: NWTPH-HCID	BTEX	BTEX/NWTPH-G	NWTPH-G	NWTPH-Dx	1664 SGT-HEM (TPH)	1664 HEM (FOG)	ORGANICS: 8260/624 VOA	8260 CHLOR SOLVENTS	8270/625 SEMI VOA	8270 PAH/PNA	8082/608 PCB	TTO - Both 624 & 625	METALS: TOTAL METALS RCRA 8	TOTAL METALS (SPECIFY)	Hexavalent Chromium	TCLP METALS RCRA 8	TCLP METALS (SPECIFY)	OTHER: PH 9040/9045	TX/TOX 9076	TURBIDITY	FLASH POINT	BOD	SOLIDS (SPECIFY) TSS	Total Cyanide	Free Cyanide
1	FTJ6	1.26.18	2:15	WW	8						X							X		X	X			X					X	X	X*
2																															
3																															
4																															
5																															
6																															
7																															
8																															
9																															
0																															

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY		Lacy Levine	BPCI	1.26.18	2:30
RECEIVED BY	Marie Holt	MARIE HOLT	Spectra	1-26-18	2:41
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 1 1/2 % per month interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other costs of collection regardless of whether suit is filed in Pierce Co., WA venue. *Spectra Analytical, LLC*

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01/17/2018

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: Lacy Levine

P.O.#: 11714
Project: Franke Tobey Jones
Client ID: FTJ4
Sample Matrix: Water
Date Sampled: 01/15/2018
Date Received: 01/15/2018
Spectra Project: 2018010419
Spectra Number: 1
Rush

Analyte	Result	Units	Method	Analyte	Result	Units	Method
HEM-SGT in Water	<5.0	mg/L	EPA 1664-B	1,2-Dichlorobenzene	<1	µg/L	EPA 624
Arsenic	< 0.025	mg/L	EPA 200.7	1,2-Dichloroethane	<1	µg/L	EPA 624
Barium	0.006	mg/L	EPA 200.7	1,2-Dichloropropane	<1	µg/L	EPA 624
Cadmium	< 0.003	mg/L	EPA 200.7	1,3-Dichlorobenzene	<1	µg/L	EPA 624
Chromium	< 0.007	mg/L	EPA 200.7	1,4-Dichlorobenzene	<1	µg/L	EPA 624
Copper	< 0.006	mg/L	EPA 200.7	2-Chloroethylvinyl Ether	<10	µg/L	EPA 624
Lead	< 0.025	mg/L	EPA 200.7	Acrolein	<10	µg/L	EPA 624
Molybdenum	< 0.005	mg/L	EPA 200.7	Acrylonitrile	<10	µg/L	EPA 624
Nickel	< 0.015	mg/L	EPA 200.7	Benzene	<1	µg/L	EPA 624
Selenium	< 0.025	mg/L	EPA 200.7	Bromodichloromethane	<1	µg/L	EPA 624
Silver	< 0.007	mg/L	EPA 200.7	Bromoform	<1	µg/L	EPA 624
Zinc	< 0.006	mg/L	EPA 200.7	Carbon Tetrachloride	<1	µg/L	EPA 624
Mercury	<0.0005	mg/L	EPA 245.1	Chlorobenzene	<1	µg/L	EPA 624
1,1,1-Trichloroethane	<1	µg/L	EPA 624	Chlorodibromomethane	<1	µg/L	EPA 624
1,1,2,2-Tetrachloroethane	<1	µg/L	EPA 624	Chloroethane	<1	µg/L	EPA 624
1,1,2-Trichloroethane	<1	µg/L	EPA 624	Chloroform	<1	µg/L	EPA 624
1,1-Dichloroethane	<1	µg/L	EPA 624	Chloromethane	<1	µg/L	EPA 624
1,1-Dichloroethene	<1	µg/L	EPA 624	Ethylbenzene	<1	µg/L	EPA 624
1,2,4-Trichlorobenzene	<1	µg/L	EPA 624	Hexachlorobutadiene	<1	µg/L	EPA 624

Surrogate	Recovery	Method
Dibromofluoromethane	93	EPA 624
1,2-Dichloroethane-d4	109	EPA 624
Toluene-d8	93	EPA 624
4-Bromofluorobenzene	104	EPA 624
2-Fluorophenol	64	EPA 625
Phenol-d6	70	EPA 625
Nitrobenzene-d5	60	EPA 625

