

SKYWAY RESOURCE CENTER

Contract# SP2300150

12610 76th Ave Seattle, WA 98178

PROJECT MANUAL – VOLUME 2 ENVIRONMENTAL REPORTS – PART 1

Owner: King County Housing Authority



600 Andover Park W.
Tukwila, WA 98188

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Hazardous Materials Survey Report

Future Skyway Resource Center
12610 76th Avenue South
Seattle, Washington 98178

Prepared for:
King County Housing Authority
600 Andover Park West
Seattle, Washington 98188

June 21, 2022
PBS Project 40573.238



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Paint Chip Laboratory Data Sheets

Paint Chip Chain of Custody Documentation

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1 INTRODUCTION

1.1 Background

PBS Engineering and Environmental Inc. (PBS) performed a hazardous materials survey of the Future Skyway Resource Center building located at 12610 76th Avenue South in Seattle, Washington, in preparation for planned renovations. Accessible building areas included in the scope of work were inspected for the presence of asbestos-containing materials (ACMs), lead-containing paint (LCP), mercury-containing light tubes, and PCB-containing light fixture ballasts. The intent of this investigation is to ensure that King County Housing Authority (KCHA) is in compliance with applicable regulatory requirements that a "good faith inspection" for ACMs be performed prior to construction activities.

1.2 Building Description

The Future Skyway Resource Center building is a two-story, slab-on-grade building that was formerly occupied by a bank. The first floor contains a lobby, cubicle area, offices, teller area, and a vault. The second floor contains restrooms, a kitchen, storage room, and a mechanical room. Interior finishes include the following: terrazzo, vinyl floor tile, carpet, and sheet vinyl flooring and vinyl floor tile under carpet floors; gypsum wallboard and concrete walls; 12" acoustical ceiling tile-covered and gypsum wallboard ceilings. Windows and doors are metal-framed. The exterior features concrete masonry unit blocks and marblecrete (aggregate rock) covered cement board panels. The roof features a membrane system over asphaltic built-up.

1.3 Survey Process

Suspect ACMs anticipated to be impacted by project activities were inspected by AHERA-accredited Asbestos Building Inspector Kaitlin Soukup (Cert. # 182737, Exp. 10/21/2022) on May 31, 2022, and June 14, 2022, for the presence of suspect ACMs.

When observed, suspect materials were sampled. All samples were assigned a unique identification number and transmitted for analysis to Seattle Asbestos Test, LLC (NVLAP # 201057-0) for analysis. All samples were analyzed by polarized light microscopy (PLM), which has a reliable limit of quantification of 1% asbestos by volume. Information regarding the type and location of sampled materials can be found on the attached PLM laboratory report located in Appendix A.

Destructive investigation was not performed to investigate inaccessible areas. Inaccessible areas are defined as those requiring selective demolition, fall protection, or confined-space entry protocols to gain access. While PBS has endeavored to identify concealed ACMs, additional unidentified materials may be present in concealed locations that were not accessed during this survey. Any materials encountered during renovation that have not been previously sampled should be sampled for asbestos content prior to impact.

2 FINDINGS

2.1 Asbestos-Containing Materials (ACMs)

The following materials were sampled and contain **greater than 1% asbestos**.

- **Tan vinyl floor tile and black mastic (exposed and under carpet, on concrete substrate)** – Reception, Utility Room, Vault, Safety Deposit Box Room, first floor northwest office, Viewing Room – approximately 850 SF
- **Tan vinyl floor tile and black mastic (exposed and under carpet, on wood substrate)** – 2nd Floor Storage Room, 2nd Floor corridor and adjacent closet, Equipment Room, Women's Powder Room – approximately 490 SF

- **Yellow mastic associated with ceramic wall tile and base – Restrooms** – approximately 90 SF
- **Interior and exterior window putty** – windows throughout – approximately 1,920 LF
- **Exterior window frame sealant** – north, south, and east elevations – 665 LF
- **Sealant between marblecrete (aggregate rock) panels and metal column** – throughout exterior – 400 LF
- **Sealant around exterior metal panels** – east and north elevations – 115 LF
- **Marblecrete (aggregate rock)-covered cement asbestos board** – exterior north, east, and west elevations – approximately 1,400 SF
- **Joint compound associated with non-asbestos gypsum wallboard (composite analysis <1%)** – throughout

The following materials were sampled and **do not** contain detectable asbestos:

- Yellow carpet mastic
- Brown sheet vinyl flooring and black mastic – stairs and landing
- Terrazzo – Lobby
- Black and yellow walk off mat mastic – Main entrance
- Black mastic (under carpet) – Kitchen
- Cream and tan cove base mastic
- 4" brown cove base and brown mastic
- Grout associated with 1" ceramic floor tile – restrooms
- Mortar associated with 1" ceramic floor tile – restrooms
- 12" acoustical ceiling tile and brown mastic – throughout
- Exterior door frame sealant – northeast
- Vapor barrier between concrete masonry unit walls and concrete foundation
- HVAC duct sealant – upper roof
- Built-up roofing under membrane – roof

Refer to Appendix A for a complete listing of representative bulk sampling and associated laboratory analysis.

2.2 Lead-Containing Paint (LCP)

PBS performed limited paint sampling as part of this investigation. Five (5) representative painted coatings were sampled for lead content. The samples were assigned a unique identification number and transmitted to NVL Laboratories, Inc. (AIHA IH #101861) in Seattle, Washington, under chain-of-custody protocols for analysis using Flame Atomic Absorption (EPA 3051/7000B).

Lead was identified above the analytical limit of detection in the following coatings:

- White paint on gypsum wallboard wall – stair landing – 0.018% lead
- Off-white paint on metal wall panel – first floor northwest office – 0.035%
- Tan paint on metal column – south elevation – 0.24% lead

- Tan paint on metal exterior panel – east elevation – 0.037% lead
- Tan paint on concrete masonry unit wall – south elevation – 0.012% lead

Refer to Appendix B for additional information including specific sample locations and associated laboratory analysis.

2.3 Mercury-Containing Components

All fluorescent light tubes are presumed to contain mercury. PBS observed 4 compact and 168 four-foot fluorescent lamps throughout the building interior and exterior.

2.4 PCB-Containing Components

Fluorescent light fixture ballasts are known to contain PCBs. PBS inspected fluorescent light fixture ballasts in the building. PBS observed one (1) magnetic ballast in fluorescent light fixtures.

3 RECOMMENDATIONS

3.1 Asbestos-Containing Materials (ACMs)

PBS recommends that ACMs to be impacted by renovation or demolition activities be removed prior to construction or only be impacted by properly trained and protected personnel in accordance with applicable local, state and federal regulations. A qualified asbestos abatement contractor licensed in the State of Washington should be employed for any removal and proper disposal of ACM in accordance with all applicable local, state and federal regulations.

Gypsum wallboard (GWB) assemblies with a composite analysis of less than 1% asbestos are present throughout the building. GWB assemblies with a composite analysis of less than 1% asbestos requires personnel impacting the material to adhere to regulatory requirements outlined in Washington State Department of Labor and Industries (L&I) regulations (WAC 296-62-077). Refer to Washington Industrial Safety and Health Act (WISHA) Regional Directive 23.30 for additional information.

The possibility exists that suspect ACM may be present in concealed areas included in the scope of the renovations. Concealed suspect ACMs encountered during construction should be considered asbestos-containing until properly sampled by an AHERA Certified Building Inspector.

3.2 Lead-Containing Paint (LCP)

Limited representative painted coatings from the project location were found to contain detectable lead by laboratory analysis. Painted coatings may exist in inaccessible areas of the work area or in secondary coatings. Any previously unidentified painted coatings should be considered lead-containing until sampled and proven otherwise. Dust control and housekeeping is crucial in preventing worker and occupant exposures.

All construction activities performed in pre-1978 residential buildings require compliance with the Environmental Protection Agency (EPA) and State of Washington lead paint regulations including but not limited to 40 CFR 745 Renovation, Repair and Painting (RRP) program regulations and 24 CFR 35 Lead-Based Paint Poisoning in Certain Residential Structures, WAC 296-155-176 L&I Lead in Construction, and WAC 173-303 State of Washington Department of Ecology Dangerous Waste Regulations.

3.3 Mercury-Containing Components

Fluorescent lamps are known to contain mercury and mercury vapors. All fluorescent lamps at this site are presumed to be mercury-containing. PBS recommends that all fluorescent lamps be carefully handled and recycled/disposed of in accordance with the contract documents and applicable regulations during demolition activities. Breakage of lamps should be avoided to prevent potential exposures to mercury. L&I requires specific training, handling, engineering controls and disposal practices when performing this work. All waste shall be handled in accordance with WAC 173-303.

3.4 PCB-Containing Components

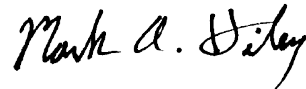
PBS recommends all light ballasts be inspected prior to disposal. Magnetic ballasts should be presumed to contain PCBs and properly removed, stored, transported and disposed of in accordance with WAC 173-303 Dangerous Waste Regulations and 40 CFR Part 761 Subpart D. All suspect ballasts that are leaking should be carefully handled and all components that come in contact with the fluid should be presumed PCB contaminated and handled/disposed accordingly. Electronic ballasts do not contain PCBs and can be disposed of as general debris in compliance with applicable codes and endpoint facility requirements.

Report prepared by:



Kaitlin Soukup
AHERA Building Inspector
Cert. # 182737, Exp. 10/21/2022

Report reviewed by:



Mark Hiley
Senior Project Manager

APPENDIX A

PLM Bulk Sampling Information

PLM Bulk Sample Laboratory Data Sheets

PLM Bulk Sample Chain of Custody Documentation

**Skyway Resource Center
King County Housing Authority
PLM ASBESTOS SAMPLE INVENTORY**

**PBS Engineering + Environmental
PBS Project #40573.238**

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
40573.238 -01	9" tan vinyl floor tile Black mastic	Utility Room, west	Layer 1: Tan tile Layer 2: Black mastic	2% Chrysotile 3% Chrysotile	SAT
40573.238 -02	9" tan vinyl floor tile Black mastic	2nd floor storage room, at water heater	Layer 1: Tan tile Layer 2: Black mastic	2% Chrysotile 3% Chrysotile	SAT
40573.238 -03	Yellow carpet mastic Tan vinyl floor tile Black mastic	2nd floor corridor at women's restroom	Layer 1: Yellow mastic Layer 2: Tan tile Layer 3: Black mastic	NAD 2% Chrysotile 3% Chrysotile	SAT
40573.238 -04	Yellow carpet mastic Tan vinyl floor tile Black mastic	Reception, south center	Layer 1: Yellow mastic Layer 2: Tan tile Layer 3: Black mastic	NAD NAD 2% Chrysotile	SAT
40573.238 -05	Yellow carpet mastic Brown sheet vinyl flooring Black mastic	Stair landing	Layer 1: Yellow mastic Layer 2: Brown sheet vinyl Layer 3: Black mastic	NAD NAD NAD	SAT
40573.238 -06	Terazzo	Lobby, northeast	Layer 1: White/green/red brittle material Layer 2: Yellow mastic	NAD NAD	SAT
40573.238 -07	Black and yellow walk off mat mastic	Main entrance	Layer 1: Black/yellow mastic	NAD	SAT
40573.238 -08	Black mastic	Kitchen, at entrance, under carpet	Layer 1: Black mastic	NAD	SAT
40573.238 -09	Cream and tan cove base mastic	1st floor cubicle space, southeast	Layer 1: Cream/tan mastic	NAD	SAT
40573.238 -10	4" brown cove base Brown mastic	Utility Room, west	Layer 1: Brown rubbery material Layer 2: Brown mastic	NAD NAD	SAT
40573.238 -11	Joint compound Gypsum wallboard	Custodial Room in 1st floor north office	Layer 1: White powdery material with paint Layer 2: White chalky material with paper	2% Chrysotile NAD Composite Analysis: <1%	SAT

**Skyway Resource Center
King County Housing Authority**

**PBS Engineering + Environmental
PBS Project #40573.238**

PBS Sample #	Material Type	Sample Location	Lab Description	Lab Result	Lab
40573.238 -12	Joint compound Gypsum wallboard	Viewing Room, southwest	Layer 1: White powdery material with paper Layer 2: White chalky material with paper	2% Chrysotile NAD Composite Analysis: <1%	SAT
40573.238 -13	Joint compound Gypsum wallboard	2nd floor storage room, at roof hatch	Layer 1: White powdery material with paint Layer 2: White chalky material with paper	2% Chrysotile NAD Composite Analysis: <1%	SAT
40573.238 -14	Grout associated with 1" ceramic floor tile	Women's Restroom	Layer 1: Gray sandy/brittle material	NAD	SAT
40573.238 -15	Mortar associated with 1" ceramic floor tile	Women's Restroom	Layer 1: Gray/sandy brittle material	NAD	SAT
40573.238 -16	Yellow mastic associated with ceramic wall tile	Women's Restroom	Layer 1: Yellow tile Layer 2: Trace yellow mastic	3% Chrysotile NAD	SAT
40573.238 -17	12" dotted acoustical ceiling tile Brown mastic	1st floor north office	Layer 1: Brown fibrous material Layer 2: Brown mastic	NAD NAD	SAT
40573.238 -18	12" acoustical ceiling tile Brown mastic	Teller's Area, north center	Layer 1: Brown fibrous material Layer 2: Brown mastic	NAD NAD	SAT
40573.238 -19	Interior window putty	1st floor northwest office	Layer 1: Gray brittle material	2% Chrysotile	SAT
40573.238 -20	Interior window putty	1st floor cubicle space, east	Layer 1: Gray brittle material	2% Chrysotile	SAT
40573.238 -21	Interior window putty	Women's Powder Room	Layer 1: Gray brittle material	2% Chrysotile	SAT
40573.238 -22	Sealant between marblecrete and metal column	South elevation, southwest corner			SAT
40573.238 -23	Sealant between metal panel and metal column (vertical)	East elevation, south	Layer 1: Tan soft material with paint Layer 2: Tan brittle material	NAD 2% Chrysotile	SAT

**Skyway Resource Center
King County Housing Authority**

**PBS Engineering + Environmental
PBS Project #40573.238**

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
40573.238 -24	White sealant between metal panel and foundation (horizontal)	East elevation, south	Layer 1: Gray brittle material	2% Chrysotile	SAT
40573.238 -25	Exterior window frame sealant	South elevation	Layer 1: Gray brittle material	2% Chrysotile	SAT
40573.238 -26	Cream and brown window frame sealant (vertical)	South elevation	Layer 1: Cream/brown soft material	3% Chrysotile	SAT
40573.238 -27	Window stop putty	South elevation, east of entrance	Layer 1: Gray brittle material with paint	2% Chrysotile	SAT
40573.238 -28	Exterior window putty	Kitchen	Layer 1: Trace gray brittle material	NAD	SAT
40573.238 -29	Exterior window putty	South elevation	Layer 1: Gray brittle material	2% Chrysotile	SAT
40573.238 -30	Exterior window putty	North elevation	Layer 1: Gray brittle material	2% Chrysotile	SAT
40573.238 -31	Exterior door frame sealant	Northeast	Layer 1: Gray soft/elastic material with paint	NAD	SAT
40573.238 -32	Marblecrete on cement board	Southwest exterior	Layer 1: Gray cementitious material with paint	15% Chrysotile	SAT
40573.238 -33	Vapor barrier between concrete masonry unit wall and foundation	South elevation, east corner	Layer 1: Tan soft material	NAD	SAT
			Layer 2: Silver foil	NAD	
			Layer 3: Trace black mastic	NAD	
40573.238 -34	Vapor barrier between concrete masonry unit wall and foundation	Reception, at former south opening	Layer 1: Black asphaltic material with fibrous material	NAD	SAT
			Layer 2: Silver foil	NAD	
			Layer 3: Tan paper with black mastic	NAD	
			Layer 4: Brown fibrous material	NAD	
40573.238 -35	HVAC duct sealant	Upper roof, northwest	Layer 1: Gray soft material	NAD	SAT
40573.238 -36	Granular asphaltic material Yellow foam with paper	Upper roof, center	Layer 1: Black asphaltic material with sand	NAD	SAT
			Layer 2: Black asphaltic material	NAD	

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
	Asphaltic layer		Layer 3: Multi-layered black asphaltic material with fibrous material	NAD	
			Layer 4: Yellow foamy material	NAD	
			Layer 5: Black asphaltic material	NAD	
			Layer 6: Brown fibrous material	NAD	
40573.238 -37	Granular asphaltic material	East lower roof (under membrane, on wood decking)	Layer 1: Black asphaltic material	NAD	SAT
	Yellow fiberglass		Layer 2: Yellow fibrous material	NAD	
	Black paper		Layer 3: Black asphaltic fibrous material	NAD	
	Yellow foam		Layer 4: Yellow foamy material	NAD	
	Black asphaltic material		Layer 5: Black asphaltic material	NAD	
40573.238 -38	Granular asphaltic material	West lower roof (under membrane, on wood decking)	Layer 1: Black asphaltic material with sand	NAD	SAT
	Brown fiberboard		Layer 2: Black asphaltic material	NAD	
	Black paper		Layer 3: Brown fibrous material	NAD	
	Brown foam		Layer 4: Black asphaltic fibrous material	NAD	
			Layer 5: Brown foamy material	NAD	
40573.238 -39	Granular asphaltic layers	ATM drive through roof (under membrane on metal decking)	Layer 1: Black asphaltic material with sand	NAD	SAT
	Brown fiberboard		Layer 2: Black asphaltic material	NAD	
			Layer 3: Black asphaltic material	NAD	
			Layer 4: Black asphaltic material	NAD	
			Layer 5: Brown fibrous material	NAD	
40573.238 -40	Asphaltic material	East lower roof, on conduit	Layer 1: Black asphaltic material	NAD	SAT
40573.238 -41	Exterior window putty	East lower roof, west	Layer 1: White brittle material	NAD	SAT
40573.238 -42	Vent caulking	West lower roof, east	Layer 1: Tan brittle material with paint	2% Chrysotile	SAT

SEATTLE ASBESTOS TEST, LLC

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

www.seattleasbestostest.com, admin@seattleasbestostest.com

Project Manager: Mark Hiley	Date Analyzed: 6/3/2022
Client: PBS Engineering and Environmental, Seattle	Client Job#: 40573.238
Address: 214 E Galer Street, Suite 300, Seattle, WA 98102	Project Location: Skyway Resource Center
Tel: 206.233.9639	Laboratory batch#: 202210147
Date Report Issued: 6/3/2022	Samples Received: 36

Enclosed please find the test results for the bulk samples submitted to our laboratory for asbestos analysis. Analysis was performed using polarized light microscopy (PLM) in accordance with Test Method US EPA - 40 CFR Appendix E of Part 763, Interim Method of Determination of Asbestos in Bulk Insulation Samples and Test Method US EPA/600/R-93/116.

Percentages for this report are done by visual estimate and relate to the suggested acceptable error ranges by the method. Since variation in data increases as the quantity of asbestos decreases toward the limit of detection, the EPA recommends point counting for samples containing between <1% and 10% asbestos (NESHAP, 40 CFR Part 61). Statistically, point counting is a more accurate method. If you feel a point count might be beneficial, please feel free to call and request one.

The test results refer only to the samples or items submitted and tested. The accuracy with which these samples represent the actual materials is totally dependent on the acuity of the person who took the samples. This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government. The test report or calibration certificate shall not be reproduced except in full, without written approval of the laboratory. If the sample is inhomogeneous the sub-samples of the components are analyzed separately as layers. This report in its entirety consists of this cover letter, the customer sampling COC or data sheet, and the analytical report which is page numbered.

This report is highly confidential and will not be released without your consent. Samples are archived for 30 days after the analysis, and disposed of as hazardous waste thereafter.

Thank you for using our service and let us know if we can further assist you.

Sincerely



Steve (Fanyao) Zhang
Approved Signatory



202210/47
LABORATORY CHAIN OF CUSTODY

Project: Skyway Resource Center

Project #: 40573.238

Analysis requested: PLM

Date: 5/31/22

Relinquished by/Signature: [Signature]

Date/Time: 5/31/22 1311

Received by/Signature: [Signature]

Date/Time: 5/31/22 17:00

Email ALL INVOICES to: seattleap@pbsusa.com

E-mail results to:

- ☐ Willem Mager
☐ Gregg Middaugh
☒ Mark Hiley
☐ Tim Ogden
☐ Ryan Hunter
☐ Prudy Stoudt-McRae

- ☐ Janet Murphy
☒ Kaitlin Soukup
☐ Allison Welch
☐ Toan Nguyen
☐ Peter Stensland
☐ Claire Tsai

- ☐ Holly Tuttle
☐ Mike Smith
☐ Ferman Fletcher
☐ Cameron Budnick
☒ Kameron DeMonnin
☐ _____

TURN AROUND TIME:

- ☐ 1 Hour
☐ 2 Hours
☐ 4 Hours

- ☒ 24 Hours
☐ 48 Hours

- ☐ 3-5 Days
☐ Other _____

SAMPLE DATA FORM

Sample #	Material	Location	Lab
40573.238-01	9" tan VFT, black mastic	Utility room, west	SAT
-02	"	2nd floor storage room, at water heater	
-03	Yellow carpet mastic, tan VFT, black mastic	2nd floor corridor at women's RR	
-04	"	Reception, south center	
-05	Yellow carpet mastic, brown SVF, black mastic	Stair landing	
-06	Terrazzo	Lobby, NE	
-07	Black and yellow walk off mat mastic	Main entrance	
-08	Black mastic	Kitchen, at entrance, under carpet	
-09	Cream and tan cove base mastics	1st floor cubicle space, SE	
-10	4" brown CB, brown mastic	Utility room, west	
-11	GWB/JC	Custodial room in 1st floor N office	
-12	"	Viewing room, SW	
-13	"	2nd floor storage, at roof hatch ladder	
-14	Grout a/w 1" CFT	Women's restroom	
-15	Mortar a/w 1" CFT	"	
-16	Yellow mastic a/w CWT	"	
-17	12" dotted ACT, brown mastic	1st floor north office	
-18	12" ACT, brown mastic	Teller's area, north center	



2022/01/47
LABORATORY CHAIN OF CUSTODY

Project: Skyway Resource Center

Project #: 40573.238

Analysis requested: PLM

Date: 5/31/22

Relinquished by/Signature: [Signature]

Date/Time: 5/31/22 1311

Received by/Signature: [Signature]

Date/Time: 5/21/22 17:00

SAMPLE DATA FORM

Sample #	Material	Location	Lab
40573.238-19	Interior window putty	1 st floor NW office	SAT
-20	"	1 st floor cubicle space, east	
-21	"	Women's powder room	
-22	Sealant between marblecrete and metal column	South elevation, SW corner	
-23	Sealant between metal panel and metal column (vertical)	East elevation, south	
-24	White sealant between metal panel and foundation (horizontal)	East elevation, south	
-25	Exterior window frame sealant	South elevation	
-26	Cream and brown window frame sealant (vertical)	South elevation	
-27	Window putty stop	South elevation, east of entrance	
-28	Exterior window putty	Kitchen	
-29	"	South elevation	
-30	"	North elevation	
-31	Exterior door frame sealant	NE	
-32	Marblecrete on cement board	SW	
-33	VB between CMU and foundation	South elevation, east corner	
-34	"	Reception, at former south opening	
-35	HVAC sealant	Upper roof, NW	
-36	Granular asphaltic material, yellow foam with paper, asphaltic layer on wood decking	Upper room, center	

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

Disclaimer: This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government.

ANALYTICAL LABORATORY REPORT

[PLM] EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;
EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn.: Mark Hiley

Client: PBS Engineering and
Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Job#: 40573.238

Batch#: 202210147

Date Received: 5/31/2022

Samples Rec'd: 36

Date Analyzed: 6/1/2022

Samples Analyzed: 36

Rev.code:GA23V

Project Loc.: Skyway Resource Center

Analyzed by: Cici Xu

Approved Signatory: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
1	40573.238-01	1	Tan tile	2	Chrysotile	Vinyl/binder, Mineral grains	2	Cellulose
		2	Black mastic	3	Chrysotile	Mastic/binder	4	Cellulose
2	40573.238-02	1	Tan tile	2	Chrysotile	Vinyl/binder, Mineral grains	2	Cellulose
		2	Black mastic	3	Chrysotile	Mastic/binder	3	Cellulose
3	40573.238-03	1	Yellow mastic		None detected	Mastic/binder	4	Synthetic fibers, Cellulose
		1	Tan tile	2	Chrysotile	Vinyl/binder, Mineral grains	3	Cellulose
		2	Black mastic	3	Chrysotile	Mastic/binder	3	Cellulose
4	40573.238-04	1	Yellow mastic		None detected	Mastic/binder	5	Synthetic fibers, Cellulose
		2	Tan tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		3	Black mastic	2	Chrysotile	Mastic/binder	3	Cellulose
5	40573.238-05	1	Yellow mastic		None detected	Mastic/binder	5	Synthetic fibers, Cellulose
		2	Brown sheet vinyl		None detected	Vinyl/binder		None detected
		3	Black mastic		None detected	Mastic/binder	3	Cellulose
6	40573.238-06	1	White/green/red brittle material		None detected	Filler, Binder	2	Cellulose
		2	Yellow mastic		None detected	Mastic/binder	3	Cellulose
7	40573.238-07	1	Black/yellow mastic		None detected	Mastic/binder	4	Cellulose
8	40573.238-08	1	Black mastic		None detected	Mastic/binder	2	Cellulose
9	40573.238-09	1	Cream/tan mastic		None detected	Mastic/binder	5	Synthetic fibers, Cellulose
10	40573.238-10	1	Brown rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Brown mastic		None detected	Mastic/binder	2	Cellulose
11	40573.238-11 Composite result <1%	1	White powdery material with paint	2	Chrysotile	Binder/filler, Paint	4	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	24	Cellulose, Glass fibers
12	40573.238-12 Composite result <1%	1	White powdery material with paint	2	Chrysotile	Binder/filler, Paint	5	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	25	Cellulose, Glass fibers
13	40573.238-13 Composite result <1%	1	White powdery material with paint	2	Chrysotile	Binder/filler, Paint	4	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	23	Cellulose, Glass fibers

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

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ANALYTICAL LABORATORY REPORT

[PLM] EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;
EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn.: Mark Hiley

Client: PBS Engineering and
Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Job#: 40573.238

Batch#: 202210147

Date Received: 5/31/2022

Samples Rec'd: 36

Date Analyzed: 6/1/2022

Samples Analyzed: 36

Rev.code:GA23V

Project Loc.: Skyway Resource Center

Analyzed by: Cici Xu

Approved Signatory: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
14	40573.238-14	1	Gray sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
15	40573.238-15	1	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
16	40573.238-16	1	Yellow tile	3	Chrysotile	Vinyl/binder, Mineral grains	2	Cellulose
		2	Trace yellow mastic		None detected	Mastic/binder	4	Cellulose
17	40573.238-17	1	Brown fibrous material		None detected	Filler	90	Cellulose
		2	Brown mastic		None detected	Mastic/binder	3	Cellulose
18	40573.238-18	1	Brown fibrous material		None detected	Filler	89	Cellulose
		2	Brown mastic		None detected	Mastic/binder	4	Cellulose
19	40573.238-19	1	Gray brittle material	2	Chrysotile	Filler, Binder	2	Cellulose
20	40573.238-20	1	Gray brittle material	2	Chrysotile	Filler, Binder	3	Cellulose
21	40573.238-21	1	Gray brittle material	2	Chrysotile	Filler, Binder	2	Cellulose
22	40573.238-22	1	Tan soft material with paint		None detected	Filler, Binder, Paint	3	Cellulose
		2	Tan brittle material	2	Chrysotile	Filler, Binder	2	Cellulose
23	40573.238-23	1	Tan soft material with paint		None detected	Filler, Binder, Paint	4	Cellulose
		2	Tan brittle material	2	Chrysotile	Filler, Binder	3	Cellulose
24	40573.238-24	1	Gray brittle material	2	Chrysotile	Filler, Binder	2	Cellulose
25	40573.238-25	1	Gray brittle material	2	Chrysotile	Filler, Binder	3	Cellulose
26	40573.238-26	1	Cream/brown soft material	3	Chrysotile	Filler, Binder	3	Cellulose
27	40573.238-27	1	Gray brittle material with paint	2	Chrysotile	Filler, Binder, Paint	3	Cellulose
28	40573.238-28	1	Trace gray brittle material		None detected	Filler, Binder	2	Cellulose
29	40573.238-29	1	Gray brittle material	2	Chrysotile	Filler, Binder	3	Cellulose
30	40573.238-30	1	Gray brittle material	2	Chrysotile	Filler, Binder	2	Cellulose
31	40573.238-31	1	Gray soft/elastic material with paint		None detected	Binder, Filler, Paint	4	Cellulose
32	40573.238-32	1	Gray cementitious material with paint	15	Chrysotile	Cement/binder, Paint	5	Cellulose
33	40573.238-33	1	Tan soft material		None detected	Filler, Binder	3	Cellulose
		2	Silver foil		None detected	Foil/binder		None detected
		3	Trace black mastic		None detected	Mastic/binder	3	Cellulose

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

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ANALYTICAL LABORATORY REPORT

[PLM] EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;
EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn.: Mark Hiley

Client: PBS Engineering and
Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Job#: 40573.238

Batch#: 202210147

Date Received: 5/31/2022

Samples Rec'd: 36

Date Analyzed: 6/1/2022

Samples Analyzed: 36

Rev.code:GA23V

Project Loc.: Skyway Resource Center

Analyzed by: Qici Xu

Approved Signatory: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
34	40573.238-34	1	Black asphaltic material with fibrous material		None detected	Asphalt/binder, Filler	25	Cellulose
		2	Silver foil		None detected	Foil/binder		None detected
		3	Tan paper with black mastic		None detected	Filler, Asphalt/binder	70	Cellulose
		4	Brown fibrous material		None detected	Binder, Filler, Perlite	85	Cellulose
35	40573.238-35	1	Gray soft material		None detected	Filler, Binder	3	Cellulose
36	40573.238-36	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	25	Glass fibers
		2	Black asphaltic material		None detected	Asphalt/binder	8	Glass fibers
		3	Multi-layered black asphaltic material with fibrous material		None detected	Asphalt/binder, Filler	25	Glass fibers
		4	Yellow foamy material		None detected	Synthetic foam		None detected
		5	Black asphaltic material		None detected	Asphalt/binder	8	Glass fibers
		6	Brown fibrous material		None detected	Binder, Filler, Perlite	85	Cellulose

SEATTLE ASBESTOS TEST, LLC

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

www.seattleasbestostest.com, admin@seattleasbestostest.com

Project Manager: Mark Hiley

Client: PBS Engineering and Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA
98102

Tel: 206.233.9639

Date Report Issued: 6/14/2022

Date Analyzed: 6/14/2022

Client Job#: 40573.238

Project Location: KCHA Skyway Resource Center

Laboratory batch#: 202210285

Samples Received: 6

Enclosed please find the test results for the bulk samples submitted to our laboratory for asbestos analysis. Analysis was performed using polarized light microscopy (PLM) in accordance with Test Method US EPA - 40 CFR Appendix E of Part 763, Interim Method of Determination of Asbestos in Bulk Insulation Samples and Test Method US EPA/600/R-93/116.

Percentages for this report are done by visual estimate and relate to the suggested acceptable error ranges by the method. Since variation in data increases as the quantity of asbestos decreases toward the limit of detection, the EPA recommends point counting for samples containing between <1% and 10% asbestos (NESHAP, 40 CFR Part 61). Statistically, point counting is a more accurate method. If you feel a point count might be beneficial, please feel free to call and request one.

The test results refer only to the samples or items submitted and tested. The accuracy with which these samples represent the actual materials is totally dependent on the acuity of the person who took the samples. This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government. The test report or calibration certificate shall not be reproduced except in full, without written approval of the laboratory. If the sample is inhomogeneous the sub-samples of the components are analyzed separately as layers. This report in its entirety consists of this cover letter, the customer sampling COC or data sheet, and the analytical report which is page numbered.

This report is highly confidential and will not be released without your consent. Samples are archived for 30 days after the analysis, and disposed of as hazardous waste thereafter.

Thank you for using our service and let us know if we can further assist you.