Surrogate	Recovery	Method
2-Fluorobiphenyl	59	EPA 625
2,4,6-Tribromophenol	96	EPA 625
p-Terphenyl-d14	92	EPA 625

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Jeffrey Cooper, Laboratory Manager

a14exsur/jac

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01/17/2018

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: Lacy Levine

P.O.#: 11714
Project: Franke Tobey Jones
Client ID: FTJ4
Sample Matrix: Water
Date Sampled: 01/15/2018
Date Received: 01/15/2018
Spectra Project: 2018010419
Spectra Number: 1
Rush

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Methyl bromide	<1	µg/L	EPA 624	2,4-Dinitrophenol	<10	µg/L	EPA 625
Methylene chloride	<1	µg/L	EPA 624	2,4-Dinitrotoluene	<2.5	µg/L	EPA 625
Naphthalene	<1	µg/L	EPA 624	2,6-Dinitrotoluene	<2.5	µg/L	EPA 625
Tetrachloroethene	<1	µg/L	EPA 624	2-Chloronaphthalene	<2.5	µg/L	EPA 625
Toluene	<1	µg/L	EPA 624	2-Chlorophenol	<2.5	µg/L	EPA 625
Total Xylenes	<2	µg/L	EPA 624	2-Nitrophenol	<2.5	µg/L	EPA 625
Trichloroethene	<1	µg/L	EPA 624	3,3-Dichlorobenzidine	<20	µg/L	EPA 625
Vinyl chloride	<1	µg/L	EPA 624	4,6-Dinitro-2-Methylphenol	<10	µg/L	EPA 625
cis-1,3-Dichloropropene	<1	µg/L	EPA 624	4-Bromophenyl-phenylether	<2.5	µg/L	EPA 625
trans-1,2-Dichloroethene	<1	µg/L	EPA 624	4-Chloro-3-Methylphenol	<2.5	µg/L	EPA 625
trans-1,3-Dichloropropene	<1	µg/L	EPA 624	4-Chlorophenyl-phenylether	<2.5	µg/L	EPA 625
1,2 diphenylhydrazine	<2.5	µg/L	EPA 625	4-Nitrophenol	<2.5	µg/L	EPA 625
1,2,4-Trichlorobenzene	<2.5	µg/L	EPA 625	Acenaphthene	<1.0	µg/L	EPA 625
1,2-Dichlorobenzene	<2.5	µg/L	EPA 625	Acenaphthylene	<1.0	µg/L	EPA 625
1,3-Dichlorobenzene	<2.5	µg/L	EPA 625	Anthracene	<1.0	µg/L	EPA 625
1,4-Dichlorobenzene	<2.5	µg/L	EPA 625	Benzidine	<20	µg/L	EPA 625
2,4,6-Trichlorophenol	<2.5	µg/L	EPA 625	Benzo(a)Anthracene	<1.0	µg/L	EPA 625
2,4-Dichlorophenol	<2.5	µg/L	EPA 625	Benzo(a)Pyrene	<1.0	µg/L	EPA 625
2,4-Dimethylphenol	<2.5	µg/L	EPA 625	Benzo(b)Fluoranthene	<1.0	µg/L	EPA 625

Surrogate	Recovery	Method
Dibromofluoromethane	93	EPA 624
1,2-Dichloroethane-d4	109	EPA 624
Toluene-d8	93	EPA 624
4-Bromofluorobenzene	104	EPA 624
2-Fluorophenol	64	EPA 625
Phenol-d6	70	EPA 625
Nitrobenzene-d5	60	EPA 625

Surrogate	Recovery	Method
2-Fluorobiphenyl	59	EPA 625
2,4,6-Tribromophenol	96	EPA 625
p-Terphenyl-d14	92	EPA 625

SPECTRA LABORATORIES

Jeffrey Cooper, Laboratory Manager

a14exsur/jac

SPECTRA Laboratories ...Where experience matters
2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

01/17/2018

BPCI Accrete Construction
801 Valley NW
Suite A
Puyallup, WA 98371
Attn: Lacy Levine

P.O.#: 11714
Project: Franke Tobey Jones
Client ID: FTJ4
Sample Matrix: Water
Date Sampled: 01/15/2018
Date Received: 01/15/2018
Spectra Project: 2018010419
Spectra Number: 1
Rush

Analyte	Result	Units	Method
Benzo(ghi)Perylene	<1.0	µg/L	EPA 625
Benzo(k)Fluoranthene	<1.0	µg/L	EPA 625
Bis(2-Chloroethyl)Ether	<2.5	µg/L	EPA 625
Butylbenzylphthalate	<2.5	µg/L	EPA 625
Chrysene	<1.0	µg/L	EPA 625
Di-n-Butylphthalate	<2.5	µg/L	EPA 625
Di-n-Octyl Phthalate	<2.5	µg/L	EPA 625
Dibenzo(a,h)Anthracene	<1.0	µg/L	EPA 625
Diethylphthalate	<2.5	µg/L	EPA 625
Dimethyl Phthalate	<2.5	µg/L	EPA 625
Fluoranthene	<1.0	µg/L	EPA 625
Fluorene	<1.0	µg/L	EPA 625
Hexachlorobenzene	<2.5	µg/L	EPA 625
Hexachlorobutadiene	<2.5	µg/L	EPA 625
Hexachlorocyclopentadiene	<2.5	µg/L	EPA 625
Hexachloroethane	<2.5	µg/L	EPA 625
Indeno(1,2,3-cd)Pyrene	<1.0	µg/L	EPA 625
Isophorone	<2.5	µg/L	EPA 625
N-Nitroso-Di-n-Propylamine	<2.5	µg/L	EPA 625
N-Nitrosodiphenylamine	<2.5	µg/L	EPA 625
N-nitrosodimethylamine	<2.5	µg/L	EPA 625
Naphthalene	<1.0	µg/L	EPA 625
Nitrobenzene	<2.5	µg/L	EPA 625
Pentachlorophenol	<2.5	µg/L	EPA 625
Phenanthrene	<1.0	µg/L	EPA 625
Phenol	<2.5	µg/L	EPA 625
Pyrene	<1.0	µg/L	EPA 625
bis(2-Chloroethoxy)Methane	<2.5	µg/L	EPA 625
bis(2-Ethylhexyl)Phthalate	<2.5	µg/L	EPA 625
bis(2-chloroisopropyl)Ether	<2.5	µg/L	EPA 625
Total Suspended Solids	4.0	mg/L	SM 2540 D
Total Cyanide	<0.01	mg/L	SM 4500-CN^- E
pH	7.06	pH	SM 4500-H^+ B
Water Digestion	c		SW846 3010

Surrogate	Recovery	Method
Dibromofluoromethane	93	EPA 624
1,2-Dichloroethane-d4	109	EPA 624
Toluene-d8	93	EPA 624
4-Bromofluorobenzene	104	EPA 624
2-Fluorophenol	64	EPA 625
Phenol-d6	70	EPA 625
Nitrobenzene-d5	60	EPA 625

Surrogate	Recovery	Method
2-Fluorobiphenyl	59	EPA 625
2,4,6-Tribromophenol	96	EPA 625
p-Terphenyl-d14	92	EPA 625

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Jeffrey Cooper, Laboratory Manager

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APPENDIX C
Report Limitations and Guidelines for Use

APPENDIX C
REPORT LIMITATIONS AND GUIDELINES FOR USE[1]

This appendix provides information to help you manage your risks with respect to the use of this report. Please confer with GeoEngineers if you need to know more about how these "Report Limitations and Guidelines for Use" apply to your project or property.

Read These Provisions Closely

It is important to recognize that environmental engineering and geoscience practices (geotechnical engineering, geology and environmental science) are less exact than other engineering and natural science disciplines. GeoEngineers includes these explanatory "limitations" provisions in our reports to help reduce the risk of misunderstandings or unrealistic expectations that lead to disappointments, claims and disputes.

Environmental Services Are Performed for Specific Purposes, Persons and Projects

GeoEngineers has performed this remedial investigation of the proposed expansion of the existing Franke Tobey Jones (FTJ) facility located at 5340 North Bristol Street in Tacoma, Washington in general accordance with the scope and limitations of our proposal, dated October 13, 2017. This report has been prepared for the exclusive use of Franke Tobey Jones. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

GeoEngineers structures its services to meet the specific needs of its clients. For example, an ESA study conducted for a property owner may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and property. Use of this report is not recommended for any purpose or project other than as expressly stated in this report.