Sincerely



Steve (Fanyao) Zhang
Approved Signatory



Project #: 40573.238

Date: 6/14/22

Date/Time:

Date/Time:

E-mail results to:

- ☐ Willem Mager
☐ Gregg Middaugh
☒ Mark Hiley
☐ Tim Ogden
☐ Ryan Hunter
☐ Prudy Stoudt-McRae

- ☐ Janet Murphy
☒ Kaitlin Soukup
☐ Allison Welch
☐ Toan Nguyen
☐ Peter Stensland
☐ Claire Tsai

- ☐ Holly Tuttle
☐ Mike Smith
☐ Ferman Fletcher
☐ Cameron Budnick
☒ Kameron DeMonnin
☐

TURN AROUND TIME:

- ☐ 1 Hour
☐ 2 Hours
☐ 4 Hours

- ☒ 24 Hours
☐ 48 Hours

- ☐
- 3-5 Days
-
- ☐
- Other_____

SAMPLE DATA FORM

214 EAST GALER STREET, SUITE 300, SEATTLE, WA 98102 • 206.233.9639 MAIN • 866.727.0140 FAX • PBSUSA.COM

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

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ANALYTICAL LABORATORY REPORT

[PLM] EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;
EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn.: Mark Hiley

Client: PBS Engineering and
Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Job#: 40573.238

Batch#: 202210285

Date Received: 6/14/2022

Samples Rec'd: 6

Date Analyzed: 6/14/2022

Samples Analyzed: 6

Project Loc.: KCHA Skyway Resource Center

Analyzed by: Cid Xu

Approved Signatory: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
1	40573.238-37	1	Black asphaltic material		None detected	Asphalt/binder	8	Glass fibers
		2	Yellow fibrous material		None detected	Filler	90	Glass fibers
		3	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	67	Cellulose
		4	Yellow foamy material		None detected	Synthetic foam		None detected
		5	Black asphaltic material		None detected	Asphalt/binder	7	Glass fibers
2	40573.238-38	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	25	Glass fibers
		2	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
		3	Brown fibrous material		None detected	Binder, Filler, Perlite	84	Cellulose
		4	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	68	Cellulose
		5	Brown foamy material		None detected	Synthetic foam		None detected
3	40573.238-39	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	24	Glass fibers
		2	Black asphaltic material		None detected	Asphalt/binder	4	Cellulose
		3	Black asphaltic material		None detected	Asphalt/binder	7	Glass fibers
		4	Black asphaltic material		None detected	Asphalt/binder	6	Glass fibers
		5	Brown fibrous material		None detected	Binder, Filler, Perlite	84	Cellulose
4	40573.238-40	1	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
5	40573.238-41	1	White brittle material		None detected	Filler, Binder	2	Cellulose
6	40573.238-42	1	Tan brittle material with paint	2	Chrysotile	Filler, Binder, Paint	3	Cellulose

APPENDIX B

Lead in Paint Sampling Information

Paint Chip Laboratory Data Sheets

Paint Chip Chain of Custody Documentation

AA LEAD PAINT CHIP SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Paint Color / Component or Substrate</u>	<u>Sample Location</u>	<u>Results (mg/kg)</u>	<u>Results (%)</u>	<u>Lab</u>
40573.238 -Pb01	White / gypsum wallboard / wall	Stair landing	180	0.018	NVL
40573.238 -Pb02	Off-white / metal / wall panel	1st floor northwest office	350	0.035	NVL
40573.238 -Pb03	Tan / metal / column	South elevation, southwest	2,400	0.24	NVL
40573.238 -Pb04	Tan / metal / exterior panel	East elevation, south	370	0.037	NVL
40573.238 -Pb05	Tan / concrete masonry unit / wall	South elevation, west	120	0.012	NVL

June 1, 2022

Mark Hiley

PBS Environmental - Seattle

214 E Galer St. Suite. 300

Seattle, WA 98102



NVL Batch # 2209996.00

RE: Total Metal Analysis
Method: EPA 7000B Lead by FAA <paint>
Item Code: FAA-02

Client Project: 40573.238
Location: Skyway Resource Center

Dear Mr. Hiley,

NVL Labs received 5 sample(s) for the said project on 5/31/2022. Preparation of these samples was conducted following protocol outlined in EPA 3051/7000B , unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with EPA 7000B Lead by FAA <paint>. The results are usually expressed in mg/Kg and percentage (%). Test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more detail.

At NVL Labs all analyses are performed under strict guidelines of the Quality Assurance Program. This report is considered highly confidential and will not be released without your approval. Samples are archived after two weeks from the analysis date. Please feel free to contact us at 206-547-0100, in case you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'Shalini Patel'.

Shalini Patel, Manager Metals Lab

Enc.: Sample results



Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

Analysis Report

Total Lead (Pb)



Client: PBS Environmental - Seattle
Address: 214 E Galer St. Suite. 300
Seattle, WA 98102

Batch #: 2209996.00

Matrix: Paint
Method: EPA 3051/7000B
Client Project #: 40573.238
Date Received: 5/31/2022
Samples Received: 5
Samples Analyzed: 5

Attention: Mr. Mark Hiley

Project Location: Skyway Resource Center

Lab ID	Client Sample #	Sample Weight (g)	RL in mg/Kg	Results in mg/Kg	Results in percent
22362783	40573.238-Pb01	0.1871	53	180	0.018
22362784	40573.238-Pb02	0.1842	54	350	0.035
22362785	40573.238-Pb03	0.1902	53	2400	0.24
22362786	40573.238-Pb04	0.1339	75	370	0.037
22362787	40573.238-Pb05	0.1893	53	120	0.012


Sampled by: Client

Analyzed by: Yasuyuki Hida

Reviewed by: Shalini Patel

Date Analyzed: 05/31/2022

Date Issued: 06/01/2022


Shalini Patel, Manager Metals Lab

mg/ Kg =Milligrams per kilogram

Percent = Milligrams per kilogram / 10000

Note : Method QC results are acceptable unless stated otherwise.

Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

RL = Reporting Limit

'<' = Below the reporting Limit

Bench Run No: 2022-0531-04

FAA-02

LEAD LABORATORY SERVICES



Company PBS Environmental - Seattle
Address 214 E Galer St. Suite. 300
 Seattle, WA 98102
Project Manager Mr. Mark Hiley
Phone (206) 233-9639
Office: (800) 628-9639

NVL Batch Number 2209996.00
TAT 1 Day **AH** No
Rush TAT
Due Date 6/1/2022 **Time** 4:05 PM
Email mark.hiley@pbsusa.com
Fax (866) 727-0140

Project Name/Number: 40573.238 **Project Location:** Skyway Resource Center

Subcategory Flame AA (FAA)

Item Code FAA-02 EPA 7000B Lead by FAA <paint>

Total Number of Samples 5

Rush Samples

	Lab ID	Sample ID	Description	A/R
1	22362783	40573.238-Pb01		A
2	22362784	40573.238-Pb02		A
3	22362785	40573.238-Pb03		A
4	22362786	40573.238-Pb04		A
5	22362787	40573.238-Pb05		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Courier				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	5/31/22	1605
Analyzed by	Yasuyuki Hida		NVL	5/31/22	
Results Called by					
<input type="checkbox"/> Faxed <input type="checkbox"/> Emailed					

Special Instructions:

Date: 5/31/2022
 Time: 4:06 PM
 Entered By: Kelly AuVu

Project: Skyway Resource Center

Project #: 40573.238

Analysis requested: FAA for Pb

Date: 5/31/22

Relinq'd by/Signature:

Date/Time: 5/31/22 1311

Received by/Signature:

Date/Time: 5/31/22 1605
courier

Email ALL INVOICES to: seattleap@pbsusa.com

E-mail results to:

- ☐ Willem Mager
☐ Gregg Middaugh
☒ Mark Hiley
☐ Tim Ogden
☐ Ryan Hunter
☐ Prudy Stoudt-McRae

- ☐ Janet Murphy
☒ Kaitlin Soukup
☐ Allison Welch
☐ Toan Nguyen
☐ Peter Stensland
☐ Claire Tsai

- ☐ Holly Tuttle
☐ Mike Smith
☐ Ferman Fletcher
☐ Cameron Budnick
☒ Kameron DeMonnin
☐ _____

TURN AROUND TIME:

- ☐ 1 Hour
☐ 2 Hours
☐ 4 Hours

- ☒ 24 Hours
☐ 48 Hours

- ☐ 3-5 Days
☐ Other _____

[illegible]

APPENDIX C

Certifications

Certificate of Completion

This is to certify that

Kaitlin Soukup

has satisfactorily completed
4 hours of online refresher training as an

AHERA Building Inspector

to comply with the training requirements of
TSCA Title II, 40 CFR 763 (AHERA)

EPA Provider # 1085

182737

Certificate Number



Oct 21, 2021 Expires in 1 year.

Date(s) of Training

Exam Score: N/A
(if applicable)

A handwritten signature in black ink, appearing to read "Andre Zwanenburg".

Instructor: Andre Zwanenburg

ARGUS PACIFIC, INC / 21905 64th AVE W, SUITE 100 / MOUNTLAKE TERRACE, WASHINGTON 98043 / 206.285.3373 / ARGUSPACIFIC.COM

Phase I Environmental Site Assessment



Bank Building
12610 76th Avenue South
Seattle, Washington

Prepared for:

U. S. Bank, N. A. 800 Nicollet Mall, 21st Floor
BC-MN-H21R
Minneapolis, MN 55402



Prepared by:

**Wenck, a Stantec
company**
1800 Pioneer Creek Center
Maple Plain, MN 55359
Phone: 763-479-4200

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1.0 Executive Summary

1.1 PURPOSE AND SCOPE

Wenck Associates, Inc. now part of Stantec Consulting Services Inc. (Stantec) was authorized by Mr. Malik Cavallo, Vice President of U. S. Bank, N. A. (U. S. Bank), to conduct this Phase I Environmental Site Assessment (ESA).

This ESA was conducted in accordance with the American Society for Testing and Materials (ASTM) Phase I Environmental Site Assessment Process, Designation E-1527-13 (ASTM Phase I Standard) and satisfies standards and practices set forth in 40 CFR Part 312 – Standards for Conducting All Appropriate Inquiry (AAI Rule) for the purposes of meeting the all appropriate inquiries provisions necessary to qualify for certain landowner liability protections under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601(35)(B).

1.2 SUBJECT PROPERTY

The Subject Property is located at 12610 76th Avenue South, Seattle, King County, Washington.



1.3 CONCLUSIONS

This ESA has identified no evidence of *recognized environmental conditions* (RECs), *controlled recognized environmental conditions* (CRECs) or *historical recognized environmental conditions* (HRECs) in connection with the Subject Property.

This ESA has revealed the following business environmental risk relative to the Subject Property:

- ▲ The former residential dwellings on the Subject Property are considered a business environmental risk as there is a potential for historical foundations or other remnant systems associated with the former structures to remain on-site and buried in place.

2.0 Purpose and Scope

2.1 PURPOSE

Stantec was authorized by Mr. Steve Sabo, Senior Corporate Counsel, Chief Counsel, Corporate Real Estate & Accessibility Banking of U. S. Bank, to conduct this Phase I ESA of the property and improvements located at 12610 76th Avenue South, Seattle, King County, Washington; the Subject Property. The Subject Property consists of approximately 0.58 acres occupied by an approximately 4,568-square-foot commercial bank building with drive-through bank windows, paved parking and drive areas and a landscaped area. Access to the Subject Property is from 76th Avenue South and South 126th Street. The Subject Property location is depicted in **Figure 1**. A Site Detail Map of the Subject Property is included as **Figure 2**.

The conclusions contained in this report have been made to assist U. S. Bank in evaluating environmental conditions at the present time at the Subject Property. In addition, the report is intended to satisfy the requirements of "all appropriate inquiry... consistent with good commercial or customary practice" referenced in the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601(35)(B).

2.2 SCOPE

This ESA was prepared in accordance with the ASTM Phase I Standard and AAI Rule to identify, to the extent feasible and in accordance with the processes described herein: recognized environmental conditions, controlled recognized environmental conditions, and historical recognized environmental conditions in connection with the Subject Property.

As defined in ASTM E 1527-13, the term *recognized environmental condition* (REC) means "the presence or likely presence of any hazardous substances or petroleum products in, on or at a property: (1) due to a release to the environment; (2) under conditions of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." Additionally, though not specifically defined in ASTM E1527-13, Stantec considers the presence of a *vapor encroachment condition* to be a REC.

As defined in ASTM E1527-13, the term *controlled recognized environmental condition* (CREC) means "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls."

As defined in ASTM E1527-13, the term *historical recognized environmental condition* (HREC) means "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls."

As defined in ASTM E1527-13, the term *business environmental risk* means "a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice."

A summary of the general scope of work for this project is described in the following tasks:

- ▲ **Task I. Records Retrieval and Review of Records:** Stantec obtained publicly available, practically reviewable and reasonably ascertainable federal, state, county and city information about the Subject Property and other properties within minimum established search distances of the Subject Property. These sources were searched for any information about RECs, CRECs, HRECs or business-related environmental risks relative to the Subject Property. This search included a review of Superfund sites; waste treatment, storage and disposal facilities regulated under RCRA; spills or discharges of hazardous substances, toxic materials or petroleum products; and known or recorded landfills; and/or well databases.
- ▲ **Task II. Site Reconnaissance:** Stantec visually inspected the Subject Property to evaluate the Subject Property for RECs, CRECs, HRECs and business-related environmental risks. The structures and grounds of the Subject Property were observed for filling, subsidence, unusual land or surface forms, colorations, odors, indications of dumping, and evidence of suspect environmental features on the Subject Property such as tanks, drains, drywells, etc. Observations pertaining to adjacent property use were also recorded where such observations pertained to RECs, CRECs, HRECs or business-related environmental risks relative to the Subject Property.
- ▲ **Task III. Interviews of People with Knowledge of the Subject Property:** Stantec interviewed people with knowledge of the history of the Subject Property and of the surrounding properties. Interviews were completed in order to obtain information pertaining to RECs, CRECs or HRECs relative to the Subject Property. Interviewees included the Subject Property owner(s) and occupant(s), as well as local government officials.

Data gathered in the course of performing the above three tasks was used in concert to determine if information from one source indicated the need for additional information from another source.

- ▲ **Task IV. Reporting:** Stantec completed this Phase I ESA by combining the information retrieved through data searches with the observations that were made during the Subject Property reconnaissance and interviews. Photographs were taken to document the overall status and current use of the Subject Property and specific areas of concern.

Deviations from the scope described in the ASTM Phase I Standard are identified in Section 2.3.

2.3 DEVIATIONS

No intentional deviations from the ASTM Phase I Standard were made in preparing this report.

2.4 LIMITATIONS AND EXCEPTIONS

The results of this study, performed by Stantec, are based on the scope of work defined in Section 2.2, subject to any project-specific limitations or project-specific additional non-scope considerations described herein.

As is the case with any investigation of finite scope, this review is intended to reduce, but cannot eliminate, the uncertainty regarding the potential for RECs, CRECs or HRECs in connection with the Subject Property. Therefore, the possibility of the presence of some localized substances that may be classified as hazardous cannot be ruled out completely. However, it is Stantec's opinion that the conditions observed at the Subject Property are representative of existing conditions at the time of the site reconnaissance.

2.5 SIGNIFICANT ASSUMPTIONS

Stantec assumes that U.S. Bank and any interviewed parties have provided accurate information that will assist Stantec in determining appropriate inquiry, including but not limited to actual knowledge, previously prepared reports, environmental cleanup liens and title review information. In addition, Stantec assumes, for the purposes of the site reconnaissance, adequate information has been provided to accurately establish the physical boundaries of the real property being evaluated.

2.6 SPECIAL TERMS AND CONDITIONS

The purpose of this report is to aid in the environmental assessment of the Subject Property and not to evaluate the structural condition of buildings or other features of the Subject Property.

Stantec has performed its work in a manner consistent with the care and skill ordinarily exercised by members of the environmental profession. The conclusions contained in this report represent our professional opinions. These opinions were arrived at in accordance with currently accepted engineering practices at this time and location. Stantec does not offer any form of warranty or guarantee that the Subject Property contains no hazardous substances, pollutants or contaminants.

Stantec assumes no responsibility for the accuracy of information that was obtained from other sources, including, without limitation, regulatory and government agencies, persons knowledgeable about the Subject Property, persons knowledgeable about adjacent properties and vendors of public practice.

2.7 USER RELIANCE

This report has been prepared solely for the information and use of U. S. Bank, National Association and King County Housing Authority. Others wishing to rely on the findings of this report, not having a contractual relationship with Stantec, do so without permission and at their own risk. Our professional recommendations made to the addressee(s) are exclusive to that party's disclosed intended or proposed consideration with respect to the Subject Property at the present time.

3.0 Site Description

3.1 USE OF SUBJECT PROPERTY

The Subject Property is located in a commercial and residential area in the City of Seattle, Washington.

Site Address/Location	Address: 12610 76 th Avenue South Historical addresses: 7609 and 7619 Scenic Ridge Avenue City: Seattle County: King Township: 23 North Range: 4 East State: Seattle Section: SW ¼ of SE ¼ of 12
Property Information	Size: 0.58 acres Property Identification Number: 758020-0190
Improvements	The Subject Property has one commercial bank building with drive-through bank windows, paved parking and drive areas and a landscaped area.
Building Information	Size: Approximately 4,568 square feet Year of Construction: 1960 Description: The building contains a customer lobby, some offices and teller area are within a single-story portion of the structure. Non-public portions of the building behind the teller area include a kitchenette, employee restrooms, small offices, storage rooms and mechanical rooms are located within a two-story portion of the building.
Use of the Property	Current Use: The Subject Property had most recently been a commercial bank building. The branch is currently closed. Past Use: According to reviewed sources of information, the Subject Property was undeveloped land from at least 1936 until the late 1940s or 1950s when two dwellings were constructed on the Subject Property. The current bank building was then constructed in 1960. Past occupants of the Subject Property include N.T.I.A, People's National Bank and U.S. Bank.
Ownership and Operation of the Property	Current Ownership & Operation: The Subject Property is owned by U S BANK CORPORATE PROPS and was most recently occupied by U. S. Bank.

The Subject Property location is depicted in **Figure 1**. A Site Detail Map showing the Subject Property is provided in **Figure 2**.

3.2 CURRENT USE OF ADJOINING PROPERTIES

The following land uses were noted on adjoining properties:

Direction	Description
North	King County Fire Department and Emebetachin Church (beyond South 126 th Street)
East	U. S. Postal Service
South	7-Eleven
West	Skyway Library (beyond 76 th Avenue South)

3.3 PHYSICAL SETTING

3.3.1 Topography

The Subject Property is generally level and is at an elevation of approximately 430 feet above mean sea level. Site surface drainage is to the northeast or west towards the municipal stormwater sewer system associated with South 126th Street or 76th Avenue South, respectively. Historic development may have included grading or filling of the Subject Property to improve the location for construction and drainage.

3.3.2 Geology

Published references describe the surficial geology at the Subject Property Vashon Till consisting of gray to brown and yellowish brown where oxidized, unstratified and highly compact, clay, silt, sand and gravel (Schuster, 2015).

3.3.3 Hydrogeology

The general direction of regional groundwater flow in the area of the Subject Property is presumed to be to the west toward the Duwamish River. Local conditions may vary due to surface water features, perched groundwater conditions or artificially created drainage systems. Depth to regional groundwater is noted to be approximately 20 feet below ground surface.

4.0 User Provided Information

4.1 REASON FOR PERFORMING PHASE I ESA

This Phase I ESA is being performed as a component of due diligence activities and to determine whether RECs, CRECs or HRECs affect the Subject Property.

4.2 OWNER, PROPERTY MANAGER AND OCCUPANT INFORMATION

The Subject Property is owned by U S BANK CORPORATE PROPS and was most recently occupied by U. S. Bank. The Subject Property Representative, Mr. Paul W. Gold, Property/Facility Manager for U. S. Bank, provided access and a tour of the Subject Property.

4.3 TITLE RECORD INFORMATION

A title commitment record for the Subject Property was not provided to Stantec during preparation of this Phase I ESA, and a title search was not within the scope of this ESA.

4.4 USER QUESTIONNAIRE

An All Appropriate Inquiries User Questionnaire was completed by Mr. Name, Job Title of Client Name to establish the User's knowledge of environmental condition of the Subject Property. The following sections include the information obtained from the completed User Questionnaire, which is included in **Appendix A**.

4.4.1 Environmental Liens or Activity and Use Limitations

No independent review of environmental liens was undertaken by Stantec as a part of this scope of work. No activity and use limitations were disclosed to Stantec during preparation of this ESA.

4.4.2 Specialized Knowledge

No prior assessments were provided to Stantec at the outset of this scope of work.

4.4.3 Commonly Known or Reasonably Ascertainable Information

Commonly known or reasonably ascertainable environmental information was found relevant to this study, which is discussed throughout this ESA.

4.4.4 Valuation Reduction for Environmental Reasons

No valuation reduction for environmental reasons was disclosed at the outset of this study.

5.0 Records Review

5.1 STANDARD ENVIRONMENTAL RECORD SOURCES

Stantec requested and reviewed a search of files from federal and state databases from GeoSearch for the Subject Property (the GeoSearch Radius Report). Files were searched from Federal and State environmental records databases within minimum search distances as specified in the ASTM Phase I Standard, and the GeoSearch Radius Report included a more extensive database list than those minimally identified as required by the ASTM Phase I Standard. A summary of the sites identified in the GeoSearch Radius Report are discussed below, along with information regarding the significance of the listing for the Subject Property. The GeoSearch Radius Report, which contains more information regarding database descriptions and search distances, is included in **Appendix B**.

5.1.1 Subject Property

The Subject Property **was not** identified on the reviewed regulatory databases in the GeoSearch Radius Report.

The Subject Property was identified within the boundaries of the Tacoma Smelter Plume (TACOMAPLUME) site. The Asarco Company operated a copper smelter in Tacoma for approximately 100 years. During operations, air pollution from the smelter settled onto surface soil throughout the Puget Sound basin area with arsenic, lead, and other heavy metals still present in soil. The arsenic level at the Subject Property is indicated to be under 20 parts per million (ppm), which is below the Model Toxics Control Act (MTCA) Method A Unrestricted Land Use value of 20 milligram per kilogram (mg/kg) or ppm. Based on the expected arsenic level to be under 20 ppm at the Subject Property, the Tacoma Smelter Plume is not considered a REC for the Subject Property.

5.1.2 Surrounding Properties

Additional mapped sites of regulatory interest identified within the search radii defined by the ASTM Phase I Standard, as identified in the GeoSearch Radius Report, include the following:

Number of Sites	Regulatory Database	Comments
2	Resource Conservation and Recovery Act – Non-Generator Facilities (RCRANGR10) sites	RCRANGR10 listings are sites listed by the EPA as a former generator of hazardous waste. King County Library System located at 12690 Renton Avenue South, the west adjacent site, is listed as a former generator of lead. The GeoSearch Radius Report does not identify inspections or violations associated with the permit. Based on the distance and lack of identified violations, this listing is not considered a REC for the Subject Property.

Number of Sites	Regulatory Database	Comments
		The remaining RCRANGR10 site, Boathouse Inc. Renton Skyway, is located approximately 0.11 miles northwest from the Subject Property. The GeoSearch Radius Report does not identify violations associated with the permit. Based on the distance and lack of identified violations, this listing is not considered a REC for the Subject Property.
4	Underground Storage Tanks (UST) sites	<p>The UST database provides information active and inactive underground storage tanks maintained by the Washington State Department of Ecology.</p> <p>Southland Crop 2307 located at 12702 Renton Avenue South, the south adjacent site, is listed for one removed unleaded gasoline and one removed leaded gasoline USTs. The site and storage tanks are not associated with a release or investigation; therefore, this listing is not considered a REC for the Subject Property.</p> <p>Skyway Market located at 12640 Renton Avenue South, the west adjacent site, is listed for one closed in-place used oil/waste oil UST and two removed USTs. The site is associated with a LUST further discussed below.</p> <p>The remaining two listings are located greater than 500 feet west or west-northwest from the Subject Property, downgradient with respect to anticipated groundwater flow. Based on the distance and location, these listings are not considered RECs for the Subject Property.</p>
3	Hazardous Sites List (HSL) sites	<p>The HSL database is a subset of the Confirmed and Selected Contaminated Sites List Database of sites that have been assessed and ranked using the Washington Ranking Method (WARM) and is maintained by the Washington State Department of Ecology.</p> <p>The HSL sites are located greater than 500 feet west or northwest from the Subject Property, downgradient with respect to anticipated groundwater flow. Based on the distance and location, these listings are not considered RECs for the Subject Property.</p>
2	Leaking Underground Storage Tanks (LUST) sites	The LUST database contains information on underground storage tank facilities that require cleanup and their cleanup history maintained by the Washington State Department of Ecology.

Number of Sites	Regulatory Database	Comments
		<p>Skyway Market located at 12640 Renton Avenue South, the west adjacent site, is listed as Cleanup Site #5420. Regulatory records were provided by Washington State Department of Ecology (WDOE) and are discussed below the table.</p> <p>The remaining LUST site is located approximately 500 feet west from the Subject Property, downgradient with respect to anticipated groundwater flow. Based on the distance and location, this listing is not considered a REC for the Subject Property.</p>
2	Voluntary Cleanup Program (VCP) sites	<p>The VCP database contains current, past, and wait listed VCPs maintained by the Washington State Department of Ecology Toxic Cleanup Program.</p> <p>Skyway Market located at 12640 Renton Avenue South, the west adjacent site, is listed as Cleanup Site #5420. Regulatory records were provided by Washington State Department of Ecology (WDOE) and are discussed below the table.</p> <p>The remaining VCP site is located approximately 0.11 miles northwest from the Subject Property, downgradient with respect to anticipated groundwater flow. Based on the distance and location, this listing is not considered a REC for the Subject Property.</p>
19	Confirmed and Suspected Contaminated Sites List (CSCSL) sites	<p>The CSCSL database contains information about sites that have received an Initial Investigation, and therefore, are undergoing cleanup and sites that are awaiting further investigation and/or cleanup maintained by the Washington State Department of Ecology.</p> <p>Skyway Market located at 12640 Renton Avenue South, the west adjacent site, is listed as Cleanup Site #5420. Regulatory records were provided by Washington State Department of Ecology (WDOE) and are discussed below the table.</p> <p>The remaining CSCSL sites are located greater than 500 feet in downgradient locations or 0.63 miles in side- to upgradient locations with respect to anticipated groundwater flow. Based on the distance and/or location, these listings are not considered a REC for the Subject Property.</p>
2	Spills Listing (SPILLS) sites	<p>The SPILLS database lists hazardous spills from the Spills Integrated Information System maintained by the Washington Department of</p>

Number of Sites	Regulatory Database	Comments
		<p>Ecology's Spill Prevention, Preparedness, and Response Division.</p> <p>The west adjacent site located at 12640 Renton Avenue South is listed for gasoline soil contamination identified at the site in 2004. This spill is associated with the LUST database discussed above.</p> <p>The remaining spill is associated with South 126th Street located to the north and northeast of the Subject Property. The spill consisted of approximately 2 gallons of mineral or transformer oil on April 1, 2020. Regulatory records associated with the spill were provided and indicate the spill occurred approximately 100 feet east of the Subject Property. The spill consisted of non-polychlorinated biphenyl (PCB) oil and was closed the same day as the release. Based on the information provided in regulatory records, this listing is not considered a REC for the Subject Property.</p>
1	Dry Cleaning Facilities (CLEANERS) site	<p>The CLEANERS database lists dry cleaning facilities registered with the Washington Department of Ecology as part of the Facility/Site Database.</p> <p>The CLEANERS site is located approximately 0.11 miles northwest from the Subject Property, downgradient with respect to anticipated groundwater flow. Based on the distance and location, this listing is not considered a REC for the Subject Property.</p>
19	Facility/Site Database (FSD) sites	<p>The FSD database provides a variety of environmental information about the search area. A listing in the FSD database, by itself, is not indicative of a release or a material threat of release of petroleum products or potentially hazardous substances at the facility.</p>
3	No Further Action (NFA) sites	<p>The NFA database contains information about sites previously on the Confirmed and Suspected Contaminated Sites list that have received a No Further Action determination maintained by the Washington State Department of Ecology.</p> <p>The west adjacent site located at 12640 Renton Avenue South is listed for a NFA determination on September 16, 2010. This listing is associated with the LUST database discussed above.</p>

Number of Sites	Regulatory Database	Comments
		The remaining two NFA listings are located greater than 0.28 miles south-southwest from the Subject Property, side- to downgradient with respect to anticipated groundwater flow. Based on the distance and location, these listings are not considered RECs for the Subject Property.
2	TACOMAPLUME sites	The TACOMAPLUME database provides information associated with the Tacoma Smelter plume consisting of arsenic and lead contaminated soil present for miles around the prior stacks. The Subject Property was identified within the under 20 ppm area associated with the Tacoma Smelter Plume; therefore, these listings are not considered RECs for the Subject Property.

No unmapped sites were identified in the GeoSearch Radius Report. Unmapped sites are those where address information is insufficient to allow the sites to be accurately mapped by GeoSearch.

Stantec reviewed the following WDOE files to determine the potential significance of these database listings relative to the Subject Property:

- ▲ Cleanup Site #5420 for Skyway Market located at 12640 Renton Avenue South

Select regulatory records are included in **Appendix B**.

Skyway Market located at 12640 Renton Avenue South (west adjacent site)

Regulatory records indicate the site has been identified with petroleum hydrocarbon soil contamination. Releases to soil and groundwater were identified during removal of two USTs in 1984 and were attributed to the leaking USTs and a historical auto repair shop onsite. In 2005, four monitoring wells were installed onsite to identify contamination status of groundwater at the site. Total lead was initially the only contaminant of concern (COC) identified in groundwater. However, total lead was re-evaluated with field filtering and analysis for dissolved lead with results all below MTCA Method A. Groundwater was then sampled from five monitoring wells in 2015 and 2016 for total petroleum hydrocarbons (TPH), diesel; TPH, oil; TPH, gasoline; benzene; toluene; ethyl benzene; m,p-xylenes; o-xylene; total lead and dissolved lead. Results from groundwater sampling indicated all COCs in groundwater were below MTCA Method A cleanup concentrations or laboratory reporting limits for four consecutive quarterly events. In addition, monitoring wells associated with the site were sampled for halogenated compounds in 2012 with no common halogenated solvents or daughter products detected above laboratory reporting limits. Based on the provide regulatory records, the release identified at Skyway Market is not considered a REC for the Subject Property.

Stantec did not review State/County/City files for these database listings because sufficient information was available from other sources to determine the potential for RECs, CRECs and/or HRECs relative to the Subject Property.

5.2 ADDITIONAL RECORD SOURCES

Additional record sources may be consulted when, in the judgment of the Environmental Professional, such additional records are reasonably ascertainable, sufficiently useful, accurate and complete, and are generally obtained pursuant to good commercial and customary practice. Such records may include local brownfield lists, or other local lists similar to those federal, state and tribal lists. Such sources may include local health or environmental departments, fire departments, planning departments, building permit or inspection departments, and other local pollution, water quality or utility companies.

5.2.1 King County Tax Information

King County tax information was obtained and reviewed from the King County tax assessor's website. Tax records provide publicly available information about the Subject Property. The tax records did not reveal additional information with respect to the environmental condition of the Subject Property.

The King County tax information is included as **Appendix C**.

5.2.2 Local Building Records Review

Local building records were obtained from King County. Building records date back to 1990 issued for People's Bank and U.S. Bank. The records are associated with signs, HVAC unit replacements, and a pole. Information obtained from King County is included in **Appendix C**.

5.3 HISTORICAL USE INFORMATION

5.3.1 Aerial Photographs

Aerial photographs were reviewed from 1936, 1943, 1968, 1972, 1977, 1980, 1990, 2006, 2009, 2013 and 2019. The aerial photographs are presented in **Appendix D**.

Year	Description
1936	The 1936 aerial photograph shows the Subject Property as undeveloped land with sparse vegetation. Adjacent sites are depicted as undeveloped, vegetated land.
1943	The 1943 aerial photograph appears to show grading activities on the eastern portion of the Subject Property; however, details are difficult to discern due to the quality of the image. Adjacent sites to the north, east and south appear to be undergoing development with undeveloped land to the west of the Subject Property.
1968-2019	The 1968 through 2019 aerial photographs show the Subject Property developed with the current commercial building and associated paved parking lot.

Year	Description
	Adjacent sites are shown developed with commercial buildings. 76 th Avenue South is shown to the immediate west of the Subject Property with South 126 th Street to the immediate northeast.

5.3.2 City Directories

City directories were researched for the Subject Property and surrounding properties. The street researched was 76th Avenue South and directories were available for the years 1969, 1973, 1977, 1986/87, 1992/93, 1996, 1999, 2003, 2008, 2013 and 2018. The city directories are included as **Appendix E**. Listings for the address of the Subject Property (12610 76th Avenue South) consist of the following:

Directory Year	Subject Property Listing
1969	N.T.I.A.
1973-1977	People's National Bank
1986/87	Peoplesbank
1992/93-2018	U.S. Bank

Other listings of interest in the vicinity of the Subject Property include:

- ▲ 12667 76th Avenue South: Joe's Hillcrest Service (1969)

Other listings in the vicinity of the Subject Property include other commercial and residential listings.