This Environmental Report is Based on a Unique Set of Project-Specific Factors

This report has been prepared for the proposed expansion of the existing Franke Tobey Jones (FTJ) facility located at 5340 North Bristol Street in Tacoma, Washington. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this Project. Unless GeoEngineers specifically indicates otherwise, it is important not to rely on this report if it was:

- not prepared for you,
- not prepared for your Project,
- not prepared for the specific site explored, or
- completed before Project changes were made.

If changes to the Project or property occur after the date of this report, GeoEngineers cannot be responsible for any consequences of such changes in relation to this report unless we have been given the opportunity

1 Developed based on material provided by GBA, GeoProfessional Business Association; www.geoprofessional.org.

to review our interpretations and recommendations in the context of such changes. Based on that review, we can provide written modifications or confirmation, as appropriate.

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of the party(ies) to whom this report is addressed. No other party may rely on the product of our services unless we agree to such reliance in advance and in writing. Within the limitations of the agreed Project scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and generally accepted environmental practices in this area at the time this report was prepared.

Understand That Geotechnical Issues Have Not Been Addressed

Unless geotechnical engineering was specifically included in our scope of service, this report does not provide any geotechnical findings, conclusions, or recommendations, including but not limited to, the suitability of subsurface materials for construction purposes.

Do Not Separate Documentation from the Report

Environmental reports often include supplemental documentation, such as maps, figures and table. Do not separate such documentation from the report. Further, do not, and do not permit any other party to redraw or modify any of the supplemental documentation for incorporation into other professionals' instruments of service.

Environmental Regulations Change and Evolve

Some substances may be present in the vicinity of the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. GeoEngineers cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substances, change or if more stringent environmental standards are developed in the future.

Uncertainty May Remain Even After This Phase II ESA is Completed

Performance of a Phase II ESA is intended to reduce uncertainty regarding the potential for contamination in connection with a property, but no ESA can wholly eliminate that uncertainty. Our interpretation of subsurface conditions in this study is based on field observations and chemical analytical data from widely spaced sampling locations. It is always possible that contamination exists in areas that were not explored, sampled or analyzed.

Subsurface Conditions Can Change

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by man-made events such as construction on or adjacent to the subject property, by new releases of hazardous substances, new information or technology that become available subsequent to the report date, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Please contact GeoEngineers before applying this report for its intended purpose so that GeoEngineers may evaluate whether changed conditions affect the continued applicability of the report.

Soil and Groundwater End Use

The cleanup levels referenced in this report are site- and situation-specific. The cleanup levels may not be applicable for other properties or for other on-site uses of the affected soil and/or groundwater. Note that hazardous substances may be present in some of the on-site soil and/or groundwater at detectable concentrations that are less than the referenced cleanup levels. GeoEngineers should be contacted prior to the export of soil or groundwater from the subject property or reuse of the affected soil or groundwater on-site to evaluate the potential for associated environmental liabilities. GeoEngineers will not assume responsibility for potential environmental liability arising out of the transfer of soil and/or groundwater from the subject property to another location, or the reuse of such soil and/or groundwater on-site in any instances that we did not recommend, know of, or control.

Most Environmental Findings Are Professional Opinions

Our interpretations of subsurface conditions are based on field observations and chemical analytical data from widely spaced sampling locations at the subject property. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied its professional judgment to render an informed opinion about subsurface conditions throughout the property. Actual subsurface conditions may differ significantly from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

Do Not Redraw the Exploration Logs

Environmental scientists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in an environmental report should never be redrawn for inclusion in other design documents. Only photographic or electronic reproduction that preserves the entire original boring log is acceptable, but separating logs from the report can create increase the risk of potential misinterpretation.

Biological Pollutants

GeoEngineers' Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this report does not include any interpretations, recommendations, findings or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants, and no conclusions or inferences should be drawn regarding Biological Pollutants as they may relate to this Project. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria and viruses, and/or any of their byproducts.

A Client that desires these specialized services is advised to obtain them from a consultant who offers services in this specialized field.

Information Provided by Others

GeoEngineers has relied upon certain data or information provided or compiled by others in the performance of our services. Although we use sources that we reasonably believe to be trustworthy, GeoEngineers cannot warrant or guarantee the accuracy or completeness of information provided or compiled by others.