5.3.3 Historical Maps

The Seattle, Washington and Tacoma, Washington USGS 30-minute series topographic maps dated 1897 and the Mercer Island, Washington; Seattle South, Washington; Renton, Washington and Des Moines, Washing USGS 7.5-minute series topographic maps dated 1968, 1973, 1983, 2014 and 2017 depict the area of the Subject Property.

The 1897 topographic map depicts the Subject Property and adjacent sites as woodland.

The 1968 through 1983 topographic maps depict structures on the Subject Property and adjacent sites. 76th Avenue South is shown to the immediate west of the Subject Property with South 126th Street to the immediate northeast.

The 2014 and 2017 topographic maps do not show structures, by design, just roadways and natural features.

The historical maps are included as **Appendix F**.

5.3.4 Fire Insurance Maps

A search was conducted to determine if fire insurance maps were available for the Subject Property. Fire insurance maps were created for insurance underwriters and often contain information regarding the uses of individual structures and the locations of fuel and/or chemical storage tanks that may have been on a particular property.

A Real Estate Atlas from 1953 was provided and is included in **Appendix G**. The 1953 real estate atlas depicts two structures on the Subject Property. Structures are depicted on the north, east and south adjacent sites with a service station on the west adjacent site. 76th Avenue South is shown to the immediate west of the Subject Property with South 126th Street to the immediate northeast.

5.4 PREVIOUS ENVIRONMENTAL REPORTS

Previous environmental reports were not provided to Stantec during preparation of this Phase I ESA.

6.0 Subject Property

6.1 SUBJECT PROPERTY OBSERVATIONS

Mr. J. Joseph Otte of Stantec conducted a site reconnaissance on June 14, 2021. Mr. Otte was accompanied during the site reconnaissance by the Subject Property Representative, Mr. Paul W. Gold, Property/Facility Manager for U. S. Bank. Stantec staff visually observed the Subject Property to identify current land use, obtain evidence of past uses, and to identify surface characteristics of the Subject Property for the presence of RECs, CRECs or HRECs. Subject Property photographs are included in **Appendix I**.

The site reconnaissance consisted of visually observing the interior and exterior portions of the Subject Property. Stantec staff observed (from the Subject Property boundaries) the adjoining properties for evidence of RECs, CRECs or HRECs, and for indications of past and current land use.

The Subject Property contains a single building constructed in 1960 as a retail bank (see photographs 1 and 2).

As noted above, the building contains a customer lobby (see photograph 3), some offices (see photograph 4) and teller area are within a single-story portion of the structure. Non-public portions of the building behind the teller area include a kitchenette (see photograph 5), employee restrooms, small offices, storage rooms (see photograph 6) and mechanical rooms are located within a two-story portion of the building.

The building is served by utility electric, gas and telephone services. Municipal water and sanitary sewer system also serve the facility. The building is heated and cooled by natural gas-powered HVAC units. There is an air-handling system in the rear of the second level

6.1.1 Materials Management

No significant materials managed at the Subject Property. The Subject Property is vacant. Materials historically managed likely included office materials and small quantities of cleaning and maintenance chemicals.

6.1.2 Solid and Hazardous Waste Management

A waste bin was observed near the front door of the facility (see photograph 8). The facility manager was uncertain as to why it was there as the facility does not have solid waste service any longer.

No evidence of hazardous waste generation was noted during the site reconnaissance or documented in the GeoSearch Radius Map Report.

6.1.3 Aboveground and Underground Storage Tanks (ASTs/USTs)

Stantec observed no evidence of former or existing ASTs/USTs at the Subject Property. No evidence of former or existing ASTs/USTs was documented in the regulatory database review. It seems unlikely the former dwellings would have had USTs, though if they did, they were likely removed at the time the dwellings were cleared prior to site redevelopment in approximately 1960.

6.1.4 Interior and Exterior Surface Observations

Stantec observed no evidence of soil subsidence, surface staining, pooled liquids, stressed vegetation, fill soil piles or debris piles on the Subject Property. Although no longer occupied the Subject Property seems to be maintained.

6.1.5 Pits, Sumps, Oil-Water Separators and Floor Drains

Stantec did not observe the presence of pits, sumps or oil-water separators at the time of the site reconnaissance. Floor drains were observed in the restrooms on the Subject Property. The first level also contains a mop sink in the janitor's closet (see photograph 9).

6.1.6 Wastewater and Stormwater Discharge Systems

The Subject Property is served by the municipal sanitary sewer system. Stormwater at the Subject Property drains to catch basins in the adjoining street grid.

6.1.7 Wells, Drywells and Lagoons

Stantec noted what was likely evidence of an abandoned at-grade monitoring well on the sidewalk adjoining the Subject Property. A presumably active monitoring well was observed immediately across the street on the library property (see photograph 10). This well is associated with a petroleum tank investigation of the Skyway Market site, discussed in **Section 5.1.2** above.

6.1.8 Polychlorinated Biphenyls (PCBs) and Oil-Containing Equipment

Stantec observed six pole-mounted transformers (two systems of three on two separate poles) on the west edge of the Subject Property at the time of the site reconnaissance (see photograph 11). There was no indication on the transformers indicating PCB content, however, the pole-mounted transformer systems did not show evidence of leaks or spills at the time of the site reconnaissance. Moreover, they are presumably the property of the local electric utility.

7.0 Interviews

7.1 INTERVIEW WITH SUBJECT PROPERTY REPRESENTATIVE

Date of Interview:	June 14, 2021
Name:	Mr. Paul W. Gold
Affiliation:	Property/Facility Manager for U. S. Bank
Years familiar with Subject Property:	Less than one year
Telephone Number:	206-888-3483

Mr. Gold provided assistance and access to the facility building at the time of the site reconnaissance. Mr. Gold was not intimately familiar with the Subject Property and had relatively little historical information pertaining to the Subject Property. He was not specifically aware of environmental concerns with respect to the Subject Property.

7.2 INTERVIEW WITH LOCAL GOVERNMENT OFFICIAL

Date of Interview:	June 17, 2021
Name:	Michael Hart
Affiliation:	Department of Ecology Northwest Regional Office
Telephone Number:	206-594-0016

Stantec contacted the Washington Department of Ecology regarding information associated with a spill located on South 126th Street. Mr. Hart provided documents associated with the spill, which are discussed above in **Section 5.1.2**.

8.0 Evaluation

8.1 DATA GAPS/DATA FAILURE

Historical information was reviewed back to 1897. Data gaps greater than five years exist from prior to 1897, from 1897 to 1936, from 1936 to 1943, from 1943 to 1953, and from 1953 to 1968.

The interviews, historical maps, city directories, real estate atlas and aerial photographs provide generally good corroborating information that allows an understanding of historical Subject Property use. A research summary is included as **Appendix I**.

Stantec considers the evaluation of the presence of RECs, CRECs and HRECs to be complete, based on the lack of identified changes in land use during the periods affected by data gaps of more than five years. Therefore, we do not recommend additional investigation relative to the resolution of those data gaps, as we do not believe it would materially affect our conclusion.

8.2 IDENTIFIED FINDINGS

Stantec was authorized by Mr. Malik Cavallo, Vice President of U. S. Bank, N. A. (U. S. Bank), to conduct this Phase I ESA of the property and improvements located at 12610 76th Avenue South, Seattle, King County, Washington; the Subject Property. The Subject Property consists of approximately 0.58 acres occupied by an approximately 4,568-square-foot commercial bank building with drive-through bank windows, paved parking and drive areas and a landscaped area. Access to the Subject Property is from 76th Avenue South and South 126th Street.

According to reviewed sources of information, the Subject Property was undeveloped land from at least 1936 until the late 1940s or 1950s when two buildings were constructed on site. The current bank building was then constructed in 1960. Past occupants of the Subject Property include N.T.I.A, People's National Bank and U.S. Bank.

The existing building on the Subject Property is an at-grade bank building with a drive-through canopy. The bank is now closed, and ATM machines associated with the Subject Property have been removed. The building has no lower level and is generally one story in the public areas of the building and two levels on the rear where employees of the bank were employed. The building was constructed in 1960 and has some architectural features consistent with the style of modern architecture favored at the time. The surrounding pavements and flatwork are in relatively good condition. There is some limited landscaping near the northwest corner of the Subject Property.

The Subject Property was not specifically identified on the reviewed regulatory databases in the GeoSearch Radius Report although the Subject Property was identified within the boundaries of the Tacoma Smelter Plume site. A copper smelter in Tacoma was operated for approximately 100 years resulting in arsenic, lead and other heavy metals present in surface soil throughout the Puget Sound basin area. The arsenic level at the Subject Property is indicated to be under 20 ppm, which is below the MTCA Method A Unrestricted Land Use value of 20 mg/kg or ppm. Moreover, due to the preponderance of hard surfaces at the Subject Property, it seems unlikely arsenic would have accumulated in Subject Property soils.

Mapped sites of regulatory interest identified in the GeoSearch Radius Report are not indicative of a release or material threat of release of petroleum products or potentially hazardous substances to soil, groundwater or soil vapor at the Subject Property based on location, regulatory status, regulatory record review or type of database.

8.3 OPINIONS

The following opinions are based on the above findings:

- ▲ The historical residential use of the Subject Property from at least late 1940s or 1950s until 1960 is not considered a REC, CREC or HREC with the Subject Property because there is no indication of a release or a material threat of release of petroleum products or potentially hazardous substances at the Subject Property. However, the potential for historical foundations, wells or septic systems associated with the dwellings are potentially buried in place and are considered a business environmental risk.
- ▲ The current commercial bank or office use of the Subject Property since 1960 is not considered a REC, CREC or HREC with the Subject Property because there is no indication of a release or a material threat of release of petroleum products or potentially hazardous substances at the Subject Property.
- ▲ The Tacoma Smelter Plume is not considered a REC for the Subject Property based on the expected arsenic level to be under 20 ppm at the Subject Property and the preponderance of hard surfaces, making accumulation of arsenic in site soil unlikely.
- ▲ The mapped sites of regulatory interest in the GeoSearch Radius Report are not considered to represent RECs for the Subject Property because there is no indication of a release or a material threat of release of petroleum products or potentially hazardous substances at the Subject Property.

8.4 CONCLUSIONS

Stantec performed a Phase I ESA in conformance with the scope and limitations of the ASTM Phase I Standard and in accordance with the AAI Rule (40 CFR Part 312) of the property and improvements of 12610 76th Avenue South in Seattle, King County, Washington. Exceptions to, or deletions from, the ASTM Phase I Standard are described in Section 2.3 and Section 2.4 of this report.

This ESA has identified no evidence of RECs, CRECs or HRECs in connection with the Subject Property.

This ESA has revealed the following business environmental risk relative to the Subject Property:

- ▲ The former residential dwellings on the Subject Property are considered a business environmental risk as there is a potential for historical foundations or other remnant systems associated with the former structures to remain on-site and buried in place.

9.0 Non-Scope Considerations

Assessments of potential environmental issues or conditions at the Subject Property that may relate to commercial real estate activities, but were not part of this scope of work (unless otherwise noted) include the following:

- ▲ Asbestos Survey
- ▲ Radon Gas Survey
- ▲ Lead-Based Paint Assessment
- ▲ Lead in Drinking Water Evaluation
- ▲ Wetland Delineation
- ▲ Regulatory Compliance Audit
- ▲ Cultural and Historic Resources Review
- ▲ Industrial Hygiene Review
- ▲ Health and Safety Assessment
- ▲ Ecological Resources Evaluation
- ▲ Endangered Species Survey
- ▲ Indoor Air Quality Evaluation
- ▲ Mold Investigation
- ▲ High Voltage Power Lines Assessment

This list is not intended to be all-inclusive and is not intended to imply significance of further investigation into these non-scope items.

10.0 References

American Society for Testing and Materials, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E 1527-13*, West Conshohocken, PA, 2013.

Schuster, J. Eric; Cabibbo, Ashley A.; Schilter, Joseph F. and Hubert, Ian J. *Geologic Map of the Tacoma 1:100,000-scale Quadrangle, Washington*. Washington State Department of Natural Resources, Washington Division of Geology and Earth Resources, Map Series 2015-03, November 2015.

Other materials referenced in this report are included in the Appendices.

11.0 Signature Page

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in 312.10 of 40 CFR Part 312, and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared by:



Alison Creeger
Environmental Scientist
Stantec Consulting Services Inc.

Reviewed by:



J. Joseph Otte
Principal
Stantec Consulting Services Inc.

12.0 Qualifications

Company Experience

Wenck Associates, Inc. now part of Stantec Consulting Services Inc. (Stantec) is a full-service environmental consulting firm that specializes in providing comprehensive environmental, regulatory, and safety guidance for our client's real estate asset protection, redevelopment and development needs. Collectively, Stantec offers our clients over 25 years of experience, depth of technical and regulatory knowledge and expertise in the following service areas:

- ▲ Environmental Assessment Services (Phase I and II)
- ▲ Site Preparation/Planning Services
- ▲ Integrated Site Remediation and Risk-based Response Actions
- ▲ Storage Tank Removal, Replacement and Compliance
- ▲ Stormwater Management Plans and Permitting (NPDES requirements, etc.)
- ▲ Wetlands Delineation and Mitigation
- ▲ Environmental Permitting and Compliance
- ▲ Asbestos and Lead Identification and Abatement
- ▲ Voluntary Cleanup Programs and Guidance on Public Funding Mechanisms for Brownfield Redevelopment
- ▲ Indoor Air Quality Assessment
- ▲ Facility Layout Review for Environmental and Safety Efficiency
- ▲ Environmental Impact Assessments (EIA) and Statements (EIS), Environmental Assessment Worksheets (EAW), Alternative Urban Areawide Review (AUAR)
- ▲ Traffic Engineering
- ▲ Pollution Prevention Plans
- ▲ Greenhouse Gas Services

Stantec strives to provide our clients with strategic, high quality and cost-effective services that are customized to their specific needs. For more extensive information on the services we provide please refer to www.Stantec.com.

Individual Bios

Alison Creeger

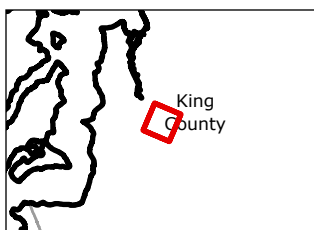
Ms. Creeger is an Environmental Scientist at Stantec. She has environmental experience working in due diligence, land restoration, tree inspection, and water conservation. Ms. Creeger focuses on conducting Phase I and Phase II Environmental Site Assessments. She has conducted on-site contractor oversight, construction excavation observation, underground storage tank removals, groundwater monitoring, soil and groundwater remediation, and final report generation. She holds a Bachelor of Science in Environmental Restoration Science and a Bachelor of Science in Environmental Studies from the University of Nebraska-Lincoln.

J. Joseph Otte

Mr. Joseph Otte has been consulting in the area of environmental real estate transaction support since 1998. For seven years prior to that, Mr. Otte's position was as project manager and supervisor of the Voluntary Investigation and Cleanup (VIC) Program of the Minnesota Pollution Control Agency (MPCA). He holds a Bachelor of Arts in geology from the College of St. Thomas and a Master of Business Communication from the University of St. Thomas, St. Paul, Minnesota.

Figures

1. Site Location Map
2. Site Detail Map



Legend
■ Subject Property

0 1,000 2,000 Feet
 (At original document size of 8.5x11)
 1:24,000



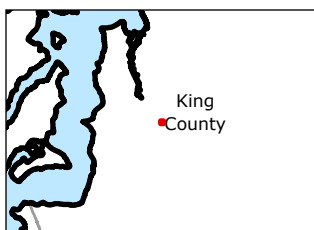
Project Location Prepared by KAB on 2021-06-11
 C. of Seattle, King Co., WA TR by XXX on 2021-XX-XX
 IR by XXX on 2021-XX-XX

Client/Project
 U.S. Bank Corporate Real Estate
 227702984

Phase I
 Figure No.
 1

Title
Site Location Map

Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources:
 3. Background: USGS Topographic Map



Legend
 Subject Property

0 100 200 Feet
 (At original document size of 8.5x11)
 1:2,400



Project Location Prepared by KAB on 2021-06-11
 C. of Seattle, King Co., WA TR by XXX on 2021-XX-XX
 IR by XXX on 2021-XX-XX

Client/Project
 U.S. Bank Corporate Real Estate
 227702984

Phase I
 Figure No.
 2

Title
 Site Detail Map

Notes
 1. Coordinate System: NAD 1983 UTM Zone 15N
 2. Data Sources:
 3. Background: King County Aerial 2019

User Questionnaire

ATSM E 1527-13 USER QUESTIONNAIRE

Property Name:

Property Location:

To meet the all-appropriate inquiry (AAI) standard, the User (people or entities relying on the Phase I) must provide the following information, if they are aware of it. Your response should represent the current collective knowledge of the User.

- *Environmental cleanup liens (40 CFR 312.25)*

Did a search of recorded land title records identify any environmental liens filed or recorded against the property?	I do not know
---	----------------------

- *Activity and land use limitations (AULs) (40 CFR 312.26)*

Did a search of recorded land title records identify any activity or use limitations, such as land use restrictions, or engineering or institutional controls that are in place at the property or have been filed or recorded against the property?	I do not know
---	----------------------

- *Specialized knowledge or experience (40 CFR 312.28)*

Do you have any special knowledge or experience related to the property or nearby properties?	No
--	-----------

- *Relationship of the purchase price to the fair market value of the property (40 CFR 312.29)*

Does the purchase price for the property reasonably reflect its fair market value property?	I do not know
If not, is there a lower purchase price because the property is or may be contaminated?	I do not know

- *Commonly known information about the property (40 CFR 312.30)*

Are you aware of information about the property that would help identify releases or threatened releases:	
Do you know the past uses of the property?	I do not know
Do you know specific chemicals that are or were present at the property?	I do not know
Do you know of any spills occurring at the property?	I do not know
Do you know of any environmental cleanups occurring at the property?	I do not know

- *Obvious or likely contamination at the property (40 CFR 312.31)*

Based on your knowledge and experience, are there any signs of contamination at the property?	In a cursory walk through, no
--	--------------------------------------

I have completed the above questionnaire to the best of my knowledge.

Signature: _____

Date: 6/24/2021

Print Name:
Company:

GeoSearch Radius Report and Regulatory Records



On time. On target. In touch.™

Radius Report

Target Property:

Seattle

12610 76th Avenue South

Seattle, King County, Washington

Prepared For:

Historical Information Gatherers

Order #: 166048

Job #: 411689

Project #: 2051580

Date: 06/02/2021

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<i>Zip Report</i>	See Attachment

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR § 312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal, state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR § 312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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Target Property Summary

Target Property Information

Seattle

12610 76th Avenue South

Seattle, Washington

Coordinates

Area centroid (-122.23786, 47.4904696)

430 feet above sea level

USGS Quadrangle

Renton, WA

Geographic Coverage Information

County/Parish: King (WA)

ZipCode(s):

Renton WA: 98057

Seattle WA: 98178

Database Summary

FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSWA	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAGR10	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR	RCRANGR10	2	0	0.1250
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	SEMS	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	SEMSARCH	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	1.0000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	RCRASUBC	0	0	1.0000
SUB-TOTAL		2	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION	ECHOR10	1	0	TP/AP
FACILITY REGISTRY SYSTEM	FRSWA	3	0	TP/AP

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR10	0	0	TP/AP
HAZARDOUS WASTE COMPLIANCE DOCKET FACILITIES	HWCD	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR10	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR10	0	0	TP/AP
SEMS LIEN ON PROPERTY	SEMSLIENS	0	0	TP/AP
SSEHRI PFAS CONTAMINATION SITES	SSEHRIPFAS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
ALTERNATIVE FUELING STATIONS	ALTFUELS	0	0	0.2500
FEMA OWNED STORAGE TANKS	FEMAUST	0	0	0.2500
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS	ICISCLEANERS	0	0	0.2500
MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE	MSHA	0	0	0.2500
MINERAL RESOURCE DATA SYSTEM	MRDS	0	0	0.2500
OPEN DUMP INVENTORY	ODI	0	0	0.5000
SURFACE MINING CONTROL AND RECLAMATION ACT SITES	SMCRA	0	0	0.5000
URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES	USUMTRCA	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMER MILITARY NIKE MISSILE SITES	NMS	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM	FUSRAP	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	0	0	1.0000
SUB-TOTAL		4	0	

Database Summary

STATE (WA) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INSTITUTIONAL / ENGINEERING CONTROLS REGISTRY	ICEC	0	0	TP/AP
ABOVEGROUND STORAGE TANKS	AST	0	0	0.2500
UNDERGROUND STORAGE TANKS	UST	4	0	0.2500
BROWNFIELD SITES	BROWNFIELD	0	0	0.5000
HAZARDOUS SITES LIST	HSL	3	0	0.5000
LANDFILL AND SOLID WASTE DISPOSAL SITES	LFSWDS	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	LUST	2	0	0.5000
PETROLEUM TECHNICAL ASSISTANCE PROGRAM SITES	PLIAPTAP	0	0	0.5000
UNDERGROUND STORAGE TANK REVOLVING LOAN AND GRANT PROGRAM SITES	PLIAUSTR LG	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM SITES	VCP	2	0	0.5000
CONFIRMED AND SUSPECTED CONTAMINATED SITES LIST	CSCSL	19	0	1.0000
SUB-TOTAL		30	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AIR PERMITTED FACILITIES	AIRS	0	0	TP/AP
SPILLS LISTING	SPILLS	2	0	TP/AP
UNDERGROUND INJECTION CONTROL WELLS	UICWELLS	0	0	TP/AP
WATER QUALITY PERMITS	WQPERMITS	0	0	TP/AP
DRY CLEANING FACILITIES	CLEANERS	1	0	0.2500
SOLID WASTE TIRE FACILITIES	SWTIRE	0	0	0.2500
FACILITY/ SITE DATABASE	FSD	19	0	0.5000
NO FURTHER ACTION SITES	NFA	3	0	0.5000
RECYCLING FACILITIES	RECYCLERS	0	0	0.5000
SUB-TOTAL		25	0	

Database Summary

LOCAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
TACOMA SMELTER PLUME	TACOMAPLUME	2	0	1.0000

SUB-TOTAL		2	0	
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Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
KING COUNTY ABANDONED LANDFILLS 1985	KCALF85	0	0	0.5000
SEATTLE KING COUNTY ABANDONED LANDFILLS 1984	SKCALF84	0	0	0.5000

SUB-TOTAL		0	0	
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Database Summary

TRIBAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR10	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR10	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000

SUB-TOTAL		0	0	
-----------	--	---	---	--

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000

SUB-TOTAL		0	0	
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TOTAL		63	0	
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Database Radius Summary

FEDERAL LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	0.0200	0	NS	NS	NS	NS	NS	0
ECHOR10	0.0200	1	NS	NS	NS	NS	NS	1
ERNSWA	0.0200	0	NS	NS	NS	NS	NS	0
FRSWA	0.0200	3	NS	NS	NS	NS	NS	3
HMIRSR10	0.0200	0	NS	NS	NS	NS	NS	0
HWCD	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	0	NS	NS	NS	NS	NS	0
ICISNPDES	0.0200	0	NS	NS	NS	NS	NS	0
LUCIS	0.0200	0	NS	NS	NS	NS	NS	0
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDESR10	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR10	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	0.0200	0	NS	NS	NS	NS	NS	0
SEMSLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSEHRIPFAS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
RCRAGR10	0.1250	0	0	NS	NS	NS	NS	0
RCRANGR10	0.1250	1	1	NS	NS	NS	NS	2
ALTFUELS	0.2500	0	0	0	NS	NS	NS	0
FEMAUST	0.2500	0	0	0	NS	NS	NS	0
HISTPST	0.2500	0	0	0	NS	NS	NS	0
ICISCLEANERS	0.2500	0	0	0	NS	NS	NS	0
MRDS	0.2500	0	0	0	NS	NS	NS	0
MSHA	0.2500	0	0	0	NS	NS	NS	0
BF	0.5000	0	0	0	0	NS	NS	0
NLRRCRAT	0.5000	0	0	0	0	NS	NS	0
ODI	0.5000	0	0	0	0	NS	NS	0

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
RCRAT	0.5000	0	0	0	0	NS	NS	0
SEMS	0.5000	0	0	0	0	NS	NS	0
SEMSARCH	0.5000	0	0	0	0	NS	NS	0
SMCRA	0.5000	0	0	0	0	NS	NS	0
USUMTRCA	0.5000	0	0	0	0	NS	NS	0
DNPL	1.0000	0	0	0	0	0	NS	0
DOD	1.0000	0	0	0	0	0	NS	0
FUDS	1.0000	0	0	0	0	0	NS	0
FUSRAP	1.0000	0	0	0	0	0	NS	0
NLRRCRAC	1.0000	0	0	0	0	0	NS	0
NMS	1.0000	0	0	0	0	0	NS	0
NPL	1.0000	0	0	0	0	0	NS	0
PNPL	1.0000	0	0	0	0	0	NS	0
RCRAC	1.0000	0	0	0	0	0	NS	0
RCRASUBC	1.0000	0	0	0	0	0	NS	0
RODS	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		5	1	0	0	0	0	6

Database Radius Summary

STATE (WA) LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRS	0.0200	0	NS	NS	NS	NS	NS	0
ICEC	0.0200	0	NS	NS	NS	NS	NS	0
SPILLS	0.0200	2	NS	NS	NS	NS	NS	2
UICWELLS	0.0200	0	NS	NS	NS	NS	NS	0
WQPERMITS	0.0200	0	NS	NS	NS	NS	NS	0
AST	0.2500	0	0	0	NS	NS	NS	0
CLEANERS	0.2500	0	1	0	NS	NS	NS	1
SWTIRE	0.2500	0	0	0	NS	NS	NS	0
UST	0.2500	2	2	0	NS	NS	NS	4
BROWNFIELD	0.5000	0	0	0	0	NS	NS	0
FSD	0.5000	3	3	3	10	NS	NS	19
HSL	0.5000	0	2	0	1	NS	NS	3
LFSWDS	0.5000	0	0	0	0	NS	NS	0
LUST	0.5000	1	1	0	0	NS	NS	2
NFA	0.5000	1	0	0	2	NS	NS	3
PLIAPTAP	0.5000	0	0	0	0	NS	NS	0
PLIAUSTR LG	0.5000	0	0	0	0	NS	NS	0
RECYCLERS	0.5000	0	0	0	0	NS	NS	0
VCP	0.5000	1	1	0	0	NS	NS	2
CSCSL	1.0000	1	2	0	1	15	NS	19
SUB-TOTAL		11	12	3	14	15	0	55

Database Radius Summary

LOCAL LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
KCALF85	0.5000	0	0	0	0	NS	NS	0
SKCALF84	0.5000	0	0	0	0	NS	NS	0
TACOMAPLUME	1.0000	1	0	0	0	1	NS	2
SUB-TOTAL		1	0	0	0	1	0	2

Database Radius Summary

TRIBAL LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR10	0.2500	0	0	0	NS	NS	NS	0
LUSTR10	0.5000	0	0	0	0	NS	NS	0
ODINDIAN	0.5000	0	0	0	0	NS	NS	0
INDIANRES	1.0000	0	0	0	0	0	NS	0

SUB-TOTAL		0	0	0	0	0	0	0
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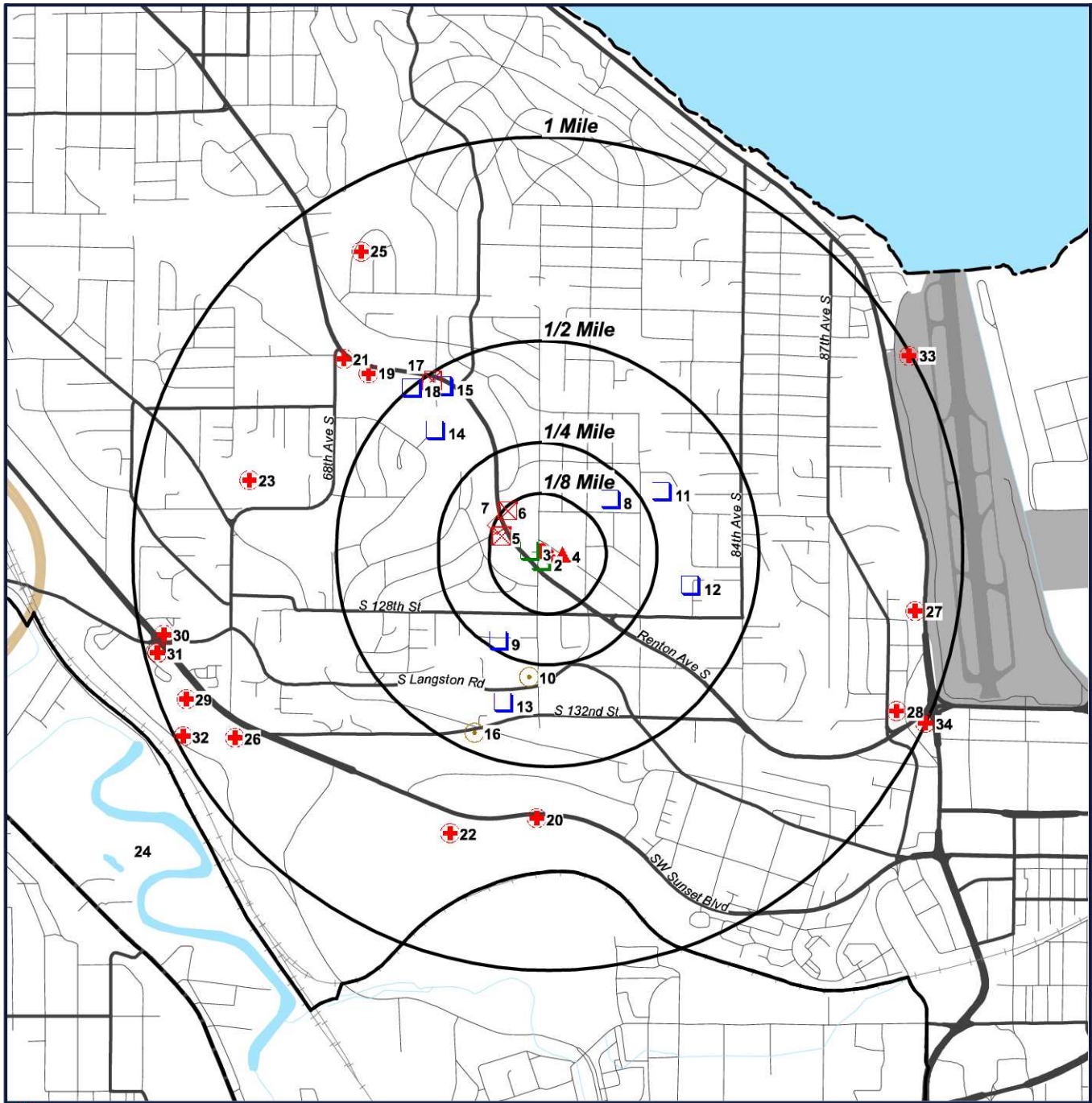
TOTAL		17	13	3	14	16	0	63
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NOTES:

NS = NOT SEARCHED

TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



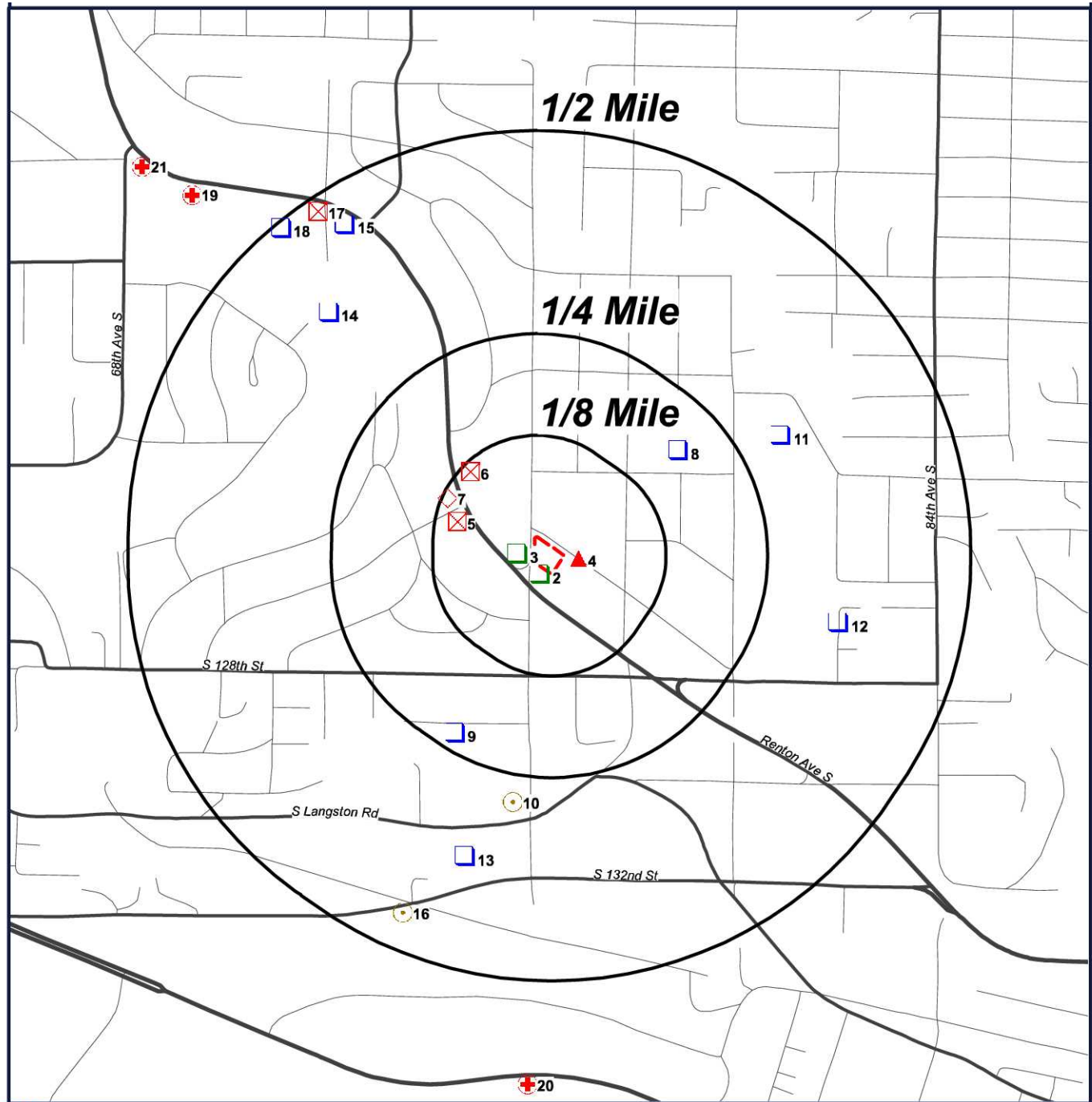
- Target Property (TP)
- TACOMAPLUME
- FRSWA
- SPILLS
- HSL
- UST
- FSD
- NFA
- CSCSL

Seattle
12610 76th Avenue
South
Seattle, Washington



0' 1000' 2000' 3000'
 SCALE: 1" = 2000'

Radius Map 2



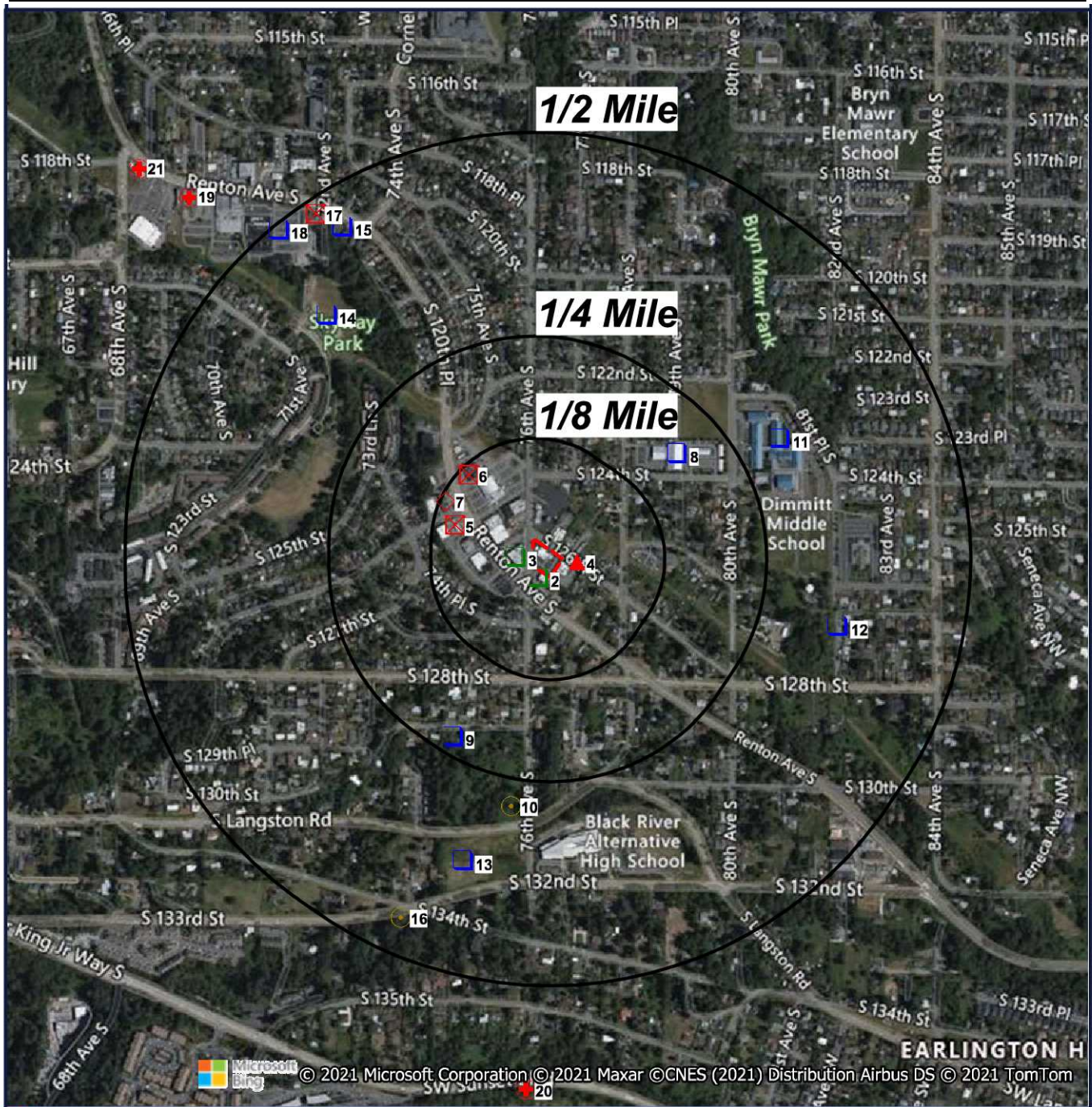
Seattle
12610 76th Avenue
South
Seattle, Washington



0' 500' 1000' 1500'
SCALE: 1" = 1000'

-  Target Property (TP)
-  TACOMAPLUME
-  FRSWA
-  SPILLS
-  HSL
-  UST
-  FSD
-  NFA
-  CSCSL

Ortho Map



- Target Property (TP)
- TACOMAPLUME
- FRSWA
- SPILLS
- HSL
- UST
- FSD
- NFA
- CSCSL

**Quadrangle(s): Renton
Seattle
12610 76th Avenue
South
Seattle, Washington**



0' 500' 1000' 1500'
SCALE: 1" = 1000'

Topographic Map



Target Property (TP)

Quadrangle(s): Renton
Source: USGS,
01/15/2014
Seattle
12610 76th Avenue
South
Seattle, Washington



Located Sites Summary

NOTE: Standard environmental records are displayed in **bold**.

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	TACOMAPLUME	0000009	Lower (428 ft.)	TP	TACOMA SMELTER PLUME	TACOMA-SEATTLE AREA, WA 98405	25
2	FRSWA	110015403730	Equal (430 ft.)	0.009 mi. SW (48 ft.)	SOUTHLAND CORP 2307	12702 RENTON AVE S, SEATTLE, WA 98178	26
2	FSD	86951499	Equal (430 ft.)	0.009 mi. SW (48 ft.)	SOUTHLAND CORP 2307	12702 RENTON AVE S, SEATTLE, WA 98178	27
2	UST	8700	Equal (430 ft.)	0.009 mi. SW (48 ft.)	SOUTHLAND CORP 2307	12702 RENTON AVE S, SEATTLE, WA 98178	28
3	CSCSL	5420CSCSL	Equal (430 ft.)	0.017 mi. W (90 ft.)	SKYWAY MARKET	12640 RENTON AVE S, SEATTLE, WA 98178	30
3	ECHOR10	110062317657	Equal (430 ft.)	0.017 mi. W (90 ft.)	KING COUNTY LIBRARY SYSTEM	12690 RENTON AVE S, SEATTLE, WA 98178	33
3	FRSWA	110017942164	Equal (430 ft.)	0.017 mi. W (90 ft.)	EAT EM UP HUT	12640 RENTON AVE S, SEATTLE, WA 98178	34
3	FRSWA	110062317657	Equal (430 ft.)	0.017 mi. W (90 ft.)	KING COUNTY LIBRARY SYSTEM	12690 RENTON AVE S, SEATTLE, WA 98178	35
3	FSD	24394	Equal (430 ft.)	0.017 mi. W (90 ft.)	KING COUNTY LIBRARY SYSTEM RENTON AVE	12690 RENTON AVE S, SEATTLE, WA 98178	36
3	FSD	6805845	Equal (430 ft.)	0.017 mi. W (90 ft.)	EAT EM UP HUT	12640 RENTON AVE S, SEATTLE, WA 98178	37
3	LUST	5420LST	Equal (430 ft.)	0.017 mi. W (90 ft.)	SKYWAY MARKET	12640 RENTON AVE S, SEATTLE, WA 98178	39
3	NFA	6805845NFA	Equal (430 ft.)	0.017 mi. W (90 ft.)	EAT EM UP HUT	12640 RENTON AVE S, SEATTLE, WA 98178	42
3	RCRANGR10	WAH000047655	Equal (430 ft.)	0.017 mi. W (90 ft.)	KING COUNTY LIBRARY SYSTEM	12690 RENTON AVE S, SEATTLE, WA 98178	43
3	SPILLS	39126	Equal (430 ft.)	0.017 mi. W (90 ft.)		12640 RENTON AVE S, SEATTLE, WA	45
3	UST	619116	Equal (430 ft.)	0.017 mi. W (90 ft.)	SKYWAY MARKET	12640 RENTON AVE S, SEATTLE, WA 98178	46
3	VCP	5420VCP	Equal (430 ft.)	0.017 mi. W (90 ft.)	SKYWAY MARKET	12640 RENTON AVE S, SEATTLE, WA 98178	49
4	SPILLS	110717	Equal (430 ft.)	0.018 mi. ESE (95 ft.)		S 126TH ST, SEATTLE, WA 98178	52
5	CSCSL	10235CSCSL	Lower (422 ft.)	0.096 mi. W (507 ft.)	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178	53
5	FSD	71287498	Lower (422 ft.)	0.096 mi. W (507 ft.)	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178	55
5	HSL	10235HSL	Lower (422 ft.)	0.096 mi. W (507 ft.)	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178	56
5	LUST	10235LST	Lower (422 ft.)	0.096 mi. W (507 ft.)	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178	58
5	UST	101878	Lower (422 ft.)	0.096 mi. W (507 ft.)	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178	60
6	CLEANERS	56652786	Lower (422 ft.)	0.112 mi. NW (591 ft.)	BOATHOUSE INC RENTON SKYWAY THE	12548 RENTON AVE S, SEATTLE, WA 98178	64
6	CSCSL	567CSCSL	Lower (422 ft.)	0.112 mi. NW (591 ft.)	BOATHOUSE INC RENTON SKYWAY	12548 RENTON AVE S, SEATTLE, WA 98178	65

Located Sites Summary

NOTE: Standard environmental records are displayed in **bold**.

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
6	FSD	56652786	Lower (422 ft.)	0.112 mi. NW (591 ft.)	BOATHOUSE INC RENTON SKYWAY THE	12548 RENTON AVE S, SEATTLE, WA 98178	67
6	HSL	567HSL	Lower (422 ft.)	0.112 mi. NW (591 ft.)	BOATHOUSE INC RENTON SKYWAY	12548 RENTON AVE S, SEATTLE, WA 98178	68
6	RCRANGR10	WAD988517041	Lower (422 ft.)	0.112 mi. NW (591 ft.)	BOATHOUSE INC RENTON SKYWAY THE	12548 RENTON AVE S, SEATTLE, WA 98118	70
6	VCP	567VCP	Lower (422 ft.)	0.112 mi. NW (591 ft.)	BOATHOUSE INC RENTON SKYWAY	12548 RENTON AVE S, SEATTLE, WA 98178	72
7	FSD	56365941	Lower (422 ft.)	0.118 mi. WNW (623 ft.)	FOREIGN SPECIALTIES	12561 RENTON AVE S, SEATTLE, WA 98178	74
7	UST	795	Lower (422 ft.)	0.118 mi. WNW (623 ft.)	FOREIGN SPECIALTIES	12561 RENTON AVE SOUTH, SEATTLE, WA 98178	75
8	FSD	913282	Higher (439 ft.)	0.191 mi. ENE (1008 ft.)	RENTON SCHOOL DIST FAC & OPS BLDG	7812 S 124TH ST, SEATTLE, WA 98178	77
8	FSD	9587	Higher (439 ft.)	0.191 mi. ENE (1008 ft.)	RENTON SECONDARY LEARNING CENTER	7812 SOUTH 124TH STREET, RENTON, WA 98178	78
9	FSD	13523	Lower (424 ft.)	0.229 mi. SW (1209 ft.)	TUSCANY RIDGE	7425 S 129TH ST, SEATTLE, WA 98178	79
10	FSD	2246	Lower (329 ft.)	0.284 mi. SSW (1500 ft.)	FLORAL CREST NURSERY	7432 S 131ST ST & LANGSTON RD, SEATTLE, WA 98178	80
10	FSD	41435438	Lower (329 ft.)	0.284 mi. SSW (1500 ft.)	FLORAL CREST	7432 S 131ST CT, SEATTLE, WA 98178	81
10	NFA	2246NFA	Lower (329 ft.)	0.284 mi. SSW (1500 ft.)	FLORAL CREST NURSERY	7432 S 131ST ST & LANGSTON RD, SEATTLE, WA 98178	82
11	FSD	57935661	Lower (418 ft.)	0.306 mi. ENE (1616 ft.)	RENTON SCH DIST 403 DIMMIT MIDDLE SCHOOL	12320 80TH AVE S, SEATTLE, WA 98178	86
12	FSD	79379823	Lower (392 ft.)	0.351 mi. E (1853 ft.)	SITE SE11 RENTON	12607 82ND AVE S, RENTON, WA 98057	88
13	FSD	9122	Lower (309 ft.)	0.365 mi. SSW (1927 ft.)	EVERGREEN FLORAL PHASE 2	7435 S LANGSTON RD, TUKWILA, WA 98178	89
14	FSD	99324	Lower (327 ft.)	0.370 mi. NW (1954 ft.)	SKYWAY PARK SEATTLE	7121 S 120TH PLACE, SEATTLE, WA 98178	90
15	FSD	72512	Lower (325 ft.)	0.445 mi. NW (2350 ft.)	SKYWAY WSD SEWER PUMP STATIONS	11909 RENTON AVE S, SEATTLE, WA 98178	91
16	FSD	2411	Lower (297 ft.)	0.454 mi. SSW (2397 ft.)	FOSTORIA PARK INDUSTRIAL CENTER	4400 BLK S 133RD & S 134TH ST, TUKWILA, WA 98168	92
16	NFA	2411NFA	Lower (297 ft.)	0.454 mi. SSW (2397 ft.)	FOSTORIA PARK INDUSTRIAL CENTER	4400 BLK S 133RD & S 134TH ST, TUKWILA, WA 98168	93

Located Sites Summary

NOTE: Standard environmental records are displayed in **bold**.

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
17	CSCSL	4483CSCSL	Lower (325 ft.)	0.479 mi. NW (2529 ft.)	LEMONBUSTERS	11903 RENTON AVE S, SEATTLE, WA 98178	94
17	FSD	95195341	Lower (325 ft.)	0.479 mi. NW (2529 ft.)	LEMONBUSTERS	11903 RENTON AVE S, SEATTLE, WA 98178	96
17	HSL	4483HSL	Lower (325 ft.)	0.479 mi. NW (2529 ft.)	LEMONBUSTERS	11903 RENTON AVE S, SEATTLE, WA 98178	97
18	FSD	83867552	Lower (332 ft.)	0.487 mi. NW (2571 ft.)	SKYWAY PARK CLEANING CENTER	11831 RENTON AVE S, SEATTLE, WA 98178	99
19	CSCSL	6370CSCSL	Lower (350 ft.)	0.596 mi. NW (3147 ft.)	SKYWAY SHELL & AUTOMOTIVE	11809 RENTON AVE S, SEATTLE, WA 98178	100
20	CSCSL	1876CSCSL	Lower (203 ft.)	0.628 mi. S (3316 ft.)	BLACK RIVER CORP PARK TRACT A	OAKSDALE AVE SW, RENTON, WA 98055	102
21	CSCSL	9883CSCSL	Lower (344 ft.)	0.665 mi. WNW (3511 ft.)	EXXON 77176	11655 RENTON AVE S, SEATTLE, WA 98178	103
22	CSCSL	424CSCSL	Lower (218 ft.)	0.706 mi. SSW (3728 ft.)	SUNSET VIEW APARTMENTS	2101 SW SUNSET BLVD, RENTON, WA 98055	106
23	CSCSL	9166CSCSL	Lower (386 ft.)	0.732 mi. W (3865 ft.)	FAA RENTON	6400 124TH AVE S, RENTON, WA 98056	107
24	TACOMAPLUM E	0000004	Lower (321 ft.)	0.757 mi. S (3997 ft.)	TACOMA SMELTER PLUME	TACOMA-SEATTLE AREA, WA 98405	108
25	CSCSL	1415CSCSL	Lower (306 ft.)	0.844 mi. NW (4456 ft.)	COWLEY LEAKING AST	11430 69TH PL S, SEATTLE, WA 98178	109
26	CSCSL	3163CSCSL	Lower (182 ft.)	0.871 mi. WSW (4599 ft.)	LITTLE ETHELS AUTO WRECKING	13301 MARTIN LUTHER KING JR WAY S, SEATTLE, WA 98178	110
27	CSCSL	14438CSCSL	Lower (60 ft.)	0.895 mi. E (4726 ft.)	SENECA REAL ESTATE	401 RAINIER AVE N, RENTON, WA 98057	112
28	CSCSL	10243CSCSL	Lower (53 ft.)	0.922 mi. ESE (4868 ft.)	RENTON ASSEMBLY OF GOD	221 HARDIE AVE NW, RENTON, WA 98055	115
29	CSCSL	1961CSCSL	Lower (278 ft.)	0.936 mi. WSW (4942 ft.)	ANDERSON JOSEPH B ET AL	13001 MARTIN LUTHER KING JR WAY S, SEATTLE, WA 98178	116
30	CSCSL	7009CSCSL	Lower (241 ft.)	0.943 mi. W (4979 ft.)	SOUTHLAND FACILITY 23525	12848 MARTIN LUTHER KING JR WAY, SEATTLE, WA 98178	120
31	CSCSL	9417CSCSL	Lower (241 ft.)	0.968 mi. W (5111 ft.)	EXXON 72894	12911 MARTIN LUTHER KING JR WAY S, SEATTLE, WA 98178	121
32	CSCSL	2813CSCSL	Lower (53 ft.)	0.981 mi. WSW (5180 ft.)	ANDERSON JOSEPH B	13336 BEACON COAL MINE RD S, SEATTLE, WA 98178	124
33	CSCSL	6266CSCSL	Lower (23 ft.)	0.995 mi. ENE (5254 ft.)	ACTION AVIATION	840 W PERIMETER RD, RENTON, WA 98057	127
34	CSCSL	5124CSCSL	Lower (37 ft.)	0.998 mi. ESE (5269 ft.)	UNOCAL 5024	59 RAINIER AVE S, RENTON, WA 98055	129

Site Summary By Database

NOTE: Standard environmental records are displayed in **bold**.

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
6	CLEANERS	56652786	Lower (422 ft.)	0.112 mi. NW (591 ft.)	BOATHOUSE INC RENTON SKYWAY THE	12548 RENTON AVE S, SEATTLE, WA 98178
3	CSCSL	5420CSCSL	Equal (430 ft.)	0.017 mi. W (90 ft.)	SKYWAY MARKET	12640 RENTON AVE S, SEATTLE, WA 98178
5	CSCSL	10235CSCSL	Lower (422 ft.)	0.096 mi. W (507 ft.)	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178
6	CSCSL	567CSCSL	Lower (422 ft.)	0.112 mi. NW (591 ft.)	BOATHOUSE INC RENTON SKYWAY	12548 RENTON AVE S, SEATTLE, WA 98178
17	CSCSL	4483CSCSL	Lower (325 ft.)	0.479 mi. NW (2529 ft.)	LEMONBUSTERS	11903 RENTON AVE S, SEATTLE, WA 98178
19	CSCSL	6370CSCSL	Lower (350 ft.)	0.596 mi. NW (3147 ft.)	SKYWAY SHELL & AUTOMOTIVE	11809 RENTON AVE S, SEATTLE, WA 98178
20	CSCSL	1876CSCSL	Lower (203 ft.)	0.628 mi. S (3316 ft.)	BLACK RIVER CORP PARK TRACT A	OAKSDALE AVE SW, RENTON, WA 98055
21	CSCSL	9883CSCSL	Lower (344 ft.)	0.665 mi. WNW (3511 ft.)	EXXON 77176	11655 RENTON AVE S, SEATTLE, WA 98178
22	CSCSL	424CSCSL	Lower (218 ft.)	0.706 mi. SSW (3728 ft.)	SUNSET VIEW APARTMENTS	2101 SW SUNSET BLVD, RENTON, WA 98055
23	CSCSL	9166CSCSL	Lower (386 ft.)	0.732 mi. W (3865 ft.)	FAA RENTON	6400 124TH AVE S, RENTON, WA 98056
25	CSCSL	1415CSCSL	Lower (306 ft.)	0.844 mi. NW (4456 ft.)	COWLEY LEAKING AST	11430 69TH PL S, SEATTLE, WA 98178
26	CSCSL	3163CSCSL	Lower (182 ft.)	0.871 mi. WSW (4599 ft.)	LITTLE ETHELS AUTO WRECKING	13301 MARTIN LUTHER KING JR WAY S, SEATTLE, WA 98178
27	CSCSL	14438CSCSL	Lower (60 ft.)	0.895 mi. E (4726 ft.)	SENECA REAL ESTATE	401 RAINIER AVE N, RENTON, WA 98057
28	CSCSL	10243CSCSL	Lower (53 ft.)	0.922 mi. ESE (4868 ft.)	RENTON ASSEMBLY OF GOD	221 HARDIE AVE NW, RENTON, WA 98055
29	CSCSL	1961CSCSL	Lower (278 ft.)	0.936 mi. WSW (4942 ft.)	ANDERSON JOSEPH B ET AL	13001 MARTIN LUTHER KING JR WAY S, SEATTLE, WA 98178
30	CSCSL	7009CSCSL	Lower (241 ft.)	0.943 mi. W (4979 ft.)	SOUTHLAND FACILITY 23525	12848 MARTIN LUTHER KING JR WAY, SEATTLE, WA 98178
31	CSCSL	9417CSCSL	Lower (241 ft.)	0.968 mi. W (5111 ft.)	EXXON 72894	12911 MARTIN LUTHER KING JR WAY S, SEATTLE, WA 98178
32	CSCSL	2813CSCSL	Lower (53 ft.)	0.981 mi. WSW (5180 ft.)	ANDERSON JOSEPH B	13336 BEACON COAL MINE RD S, SEATTLE, WA 98178
33	CSCSL	6266CSCSL	Lower (23 ft.)	0.995 mi. ENE (5254 ft.)	ACTION AVIATION	840 W PERIMETER RD, RENTON, WA 98057
34	CSCSL	5124CSCSL	Lower (37 ft.)	0.998 mi. ESE (5269 ft.)	UNOCAL 5024	59 RAINIER AVE S, RENTON, WA 98055
3	ECHOR10	110062317657	Equal (430 ft.)	0.017 mi. W (90 ft.)	KING COUNTY LIBRARY SYSTEM	12690 RENTON AVE S, SEATTLE, WA 98178
2	FRSWA	110015403730	Equal (430 ft.)	0.009 mi. SW (48 ft.)	SOUTHLAND CORP 2307	12702 RENTON AVE S, SEATTLE, WA 98178

Site Summary By Database

NOTE: Standard environmental records are displayed in **bold**.

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
3	FRSWA	110017942164	Equal (430 ft.)	0.017 mi. W (90 ft.)	EAT EM UP HUT	12640 RENTON AVE S, SEATTLE, WA 98178
3	FRSWA	110062317657	Equal (430 ft.)	0.017 mi. W (90 ft.)	KING COUNTY LIBRARY SYSTEM	12690 RENTON AVE S, SEATTLE, WA 98178
2	FSD	86951499	Equal (430 ft.)	0.009 mi. SW (48 ft.)	SOUTHLAND CORP 2307	12702 RENTON AVE S, SEATTLE, WA 98178
3	FSD	24394	Equal (430 ft.)	0.017 mi. W (90 ft.)	KING COUNTY LIBRARY SYSTEM RENTON AVE	12690 RENTON AVE S, SEATTLE, WA 98178
3	FSD	6805845	Equal (430 ft.)	0.017 mi. W (90 ft.)	EAT EM UP HUT	12640 RENTON AVE S, SEATTLE, WA 98178
5	FSD	71287498	Lower (422 ft.)	0.096 mi. W (507 ft.)	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178
6	FSD	56652786	Lower (422 ft.)	0.112 mi. NW (591 ft.)	BOATHOUSE INC RENTON SKYWAY THE	12548 RENTON AVE S, SEATTLE, WA 98178
7	FSD	56365941	Lower (422 ft.)	0.118 mi. WNW (623 ft.)	FOREIGN SPECIALTIES	12561 RENTON AVE S, SEATTLE, WA 98178
8	FSD	913282	Higher (439 ft.)	0.191 mi. ENE (1008 ft.)	RENTON SCHOOL DIST FAC & OPS BLDG	7812 S 124TH ST, SEATTLE, WA 98178
8	FSD	9587	Higher (439 ft.)	0.191 mi. ENE (1008 ft.)	RENTON SECONDARY LEARNING CENTER	7812 SOUTH 124TH STREET, RENTON, WA 98178
9	FSD	13523	Lower (424 ft.)	0.229 mi. SW (1209 ft.)	TUSCANY RIDGE	7425 S 129TH ST, SEATTLE, WA 98178
10	FSD	2246	Lower (329 ft.)	0.284 mi. SSW (1500 ft.)	FLORAL CREST NURSERY	7432 S 131ST ST & LANGSTON RD, SEATTLE, WA 98178
10	FSD	41435438	Lower (329 ft.)	0.284 mi. SSW (1500 ft.)	FLORAL CREST	7432 S 131ST CT, SEATTLE, WA 98178
11	FSD	57935661	Lower (418 ft.)	0.306 mi. ENE (1616 ft.)	RENTON SCH DIST 403 DIMMIT MIDDLE SCHOOL	12320 80TH AVE S, SEATTLE, WA 98178
12	FSD	79379823	Lower (392 ft.)	0.351 mi. E (1853 ft.)	SITE SE11 RENTON	12607 82ND AVE S, RENTON, WA 98057
13	FSD	9122	Lower (309 ft.)	0.365 mi. SSW (1927 ft.)	EVERGREEN FLORAL PHASE 2	7435 S LANGSTON RD, TUKWILA, WA 98178
14	FSD	99324	Lower (327 ft.)	0.370 mi. NW (1954 ft.)	SKYWAY PARK SEATTLE	7121 S 120TH PLACE, SEATTLE, WA 98178
15	FSD	72512	Lower (325 ft.)	0.445 mi. NW (2350 ft.)	SKYWAY WSD SEWER PUMP STATIONS	11909 RENTON AVE S, SEATTLE, WA 98178
16	FSD	2411	Lower (297 ft.)	0.454 mi. SSW (2397 ft.)	FOSTORIA PARK INDUSTRIAL CENTER	4400 BLK S 133RD & S 134TH ST, TUKWILA, WA 98168
17	FSD	95195341	Lower (325 ft.)	0.479 mi. NW (2529 ft.)	LEMONBUSTERS	11903 RENTON AVE S, SEATTLE, WA 98178
18	FSD	83867552	Lower (332 ft.)	0.487 mi. NW (2571 ft.)	SKYWAY PARK CLEANING CENTER	11831 RENTON AVE S, SEATTLE, WA 98178

Site Summary By Database

NOTE: Standard environmental records are displayed in **bold**.

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
5	HSL	10235HSL	Lower (422 ft.)	0.096 mi. W (507 ft.)	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178
6	HSL	567HSL	Lower (422 ft.)	0.112 mi. NW (591 ft.)	BOATHOUSE INC RENTON SKYWAY	12548 RENTON AVE S, SEATTLE, WA 98178
17	HSL	4483HSL	Lower (325 ft.)	0.479 mi. NW (2529 ft.)	LEMONBUSTERS	11903 RENTON AVE S, SEATTLE, WA 98178
3	LUST	5420LST	Equal (430 ft.)	0.017 mi. W (90 ft.)	SKYWAY MARKET	12640 RENTON AVE S, SEATTLE, WA 98178
5	LUST	10235LST	Lower (422 ft.)	0.096 mi. W (507 ft.)	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178
3	NFA	6805845NFA	Equal (430 ft.)	0.017 mi. W (90 ft.)	EAT EM UP HUT	12640 RENTON AVE S, SEATTLE, WA 98178
10	NFA	2246NFA	Lower (329 ft.)	0.284 mi. SSW (1500 ft.)	FLORAL CREST NURSERY	7432 S 131ST ST & LANGSTON RD, SEATTLE, WA 98178
16	NFA	2411NFA	Lower (297 ft.)	0.454 mi. SSW (2397 ft.)	FOSTORIA PARK INDUSTRIAL CENTER	4400 BLK S 133RD & S 134TH ST, TUKWILA, WA 98168
3	RCRANGR10	WAH000047655	Equal (430 ft.)	0.017 mi. W (90 ft.)	KING COUNTY LIBRARY SYSTEM	12690 RENTON AVE S, SEATTLE, WA 98178
6	RCRANGR10	WAD988517041	Lower (422 ft.)	0.112 mi. NW (591 ft.)	BOATHOUSE INC RENTON SKYWAY THE	12548 RENTON AVE S, SEATTLE, WA 98118
3	SPILLS	39126	Equal (430 ft.)	0.017 mi. W (90 ft.)		12640 RENTON AVE S, SEATTLE, WA
4	SPILLS	110717	Equal (430 ft.)	0.018 mi. ESE (95 ft.)		S 126TH ST, SEATTLE, WA 98178
1	TACOMAPLUM E	0000009	Lower (428 ft.)	TP	TACOMA SMELTER PLUME	TACOMA-SEATTLE AREA, WA 98405
24	TACOMAPLUM E	0000004	Lower (321 ft.)	0.757 mi. S (3997 ft.)	TACOMA SMELTER PLUME	TACOMA-SEATTLE AREA, WA 98405
2	UST	8700	Equal (430 ft.)	0.009 mi. SW (48 ft.)	SOUTHLAND CORP 2307	12702 RENTON AVE S, SEATTLE, WA 98178
3	UST	619116	Equal (430 ft.)	0.017 mi. W (90 ft.)	SKYWAY MARKET	12640 RENTON AVE S, SEATTLE, WA 98178
5	UST	101878	Lower (422 ft.)	0.096 mi. W (507 ft.)	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178
7	UST	795	Lower (422 ft.)	0.118 mi. WNW (623 ft.)	FOREIGN SPECIALTIES	12561 RENTON AVE SOUTH, SEATTLE, WA 98178
3	VCP	5420VCP	Equal (430 ft.)	0.017 mi. W (90 ft.)	SKYWAY MARKET	12640 RENTON AVE S, SEATTLE, WA 98178
6	VCP	567VCP	Lower (422 ft.)	0.112 mi. NW (591 ft.)	BOATHOUSE INC RENTON SKYWAY	12548 RENTON AVE S, SEATTLE, WA 98178

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 430 ft.

NOTE: Standard environmental records are displayed in **bold**.

EQUAL/HIGHER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
2	FRSWA	430 ft.	SOUTHLAND CORP 2307	12702 RENTON AVE S, SEATTLE, WA 98178	26
2	FSD	430 ft.	SOUTHLAND CORP 2307	12702 RENTON AVE S, SEATTLE, WA 98178	27
2	UST	430 ft.	SOUTHLAND CORP 2307	12702 RENTON AVE S, SEATTLE, WA 98178	28
3	CSCSL	430 ft.	SKYWAY MARKET	12640 RENTON AVE S, SEATTLE, WA 98178	30
3	ECHOR10	430 ft.	KING COUNTY LIBRARY SYSTEM	12690 RENTON AVE S, SEATTLE, WA 98178	33
3	FRSWA	430 ft.	EAT EM UP HUT	12640 RENTON AVE S, SEATTLE, WA 98178	34
3	FRSWA	430 ft.	KING COUNTY LIBRARY SYSTEM	12690 RENTON AVE S, SEATTLE, WA 98178	35
3	FSD	430 ft.	KING COUNTY LIBRARY SYSTEM RENTON AVE	12690 RENTON AVE S, SEATTLE, WA 98178	36
3	FSD	430 ft.	EAT EM UP HUT	12640 RENTON AVE S, SEATTLE, WA 98178	37
3	LUST	430 ft.	SKYWAY MARKET	12640 RENTON AVE S, SEATTLE, WA 98178	39
3	NFA	430 ft.	EAT EM UP HUT	12640 RENTON AVE S, SEATTLE, WA 98178	42
3	RCRANGR10	430 ft.	KING COUNTY LIBRARY SYSTEM	12690 RENTON AVE S, SEATTLE, WA 98178	43
3	SPILLS	430 ft.		12640 RENTON AVE S, SEATTLE, WA	45
3	UST	430 ft.	SKYWAY MARKET	12640 RENTON AVE S, SEATTLE, WA 98178	46
3	VCP	430 ft.	SKYWAY MARKET	12640 RENTON AVE S, SEATTLE, WA 98178	49
4	SPILLS	430 ft.		S 126TH ST, SEATTLE, WA 98178	52
8	FSD	439 ft.	RENTON SCHOOL DIST FAC & OPS BLDG	7812 S 124TH ST, SEATTLE, WA 98178	77
8	FSD	439 ft.	RENTON SECONDARY LEARNING CENTER	7812 SOUTH 124TH STREET, RENTON, WA 98178	78

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	TACOMAPLUME	428 ft.	TACOMA SMELTER PLUME	TACOMA-SEATTLE AREA, WA 98405	25
5	CSCSL	422 ft.	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178	53
5	FSD	422 ft.	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178	55

Elevation Summary

Map ID#	Database Name	Elevation	Site Name	Address	Page #
5	HSL	422 ft.	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178	56
5	LUST	422 ft.	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178	58
5	UST	422 ft.	FRANKS	12603 RENTON AVE S, SEATTLE, WA 98178	60
6	CLEANERS	422 ft.	BOATHOUSE INC RENTON SKYWAY THE	12548 RENTON AVE S, SEATTLE, WA 98178	64
6	CSCSL	422 ft.	BOATHOUSE INC RENTON SKYWAY	12548 RENTON AVE S, SEATTLE, WA 98178	65
6	FSD	422 ft.	BOATHOUSE INC RENTON SKYWAY THE	12548 RENTON AVE S, SEATTLE, WA 98178	67
6	HSL	422 ft.	BOATHOUSE INC RENTON SKYWAY	12548 RENTON AVE S, SEATTLE, WA 98178	68
6	RCRANGR10	422 ft.	BOATHOUSE INC RENTON SKYWAY THE	12548 RENTON AVE S, SEATTLE, WA 98118	70
6	VCP	422 ft.	BOATHOUSE INC RENTON SKYWAY	12548 RENTON AVE S, SEATTLE, WA 98178	72
7	FSD	422 ft.	FOREIGN SPECIALTIES	12561 RENTON AVE S, SEATTLE, WA 98178	74
7	UST	422 ft.	FOREIGN SPECIALTIES	12561 RENTON AVE SOUTH, SEATTLE, WA 98178	75
9	FSD	424 ft.	TUSCANY RIDGE	7425 S 129TH ST, SEATTLE, WA 98178	79
10	FSD	329 ft.	FLORAL CREST NURSERY	7432 S 131ST ST & LANGSTON RD, SEATTLE, WA 98178	80
10	FSD	329 ft.	FLORAL CREST	7432 S 131ST CT, SEATTLE, WA 98178	81
10	NFA	329 ft.	FLORAL CREST NURSERY	7432 S 131ST ST & LANGSTON RD, SEATTLE, WA 98178	82
11	FSD	418 ft.	RENTON SCH DIST 403 DIMMIT MIDDLE SCHOOL	12320 80TH AVE S, SEATTLE, WA 98178	86
12	FSD	392 ft.	SITE SE11 RENTON	12607 82ND AVE S, RENTON, WA 98057	88
13	FSD	309 ft.	EVERGREEN FLORAL PHASE 2	7435 S LANGSTON RD, TUKWILA, WA 98178	89
14	FSD	327 ft.	SKYWAY PARK SEATTLE	7121 S 120TH PLACE, SEATTLE, WA 98178	90
15	FSD	325 ft.	SKYWAY WSD SEWER PUMP STATIONS	11909 RENTON AVE S, SEATTLE, WA 98178	91
16	FSD	297 ft.	FOSTORIA PARK INDUSTRIAL CENTER	4400 BLK S 133RD & S 134TH ST, TUKWILA, WA 98168	92
16	NFA	297 ft.	FOSTORIA PARK INDUSTRIAL CENTER	4400 BLK S 133RD & S 134TH ST, TUKWILA, WA 98168	93
17	CSCSL	325 ft.	LEMONBUSTERS	11903 RENTON AVE S, SEATTLE, WA 98178	94
17	FSD	325 ft.	LEMONBUSTERS	11903 RENTON AVE S, SEATTLE, WA 98178	96
17	HSL	325 ft.	LEMONBUSTERS	11903 RENTON AVE S, SEATTLE, WA 98178	97
18	FSD	332 ft.	SKYWAY PARK CLEANING CENTER	11831 RENTON AVE S, SEATTLE, WA 98178	99
19	CSCSL	350 ft.	SKYWAY SHELL & AUTOMOTIVE	11809 RENTON AVE S, SEATTLE, WA 98178	100

Elevation Summary

Map ID#	Database Name	Elevation	Site Name	Address	Page #
20	CSCSL	203 ft.	BLACK RIVER CORP PARK TRACT A	OAKSDALE AVE SW, RENTON, WA 98055	102
21	CSCSL	344 ft.	EXXON 77176	11655 RENTON AVE S, SEATTLE, WA 98178	103
22	CSCSL	218 ft.	SUNSET VIEW APARTMENTS	2101 SW SUNSET BLVD, RENTON, WA 98055	106
23	CSCSL	386 ft.	FAA RENTON	6400 124TH AVE S, RENTON, WA 98056	107
24	TACOMAPLUME	321 ft.	TACOMA SMELTER PLUME	TACOMA-SEATTLE AREA, WA 98405	108
25	CSCSL	306 ft.	COWLEY LEAKING AST	11430 69TH PL S, SEATTLE, WA 98178	109
26	CSCSL	182 ft.	LITTLE ETHELS AUTO WRECKING	13301 MARTIN LUTHER KING JR WAY S, SEATTLE, WA 98178	110
27	CSCSL	60 ft.	SENECA REAL ESTATE	401 RAINIER AVE N, RENTON, WA 98057	112
28	CSCSL	53 ft.	RENTON ASSEMBLY OF GOD	221 HARDIE AVE NW, RENTON, WA 98055	115
29	CSCSL	278 ft.	ANDERSON JOSEPH B ET AL	13001 MARTIN LUTHER KING JR WAY S, SEATTLE, WA 98178	116
30	CSCSL	241 ft.	SOUTHLAND FACILITY 23525	12848 MARTIN LUTHER KING JR WAY, SEATTLE, WA 98178	120
31	CSCSL	241 ft.	EXXON 72894	12911 MARTIN LUTHER KING JR WAY S, SEATTLE, WA 98178	121
32	CSCSL	53 ft.	ANDERSON JOSEPH B	13336 BEACON COAL MINE RD S, SEATTLE, WA 98178	124
33	CSCSL	23 ft.	ACTION AVIATION	840 W PERIMETER RD, RENTON, WA 98057	127
34	CSCSL	37 ft.	UNOCAL 5024	59 RAINIER AVE S, RENTON, WA 98055	129

Tacoma Smelter Plume (TACOMAPLUME)

[MAP ID# 1](#)

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 428 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 0000009

FACILITY NAME: TACOMA SMELTER PLUME

CITY: TACOMA-SEATTLE AREA

STATE: WA

ARSENIC LEVEL: UNDER 20 PPM

FACILITY LINK: [Tacoma Smelter Plume project](#)

DOCUMENT LINK: [Document Repository for Asarco Tacoma Smelter Site](#)

MAP LINK: [Tacoma Smelter Search](#)

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Facility Registry System (FRSWA)

[MAP ID# 2](#)

Distance from Property: 0.009 mi. (48 ft.) SW
Elevation: 430 ft. (Equal to TP)

FACILITY INFORMATION

REGISTRY ID: 110015403730

NAME: SOUTHLAND CORP 2307

LOCATION ADDRESS: 12702 RENTON AVE S
SEATTLE, WA 98178-4850

COUNTY: KING

EPA REGION: 10

FEDERAL FACILITY:

TRIBAL LAND:

ALTERNATIVE NAME/S:

NO ALTERNATIVE NAME(S) LISTED FOR THIS FACILITY

PROGRAM/S LISTED FOR THIS FACILITY

***DEFINITION NOT PROVIDED BY REPORTING AGENCY**

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

NO SIC DATA REPORTED

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

NO NAICS DATA REPORTED

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Facility/ Site Database (FSD)

[MAP ID# 2](#)

Distance from Property: 0.009 mi. (48 ft.) SW
Elevation: 430 ft. (Equal to TP)

SITE INFORMATION

FACILITY SITE ID: 86951499

NAME: SOUTHLAND CORP 2307

ADDRESS: 12702 RENTON AVE S
SEATTLE, WA 98178-4850

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: UNDERGROUND STORAGE TANK

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: 8700

START DATE: 04/01/1976

END DATE: 05/03/2000

INTERACTION DESCRIPTION: EMERGENCY/HAZ CHEM RPT TIER2

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: CRK000011760

START DATE: 01/01/1988

END DATE: 07/04/1776

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Underground Storage Tanks (UST)

MAP ID# 2

Distance from Property: 0.009 mi. (48 ft.) SW
Elevation: 430 ft. (Equal to TP)

SITE INFORMATION

GEOSEARCH ID: 8700
FACILITY SITE ID: 86951499
UST SITE ID: 8700
NAME: SOUTHLAND CORP 2307
ADDRESS: 12702 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

ALTERNATE SITE NAME(s):
FACILITY STATUS: NO
ACTIVE TAG:
RESPONSIBLE UNIT: NORTHWEST
UBI NUMBER:

TANK(s) INFORMATION

UST SITE ID: 8700
TANK NAME: NOL
TANK STATUS: REMOVED
INSTALL DATE: 04/01/1976
STATUS DATE: 08/06/1996
UPGRADE DATE:
PERMANENTLY CLOSED DATE:
PERMIT EXPIRATION DATE:

TANK MATERIAL

MATERIAL: STEEL
CONSTRUCTION: SINGLE WALL TANK
CORROSION PROTECTION:
MANIFOLDED TANK:
RELEASE DETECTION: OTHER
TIGHTNESS TEST:
SPILL PREVENTION:
OVERFILL PREVENTION:

PIPE MATERIAL

MATERIAL: STEEL
CONSTRUCTION: SINGLE WALL PIPE
CORROSION PROTECTION:
STEEL FLEX CONNECTOR AT TANK:
STEEL FLEX CONNECTOR AT DISPENSER/PUMP:
1ST RELEASE DETECTION: AUTOMATIC LINE LEAK DETECTOR (ALLD)
2ND RELEASE DETECTION:
PUMPING SYSTEM: PRESSURIZED SYSTEM

UST SITE ID: 8700

Underground Storage Tanks (UST)

TANK NAME: **REG**

TANK STATUS: **REMOVED**

INSTALL DATE: **04/01/1976**

STATUS DATE: **08/06/1996**

UPGRADE DATE:

PERMANENTLY CLOSED DATE:

PERMIT EXPIRATION DATE:

TANK MATERIAL

MATERIAL: **STEEL**

CONSTRUCTION: **SINGLE WALL TANK**

CORROSION PROTECTION:

MANIFOLDED TANK:

RELEASE DETECTION: **OTHER**

TIGHTNESS TEST:

SPILL PREVENTION:

OVERFILL PREVENTION:

PIPE MATERIAL

MATERIAL: **STEEL**

CONSTRUCTION: **SINGLE WALL PIPE**

CORROSION PROTECTION:

STEEL FLEX CONNECTOR AT TANK:

STEEL FLEX CONNECTOR AT DISPENSER/PUMP:

1ST RELEASE DETECTION: **AUTOMATIC LINE LEAK DETECTOR (ALLD)**

2ND RELEASE DETECTION:

PUMPING SYSTEM: **PRESSURIZED SYSTEM**

COMPARTMENTS(s) INFORMATION

UST SITE ID: **8700**

TANK NAME: **NOL**

COMPARTMENT NUMBER: **1**

STORED SUBSTANCE: **UNLEADED GASOLINE**

USED SUBSTANCE: **MOTOR FUEL FOR VEHICLES**

COMPARTMENT CAPACITY:

UST SITE ID: **8700**

TANK NAME: **REG**

COMPARTMENT NUMBER: **1**

STORED SUBSTANCE: **LEADED GASOLINE**

USED SUBSTANCE: **MOTOR FUEL FOR VEHICLES**

COMPARTMENT CAPACITY:

[Back to Report Summary](#)

Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 3

Distance from Property: 0.017 mi. (90 ft.) W
Elevation: 430 ft. (Equal to TP)

SITE INFORMATION

GEOSEARCH ID: 5420CSCSL
FACILITY SITE ID: 6805845
CLEANUP SITE ID: 5420
ADDRESS: 12640 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: SKYWAY MARKET
ALTERNATE SITE NAME(s): ARCO,EAT EM UP HUT,SKYWAY LIBRARY (KCLS)
SITE STATUS: CLEANUP STARTED
SITE RANK:
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?: YES
CURRENT VCP?: YES

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 5420
SITE NAME: SKYWAY MARKET
CONTAMINANT NAME: BENZENE
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 5420
SITE NAME: SKYWAY MARKET
CONTAMINANT NAME: LEAD
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 5420
SITE NAME: SKYWAY MARKET

Confirmed and Suspected Contaminated Sites List (CSCSL)

CONTAMINANT NAME: **METALS PRIORITY POLLUTANTS**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **SUSPECTED**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **5420**
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **NON-HALOGENATED SOLVENTS**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **5420**
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **PETROLEUM-DIESEL**
GROUND WATER:
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **5420**
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **PETROLEUM-GASOLINE**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **5420**
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **PETROLEUM-OTHER**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**

Confirmed and Suspected Contaminated Sites List (CSCSL)

SURFACE WATER:

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **5420**

SITE NAME: **SKYWAY MARKET**

CONTAMINANT NAME: **POLYCYCLIC AROMATIC HYDROCARBONS**

GROUND WATER: **SUSPECTED**

SURFACE WATER:

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

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Enforcement and Compliance History Information (ECHOR10)

MAP ID# 3

Distance from Property: 0.017 mi. (90 ft.) W

Elevation: 430 ft. (Equal to TP)

FACILITY INFORMATION

UNIQUE ID: 110062317657

REGISTRY ID: 110062317657

NAME: KING COUNTY LIBRARY SYSTEM

ADDRESS: 12690 RENTON AVE S

SEATTLE, WA 98178

COUNTY: KING

FACILITY LINK: [Facility Detail Report](#)

[Back to Report Summary](#)

Facility Registry System (FRSWA)

MAP ID# 3

Distance from Property: 0.017 mi. (90 ft.) W

Elevation: 430 ft. (Equal to TP)

FACILITY INFORMATION

REGISTRY ID: 110017942164

NAME: EAT EM UP HUT

LOCATION ADDRESS: 12640 RENTON AVE S
SEATTLE, WA 98178

COUNTY: KING

EPA REGION: 10

FEDERAL FACILITY:

TRIBAL LAND:

ALTERNATIVE NAME/S:

NO ALTERNATIVE NAME(S) LISTED FOR THIS FACILITY

PROGRAM/S LISTED FOR THIS FACILITY

***DEFINITION NOT PROVIDED BY REPORTING AGENCY**

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

NO SIC DATA REPORTED

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

NO NAICS DATA REPORTED

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Facility Registry System (FRSWA)

[MAP ID# 3](#)

Distance from Property: 0.017 mi. (90 ft.) W

Elevation: 430 ft. (Equal to TP)

FACILITY INFORMATION

REGISTRY ID: 110062317657

NAME: KING COUNTY LIBRARY SYSTEM

LOCATION ADDRESS: 12690 RENTON AVE S
SEATTLE, WA 98178

COUNTY: KING

EPA REGION: 10

FEDERAL FACILITY:

TRIBAL LAND:

ALTERNATIVE NAME/S:

NO ALTERNATIVE NAME(S) LISTED FOR THIS FACILITY

PROGRAM/S LISTED FOR THIS FACILITY

***DEFINITION NOT PROVIDED BY REPORTING AGENCY**

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

NO SIC DATA REPORTED

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

512290 - OTHER SOUND RECORDING INDUSTRIES.

512290 - OTHER SOUND RECORDING INDUSTRIES.

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Facility/ Site Database (FSD)

[MAP ID# 3](#)

Distance from Property: 0.017 mi. (90 ft.) W
Elevation: 430 ft. (Equal to TP)

SITE INFORMATION

FACILITY SITE ID: 24394

NAME: KING COUNTY LIBRARY SYSTEM RENTON AVE

ADDRESS: 12690 RENTON AVE S

SEATTLE, WA 98178

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: HAZARDOUS WASTE GENERATOR

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAH000047655

START DATE: 10/16/2014

END DATE: 12/31/2014

INTERACTION DESCRIPTION: HAZARDOUS WASTE GENERATOR

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAH000047655

START DATE: 10/16/14

END DATE: NOT REPORTED

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Facility/ Site Database (FSD)

MAP ID# 3

Distance from Property: 0.017 mi. (90 ft.) W

Elevation: 430 ft. (Equal to TP)

SITE INFORMATION

FACILITY SITE ID: 6805845

NAME: EAT EM UP HUT

ADDRESS: 12640 RENTON AVE S

SEATTLE, WA 98178

SITE STATUS: ACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: LUST FACILITY

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: 619116

START DATE: 03/13/2015

END DATE: NOT REPORTED

INTERACTION DESCRIPTION: VOLUNTARY CLEANUP SITES

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: NW3132

START DATE: 05/12/2017

END DATE: NOT REPORTED

INTERACTION DESCRIPTION: INDEPENDENT CLEANUP

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: NOT REPORTED

START DATE: 05/25/2004

END DATE: 09/16/2010

INTERACTION DESCRIPTION: LUST FACILITY

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: 619116

START DATE: 12/29/2004

END DATE: 09/16/2010

INTERACTION DESCRIPTION: UNDERGROUND STORAGE TANK

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: 619116

START DATE: 12/29/2004

END DATE: 12/31/2004

INTERACTION DESCRIPTION: VOLUNTARY CLEANUP SITES

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: NW2149

START DATE: 05/19/2009

END DATE: 09/16/2010

Facility/ Site Database (FSD)

INTERACTION DESCRIPTION: **INDEPENDENT CLEANUP**

ECOLOGY PROGRAM: **TOXICS**

PROGRAM ID: **NOT REPORTED**

START DATE: **05/25/04**

END DATE: **NOT REPORTED**

INTERACTION DESCRIPTION: **LUST FACILITY**

ECOLOGY PROGRAM: **TOXICS**

PROGRAM ID: **619116**

START DATE: **12/29/04**

END DATE: **NOT REPORTED**

INTERACTION DESCRIPTION: **VOLUNTARY CLEANUP SITES**

ECOLOGY PROGRAM: **TOXICS**

PROGRAM ID: **NW2149**

START DATE: **05/19/09**

END DATE: **NOT REPORTED**

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Leaking Underground Storage Tanks (LUST)

MAP ID# 3

Distance from Property: 0.017 mi. (90 ft.) W
Elevation: 430 ft. (Equal to TP)

SITE INFORMATION

GEOSEARCH ID: 5420LST
NAME: **SKYWAY MARKET**
ADDRESS: 12640 RENTON AVE S
SEATTLE, WA 98178
COUNTY: **KING**

SITE DETAILS

FACILITY SITE ID: 6805845
SITE ID: 5420
CLEANUP UNIT NAME:
CLEANUP UNIT TYPE:
RESPONSIBLE SECTION: **NORTHWEST**
REGION: **NORTHWEST**
PROCESS TYPE:
LUST STATUS TYPE: **LUST - CLEANUP STARTED**
LUST STATUS DATE: 03/13/2015
MEDIA:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 5420
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **BENZENE**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 5420
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **LEAD**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 5420
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **METALS PRIORITY POLLUTANTS**

Leaking Underground Storage Tanks (LUST)

GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **SUSPECTED**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **5420**
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **NON-HALOGENATED SOLVENTS**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **5420**
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **PETROLEUM-DIESEL**
GROUND WATER:
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **5420**
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **PETROLEUM-GASOLINE**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **5420**
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **PETROLEUM-OTHER**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:

Leaking Underground Storage Tanks (LUST)

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **5420**

SITE NAME: **SKYWAY MARKET**

CONTAMINANT NAME: **POLYCYCLIC AROMATIC HYDROCARBONS**

GROUND WATER: **SUSPECTED**

SURFACE WATER:

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

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No Further Action Sites (NFA)

MAP ID# 3

Distance from Property: 0.017 mi. (90 ft.) W
Elevation: 430 ft. (Equal to TP)

SITE INFORMATION

GEOSEARCH ID: 6805845NFA
NAME: EAT EM UP HUT
ADDRESS: 12640 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

FACILITY SITE ID: 6805845
CLEANUP SITE ID: 5420
ALTERNATE SITE NAME(s): NOT REPORTED
NFA REASON: NOT REPORTED
SITE STATUS: NOT REPORTED
REGION: NOT REPORTED
RESPONSIBLE UNIT: NOT REPORTED
RANK: NOT REPORTED
VCP?: YES
NFA DATE: 9/16/2010
CONTAMINANT NAME: NOT REPORTED
GROUND WATER: NOT REPORTED
SURFACE WATER: NOT REPORTED
SOIL: NOT REPORTED
SEDIMENT: NOT REPORTED
AIR: NOT REPORTED
BEDROCK: NOT REPORTED

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Resource Conservation & Recovery Act - Non-Generator (RCRANGR10)

MAP ID# 3

Distance from Property: 0.017 mi. (90 ft.) W
Elevation: 430 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: WAH000047655

NAME: KING COUNTY LIBRARY SYSTEM

ADDRESS: 12690 RENTON AVE S
SEATTLE, WA 98178

CONTACT NAME: GREG SMITH

CONTACT ADDRESS: 960 NEWPORT WAY NW
ISSAQUAH WA 98027

CONTACT PHONE: 425-369-3237

NON-NOTIFIER:

DATE RECEIVED BY AGENCY: 03/05/2015

OWNER TYPE: PRIVATE

OWNER NAME: KING COUNTY LIBRARY SYSTEM

OPERATOR TYPE: PRIVATE

OPERATOR NAME: KING COUNTY LIBRARY SYSTEM

CERTIFICATION

CERTIFICATION NAME:

CERTIFICATION TITLE:

CERTIFICATION SIGNED DATE:

WASHINGTON DEPARTMENT OF WA
ECOLOGY

03/05/2015

ELECTRONIC FILER

EF

10/16/2014

GREG SMITH

DIRECTOR OF FACILITIES MANAGEMENT

10/15/2014

ELECTRONIC FILER

EF

03/04/2015

GREG SMITH

DIRECTOR OF FACILITIES MANAGEMENT

02/27/2015

INDUSTRY CLASSIFICATION (NAICS)

512290 - OTHER SOUND RECORDING INDUSTRIES

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **05/08/2018**

SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**

TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**

TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**

NON TDSFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**

CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**

UNDERGROUND INJECTION: **NO**

MIXED WASTE GENERATOR: **NO**

UNIVERSAL WASTE DESTINATION FACILITY: **NO**

RECYCLER: **NO**

TRANSFER FACILITY: **NO**

TRANSPORTER: **NO**

USED OIL FUEL BURNER: **NO**

ONSITE BURNER EXEMPTION: **NO**

USED OIL PROCESSOR: **NO**

FURNACE EXEMPTION: **NO**

USED OIL FUEL MARKETER TO BURNER: **NO**

USED OIL REFINER: **NO**

SPECIFICATION USED OIL MARKETER: **NO**

USED OIL TRANSFER FACILITY: **NO**

USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS - **NO EVALUATIONS REPORTED** -

VIOLATIONS - **NO VIOLATIONS REPORTED** -

ENFORCEMENTS - **NO ENFORCEMENTS REPORTED** -

HAZARDOUS WASTE

Resource Conservation & Recovery Act - Non-Generator (RCRANGR10)

D008 LEAD

WT02

UNIVERSAL WASTE - NO UNIVERSAL WASTE REPORTED -

CORRECTIVE ACTION AREA - NO CORRECTIVE ACTION AREA INFORMATION REPORTED -

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

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Spills Listing (SPILLS)

MAP ID# 3

Distance from Property: 0.017 mi. (90 ft.) W

Elevation: 430 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **39126**

INCIDENT ID: **39126**

LOCATION NAME:

ADDRESS: **12640 RENTON AVE S**

SEATTLE, WA

COUNTY: **KING**

SITE DETAILS

INCIDENT DATE: **12/29/2004**

INCIDENT CATEGORY: **NON OIL**

INCIDENT CATEGORY DESCRIPTION:

PRODUCT: **GASOLINE**

SPILL QUANTITY:

MEDIUM TYPE DESCRIPTION: **LAND**

MEDIUM: **LAND**

CAUSE TYPE DESCRIPTION:

CAUSE:

SOURCE TYPE DESCRIPTION:

SOURCE:

BUSINESS NAME:

IMPACT: **SOIL CONTAMINATION**

COMMENTS:

[Back to Report Summary](#)

Underground Storage Tanks (UST)

MAP ID# 3

Distance from Property: 0.017 mi. (90 ft.) W
Elevation: 430 ft. (Equal to TP)

SITE INFORMATION

GEOSEARCH ID: 619116
FACILITY SITE ID: 6805845
UST SITE ID: 619116
NAME: SKYWAY MARKET
ADDRESS: 12640 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

ALTERNATE SITE NAME(s): ARCO,EAT EM UP HUT,SKYWAY LIBRARY (KCLS)
FACILITY STATUS: NO
ACTIVE TAG:
RESPONSIBLE UNIT: NORTHWEST
UBI NUMBER:

TANK(s) INFORMATION

UST SITE ID: 619116
TANK NAME: TP1
TANK STATUS: CLOSURE IN PROCESS
INSTALL DATE:
STATUS DATE: 12/03/2014
UPGRADE DATE:
PERMANENTLY CLOSED DATE: 09/15/2014
PERMIT EXPIRATION DATE:

TANK MATERIAL

MATERIAL:
CONSTRUCTION:
CORROSION PROTECTION:
MANIFOLDED TANK:
RELEASE DETECTION:
TIGHTNESS TEST:
SPILL PREVENTION:
OVERFILL PREVENTION:

PIPE MATERIAL

MATERIAL:
CONSTRUCTION:
CORROSION PROTECTION:
STEEL FLEX CONNECTOR AT TANK:
STEEL FLEX CONNECTOR AT DISPENSER/PUMP:
1ST RELEASE DETECTION:
2ND RELEASE DETECTION:
PUMPING SYSTEM:

UST SITE ID: 619116

Underground Storage Tanks (UST)

TANK NAME: 1
TANK STATUS: **REMOVED**
INSTALL DATE:
STATUS DATE:
UPGRADE DATE:
PERMANENTLY CLOSED DATE:
PERMIT EXPIRATION DATE:

TANK MATERIAL

MATERIAL:
CONSTRUCTION:
CORROSION PROTECTION:
MANIFOLDED TANK:
RELEASE DETECTION:
TIGHTNESS TEST:
SPILL PREVENTION:
OVERFILL PREVENTION:

PIPE MATERIAL

MATERIAL:
CONSTRUCTION:
CORROSION PROTECTION:
STEEL FLEX CONNECTOR AT TANK:
STEEL FLEX CONNECTOR AT DISPENSER/PUMP:
1ST RELEASE DETECTION:
2ND RELEASE DETECTION:
PUMPING SYSTEM:

UST SITE ID: **619116**
TANK NAME: 2
TANK STATUS: **REMOVED**
INSTALL DATE:
STATUS DATE: **04/15/2005**
UPGRADE DATE:
PERMANENTLY CLOSED DATE:
PERMIT EXPIRATION DATE:

TANK MATERIAL

MATERIAL:
CONSTRUCTION:
CORROSION PROTECTION:
MANIFOLDED TANK:
RELEASE DETECTION:
TIGHTNESS TEST:
SPILL PREVENTION:
OVERFILL PREVENTION:

PIPE MATERIAL

MATERIAL:
CONSTRUCTION:
CORROSION PROTECTION:

Underground Storage Tanks (UST)

STEEL FLEX CONNECTOR AT TANK:

STEEL FLEX CONNECTOR AT DISPENSER/PUMP:

1ST RELEASE DETECTION:

2ND RELEASE DETECTION:

PUMPING SYSTEM:

COMPARTMENTS(s) INFORMATION

UST SITE ID: **619116**

TANK NAME: **TP1**

COMPARTMENT NUMBER: **1**

STORED SUBSTANCE: **USED OIL/WASTE OIL**

USED SUBSTANCE: **RECYCLED (USED OIL)**

COMPARTMENT CAPACITY: **200**

UST SITE ID: **619116**

TANK NAME: **1**

COMPARTMENT NUMBER: **0**

STORED SUBSTANCE:

USED SUBSTANCE:

COMPARTMENT CAPACITY:

UST SITE ID: **619116**

TANK NAME: **2**

COMPARTMENT NUMBER: **0**

STORED SUBSTANCE:

USED SUBSTANCE:

COMPARTMENT CAPACITY:

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Voluntary Cleanup Program Sites (VCP)

MAP ID# 3

Distance from Property: 0.017 mi. (90 ft.) W

Elevation: 430 ft. (Equal to TP)

SITE INFORMATION

GEOSEARCH ID: **5420VCP**

FACILITY SITE ID: **6805845**

CLEANUP SITE ID: **5420**

ADDRESS: **12640 RENTON AVE S**
SEATTLE, WA 98178

COUNTY: **KING**

SITE DETAILS

SITE NAME: **SKYWAY MARKET**

ALTERNATE SITE NAME(s): **ARCO,EAT EM UP HUT,SKYWAY LIBRARY (KCLS)**

SITE STATUS: **CLEANUP STARTED**

SITE RANK:

REGION: **NORTHWEST**

RESPONSIBLE UNIT: **NORTHWEST**

HAS INSTITUTIONAL CONTROL?:

PAST VCP?: **YES**

CURRENT VCP?: **YES**

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: **5420**

SITE NAME: **SKYWAY MARKET**

CONTAMINANT NAME: **BENZENE**

GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**

SURFACE WATER:

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **5420**

SITE NAME: **SKYWAY MARKET**

CONTAMINANT NAME: **LEAD**

GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**

SURFACE WATER:

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **5420**

SITE NAME: **SKYWAY MARKET**

Voluntary Cleanup Program Sites (VCP)

CONTAMINANT NAME: **METALS PRIORITY POLLUTANTS**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **SUSPECTED**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **5420**
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **NON-HALOGENATED SOLVENTS**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **5420**
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **PETROLEUM-DIESEL**
GROUND WATER:
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **5420**
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **PETROLEUM-GASOLINE**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **5420**
SITE NAME: **SKYWAY MARKET**
CONTAMINANT NAME: **PETROLEUM-OTHER**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**

Voluntary Cleanup Program Sites (VCP)

SURFACE WATER:

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **5420**

SITE NAME: **SKYWAY MARKET**

CONTAMINANT NAME: **POLYCYCLIC AROMATIC HYDROCARBONS**

GROUND WATER: **SUSPECTED**

SURFACE WATER:

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

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Spills Listing (SPILLS)

MAP ID# 4

Distance from Property: 0.018 mi. (95 ft.) ESE
Elevation: 430 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: 110717

INCIDENT ID: 110717

LOCATION NAME:

ADDRESS: S 126TH ST
SEATTLE, WA 98178

COUNTY: KING

SITE DETAILS

INCIDENT DATE: 4/1/2020

INCIDENT CATEGORY: OIL SPILL

INCIDENT CATEGORY DESCRIPTION: OIL SPILL

PRODUCT: MINERAL OIL/TRANSFORMER OIL

SPILL QUANTITY: 2 GALS

MEDIUM TYPE DESCRIPTION: LAND

MEDIUM: SOIL

CAUSE TYPE DESCRIPTION:

CAUSE: NATURAL PHENOMENON

SOURCE TYPE DESCRIPTION: FACILITY

SOURCE: POWER GENERATION UTILITY

BUSINESS NAME:

IMPACT: SOIL CONTAMINATION

COMMENTS:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 5

Distance from Property: 0.096 mi. (507 ft.) W
Elevation: 422 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 10235CSCSL
FACILITY SITE ID: 71287498
CLEANUP SITE ID: 10235
ADDRESS: 12603 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: FRANKS
ALTERNATE SITE NAME(s): SHAYS JET SKI RENTALS
SITE STATUS: CLEANUP STARTED
SITE RANK: 1 - HIGHEST ASSESSED RISK
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 10235
SITE NAME: FRANKS
CONTAMINANT NAME: BENZENE
GROUND WATER:
SURFACE WATER:
SOIL: SUSPECTED
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 10235
SITE NAME: FRANKS
CONTAMINANT NAME: PETROLEUM-GASOLINE
GROUND WATER:
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 10235
SITE NAME: FRANKS

Confirmed and Suspected Contaminated Sites List (CSCSL)

CONTAMINANT NAME: PETROLEUM-OTHER

GROUND WATER:

SURFACE WATER:

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

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Facility/ Site Database (FSD)

MAP ID# 5

Distance from Property: 0.096 mi. (507 ft.) W
Elevation: 422 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 71287498

NAME: FRANKS

ADDRESS: 12603 RENTON AVE S
SEATTLE, WA 98178

SITE STATUS: ACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: LUST FACILITY

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: 101878

START DATE: 07/12/1994

END DATE: NOT REPORTED

INTERACTION DESCRIPTION: UNDERGROUND STORAGE TANK

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: 101878

START DATE: 07/27/1975

END DATE: NOT REPORTED

INTERACTION DESCRIPTION: LUST FACILITY

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: 101878

START DATE: 07/12/94

END DATE: 03/06/01

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Hazardous Sites List (HSL)

MAP ID# 5

Distance from Property: 0.096 mi. (507 ft.) W
Elevation: 422 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 10235HSL
FACILITY SITE ID: 71287498
CLEANUP SITE ID: 10235
ADDRESS: 12603 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: FRANKS
ALTERNATE SITE NAME(s): SHAYS JET SKI RENTALS
SITE STATUS: CLEANUP STARTED
SITE RANK: 1 - HIGHEST ASSESSED RISK
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 10235
SITE NAME: FRANKS
CONTAMINANT NAME: BENZENE
GROUND WATER:
SURFACE WATER:
SOIL: SUSPECTED
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 10235
SITE NAME: FRANKS
CONTAMINANT NAME: PETROLEUM-GASOLINE
GROUND WATER:
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 10235
SITE NAME: FRANKS

Hazardous Sites List (HSL)

CONTAMINANT NAME: **PETROLEUM-OTHER**

GROUND WATER:

SURFACE WATER:

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

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Leaking Underground Storage Tanks (LUST)

MAP ID# 5

Distance from Property: 0.096 mi. (507 ft.) W
Elevation: 422 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 10235LST
NAME: FRANKS
ADDRESS: 12603 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

FACILITY SITE ID: 71287498
SITE ID: 10235
CLEANUP UNIT NAME:
CLEANUP UNIT TYPE:
RESPONSIBLE SECTION: NORTHWEST
REGION: NORTHWEST
PROCESS TYPE:
LUST STATUS TYPE: LUST - CLEANUP STARTED
LUST STATUS DATE: 07/01/2011
MEDIA:

FACILITY SITE ID: 71287498
SITE ID: 10235
CLEANUP UNIT NAME: FRANKS
CLEANUP UNIT TYPE: UPLAND
RESPONSIBLE SECTION: NORTHWEST
REGION: NORTHWEST
PROCESS TYPE: INDEPENDENT ACTION
LUST STATUS TYPE: REPORTED CLEANED UP
LUST STATUS DATE: 3/6/2001
MEDIA:

FACILITY SITE ID: 71287498
SITE ID: 10235
CLEANUP UNIT NAME: FRANKS
CLEANUP UNIT TYPE: UPLAND
RESPONSIBLE SECTION: NORTHWEST
REGION: NORTHWEST
PROCESS TYPE: INDEPENDENT ACTION
LUST STATUS TYPE: CLEANUP STARTED
LUST STATUS DATE: 6/1/1995
MEDIA:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 10235
SITE NAME: FRANKS
CONTAMINANT NAME: BENZENE

Leaking Underground Storage Tanks (LUST)

GROUND WATER:
SURFACE WATER:
SOIL: **SUSPECTED**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **10235**
SITE NAME: **FRANKS**
CONTAMINANT NAME: **PETROLEUM-GASOLINE**
GROUND WATER:
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **10235**
SITE NAME: **FRANKS**
CONTAMINANT NAME: **PETROLEUM-OTHER**
GROUND WATER:
SURFACE WATER:
SOIL: **SUSPECTED**
SEDIMENT:
AIR:
BEDROCK:

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Underground Storage Tanks (UST)

MAP ID# 5

Distance from Property: 0.096 mi. (507 ft.) W
Elevation: 422 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 101878
FACILITY SITE ID: 71287498
UST SITE ID: 101878
NAME: FRANKS
ADDRESS: 12603 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

ALTERNATE SITE NAME(s): SHAYS JET SKI RENTALS
FACILITY STATUS: NO
ACTIVE TAG:
RESPONSIBLE UNIT: NORTHWEST
UBI NUMBER:

TANK(s) INFORMATION

UST SITE ID: 101878
TANK NAME: 3
TANK STATUS: REMOVED
INSTALL DATE: 09/17/1987
STATUS DATE: 08/06/1996
UPGRADE DATE:
PERMANENTLY CLOSED DATE:
PERMIT EXPIRATION DATE:

TANK MATERIAL

MATERIAL: DIELECTRIC COATED STEEL
CONSTRUCTION: SINGLE WALL TANK
CORROSION PROTECTION: SACRIFICIAL ANODE
MANIFOLDED TANK:
RELEASE DETECTION: MANUAL INVENTORY CONTROL (DAILY)
TIGHTNESS TEST:
SPILL PREVENTION: SPILL BUCKET/SPILL BOX
OVERFILL PREVENTION: NONE

PIPE MATERIAL

MATERIAL: FIBERGLASS
CONSTRUCTION: SINGLE WALL PIPE
CORROSION PROTECTION: CORROSION RESISTANT
STEEL FLEX CONNECTOR AT TANK:
STEEL FLEX CONNECTOR AT DISPENSER/PUMP:
1ST RELEASE DETECTION: SAFE SUCTION (NO LEAK DETECTION)
2ND RELEASE DETECTION:
PUMPING SYSTEM:

UST SITE ID: 101878

Underground Storage Tanks (UST)

TANK NAME: 4

TANK STATUS: REMOVED

INSTALL DATE: 09/17/1987

STATUS DATE: 08/06/1996

UPGRADE DATE:

PERMANENTLY CLOSED DATE:

PERMIT EXPIRATION DATE:

TANK MATERIAL

MATERIAL: DIELECTRIC COATED STEEL

CONSTRUCTION: SINGLE WALL TANK

CORROSION PROTECTION: SACRIFICIAL ANODE

MANIFOLDED TANK:

RELEASE DETECTION: MANUAL INVENTORY CONTROL (DAILY)

TIGHTNESS TEST:

SPILL PREVENTION: SPILL BUCKET/SPILL BOX

OVERFILL PREVENTION: NONE

PIPE MATERIAL

MATERIAL: FIBERGLASS

CONSTRUCTION: SINGLE WALL PIPE

CORROSION PROTECTION: CORROSION RESISTANT

STEEL FLEX CONNECTOR AT TANK:

STEEL FLEX CONNECTOR AT DISPENSER/PUMP:

1ST RELEASE DETECTION: SAFE SUCTION (NO LEAK DETECTION)

2ND RELEASE DETECTION:

PUMPING SYSTEM:

UST SITE ID: 101878

TANK NAME: 1

TANK STATUS: REMOVED

INSTALL DATE: 07/27/1975

STATUS DATE: 08/06/1996

UPGRADE DATE:

PERMANENTLY CLOSED DATE:

PERMIT EXPIRATION DATE:

TANK MATERIAL

MATERIAL:

CONSTRUCTION: SINGLE WALL TANK

CORROSION PROTECTION: SACRIFICIAL ANODE

MANIFOLDED TANK:

RELEASE DETECTION: MANUAL INVENTORY CONTROL (DAILY)

TIGHTNESS TEST:

SPILL PREVENTION: SPILL BUCKET/SPILL BOX

OVERFILL PREVENTION: NONE

PIPE MATERIAL

MATERIAL: FIBERGLASS

CONSTRUCTION: SINGLE WALL PIPE

CORROSION PROTECTION: CORROSION RESISTANT

Underground Storage Tanks (UST)

STEEL FLEX CONNECTOR AT TANK:

STEEL FLEX CONNECTOR AT DISPENSER/PUMP:

1ST RELEASE DETECTION: **SAFE SUCTION (NO LEAK DETECTION)**

2ND RELEASE DETECTION:

PUMPING SYSTEM:

UST SITE ID: **101878**

TANK NAME: **2**

TANK STATUS: **REMOVED**

INSTALL DATE: **07/27/1975**

STATUS DATE: **08/06/1996**

UPGRADE DATE:

PERMANENTLY CLOSED DATE:

PERMIT EXPIRATION DATE:

TANK MATERIAL

MATERIAL:

CONSTRUCTION: **SINGLE WALL TANK**

CORROSION PROTECTION: **SACRIFICIAL ANODE**

MANIFOLDED TANK:

RELEASE DETECTION: **MANUAL INVENTORY CONTROL (DAILY)**

TIGHTNESS TEST:

SPILL PREVENTION: **SPILL BUCKET/SPILL BOX**

OVERFILL PREVENTION: **NONE**

PIPE MATERIAL

MATERIAL: **FIBERGLASS**

CONSTRUCTION: **SINGLE WALL PIPE**

CORROSION PROTECTION: **CORROSION RESISTANT**

STEEL FLEX CONNECTOR AT TANK:

STEEL FLEX CONNECTOR AT DISPENSER/PUMP:

1ST RELEASE DETECTION: **SAFE SUCTION (NO LEAK DETECTION)**

2ND RELEASE DETECTION:

PUMPING SYSTEM:

COMPARTMENTS(s) INFORMATION

UST SITE ID: **101878**

TANK NAME: **3**

COMPARTMENT NUMBER: **1**

STORED SUBSTANCE: **UNLEADED GASOLINE**

USED SUBSTANCE: **MOTOR FUEL FOR VEHICLES**

COMPARTMENT CAPACITY:

UST SITE ID: **101878**

TANK NAME: **4**

COMPARTMENT NUMBER: **1**

STORED SUBSTANCE: **UNLEADED GASOLINE**

USED SUBSTANCE: **MOTOR FUEL FOR VEHICLES**

COMPARTMENT CAPACITY:

Underground Storage Tanks (UST)

UST SITE ID: **101878**

TANK NAME: **1**

COMPARTMENT NUMBER: **1**

STORED SUBSTANCE:

USED SUBSTANCE: **MOTOR FUEL FOR VEHICLES**

COMPARTMENT CAPACITY:

UST SITE ID: **101878**

TANK NAME: **2**

COMPARTMENT NUMBER: **1**

STORED SUBSTANCE: **LEADED GASOLINE**

USED SUBSTANCE: **MOTOR FUEL FOR VEHICLES**

COMPARTMENT CAPACITY:

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Dry Cleaning Facilities (CLEANERS)

MAP ID# 6

Distance from Property: 0.112 mi. (591 ft.) NW
Elevation: 422 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 56652786

FACILITY ID: 56652786

NAME: BOATHOUSE INC RENTON SKYWAY THE

ADDRESS: 12548 RENTON AVE S
SEATTLE, WA 98178

SITE DETAILS

SIC: 7211

SIC DESCRIPTION: POWER LAUNDRIES, FAMILY AND COMMERCIAL

SIC: 7216

SIC DESCRIPTION: DRYCLEANING PLANTS, EXCEPT RUG CLEANING

SIC: 7219

SIC DESCRIPTION: LAUNDRY AND GARMENT SERVICES, NOT ELSEWHERE CLASSIFIED

SIC:

SIC DESCRIPTION:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 6

Distance from Property: 0.112 mi. (591 ft.) NW
Elevation: 422 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 567CSCSL
FACILITY SITE ID: 56652786
CLEANUP SITE ID: 567
ADDRESS: 12548 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: BOATHOUSE INC RENTON SKYWAY
ALTERNATE SITE NAME(s): BOATHOUSE INC RENTON SKYWAY THE,KENS SKYWAY CLEANERS,SKYWAY MART &
SMOKE,THE BOATHOUSE
SITE STATUS: CLEANUP STARTED
SITE RANK: 3 - MODERATE RISK
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?: YES
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 567
SITE NAME: BOATHOUSE INC RENTON SKYWAY
CONTAMINANT NAME: CONVENTIONAL CONTAMINANTS, ORGANIC
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 567
SITE NAME: BOATHOUSE INC RENTON SKYWAY
CONTAMINANT NAME: HALOGENATED ORGANICS
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 567

Confirmed and Suspected Contaminated Sites List (CSCSL)

SITE NAME: **BOATHOUSE INC RENTON SKYWAY**

CONTAMINANT NAME: **METALS PRIORITY POLLUTANTS**

GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**

SURFACE WATER:

SOIL:

SEDIMENT:

AIR:

BEDROCK:

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Facility/ Site Database (FSD)

MAP ID# 6

Distance from Property: 0.112 mi. (591 ft.) NW
Elevation: 422 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 56652786

NAME: BOATHOUSE INC RENTON SKYWAY THE

ADDRESS: 12548 RENTON AVE S

SEATTLE, WA 98178

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: HAZARDOUS WASTE GENERATOR

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAD988517041

START DATE: 02/01/1993

END DATE: 12/31/1993

INTERACTION DESCRIPTION: STATE CLEANUP SITE

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: NOT REPORTED

START DATE: 02/02/2000

END DATE: 07/05/2002

INTERACTION DESCRIPTION: HAZARDOUS WASTE GENERATOR

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAD988517041

START DATE: 09/14/2001

END DATE: 12/31/2001

INTERACTION DESCRIPTION: VOLUNTARY CLEANUP SITES

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: NW0926

START DATE: 07/05/2002

END DATE: 01/31/2007

INTERACTION DESCRIPTION: STATE CLEANUP SITE

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: NOT REPORTED

START DATE: 01/31/2007

END DATE: NOT REPORTED

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Hazardous Sites List (HSL)

MAP ID# 6

Distance from Property: 0.112 mi. (591 ft.) NW
Elevation: 422 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 567HSL
FACILITY SITE ID: 56652786
CLEANUP SITE ID: 567
ADDRESS: 12548 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: BOATHOUSE INC RENTON SKYWAY
ALTERNATE SITE NAME(s): BOATHOUSE INC RENTON SKYWAY THE,KENS SKYWAY CLEANERS,SKYWAY MART &
SMOKE,THE BOATHOUSE
SITE STATUS: CLEANUP STARTED
SITE RANK: 3 - MODERATE RISK
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?: YES
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 567
SITE NAME: BOATHOUSE INC RENTON SKYWAY
CONTAMINANT NAME: CONVENTIONAL CONTAMINANTS, ORGANIC
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 567
SITE NAME: BOATHOUSE INC RENTON SKYWAY
CONTAMINANT NAME: HALOGENATED ORGANICS
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 567

Hazardous Sites List (HSL)

SITE NAME: **BOATHOUSE INC RENTON SKYWAY**

CONTAMINANT NAME: **METALS PRIORITY POLLUTANTS**

GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**

SURFACE WATER:

SOIL:

SEDIMENT:

AIR:

BEDROCK:

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Resource Conservation & Recovery Act - Non-Generator (RCRANGR10)

MAP ID# 6

Distance from Property: 0.112 mi. (591 ft.) NW
Elevation: 422 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: WAD988517041

NAME: BOATHOUSE INC RENTON SKYWAY THE

ADDRESS: 12548 RENTON AVE S
SEATTLE, WA 98118

CONTACT NAME: JOHN LIMANTZAKIS

CONTACT ADDRESS: 704 NE NORTHLAKE WAY #100
SEATTLE WA 98105

CONTACT PHONE: 206-632-1222

NON-NOTIFIER:

DATE RECEIVED BY AGENCY: 02/19/2002

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
SEE PAPER	FORM	09/12/2001
JOHN A LIMANTZAKIS	LEGAL OWNER	02/19/2002
WASHINGTON DEPARTMENT OF WA ECOLOGY		07/02/1997
WASHINGTON DEPARTMENT OF WA ECOLOGY		02/19/2002
ELECTRONIC FILER	EF	12/31/1994
ELECTRONIC FILER	EF	07/01/1997
ELECTRONIC FILER	EF	09/14/2001
ELECTRONIC FILER	EF	02/18/2002
ELECTRONIC FILER	EF	02/19/2002
TAE YOUNG YANG	AUTHORIZED REPR	02/19/2002

INDUSTRY CLASSIFICATION (NAICS)

81232 - DRYCLEANING AND LAUNDRY SERVICES (EXCEPT COIN-OPERATED)

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **05/10/2018**

SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**

TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**

TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**

NON TDSFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**

CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**

UNDERGROUND INJECTION: **NO**

MIXED WASTE GENERATOR: **NO**

UNIVERSAL WASTE DESTINATION FACILITY: **NO**

RECYCLER: **NO**

TRANSFER FACILITY: **NO**

TRANSPORTER: **NO**

USED OIL FUEL BURNER: **NO**

ONSITE BURNER EXEMPTION: **NO**

USED OIL PROCESSOR: **NO**

FURNACE EXEMPTION: **NO**

USED OIL FUEL MARKETER TO BURNER: **NO**

USED OIL REFINER: **NO**

SPECIFICATION USED OIL MARKETER: **NO**

USED OIL TRANSFER FACILITY: **NO**

USED OIL TRANSPORTER: **NO**

Resource Conservation & Recovery Act - Non-Generator (RCRANGR10)

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS

07/24/1996 CAV COMPLIANCE ASSISTANCE VISIT

VIOLATIONS - NO VIOLATIONS REPORTED -

ENFORCEMENTS - NO ENFORCEMENTS REPORTED -

HAZARDOUS WASTE

F002 THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

UNIVERSAL WASTE

WASTE TYPE:	ACCUMULATED WASTE ON-SITE:	GENERATED WASTE ON-SITE:	SOURCE TYPE:
BATTERIES	UNKNOWN	UNKNOWN	ANNUAL/BIENNIAL REPORT
LAMPS	UNKNOWN	UNKNOWN	ANNUAL/BIENNIAL REPORT
PESTICIDES	UNKNOWN	UNKNOWN	ANNUAL/BIENNIAL REPORT
MERCURY CONTAINING EQUIPMENT	UNKNOWN	UNKNOWN	ANNUAL/BIENNIAL REPORT

CORRECTIVE ACTION AREA - NO CORRECTIVE ACTION AREA INFORMATION REPORTED -

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

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Voluntary Cleanup Program Sites (VCP)

MAP ID# 6

Distance from Property: 0.112 mi. (591 ft.) NW
Elevation: 422 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 567VCP
FACILITY SITE ID: 56652786
CLEANUP SITE ID: 567
ADDRESS: 12548 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: BOATHOUSE INC RENTON SKYWAY
ALTERNATE SITE NAME(s): BOATHOUSE INC RENTON SKYWAY THE,KENS SKYWAY CLEANERS,SKYWAY MART &
SMOKE,THE BOATHOUSE
SITE STATUS: CLEANUP STARTED
SITE RANK: 3 - MODERATE RISK
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?: YES
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 567
SITE NAME: BOATHOUSE INC RENTON SKYWAY
CONTAMINANT NAME: CONVENTIONAL CONTAMINANTS, ORGANIC
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 567
SITE NAME: BOATHOUSE INC RENTON SKYWAY
CONTAMINANT NAME: HALOGENATED ORGANICS
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 567

Voluntary Cleanup Program Sites (VCP)

SITE NAME: **BOATHOUSE INC RENTON SKYWAY**

CONTAMINANT NAME: **METALS PRIORITY POLLUTANTS**

GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**

SURFACE WATER:

SOIL:

SEDIMENT:

AIR:

BEDROCK:

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Facility/ Site Database (FSD)

[MAP ID# 7](#)

Distance from Property: 0.118 mi. (623 ft.) WNW
Elevation: 422 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 56365941

NAME: FOREIGN SPECIALTIES

ADDRESS: 12561 RENTON AVE S
SEATTLE, WA 98178-3710

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: UNDERGROUND STORAGE TANK

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: 795

START DATE: 02/29/2000

END DATE: 05/03/2000

INTERACTION DESCRIPTION: UNDERGROUND STORAGE TANK

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: 795

START DATE: 03/01/00

END DATE: 05/03/00

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Underground Storage Tanks (UST)

MAP ID# 7

Distance from Property: 0.118 mi. (623 ft.) WNW
Elevation: 422 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 795
FACILITY SITE ID: 56365941
UST SITE ID: 795
NAME: FOREIGN SPECIALTIES
ADDRESS: 12561 RENTON AVE SOUTH
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

ALTERNATE SITE NAME(s):
FACILITY STATUS: NO
ACTIVE TAG:
RESPONSIBLE UNIT: NORTHWEST
UBI NUMBER:

TANK(s) INFORMATION

UST SITE ID: 795
TANK NAME: 1
TANK STATUS: CLOSED IN PLACE - NO SITE ASSESSMENT FOUND
INSTALL DATE: 12/31/1964
STATUS DATE: 08/06/1996
UPGRADE DATE:
PERMANENTLY CLOSED DATE: 09/26/1990
PERMIT EXPIRATION DATE:

TANK MATERIAL

MATERIAL: STEEL
CONSTRUCTION:
CORROSION PROTECTION:
MANIFOLDED TANK:
RELEASE DETECTION:
TIGHTNESS TEST:
SPILL PREVENTION:
OVERFILL PREVENTION:

PIPE MATERIAL

MATERIAL: STEEL
CONSTRUCTION:
CORROSION PROTECTION:
STEEL FLEX CONNECTOR AT TANK:
STEEL FLEX CONNECTOR AT DISPENSER/PUMP:
1ST RELEASE DETECTION:
2ND RELEASE DETECTION:
PUMPING SYSTEM:

UST SITE ID: 795

Underground Storage Tanks (UST)

TANK NAME: 2
TANK STATUS: **CLOSED IN PLACE - NO SITE ASSESSMENT FOUND**
INSTALL DATE: 12/31/1964
STATUS DATE: 08/06/1996
UPGRADE DATE:
PERMANENTLY CLOSED DATE: 09/26/1990
PERMIT EXPIRATION DATE:

TANK MATERIAL

MATERIAL: **STEEL**
CONSTRUCTION:
CORROSION PROTECTION:
MANIFOLDED TANK:
RELEASE DETECTION:
TIGHTNESS TEST:
SPILL PREVENTION:
OVERFILL PREVENTION:

PIPE MATERIAL

MATERIAL: **STEEL**
CONSTRUCTION:
CORROSION PROTECTION:
STEEL FLEX CONNECTOR AT TANK:
STEEL FLEX CONNECTOR AT DISPENSER/PUMP:
1ST RELEASE DETECTION:
2ND RELEASE DETECTION:
PUMPING SYSTEM:

COMPARTMENTS(s) INFORMATION

UST SITE ID: 795
TANK NAME: 1
COMPARTMENT NUMBER: 1
STORED SUBSTANCE: **LEADED GASOLINE**
USED SUBSTANCE:
COMPARTMENT CAPACITY:

UST SITE ID: 795
TANK NAME: 2
COMPARTMENT NUMBER: 1
STORED SUBSTANCE: **UNLEADED GASOLINE**
USED SUBSTANCE:
COMPARTMENT CAPACITY:

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Facility/ Site Database (FSD)

MAP ID# 8

Distance from Property: 0.191 mi. (1,008 ft.) ENE
Elevation: 439 ft. (Higher than TP)

SITE INFORMATION

FACILITY SITE ID: 913282

NAME: RENTON SCHOOL DIST FAC & OPS BLDG

ADDRESS: 7812 S 124TH ST

SEATTLE, WA 98178

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: HAZARDOUS WASTE GENERATOR

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAH000032688

START DATE: 03/03/2008

END DATE: 12/31/2008

INTERACTION DESCRIPTION: HAZ WASTE MANAGEMENT ACTIVITY

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAH000032688

START DATE: 12/31/2008

END DATE: 12/31/2010

INTERACTION DESCRIPTION: HAZARDOUS WASTE GENERATOR

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAH000032688

START DATE: 12/31/2010

END DATE: NOT REPORTED

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Facility/ Site Database (FSD)

MAP ID# 8

Distance from Property: 0.191 mi. (1,008 ft.) ENE
Elevation: 439 ft. (Higher than TP)

SITE INFORMATION

FACILITY SITE ID: 9587

NAME: RENTON SECONDARY LEARNING CENTER

ADDRESS: 7812 SOUTH 124TH STREET

RENTON, WA 98178-4830

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: CONSTRUCTION SW GP

ECOLOGY PROGRAM: WATQUAL

PROGRAM ID: WAR124555

START DATE: 07/30/2010

END DATE: 08/08/2013

INTERACTION DESCRIPTION: CONSTRUCTION SW GP

ECOLOGY PROGRAM: WATQUAL

PROGRAM ID: WAR124555

START DATE: 07/30/10

END DATE: 08/08/13

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Facility/ Site Database (FSD)

[MAP ID# 9](#)

Distance from Property: 0.229 mi. (1,209 ft.) SW

Elevation: 424 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 13523

NAME: TUSCANY RIDGE

ADDRESS: 7425 S 129TH ST

SEATTLE, WA 98178

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: CONSTRUCTION SW GP

ECOLOGY PROGRAM: WATQUAL

PROGRAM ID: WAR007670

START DATE: 10/23/2006

END DATE: 12/16/2010

INTERACTION DESCRIPTION: CONSTRUCTION SW GP

ECOLOGY PROGRAM: WATQUAL

PROGRAM ID: WAR007670

START DATE: 10/23/06

END DATE: 12/16/10

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Facility/ Site Database (FSD)

MAP ID# 10

Distance from Property: 0.284 mi. (1,500 ft.) SSW
Elevation: 329 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 2246

NAME: FLORAL CREST NURSERY

ADDRESS: 7432 S 131ST ST & LANGSTON RD
SEATTLE, WA 98178

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: VOLUNTARY CLEANUP SITES

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: NW0261

START DATE: 05/26/1999

END DATE: 09/15/2004

INTERACTION DESCRIPTION: STATE CLEANUP SITE

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: NOT REPORTED

START DATE: NOT REPORTED

END DATE: 09/17/1999

INTERACTION DESCRIPTION: STATE CLEANUP SITE

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: NOT REPORTED

START DATE: NOT REPORTED

END DATE: 09/17/99

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Facility/ Site Database (FSD)

[MAP ID# 10](#)

Distance from Property: 0.284 mi. (1,500 ft.) SSW

Elevation: 329 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 41435438

NAME: FLORAL CREST

ADDRESS: 7432 S 131ST CT

SEATTLE, WA 98178

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: HAZARDOUS WASTE GENERATOR

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAD982657553

START DATE: 05/04/1989

END DATE: 12/31/1998

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No Further Action Sites (NFA)

MAP ID# 10

Distance from Property: 0.284 mi. (1,500 ft.) SSW
Elevation: 329 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 2246NFA
NAME: FLORAL CREST NURSERY
ADDRESS: 7432 S 131ST ST & LANGSTON RD
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

FACILITY SITE ID: 2246
CLEANUP SITE ID: 1363
ALTERNATE SITE NAME(s): FLORALHURST GREENHOUSE,GEORGE KUACHI
NFA REASON: NFA-VOLUNTARY CLEANUP PROGRAM REVIEW
SITE STATUS: NFA
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
RANK: NOT REPORTED
VCP?: NOT REPORTED
NFA DATE: 9/8/1999
CONTAMINANT NAME: ASBESTOS
GROUND WATER: BELOW CLEANUP LEVELS
SURFACE WATER: NOT REPORTED
SOIL: REMEDIATED
SEDIMENT: NOT REPORTED
AIR: REMEDIATED
BEDROCK: NOT REPORTED

FACILITY SITE ID: 2246
CLEANUP SITE ID: 1363
ALTERNATE SITE NAME(s): FLORALHURST GREENHOUSE,GEORGE KUACHI
NFA REASON: NFA-VOLUNTARY CLEANUP PROGRAM REVIEW
SITE STATUS: NFA
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
RANK: NOT REPORTED
VCP?: NOT REPORTED
NFA DATE: 9/8/1999
CONTAMINANT NAME: CONVENTIONAL CONTAMINANTS, INORGANIC
GROUND WATER: BELOW CLEANUP LEVELS
SURFACE WATER: NOT REPORTED
SOIL: REMEDIATED
SEDIMENT: NOT REPORTED
AIR: REMEDIATED
BEDROCK: NOT REPORTED

FACILITY SITE ID: 2246

No Further Action Sites (NFA)

CLEANUP SITE ID: 1363
ALTERNATE SITE NAME(s): FLORALHURST GREENHOUSE,GEORGE KUACHI
NFA REASON: NFA-VOLUNTARY CLEANUP PROGRAM REVIEW
SITE STATUS: NFA
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
RANK: NOT REPORTED
VCP?: NOT REPORTED
NFA DATE: 9/8/1999
CONTAMINANT NAME: CONVENTIONAL CONTAMINANTS, ORGANIC
GROUND WATER: BELOW CLEANUP LEVELS
SURFACE WATER: NOT REPORTED
SOIL: REMEDIATED
SEDIMENT: NOT REPORTED
AIR: REMEDIATED
BEDROCK: NOT REPORTED

FACILITY SITE ID: 2246
CLEANUP SITE ID: 1363
ALTERNATE SITE NAME(s): FLORALHURST GREENHOUSE,GEORGE KUACHI
NFA REASON: NFA-VOLUNTARY CLEANUP PROGRAM REVIEW
SITE STATUS: NFA
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
RANK: NOT REPORTED
VCP?: NOT REPORTED
NFA DATE: 9/8/1999
CONTAMINANT NAME: CORROSIVE WASTES
GROUND WATER: BELOW CLEANUP LEVELS
SURFACE WATER: NOT REPORTED
SOIL: REMEDIATED
SEDIMENT: NOT REPORTED
AIR: REMEDIATED
BEDROCK: NOT REPORTED

FACILITY SITE ID: 2246
CLEANUP SITE ID: 1363
ALTERNATE SITE NAME(s): FLORALHURST GREENHOUSE,GEORGE KUACHI
NFA REASON: NFA-VOLUNTARY CLEANUP PROGRAM REVIEW
SITE STATUS: NFA
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
RANK: NOT REPORTED
VCP?: NOT REPORTED
NFA DATE: 9/8/1999
CONTAMINANT NAME: HALOGENATED ORGANICS
GROUND WATER: NOT REPORTED

No Further Action Sites (NFA)

SURFACE WATER: NOT REPORTED
SOIL: REMEDIATED
SEDIMENT: NOT REPORTED
AIR: REMEDIATED
BEDROCK: NOT REPORTED

FACILITY SITE ID: 2246
CLEANUP SITE ID: 1363
ALTERNATE SITE NAME(s): FLORALHURST GREENHOUSE,GEORGE KUACHI
NFA REASON: NFA-VOLUNTARY CLEANUP PROGRAM REVIEW
SITE STATUS: NFA
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
RANK: NOT REPORTED
VCP?: NOT REPORTED
NFA DATE: 9/8/1999
CONTAMINANT NAME: METALS PRIORITY POLLUTANTS
GROUND WATER: BELOW CLEANUP LEVELS
SURFACE WATER: NOT REPORTED
SOIL: NOT REPORTED
SEDIMENT: NOT REPORTED
AIR: NOT REPORTED
BEDROCK: NOT REPORTED

FACILITY SITE ID: 2246
CLEANUP SITE ID: 1363
ALTERNATE SITE NAME(s): FLORALHURST GREENHOUSE,GEORGE KUACHI
NFA REASON: NFA-VOLUNTARY CLEANUP PROGRAM REVIEW
SITE STATUS: NFA
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
RANK: NOT REPORTED
VCP?: NOT REPORTED
NFA DATE: 9/8/1999
CONTAMINANT NAME: OTHER REACTIVE WASTES
GROUND WATER: BELOW CLEANUP LEVELS
SURFACE WATER: REMEDIATED
SOIL: REMEDIATED
SEDIMENT: NOT REPORTED
AIR: REMEDIATED
BEDROCK: NOT REPORTED

FACILITY SITE ID: 2246
CLEANUP SITE ID: 1363
ALTERNATE SITE NAME(s): FLORALHURST GREENHOUSE,GEORGE KUACHI
NFA REASON: NFA-VOLUNTARY CLEANUP PROGRAM REVIEW

No Further Action Sites (NFA)

SITE STATUS: **NFA**
REGION: **NORTHWEST**
RESPONSIBLE UNIT: **NORTHWEST**
RANK: **NOT REPORTED**
VCP?: **NOT REPORTED**
NFA DATE: **9/8/1999**
CONTAMINANT NAME: **PESTICIDES-UNSPECIFIED**
GROUND WATER: **BELOW CLEANUP LEVELS**
SURFACE WATER: **REMEDIATED**
SOIL: **REMEDIATED**
SEDIMENT: **NOT REPORTED**
AIR: **REMEDIATED**
BEDROCK: **NOT REPORTED**

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Facility/ Site Database (FSD)

MAP ID# 11

Distance from Property: 0.306 mi. (1,616 ft.) ENE
Elevation: 418 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 57935661

NAME: RENTON SCH DIST 403 DIMMIT MIDDLE SCHOOL

ADDRESS: 12320 80TH AVE S
SEATTLE, WA 98178

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: HAZARDOUS WASTE GENERATOR

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAH000009472

START DATE: 08/25/1999

END DATE: 12/31/2003

INTERACTION DESCRIPTION: HAZ WASTE MANAGEMENT ACTIVITY

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAH000009472

START DATE: 12/31/2003

END DATE: 12/31/2005

INTERACTION DESCRIPTION: HAZARDOUS WASTE GENERATOR

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAH000009472

START DATE: 12/31/2005

END DATE: 12/31/2007

INTERACTION DESCRIPTION: HAZ WASTE MANAGEMENT ACTIVITY

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAH000009472

START DATE: 12/31/2007

END DATE: 12/31/2013

INTERACTION DESCRIPTION: CONSTRUCTION SW GP

ECOLOGY PROGRAM: WATQUAL

PROGRAM ID: WAR012338

START DATE: 04/01/2010

END DATE: 03/03/2011

INTERACTION DESCRIPTION: CONSTRUCTION SW GP

ECOLOGY PROGRAM: WATQUAL

PROGRAM ID: WAR012338

START DATE: 04/01/10

END DATE: 03/03/11

Facility/ Site Database (FSD)

INTERACTION DESCRIPTION: **HAZ WASTE MANAGEMENT ACTIVITY**

ECOLOGY PROGRAM: **HAZWASTE**

PROGRAM ID: **WAH000009472**

START DATE: **12/31/07**

END DATE: **NOT REPORTED**

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Facility/ Site Database (FSD)

MAP ID# 12

Distance from Property: 0.351 mi. (1,853 ft.) E
Elevation: 392 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 79379823
NAME: SITE SE11 RENTON
ADDRESS: 12607 82ND AVE S
RENTON, WA 98057
SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: UNDERGROUND STORAGE TANK
ECOLOGY PROGRAM: TOXICS
PROGRAM ID: 100616
START DATE: 12/15/1985
END DATE: 05/03/2000

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Facility/ Site Database (FSD)

MAP ID# 13

Distance from Property: 0.365 mi. (1,927 ft.) SSW
Elevation: 309 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 9122

NAME: EVERGREEN FLORAL PHASE 2

ADDRESS: 7435 S LANGSTON RD

TUKWILA, WA 98178

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: CONSTRUCTION SW GP

ECOLOGY PROGRAM: WATQUAL

PROGRAM ID: WAR125649

START DATE: 12/13/2011

END DATE: 06/20/2013

INTERACTION DESCRIPTION: CONSTRUCTION SW GP

ECOLOGY PROGRAM: WATQUAL

PROGRAM ID: WAR125649

START DATE: 12/13/11

END DATE: 06/20/13

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Facility/ Site Database (FSD)

[MAP ID# 14](#)

Distance from Property: 0.370 mi. (1,954 ft.) NW
Elevation: 327 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 99324

NAME: SKYWAY PARK SEATTLE

ADDRESS: 7121 S 120TH PLACE

SEATTLE, WA 98178

SITE STATUS: ACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: CONSTRUCTION SW GP

ECOLOGY PROGRAM: WATQUAL

PROGRAM ID: WAR309265

START DATE: NOT REPORTED

END DATE: NOT REPORTED

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Facility/ Site Database (FSD)

MAP ID# 15

Distance from Property: 0.445 mi. (2,350 ft.) NW

Elevation: 325 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 72512

NAME: SKYWAY WSD SEWER PUMP STATIONS

ADDRESS: 11909 RENTON AVE S

SEATTLE, WA 98178

SITE STATUS: ACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: CONSTRUCTION SW GP

ECOLOGY PROGRAM: WATQUAL

PROGRAM ID: WAR308507

START DATE: 10/07/2019

END DATE: NOT REPORTED

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Facility/ Site Database (FSD)

MAP ID# 16

Distance from Property: 0.454 mi. (2,397 ft.) SSW
Elevation: 297 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 2411

NAME: FOSTORIA PARK INDUSTRIAL CENTER

ADDRESS: 4400 BLK S 133RD & S 134TH ST
TUKWILA, WA 98168-3280

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: HAZARDOUS WASTE GENERATOR

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAD988494225

START DATE: 12/11/1991

END DATE: 12/31/2003

INTERACTION DESCRIPTION: INDEPENDENT REMEDIAL ACTN PRG

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: NOT REPORTED

START DATE: 11/19/1996

END DATE: 06/18/1999

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No Further Action Sites (NFA)

MAP ID# 16

Distance from Property: 0.454 mi. (2,397 ft.) SSW
Elevation: 297 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 2411NFA
NAME: FOSTORIA PARK INDUSTRIAL CENTER
ADDRESS: 4400 BLK S 133RD & S 134TH ST
TUKWILA, WA 98168
COUNTY: KING

SITE DETAILS

FACILITY SITE ID: 2411
CLEANUP SITE ID: 3795
ALTERNATE SITE NAME(s): AMERICAN TIRES WHOLESALER,FOSTORIA PARK BLDGS ABC,NORTHSTREAM PROPERTIES
NFA REASON: NFA-INDEPENDENT REMEDIAL ACTION PROGRAM REVIEW
SITE STATUS: NFA
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
RANK: NOT REPORTED
VCP?: NOT REPORTED
NFA DATE: 6/18/1999
CONTAMINANT NAME: CONVENTIONAL CONTAMINANTS, INORGANIC
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER: NOT REPORTED
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT: NOT REPORTED
AIR: NOT REPORTED
BEDROCK: NOT REPORTED

FACILITY SITE ID: 2411
CLEANUP SITE ID: 3795
ALTERNATE SITE NAME(s): AMERICAN TIRES WHOLESALER,FOSTORIA PARK BLDGS ABC,NORTHSTREAM PROPERTIES
NFA REASON: NFA-INDEPENDENT REMEDIAL ACTION PROGRAM REVIEW
SITE STATUS: NFA
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
RANK: NOT REPORTED
VCP?: NOT REPORTED
NFA DATE: 6/18/1999
CONTAMINANT NAME: METALS PRIORITY POLLUTANTS
GROUND WATER: REMEDIATED
SURFACE WATER: NOT REPORTED
SOIL: REMEDIATED
SEDIMENT: NOT REPORTED
AIR: NOT REPORTED
BEDROCK: NOT REPORTED

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 17

Distance from Property: 0.479 mi. (2,529 ft.) NW
Elevation: 325 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 4483CSCSL
FACILITY SITE ID: 95195341
CLEANUP SITE ID: 4483
ADDRESS: 11903 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: LEMONBUSTERS
ALTERNATE SITE NAME(s): ELBURN PROPERTY
SITE STATUS: AWAITING CLEANUP
SITE RANK: 3 - MODERATE RISK
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 4483
SITE NAME: LEMONBUSTERS
CONTAMINANT NAME: HALOGENATED ORGANICS
GROUND WATER: SUSPECTED
SURFACE WATER:
SOIL:
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 4483
SITE NAME: LEMONBUSTERS
CONTAMINANT NAME: METALS - OTHER
GROUND WATER:
SURFACE WATER: SUSPECTED
SOIL: SUSPECTED
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 4483
SITE NAME: LEMONBUSTERS

Confirmed and Suspected Contaminated Sites List (CSCSL)

CONTAMINANT NAME: **METALS PRIORITY POLLUTANTS**

GROUND WATER:

SURFACE WATER: **SUSPECTED**

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **4483**

SITE NAME: **LEMONBUSTERS**

CONTAMINANT NAME: **NON-HALOGENATED SOLVENTS**

GROUND WATER:

SURFACE WATER:

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **4483**

SITE NAME: **LEMONBUSTERS**

CONTAMINANT NAME: **PETROLEUM PRODUCTS-UNSPECIFIED**

GROUND WATER: **SUSPECTED**

SURFACE WATER: **SUSPECTED**

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

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Facility/ Site Database (FSD)

[MAP ID# 17](#)

Distance from Property: 0.479 mi. (2,529 ft.) NW
Elevation: 325 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 95195341

NAME: LEMONBUSTERS

ADDRESS: 11903 RENTON AVE S
SEATTLE, WA 98178-3725

SITE STATUS: ACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: STATE CLEANUP SITE

ECOLOGY PROGRAM: TOXICS

PROGRAM ID: NOT REPORTED

START DATE: 06/13/1997

END DATE: NOT REPORTED

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Hazardous Sites List (HSL)

MAP ID# 17

Distance from Property: 0.479 mi. (2,529 ft.) NW
Elevation: 325 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 4483HSL
FACILITY SITE ID: 95195341
CLEANUP SITE ID: 4483
ADDRESS: 11903 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: LEMONBUSTERS
ALTERNATE SITE NAME(s): ELBURN PROPERTY
SITE STATUS: AWAITING CLEANUP
SITE RANK: 3 - MODERATE RISK
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 4483
SITE NAME: LEMONBUSTERS
CONTAMINANT NAME: HALOGENATED ORGANICS
GROUND WATER: SUSPECTED
SURFACE WATER:
SOIL:
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 4483
SITE NAME: LEMONBUSTERS
CONTAMINANT NAME: METALS - OTHER
GROUND WATER:
SURFACE WATER: SUSPECTED
SOIL: SUSPECTED
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 4483
SITE NAME: LEMONBUSTERS

Hazardous Sites List (HSL)

CONTAMINANT NAME: **METALS PRIORITY POLLUTANTS**

GROUND WATER:

SURFACE WATER: **SUSPECTED**

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **4483**

SITE NAME: **LEMONBUSTERS**

CONTAMINANT NAME: **NON-HALOGENATED SOLVENTS**

GROUND WATER:

SURFACE WATER:

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **4483**

SITE NAME: **LEMONBUSTERS**

CONTAMINANT NAME: **PETROLEUM PRODUCTS-UNSPECIFIED**

GROUND WATER: **SUSPECTED**

SURFACE WATER: **SUSPECTED**

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

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Facility/ Site Database (FSD)

MAP ID# 18

Distance from Property: 0.487 mi. (2,571 ft.) NW
Elevation: 332 ft. (Lower than TP)

SITE INFORMATION

FACILITY SITE ID: 83867552

NAME: SKYWAY PARK CLEANING CENTER

ADDRESS: 11831 RENTON AVE S

SEATTLE, WA 98178

SITE STATUS: INACTIVE

ECOLOGY INTERACTION

INTERACTION DESCRIPTION: HAZARDOUS WASTE GENERATOR

ECOLOGY PROGRAM: HAZWASTE

PROGRAM ID: WAD988475414

START DATE: 07/19/1990

END DATE: 12/31/1996

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 19

Distance from Property: 0.596 mi. (3,147 ft.) NW
Elevation: 350 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 6370CSCSL
FACILITY SITE ID: 61186376
CLEANUP SITE ID: 6370
ADDRESS: 11809 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: SKYWAY SHELL & AUTOMOTIVE
ALTERNATE SITE NAME(s): SKYWAY SHELL,SKYWAY TEXACO,SKYWAY TEXACO SERVICE,UNOCAL 5534
SITE STATUS: CLEANUP STARTED
SITE RANK: 1 - HIGHEST ASSESSED RISK
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?: YES
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 6370
SITE NAME: SKYWAY SHELL & AUTOMOTIVE
CONTAMINANT NAME: BENZENE
GROUND WATER: REMEDIATED-BELOW
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 6370
SITE NAME: SKYWAY SHELL & AUTOMOTIVE
CONTAMINANT NAME: PETROLEUM-GASOLINE
GROUND WATER: REMEDIATED-BELOW
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 6370
SITE NAME: SKYWAY SHELL & AUTOMOTIVE

Confirmed and Suspected Contaminated Sites List (CSCSL)

CONTAMINANT NAME: **PETROLEUM-OTHER**

GROUND WATER: **REMEDIATED-BELOW**

SURFACE WATER:

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 20

Distance from Property: 0.628 mi. (3,316 ft.) S
Elevation: 203 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 1876CSCSL
FACILITY SITE ID: 2272
CLEANUP SITE ID: 1876
ADDRESS: OAKSDALE AVE SW
RENTON, WA 98055
COUNTY: KING

SITE DETAILS

SITE NAME: BLACK RIVER CORP PARK TRACT A
ALTERNATE SITE NAME(s): BLACK RIV HYDRAULIC DREDGE SPOILS, BLACK RIVER IMPOUNDMENT
SITE STATUS: AWAITING CLEANUP
SITE RANK:
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 1876
SITE NAME: BLACK RIVER CORP PARK TRACT A
CONTAMINANT NAME: METALS PRIORITY POLLUTANTS
GROUND WATER: SUSPECTED
SURFACE WATER: SUSPECTED
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 1876
SITE NAME: BLACK RIVER CORP PARK TRACT A
CONTAMINANT NAME: PETROLEUM PRODUCTS-UNSPECIFIED
GROUND WATER: SUSPECTED
SURFACE WATER: SUSPECTED
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 21

Distance from Property: 0.665 mi. (3,511 ft.) WNW
Elevation: 344 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 9883CSCSL
FACILITY SITE ID: 61442182
CLEANUP SITE ID: 9883
ADDRESS: 11655 RENTON AVE S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: EXXON 77176
ALTERNATE SITE NAME(s): BP SERVICE STATION 03161,BP SERVICE STATION RENTON AVE,CONOCOPHILLIPS
30119,PHILLIPS 66 # 2677176,SKY WAY GASOLINE,SKYWAY GASOLINE,SKYWAY GASOLINE SEATTLE,SUN COR HOLDINGS
COPII LLC 7,TOSCO 0316130119
SITE STATUS: CLEANUP STARTED
SITE RANK: 1 - HIGHEST ASSESSED RISK
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?: YES
CURRENT VCP?: YES

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 9883
SITE NAME: EXXON 77176
CONTAMINANT NAME: BENZENE
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 9883
SITE NAME: EXXON 77176
CONTAMINANT NAME: LEAD
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

Confirmed and Suspected Contaminated Sites List (CSCSL)

CLEANUP SITE ID: 9883
SITE NAME: EXXON 77176
CONTAMINANT NAME: METHYL TERTIARY-BUTYL ETHER
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL:
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 9883
SITE NAME: EXXON 77176
CONTAMINANT NAME: OTHER HALOGENATED ORGANICS
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL:
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 9883
SITE NAME: EXXON 77176
CONTAMINANT NAME: OTHER NON-HALOGENATED ORGANICS
GROUND WATER:
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 9883
SITE NAME: EXXON 77176
CONTAMINANT NAME: PETROLEUM-DIESEL
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 9883
SITE NAME: EXXON 77176

Confirmed and Suspected Contaminated Sites List (CSCSL)

CONTAMINANT NAME: **PETROLEUM-GASOLINE**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **9883**
SITE NAME: **EXXON 77176**
CONTAMINANT NAME: **PETROLEUM-OTHER**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **9883**
SITE NAME: **EXXON 77176**
CONTAMINANT NAME: **POLYCYCLIC AROMATIC HYDROCARBONS**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL:
SEDIMENT:
AIR:
BEDROCK:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 22

Distance from Property: 0.706 mi. (3,728 ft.) SSW
Elevation: 218 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 424CSCSL
FACILITY SITE ID: 9625997
CLEANUP SITE ID: 424
ADDRESS: 2101 SW SUNSET BLVD
RENTON, WA 98055
COUNTY: KING

SITE DETAILS

SITE NAME: SUNSET VIEW APARTMENTS
ALTERNATE SITE NAME(s):
SITE STATUS: CLEANUP STARTED
SITE RANK: N - NOT RANKED
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?: YES

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 23

Distance from Property: 0.732 mi. (3,865 ft.) W
Elevation: 386 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 9166CSCSL
FACILITY SITE ID: 43229653
CLEANUP SITE ID: 9166
ADDRESS: 6400 124TH AVE S
RENTON, WA 98056
COUNTY: KING

SITE DETAILS

SITE NAME: FAA RENTON
ALTERNATE SITE NAME(s): FEDERAL AVIATION ADMINISTRATION
SITE STATUS: CLEANUP STARTED
SITE RANK:
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 9166
SITE NAME: FAA RENTON
CONTAMINANT NAME: PETROLEUM-OTHER
GROUND WATER:
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

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Tacoma Smelter Plume (TACOMAPLUME)

MAP ID# 24

Distance from Property: 0.757 mi. (3,997 ft.) S
Elevation: 321 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 0000004

FACILITY NAME: TACOMA SMELTER PLUME

CITY: TACOMA-SEATTLE AREA

STATE: WA

ARSENIC LEVEL: 20 PPM TO 40 PPM

FACILITY LINK: [Tacoma Smelter Plume project](#)

DOCUMENT LINK: [Document Repository for Asarco Tacoma Smelter Site](#)

MAP LINK: [Tacoma Smelter Search](#)

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 25

Distance from Property: 0.844 mi. (4,456 ft.) NW
Elevation: 306 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 1415CSCSL
FACILITY SITE ID: 2936208
CLEANUP SITE ID: 1415
ADDRESS: 11430 69TH PL S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: COWLEY LEAKING AST
ALTERNATE SITE NAME(s): COWLEY PROPERTY
SITE STATUS: AWAITING CLEANUP
SITE RANK:
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 1415
SITE NAME: COWLEY LEAKING AST
CONTAMINANT NAME: PETROLEUM PRODUCTS-UNSPECIFIED
GROUND WATER: SUSPECTED
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 26

Distance from Property: 0.871 mi. (4,599 ft.) WSW

Elevation: 182 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 3163CSCSL

FACILITY SITE ID: 2423

CLEANUP SITE ID: 3163

ADDRESS: 13301 MARTIN LUTHER KING JR WAY S
SEATTLE, WA 98178

COUNTY: KING

SITE DETAILS

SITE NAME: LITTLE ETHELS AUTO WRECKING

ALTERNATE SITE NAME(s): HUNTER'S AUTO WRECKING, MONSTER AUTO WRECKING, MONSTER AUTO WRECKING INC.

SITE STATUS: AWAITING CLEANUP

SITE RANK: 1 - HIGHEST ASSESSED RISK

REGION: NORTHWEST

RESPONSIBLE UNIT: NORTHWEST

HAS INSTITUTIONAL CONTROL?:

PAST VCP?:

CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 3163

SITE NAME: LITTLE ETHELS AUTO WRECKING

CONTAMINANT NAME: HALOGENATED ORGANICS

GROUND WATER: SUSPECTED

SURFACE WATER: SUSPECTED

SOIL: SUSPECTED

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: 3163

SITE NAME: LITTLE ETHELS AUTO WRECKING

CONTAMINANT NAME: METALS PRIORITY POLLUTANTS

GROUND WATER: SUSPECTED

SURFACE WATER: SUSPECTED

SOIL: CONFIRMED ABOVE CLEANUP LEVELS

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: 3163

SITE NAME: LITTLE ETHELS AUTO WRECKING

Confirmed and Suspected Contaminated Sites List (CSCSL)

CONTAMINANT NAME: **NON-HALOGENATED SOLVENTS**

GROUND WATER: **SUSPECTED**

SURFACE WATER: **SUSPECTED**

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **3163**

SITE NAME: **LITTLE ETHELS AUTO WRECKING**

CONTAMINANT NAME: **PETROLEUM PRODUCTS-UNSPECIFIED**

GROUND WATER: **SUSPECTED**

SURFACE WATER: **SUSPECTED**

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **3163**

SITE NAME: **LITTLE ETHELS AUTO WRECKING**

CONTAMINANT NAME: **POLYCYCLIC AROMATIC HYDROCARBONS**

GROUND WATER: **SUSPECTED**

SURFACE WATER: **SUSPECTED**

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 27

Distance from Property: 0.895 mi. (4,726 ft.) E
Elevation: 60 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 14438CSCSL
FACILITY SITE ID: 23348321
CLEANUP SITE ID: 14438
ADDRESS: 401 RAINIER AVE N
RENTON, WA 98057
COUNTY: KING

SITE DETAILS

SITE NAME: SENECA REAL ESTATE
ALTERNATE SITE NAME(s): B & B AUTO PARTS, SENECA REAL ESTATE
SITE STATUS: AWAITING CLEANUP
SITE RANK:
REGION: NORTHWEST
RESPONSIBLE UNIT: POLLUTION LIABILITY INS AGCY
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 14438
SITE NAME: SENECA REAL ESTATE
CONTAMINANT NAME: BENZENE
GROUND WATER:
SURFACE WATER:
SOIL: BELOW CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 14438
SITE NAME: SENECA REAL ESTATE
CONTAMINANT NAME: HALOGENATED SOLVENTS
GROUND WATER:
SURFACE WATER:
SOIL: BELOW CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 14438
SITE NAME: SENECA REAL ESTATE

Confirmed and Suspected Contaminated Sites List (CSCSL)

CONTAMINANT NAME: **LEAD**
GROUND WATER:
SURFACE WATER:
SOIL: **BELOW CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **14438**
SITE NAME: **SENECA REAL ESTATE**
CONTAMINANT NAME: **METHYL TERTIARY-BUTYL ETHER**
GROUND WATER:
SURFACE WATER:
SOIL: **BELOW CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **14438**
SITE NAME: **SENECA REAL ESTATE**
CONTAMINANT NAME: **NON-HALOGENATED SOLVENTS**
GROUND WATER:
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **14438**
SITE NAME: **SENECA REAL ESTATE**
CONTAMINANT NAME: **OTHER NON-HALOGENATED ORGANICS**
GROUND WATER: **SUSPECTED**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **14438**
SITE NAME: **SENECA REAL ESTATE**
CONTAMINANT NAME: **PETROLEUM-DIESEL**
GROUND WATER:

Confirmed and Suspected Contaminated Sites List (CSCSL)

SURFACE WATER:

SOIL: **BELOW CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **14438**

SITE NAME: **SENECA REAL ESTATE**

CONTAMINANT NAME: **PETROLEUM-GASOLINE**

GROUND WATER: **SUSPECTED**

SURFACE WATER:

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **14438**

SITE NAME: **SENECA REAL ESTATE**

CONTAMINANT NAME: **PETROLEUM-OTHER**

GROUND WATER:

SURFACE WATER:

SOIL: **BELOW CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 28

Distance from Property: 0.922 mi. (4,868 ft.) ESE

Elevation: 53 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 10243CSCSL

FACILITY SITE ID: 71592529

CLEANUP SITE ID: 10243

ADDRESS: 221 HARDIE AVE NW

RENTON, WA 98055

COUNTY: KING

SITE DETAILS

SITE NAME: RENTON ASSEMBLY OF GOD

ALTERNATE SITE NAME(s):

SITE STATUS: CLEANUP STARTED

SITE RANK:

REGION: NORTHWEST

RESPONSIBLE UNIT: NORTHWEST

HAS INSTITUTIONAL CONTROL?:

PAST VCP?:

CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 10243

SITE NAME: RENTON ASSEMBLY OF GOD

CONTAMINANT NAME: PETROLEUM-GASOLINE

GROUND WATER:

SURFACE WATER:

SOIL: CONFIRMED ABOVE CLEANUP LEVELS

SEDIMENT:

AIR:

BEDROCK:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 29

Distance from Property: 0.936 mi. (4,942 ft.) WSW
Elevation: 278 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 1961CSCSL
FACILITY SITE ID: 1075883
CLEANUP SITE ID: 1961
ADDRESS: 13001 MARTIN LUTHER KING JR WAY S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: ANDERSON JOSEPH B ET AL
ALTERNATE SITE NAME(s): BUILDING BUSTERS, WASHINGTON WRECKING
SITE STATUS: AWAITING CLEANUP
SITE RANK:
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 1961
SITE NAME: ANDERSON JOSEPH B ET AL
CONTAMINANT NAME: ARSENIC
GROUND WATER:
SURFACE WATER: SUSPECTED
SOIL: SUSPECTED
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 1961
SITE NAME: ANDERSON JOSEPH B ET AL
CONTAMINANT NAME: ASBESTOS
GROUND WATER:
SURFACE WATER: SUSPECTED
SOIL: SUSPECTED
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 1961
SITE NAME: ANDERSON JOSEPH B ET AL

Confirmed and Suspected Contaminated Sites List (CSCSL)

CONTAMINANT NAME: CONVENTIONAL CONTAMINANTS, INORGANIC

GROUND WATER:

SURFACE WATER: SUSPECTED

SOIL: SUSPECTED

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: 1961

SITE NAME: ANDERSON JOSEPH B ET AL

CONTAMINANT NAME: CONVENTIONAL CONTAMINANTS, ORGANIC

GROUND WATER:

SURFACE WATER: SUSPECTED

SOIL: SUSPECTED

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: 1961

SITE NAME: ANDERSON JOSEPH B ET AL

CONTAMINANT NAME: CORROSIVE WASTES

GROUND WATER:

SURFACE WATER: SUSPECTED

SOIL: SUSPECTED

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: 1961

SITE NAME: ANDERSON JOSEPH B ET AL

CONTAMINANT NAME: HALOGENATED ORGANICS

GROUND WATER:

SURFACE WATER: SUSPECTED

SOIL: SUSPECTED

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: 1961

SITE NAME: ANDERSON JOSEPH B ET AL

CONTAMINANT NAME: METALS - OTHER

GROUND WATER:

Confirmed and Suspected Contaminated Sites List (CSCSL)

SURFACE WATER: **SUSPECTED**

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **1961**

SITE NAME: **ANDERSON JOSEPH B ET AL**

CONTAMINANT NAME: **METALS PRIORITY POLLUTANTS**

GROUND WATER:

SURFACE WATER: **SUSPECTED**

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **1961**

SITE NAME: **ANDERSON JOSEPH B ET AL**

CONTAMINANT NAME: **METHYL TERTIARY-BUTYL ETHER**

GROUND WATER:

SURFACE WATER: **SUSPECTED**

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **1961**

SITE NAME: **ANDERSON JOSEPH B ET AL**

CONTAMINANT NAME: **NON-HALOGENATED SOLVENTS**

GROUND WATER:

SURFACE WATER:

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **1961**

SITE NAME: **ANDERSON JOSEPH B ET AL**

CONTAMINANT NAME: **OTHER DELETERIOUS SUBSTANCES**

GROUND WATER:

SURFACE WATER:

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

Confirmed and Suspected Contaminated Sites List (CSCSL)

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **1961**

SITE NAME: **ANDERSON JOSEPH B ET AL**

CONTAMINANT NAME: **PETROLEUM PRODUCTS-UNSPECIFIED**

GROUND WATER:

SURFACE WATER: **CONFIRMED ABOVE CLEANUP LEVELS**

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 30

Distance from Property: 0.943 mi. (4,979 ft.) W
Elevation: 241 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 7009CSCSL

FACILITY SITE ID: 99853513

CLEANUP SITE ID: 7009

ADDRESS: 12848 MARTIN LUTHER KING JR WAY
SEATTLE, WA 98178-3512

COUNTY: KING

SITE DETAILS

SITE NAME: SOUTHLAND FACILITY 23525

ALTERNATE SITE NAME(s):

SITE STATUS: CLEANUP STARTED

SITE RANK:

REGION: NORTHWEST

RESPONSIBLE UNIT: NORTHWEST

HAS INSTITUTIONAL CONTROL?:

PAST VCP?:

CURRENT VCP?: YES

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 31

Distance from Property: 0.968 mi. (5,111 ft.) W
Elevation: 241 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 9417CSCSL
FACILITY SITE ID: 48796862
CLEANUP SITE ID: 9417
ADDRESS: 12911 MARTIN LUTHER KING JR WAY S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: EXXON 72894
ALTERNATE SITE NAME(s): EXXON STATION 7-2894,M.L.K. SHELL,MLK FOOD MART & HL TRAVEL,MLK SHELL,SUN COR
HOLDINGS COPII LLC,TOSCO 0314030108
SITE STATUS: CLEANUP STARTED
SITE RANK: 1 - HIGHEST ASSESSED RISK
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 9417
SITE NAME: EXXON 72894
CONTAMINANT NAME: BENZENE
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 9417
SITE NAME: EXXON 72894
CONTAMINANT NAME: LEAD
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 9417

Confirmed and Suspected Contaminated Sites List (CSCSL)

SITE NAME: **EXXON 72894**
CONTAMINANT NAME: **METHYL TERTIARY-BUTYL ETHER**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **9417**
SITE NAME: **EXXON 72894**
CONTAMINANT NAME: **NON-HALOGENATED SOLVENTS**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **9417**
SITE NAME: **EXXON 72894**
CONTAMINANT NAME: **PETROLEUM-DIESEL**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **9417**
SITE NAME: **EXXON 72894**
CONTAMINANT NAME: **PETROLEUM-GASOLINE**
GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**
SURFACE WATER:
SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **9417**
SITE NAME: **EXXON 72894**
CONTAMINANT NAME: **PETROLEUM-OTHER**

Confirmed and Suspected Contaminated Sites List (CSCSL)

GROUND WATER: **CONFIRMED ABOVE CLEANUP LEVELS**

SURFACE WATER:

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 32

Distance from Property: 0.981 mi. (5,180 ft.) WSW
Elevation: 53 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 2813CSCSL
FACILITY SITE ID: 8509656
CLEANUP SITE ID: 2813
ADDRESS: 13336 BEACON COAL MINE RD S
SEATTLE, WA 98178
COUNTY: KING

SITE DETAILS

SITE NAME: ANDERSON JOSEPH B
ALTERNATE SITE NAME(s): JUNIOR TRUCKING
SITE STATUS: AWAITING CLEANUP
SITE RANK:
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 2813
SITE NAME: ANDERSON JOSEPH B
CONTAMINANT NAME: CONVENTIONAL CONTAMINANTS, ORGANIC
GROUND WATER:
SURFACE WATER: SUSPECTED
SOIL: SUSPECTED
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 2813
SITE NAME: ANDERSON JOSEPH B
CONTAMINANT NAME: CORROSIVE WASTES
GROUND WATER:
SURFACE WATER: SUSPECTED
SOIL: SUSPECTED
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 2813
SITE NAME: ANDERSON JOSEPH B

Confirmed and Suspected Contaminated Sites List (CSCSL)

CONTAMINANT NAME: **METALS - OTHER**

GROUND WATER:

SURFACE WATER: **SUSPECTED**

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **2813**

SITE NAME: **ANDERSON JOSEPH B**

CONTAMINANT NAME: **METALS PRIORITY POLLUTANTS**

GROUND WATER:

SURFACE WATER: **SUSPECTED**

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **2813**

SITE NAME: **ANDERSON JOSEPH B**

CONTAMINANT NAME: **NON-HALOGENATED SOLVENTS**

GROUND WATER:

SURFACE WATER: **CONFIRMED ABOVE CLEANUP LEVELS**

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **2813**

SITE NAME: **ANDERSON JOSEPH B**

CONTAMINANT NAME: **PETROLEUM PRODUCTS-UNSPECIFIED**

GROUND WATER: **SUSPECTED**

SURFACE WATER: **CONFIRMED ABOVE CLEANUP LEVELS**

SOIL: **CONFIRMED ABOVE CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **2813**

SITE NAME: **ANDERSON JOSEPH B**

CONTAMINANT NAME: **POLYCHLORINATED BIPHENYLS (PCB)**

GROUND WATER:

Confirmed and Suspected Contaminated Sites List (CSCSL)

SURFACE WATER:

SOIL: **BELOW CLEANUP LEVELS**

SEDIMENT:

AIR:

BEDROCK:

CLEANUP SITE ID: **2813**

SITE NAME: **ANDERSON JOSEPH B**

CONTAMINANT NAME: **POLYCYCLIC AROMATIC HYDROCARBONS**

GROUND WATER:

SURFACE WATER: **SUSPECTED**

SOIL: **SUSPECTED**

SEDIMENT:

AIR:

BEDROCK:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 33

Distance from Property: 0.995 mi. (5,254 ft.) ENE
Elevation: 23 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 6266CSCSL
FACILITY SITE ID: 54846481
CLEANUP SITE ID: 6266
ADDRESS: 840 W PERIMETER RD
RENTON, WA 98057
COUNTY: KING

SITE DETAILS

SITE NAME: ACTION AVIATION
ALTERNATE SITE NAME(s): ACTION AVIATION INC,BOEING RENTON BLDG 5-14
SITE STATUS: CLEANUP STARTED
SITE RANK:
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?: YES
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 6266
SITE NAME: ACTION AVIATION
CONTAMINANT NAME: BENZENE
GROUND WATER: SUSPECTED
SURFACE WATER: SUSPECTED
SOIL: REMEDIATED-BELOW
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 6266
SITE NAME: ACTION AVIATION
CONTAMINANT NAME: PETROLEUM PRODUCTS-UNSPECIFIED
GROUND WATER:
SURFACE WATER: SUSPECTED
SOIL:
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: 6266
SITE NAME: ACTION AVIATION

Confirmed and Suspected Contaminated Sites List (CSCSL)

CONTAMINANT NAME: **PETROLEUM-DIESEL**
GROUND WATER: **SUSPECTED**
SURFACE WATER:
SOIL: **REMEDIATED-BELOW**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **6266**
SITE NAME: **ACTION AVIATION**
CONTAMINANT NAME: **PETROLEUM-GASOLINE**
GROUND WATER: **SUSPECTED**
SURFACE WATER: **SUSPECTED**
SOIL: **REMEDIATED-BELOW**
SEDIMENT:
AIR:
BEDROCK:

CLEANUP SITE ID: **6266**
SITE NAME: **ACTION AVIATION**
CONTAMINANT NAME: **PETROLEUM-OTHER**
GROUND WATER: **SUSPECTED**
SURFACE WATER: **SUSPECTED**
SOIL: **REMEDIATED-BELOW**
SEDIMENT:
AIR:
BEDROCK:

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Confirmed and Suspected Contaminated Sites List (CSCSL)

MAP ID# 34

Distance from Property: 0.998 mi. (5,269 ft.) ESE
Elevation: 37 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: 5124CSCSL
FACILITY SITE ID: 2503
CLEANUP SITE ID: 5124
ADDRESS: 59 RAINIER AVE S
RENTON, WA 98055
COUNTY: KING

SITE DETAILS

SITE NAME: UNOCAL 5024
ALTERNATE SITE NAME(s): UNOCAL SS 5024, UNOCAL STATION 5024
SITE STATUS: CLEANUP STARTED
SITE RANK:
REGION: NORTHWEST
RESPONSIBLE UNIT: NORTHWEST
HAS INSTITUTIONAL CONTROL?:
PAST VCP?:
CURRENT VCP?:

CONTAMINANT(s) DETAILS

CLEANUP SITE ID: 5124
SITE NAME: UNOCAL 5024
CONTAMINANT NAME: PETROLEUM-OTHER
GROUND WATER: CONFIRMED ABOVE CLEANUP LEVELS
SURFACE WATER:
SOIL: CONFIRMED ABOVE CLEANUP LEVELS
SEDIMENT:
AIR:
BEDROCK:

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Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

No Records Found

Environmental Records Definitions - FEDERAL

AIRSAFS

Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance. Enforcement and Compliance History Online (ECHO) Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014, the EPA retired this system for Clean Air Act stationary sources.

ALTFUELS

Alternative Fueling Stations

VERSION DATE: 10/28/20

Nationwide list of alternative fueling stations made available by the U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Bio-diesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

BF

Brownfields Management System

VERSION DATE: 01/11/21

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

BRS

Biennial Reporting System

VERSION DATE: 12/31/17

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL

Clandestine Drug Laboratory Locations

VERSION DATE: 06/17/20

Environmental Records Definitions - FEDERAL

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DNPL Delisted National Priorities List

VERSION DATE: 04/26/21

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

DOCKETS EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

DOD Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 04/27/21

This database includes site locations where Engineering and/or Institutional Controls have been identified as part of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. The data displays remedy component information for Superfund decision documents issued in fiscal years 1982-2017, and it includes final and deleted NPL sites as well as sites with a Superfund Alternative Approach (SAA) agreement in place. The only sites included that are not on the NPL, proposed for NPL, or removed from proposed NPL, are those with an SAA Agreement in place. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the

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potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ECHOR10 Enforcement and Compliance History Information

VERSION DATE: 11/28/20

The U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

ERNSWA Emergency Response Notification System

VERSION DATE: 03/28/21

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FEMAUST FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

FRSWA Facility Registry System

VERSION DATE: 03/02/21

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

FUDS Formerly Used Defense Sites

VERSION DATE: 12/31/18

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not

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all properties currently have polygon data available. **DISCLAIMER:** This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

FUSRAP

Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

HISTPST

Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

HMIRSR10

Hazardous Materials Incident Reporting System

VERSION DATE: 03/24/21

The HMIRS database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation located in EPA Region 10. This region includes the following states: Alaska, Idaho, Oregon, Washington, and 271 Native Tribes.

HWCD

Hazardous Waste Compliance Docket Facilities

VERSION DATE: 10/29/20

This list of the Federal Agency Hazardous Waste Compliance Docket Facilities is maintained by the United States Environmental Protection Agency (EPA). According to the EPA, Section 120(c) of CERCLA requires EPA to establish a listing, known as the Federal Facility Hazardous Waste Compliance Docket (Docket), of Federal facilities which are managing or have managed hazardous waste; or have had a release of hazardous waste. Thus, the Docket identifies all Federal facilities that must be evaluated to determine whether they pose a risk to human health and the environment and it makes this information available to the public. In order for the Docket to remain current and accurate it requires periodic updating.

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ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 09/19/20

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

ICISCLEANERS Integrated Compliance Information System Drycleaners

VERSION DATE: 09/19/20

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The U.S. Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments. The following Primary SIC Codes are included in this data: 7211, 7212, 7213, 7215, 7216, 7217, 7218, and/or 7219; the following Primary NAICS Codes are included in this data: 812320, 812331, and/or 812332.

ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 04/26/20

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. This database is provided by the U.S. Environmental Protection Agency.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States Nuclear Regulatory Commission (NRC) licensing requirements. Disclaimer: Due to agency regulations and policies, this database contains applicant/licensee location information which may or may not be related to the physical location per MLTS site.

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MRDS Mineral Resource Data System

VERSION DATE: 03/15/16

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps. A few updates last occurred 2015 and early 2016 for select mine site area/s.

MSHA Mine Safety and Health Administration Master Index File

VERSION DATE: 08/07/20

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/22/21

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/22/21

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

NMS Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline,

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heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

NPDES10 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from the U.S. Environmental Protection Agency (EPA) from December 2002 through April 2007. Refer to the ICIS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 10. This region includes the following states: Alaska, Idaho, Oregon, Washington, and 271 Native Tribes.

NPL National Priorities List

VERSION DATE: 04/26/21

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

PADS PCB Activity Database System

VERSION DATE: 11/19/20

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of Polychlorinated Biphenyls (PCB) who are required to notify the U.S. Environmental Protection Agency of such activities.

PCSR10 Permit Compliance System

VERSION DATE: 08/01/12

The historic Permit Compliance System tracked enforcement status and permit compliance of facilities controlled

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by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act. This database includes permitted facilities located in EPA Region 10 states: Alaska, Idaho, Oregon, Washington, and 271 Native Tribes. This system has since been modernized by United States Environmental Protection Agency and is now integrated into the Integrated Compliance Information System (ICIS). Please refer to the ICIS database as the current source for this data.

PNPL Proposed National Priorities List

VERSION DATE: 04/26/21

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/22/21

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

RCRAGR10 Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/22/21

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 10 includes the following states: Alaska, Idaho, Oregon, Washington, and 271 Native Tribes.

RCRANGR10 Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/22/21

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA

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Region 10 includes the following states: Alaska, Idaho, Oregon, Washington, and 271 Native Tribes.

RCRASC RCRA Sites with Controls

VERSION DATE: 05/16/21

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

RCRASUBC Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/22/21

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/22/21

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

RODS Record of Decision System

VERSION DATE: 09/21/20

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

SEMS Superfund Enterprise Management System

VERSION DATE: 04/26/21

Environmental Records Definitions - FEDERAL

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH

Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 04/26/21

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System Archived Site Inventory (List 8R Archived) replaced the CERCLIS NFRAP reporting system in 2015. This listing reflects sites at which the EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program.

SEMSLIENS

SEMS Lien on Property

VERSION DATE: 06/22/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

SFLIENS

CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete. Please refer to the SEMSLIENS database as source of current data.

SMCRA

Surface Mining Control and Reclamation Act Sites

VERSION DATE: 12/18/20

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those

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problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

SSEHRIPFAS

SSEHRI PFAS Contamination Sites

VERSION DATE: 12/12/19

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Disclaimer: The source conveys this database undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Limited location details are available with this data. Please access the following source link for the most current information: <https://pfasproject.com/pfas-contamination-site-tracker/>

SSTS

Section Seven Tracking System

VERSION DATE: 08/04/20

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. "Production" includes formulation, packaging, repackaging, and relabeling. For this database, the Product Information is only available for establishments up through 2014 or prior years, product details are no longer released by the EPA within the current SSTS non-Confidential Business Information data.

TRI

Toxics Release Inventory

VERSION DATE: 12/31/18

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA

Toxic Substance Control Act Inventory

VERSION DATE: 12/31/16

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured,

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imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency (EPA) authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site. The EPA has collected Chemical Data Reporting (CDR) data since in 1986 (as Inventory Update Reporting). Collections occur approximately every four years and reporting requirements changed from collection to collection.

USUMTRCA

Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

Environmental Records Definitions - STATE (WA)

AIRS Air Permitted Facilities

VERSION DATE: 06/10/19

This list of air emissions inventory is a point source summary of individual inventories from facilities with air operating permits. This list is maintained by the Washington Department of Ecology.

AST Aboveground Storage Tanks

VERSION DATE: 08/31/17

Although the Washington Department of Ecology (DEC) does not regulate all aboveground storage tanks, this AST data was queried from an online DEC Spills Program mapper. The DEC's Spills Program does regulate ASTs over 10,000 gallons at Class I facilities. Other governmental entities also have regulatory jurisdiction depending on the situation. The Spills Program mapper notes the locations of facilities regulated by the Spills Program only; therefore, this data does not include all ASTs or all of those ASTs with a release. The DEC does not compile separate information on leaking ASTs or ASTs. There is no reliable way to obtain AST data, and to the knowledge of the DEC, there is no comprehensive source for that information in the State of Washington.

BROWNFIELD Brownfield Sites

VERSION DATE: 03/10/21

This list of brownfields is maintained by the Washington State Department of Ecology (DEC) Toxic Cleanup Program. In 2016 the DEC changed their information system to track only publicly funded Brownfields sites rather than all Brownfields sites. As a result, the number of sites reflected on the Brownfields report after 2016 dropped from previous reports. The Brownfields flag in the old CSCSL should have been removed at that time, however was mistakenly left in the reports until 4/1/2019.

CLEANERS Dry Cleaning Facilities

VERSION DATE: 02/09/21

This list of dry cleaning facilities, who registered with the Washington Department of Ecology (using the SIC code of 7211, 7212, 7213, 7215, 7216, 7217, 7218, and 7219) as part of the Facility/Site Database, is maintained by the Washington Department of Ecology.

CSCSL Confirmed and Suspected Contaminated Sites List

VERSION DATE: 03/03/21

This list of Confirmed & Suspected Contaminated Sites List (CSCSL) is maintained by the Washington State Department of Ecology's Toxic Cleanup Program. The CSCSL contains information about sites that are undergoing cleanup and sites that are awaiting further investigation and/or cleanup. Sites on this list have received an Initial Investigation. Sites that have been ranked and are on the Hazardous Sites List are included in this data set. When sites receive a No Further Action determination, the Department of Ecology removes them from the list, however GeoSearch does not drop records.

Environmental Records Definitions - STATE (WA)

FSD Facility/ Site Database

VERSION DATE: 10/16/20

The Facility/Site database is maintained by the Washington State Department of Ecology. This database includes regulated facilities and sites of environmental interest such as: State Cleanup sites, Federal Superfund sites, Hazardous Waste Generators, Solid Waste Facilities, Underground Storage Tanks, Dairies, and Enforcement.

HSL Hazardous Sites List

VERSION DATE: 03/03/21

The Hazardous Sites List is a subset of the Confirmed and Selected Contaminated Sites List Database. It includes sites which have been assessed and ranked using the Washington Ranking Method (WARM). This data is maintained by the Washington Department of Ecology.

ICEC Institutional / Engineering Controls Registry

VERSION DATE: 03/11/21

This list of environmental covenants is a compilation of the Environmental Covenants Registry and the Cleanup Site Details lists maintained by the Washington Department of Ecology. This registry is a list of sites that have residual contamination remaining on them after the cleanup has been completed. These sites have environmental covenants or deed restrictions limiting certain uses of the property.

LFSWDS Landfill and Solid Waste Disposal Sites

VERSION DATE: 03/05/21

The Washington State Department of Ecology maintains this list of solid waste facilities. Waste management in Washington relies on a working partnership between state and local governments and private sector businesses. County governments and local health departments develop solid waste regulations and management plans, while the Washington Solid Waste Management program supports these local governments with technical assistance and guidance. In Washington, most of the solid waste facilities are permitted by the local Jurisdictional Health Departments.

LUST Leaking Underground Storage Tanks

VERSION DATE: 03/11/21

New definition: This list of leaking underground storage tanks (LUST report) is provided by the Washington State Department of Ecology (DEC). The LUST report contains information on underground storage tank facilities that require cleanup and their cleanup history. As of 4/1/2019 the DEC updated their LUST database to include No Further Action LUST sites. The new database includes all LUST sites.

Environmental Records Definitions - STATE (WA)

NFA No Further Action Sites

VERSION DATE: 01/06/21

The NFA database contains information about sites previously on the Confirmed and Suspected Contaminated Sites list that have received a No Further Action determination. This includes sites that received a No Further Action letter: During a Voluntary Cleanup Program (VCP) cleanup, where property owners independently clean up their sites but can ask for Ecology's help; During a non-VCP cleanup, such as when property owners independently clean up their sites outside the VCP, or when Ecology oversees the cleanup; During the Initial Investigation or Site Hazard Assessment stage, which are two steps in the formal cleanup process. This data is maintained by the Washington State Department of Ecology (DEC).

PLIAPTAP Petroleum Technical Assistance Program Sites

VERSION DATE: 05/02/21

This list of current Petroleum Technical Assistance Program (PTAP) projects is maintained by the Pollution Liability Insurance Agency (PLIA). According to the PLIA, PTAP expands the state's ability to respond to the high customer demand to clean up petroleum contaminated sites. Under the PTAP, the PLIA may provide informal site-specific technical consultations and issue written opinion letters to persons conducting independent remedial actions at qualifying petroleum cleanup sites. PLIA may provide these services under the authority of RCW 70.149.040(9) and the Model Toxics Control Act (MTCOA), Chapter 70.105D RCW and Chapter 173-340 WAC. The program is available for customers who conduct cleanups of qualifying petroleum contaminated sites and wish to receive an opinion letter from the state. This program began in January of 2018.

PLIAUSTRLG Underground Storage Tank Revolving Loan and Grant Program Sites

VERSION DATE: 02/13/20

This list of Underground Storage Tank Revolving Loan and Grant Program sites is maintained by the Pollution Liability Insurance Agency (PLIA). According to the PLIA, this Program will assist UST owners or operators with the costs to install new infrastructure, retrofit existing infrastructure, close an underground storage tank, or clean up facilities contaminated by a petroleum release through the Revolving Loan and Grant Program, in partnership with the Washington State Department of Health (DOH). The PLIA will provide the oversight and technical assistance, while DOH operates the lending/repayment process. The enabling act for this Program was filed in the Office of the Secretary of State in April of 2016, became effective in July of 2016, and the initial award cycle for applications was 2016-2017.

RECYCLERS Recycling Facilities

VERSION DATE: 09/16/20

The Washington State Department of Ecology maintains this database of recycling opportunities available in Washington State.

Environmental Records Definitions - STATE (WA)

SPILLS

Spills Listing

VERSION DATE: 03/03/21

This list of hazardous spills is extracted from the SPIIS (Spills Integrated Information System) database, which is maintained by the Washington Department of Ecology's Spill Prevention, Preparedness and Response Division. The Spills Program works to Prevent, Plan and Respond to spills of oil and hazardous materials in Washington. The Spills Program also inspects chemical storage and transport facilities, vessels and assists in the cleanup of contaminated sites that harm the environment. Anything that is phoned into Ecology that has spilled to the water/ground, from any source (car accidents, buildings/facilities, vessels, by a person, etc.) and needs to be cleaned up, is considered a Spill and is included in the SPIIS database.

SWTIRE

Solid Waste Tire Facilities

VERSION DATE: 06/09/20

The Washington State Department of Ecology maintains this database of waste tire recycling opportunities available in Washington State.

UICWELLS

Underground Injection Control Wells

VERSION DATE: 10/15/20

The Water Quality Program of the Washington State Department of Ecology (DEC) maintains this water quality permit database that includes Underground Injection Control (UIC) wells. According to the DEC, UIC wells are manmade structures used to discharge fluids into the subsurface. Examples are drywells, infiltration trenches with perforated pipe, and any structure deeper than the widest surface dimension. The majority of UIC wells in Washington are used to manage storm water and sanitary waste, return water to the ground, and help clean up contaminated sites. The potential for groundwater contamination from injection wells depends upon well construction and location; quality of the fluids injected; and the geographic and hydrologic settings in which the injection occurs.

UST

Underground Storage Tanks

VERSION DATE: 03/11/21

This list of regulated active and inactive underground storage tanks is maintained by the Washington Department of Ecology (DEC). The Regulated USTs, All Active & Inactive Facilities List shows all underground storage tanks (UST) at regulated facilities in Washington State. Active facilities are defined as those having at least one tank with Operational, Temporarily Closed, Deferred, or Red Tag status. As of 4/1/2019, the DEC updated the UST database which resulted in significant changes to the data we are able to collect. Please note that specific tank data is no longer provided as a downloadable list by the DEC. Most of this data can now be found through the DEC's online search database: <https://apps.ecology.wa.gov/tcpwebreporting/reports/ust/search>

Environmental Records Definitions - STATE (WA)

VCP Voluntary Cleanup Program Sites

VERSION DATE: 03/03/21

This list of voluntary cleanup program (VCP) sites is a compilation of databases maintained by the Washington State Department of Ecology Toxic Cleanup Program. Sites included in this data are current, past, and wait listed VCPs. Data is queried from the Confirmed & Suspected Contaminated Sites List (CSCSL). A Past VCP site has at least one Voluntary Cleanup Program project, any status except Application Rejected. A Current VCP site has at least one Voluntary Cleanup Program project with a status of Open, Waitlist-New, or Waitlist-Existing. Data is also extracted from the Voluntary Cleanup Program (VCP) Wait List (Existing), which shows a list of VCP projects already accepted into the VCP Program, where there is no VCP Site Manager available to work on the project. Lastly, data is also extracted from Voluntary Cleanup Program (VCP) Wait List (New) shows a list of VCP projects accepted into the VCP Program after the VCP Wait Lists were established, where there is no VCP Site Manager available to work on the project.

WQPERMITS Water Quality Permits

VERSION DATE: 10/28/20

The Water Quality Program of the Washington State Department of Ecology maintains this water quality permit database that includes information on water quality permits, inspections, enforcement actions, and discharge monitoring data. Both historic NPDES and State Waste Discharge permits are included in the database.

Environmental Records Definitions - LOCAL

KCALF85

King County Abandoned Landfills 1985

VERSION DATE: 04/30/85

This abandoned landfill study in King County was completed by the Seattle-King County Department of Public Health's Solid Waste Division on April 30, 1985. The objective of this study was to identify any evident and/ or potential problems at these landfills that could affect the public's health and safety. In September of 1984, an initial list of 20 sites was organized for this study and then three additional sites were later added to that list. The Health Department utilized geographic and historical data from various city and county agencies for this study.

SKCALF84

Seattle King County Abandoned Landfills 1984

VERSION DATE: 07/30/84

This abandoned landfill study in the city of Seattle was completed by the Seattle-King County Department of Public Health on July 30, 1984. The primary objective of the study was to identify if any evident and/ or potential problems at these landfills could be public health hazards. A total of twelve abandoned disposal sites were selected and prioritized for this study.

TACOMAPLUME

Tacoma Smelter Plume

VERSION DATE: 04/01/18

This plume data is provided by the Department of Ecology for the State of Washington. The Tacoma Smelter site was formerly operated by the copper mining company Asarco, consequently leaving arsenic and lead contaminated soils present for miles around the prior stacks. The extent of the plume covers 1,000 square miles. Since 1993, the Department of Ecology and the U.S. Environmental Protection Agency has been cleaning up the Tacoma smelter areas. Those areas with arsenic levels over 230 parts per million qualified for soil work.

Environmental Records Definitions - TRIBAL

INDIANRES

Indian Reservations

VERSION DATE: 09/27/17

This database is extracted from select geographic and cartographic information from the U.S. Census Bureau. The Bureau of Indian Affairs (BIA) within the U.S. Department of the Interior (DOI) provides the list of federally recognized tribes. The American Indian/Alaska Native/Native Hawaiian (AIANNH) Areas includes the following legal entities: federally recognized American Indian reservations and off-reservation trust land areas, state-recognized American Indian reservations, and Hawaiian home lands (HHLs). The boundaries for federally recognized American Indian reservations and off-reservation trust lands are as of January 2017. The boundaries for state-recognized American Indian reservations and for state designated tribal statistical areas were delineated by state governor-appointed liaisons for the 2010 Census through the State American Indian Reservation Program and Tribal Statistical Areas Program respectively.

LUSTR10

Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 11/12/20

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 10. This region includes the following states: Alaska, Idaho, Oregon, Washington, and 271 Native Tribes.

ODINDIAN

Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

USTR10

Underground Storage Tanks On Tribal Lands

VERSION DATE: 11/12/20

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region10. This region includes the following states: Alaska, Idaho, Oregon, Washington, and 271 Native Tribes.

INCIDENT DETAIL REPORT

Spill Program Integrated Information System - Printed: 06/17/2021



INITIAL

INCIDENT#: 110717

Report# 1 of 1

Incident Info:

Incident Date: 04/01/2020 Incident#: 110717 ERTS#: 697505
Report Date: 4/1/2020 6:13:00 PM Incident Category: Oil Spill
Received By: Rob Reed Official Notification? N After Hour? N

Caller:

Name: Aurana Lewis Street Address:
Org/Bus. Name: Seattle City Light Other Address:
Phone#: (206) 459-0114 Ext. Ref# City, State, Zip: , 0
Email: Is Caller Resp? N Confidential? N

Location:

Location: LAT: 47.49 LONG: -122.24
Street Address: S 126th St Driving
Other Address: Direction:
City, State, Zip: SEATTLE, WA 98178
County: KING Region: NWRO

What's happened:

OIL:

Vessel/Facility	Source	Vessel IMO#	Regulate	Primary
	Power Generation Utility - Transformer		N	Y

Material	Medium	Spill Qty	Unit	Rec. Qty	Rec. 24Hrs
MINERAL OIL/TRANSFORMER OIL	Soil	2.00	Gals	2.00	0.00

Activity: NOT OPERATING OR PERFORMING
DESIGNED FUN

Impact: SOIL CONTAMINATION

Other Activity:

Does Not Effect WA: N

PRP:

***No RP Info.

Referral:

Name	Org. Name	Ref. Method	Ref. Date	Phone Number	Email Address	Pri?
Rob Reed		TELEPHONE	04/01/20	(360) 407-6348	RREE461@ecy.wa.gov	Y

Initial Info:

INCIDENT DETAIL REPORT

Spill Program Integrated Information System - Printed: 06/17/2021



<p>AHR REED EOC notified of report from Seattle City Light: transformer oil to asphalt and soil at Location (nonPCB) and crew enroute to clean-up.</p> <p>I called City Light to hear it was caused by squirrel that broke a bushing. We confirmed no impact to water and that they had a crew out to clean. No further action by AHR.</p>

INCIDENT DETAIL REPORT

Spill Program Integrated Information System - Printed: 06/17/2021



FOLLOW-UP

INCIDENT#: 110717

Incident Info:

Case Name	Seattle City Light Transformer Spill 04/01/2020	Incident#:	110717	ERTS#:	697505
Incident Date:	04/01/2020	ANT#:		SIC/MIC#:	
Inc. Category:	Oil Spill	Potential Vessel Emerg?	N	Tug Deployment?	N
Inc. Type#:	6	Status:	Closed	ECY Hired Contractor?	N

Location:

Location:	LAT:	47.49	LONG:	-122.24
Street Address:	S 126th St	Driving Direction:		
Other Address:				
City, State, Zip	SEATTLE, WA 98178			
County:	KING	Region:	NWRO	

Response:

Name	Role	Action	Start Date	End Date	Overtime?
Rob Reed	Response Duty Officer	TELEPHONE	04/01/20	04/02/20	Y

What's happened:

OIL:

Vessel/Facility	Source	Vessel IMO#	Regulate	Primary	Delvr/Recvr
	Power Generation Utility - Transformer		N	Y	

Material	Medium	Spill Qty	Unit	Rec. Qty	Rec. 24Hrs
MINERAL OIL/TRANSFORMER OIL	Soil	2.00	Gals	2.00	0.00

Cause:

Cause	Other Cause	Immediate?	Remarks
NATURAL PHENOMENON	squirrel	N	

Activity: NOT OPERATING OR PERFORMING DESIGNED FUN

Impact: SOIL CONTAMINATION

Other Activity:

Does Not Effect WA: N

Weather & Tracking:

Weather:	Wind Speed:	Tide Stage:
Visibility:	Wind Direction:	Tide Height:
Water Temp.	Current:	Swell Height:

INCIDENT DETAIL REPORT

Spill Program Integrated Information System - Printed: 06/17/2021



Temperature:	Wave Height:	Swell Direction:
Sample Taken? N	Lab Analysis? N	Entry By: Rob Reed
Photo Taken? N	Document? N	Entry Date: 04/02/2020
PIO Involved? N	Interview? N	Update By:
Press Release? N	NOPLR? N	Last Update:

PRP:

***No RP Info.

Notification:

***No Notification Info.

***No TRAP Info.

Document:

***No Upload Document

Narrative:

Name: Rob Reed

Last Update: 4/7/2020 5:00:27 PM

I called City Light to hear it was caused by squirrel that broke a bushing. We confirmed no impact to water and that they had a crew out to clean. No further action by AHR.

Disclaimer: This information was pulled on 'current date'. All data is subject to change based on updated information. Ecology cannot and does not warranty the accuracy of this data as data is reported by different entities. Ecology cannot accept any responsibility for errors, omissions, or positional accuracy.

ERTS Incident #697505

Environmental Report Tracking - Generated 6/17/2021, 9:00 AM

Primary Initial Report - Reported: 04/01/20 18:13

Where did it happen?

Location name:
Physical address: S 126th St
SEATTLE WA 98178
US
County: KING
Ecology region: NWRO
Lat, long: 47.49039 , -122.23703
Directions/Landmarks:

What happened?

Incident date: 04/01/20 00:00
Activity: Not operating or not performing designed function
Cause:
Medium: Ground - Soil
Source: Facility - Power generation utility
Substance: Oil - Mineral oil/Transformer oil
Substance amount: 2 U.S. gallons

Who might be responsible?

Name:
Organization:
Email:
Phone number(s):
Mailing address:

How was it reported?

Intake type: Call
Reported date: 04/01/20 18:13
Entered by: Rob Reed
Entered at: 04/02/20 07:59

Who reported it?

Do they want this to be confidential? No

Reporter type:
Name: Aurana Lewis
Organization: Seattle City Light
Email:
Phone number(s): (206) 459-0114
Mailing address:
Are they anonymous? No
Are they self-reporting? No
External reference number:

Comments/notes

AHR REED

EOC notified of report from Seattle City Light: transformer oil to asphalt and soil at Location (nonPCB) and crew enroute to clean-up.

I called City Light to hear it was caused by squirrel that broke a bushing. We confirmed no impact to water and that they had a crew out to clean. No further action by AHR.

Incident details

Life cycle status: Referred to program
Incident Date: 04/01/20
Was it self-reported?: No
Show to public?: No

Program owners

Wondwosen Paulos (Primary)

Location

Location name:
Physical Address: S 126th St
SEATTLE WA 98178
US
County: KING
Lat, long: 47.49039 , -122.23703

Who might be responsible?

6/17/2021

ERTS Incident #697505 - Print

NWRO - Spill Prevention, Preparedness & Response

Donna Musa (Primary)

NWRO - Toxics Cleanup

Name:

Organization:

Email:

Phone number(s):

Mailing address:

Disclaimer: Contact Ecology if you would like a copy of any of these attachments



Electronic Copy

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

*Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000
711 for Washington Relay Service • Persons with a speech disability can call (877) 833-6341*

March 16, 2021

Greg Smith
King County Library System
960 Newport Way NW
Issaquah, WA 98027
(ggsmith@kcls.org)

Re: Opinion Pursuant to WAC 173-340-515(5) on Cleanup Action Report for the following Hazardous Waste Site:

- **Site Name:** Skyway Market
- **Site Address:** 12640 Renton Avenue South, Seattle, WA 98178
- **Facility/Site No.:** 6805845
- **Cleanup Site ID No.:** 5420
- **VCP Project No.:** NW3132
- **LUST ID No.:** 6064

Dear Greg Smith:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup report of the Skyway Market facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70A.305 RCW.

Issue Presented and Opinion

Is the information presented in the December 15, 2020, *Technical Memo, Skyway Market, Project No. T-6672-2 (Technical Memo)* sufficient to support a Property No Further Action (NFA) opinion?

NO. Ecology has determined that additional steps are necessary to document the request for a Property NFA opinion for the Site.

This opinion is also based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70A.305 RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following releases:

- Total petroleum hydrocarbons as gasoline (TPH-G), diesel (TPH-D), and oil (TPH-O) range organics; benzene, toluene, ethylbenzene and xylene (BTEX) in soil.

Enclosure A includes a detailed description and diagrams of the Site as currently known to Ecology.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel associated with this Site is affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. Terra Associates, Inc. (Terra), December 15, 2020, Technical Memo, Skyway Market, Project No. T-6672-2.
2. Terra, July 3, 2019, Proposed Work Plan for Supplemental Soil Sampling at Skyway Market, Project No. T-6672-2.
3. Department of Ecology, April 12, 2019, Opinion on Remedial Action, Skyway Market, VCP No. NW3132.
4. Terra, April 3, 2017, Remediation/Feasibility Study/Cleanup Action Summary, Skyway Library.
5. Terra, December 16, 2014, Technical Memorandum, Supplemental Site Remedial Action, New Skyway Library.
6. PBS Engineering + Environmental, September 24, 2014, Underground Storage Tank Removal Report 12690 Renton Ave S, Seattle WA.

A number of these documents are accessible in electronic form from the [Site web page](https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=5420)^[1]. The complete records are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Visit our [Public Records Request page](https://ecology.wa.gov/publicrecords)^[2] to submit a public records request or get more information about the process. If you require assistance with

^[1] <https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=5420>

^[2] <https://ecology.wa.gov/publicrecords>

this process, you may contact the Public Records Officer at publicrecordsofficer@ecy.wa.gov or 360-407-6040.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis and Opinion

Based on a review of the *Technical Memo*, Ecology has determined:

1. Soil Sampling

Following Ecology's recommendations stated in an opinion letter dated April 12, 2019, four soil borings (SB-1, -2, -3, and -4) were advanced along the eastern and western boundaries of the Property (**Enclosure A, Figure 2**) to further characterize the nature and extent of the contamination in the soil. Based on the analytical data obtained in September 2020, the Site chemicals of concern (COCs) were detected only at SB-2 with the concentrations exceeding the MTCA Method A cleanup levels, while at the other three locations the concentrations were below the cleanup levels or laboratory detection limits (**Enclosure A, Table 1**).

2. Groundwater Monitoring

Quality of the groundwater at this Site was assessed in monitoring events completed between February 2008 and September 2020. Based on the laboratory results, the COCs were detected in all groundwater monitoring wells at concentrations below MTCA Method A cleanup levels or laboratory detection limits.

The laboratory data was collected in the former monitoring wells MW-1 through MW-4 (decommissioned prior to commencement of remedial excavation), and in the existing monitoring wells MW-102 through MW-105 (**Enclosure A, Table 2**) for four consecutive quarterly monitorings in 2016. Monitoring well MW-101 has been dry since installation in October 2015.

3. Additional Steps Necessary to Document the Request for a Property NFA Opinion

- A. Revise Figure 1 of the December 15, 2020 *Technical Memo* to include the following soil samples that exceeded Method A cleanup levels: benzene in the MW-101 borehole at 10 feet bgs (below ground surface); and benzene in the MW-105 boring at 12.5 feet and 15 feet bgs.
- B. The horizontal extent of soil with concentrations of COCs above MTCA cleanup levels has not been adequately documented. Options to resolve this data gap include:

- a. Determine if soil chemical results from the MW-105, MW-101, SB-1, and SB-2 borings, along with the absence of perched groundwater at the MW-101 and former MW-3 locations, can successfully demonstrate that soil impacts in the Renton Avenue S right-of-way have been sufficiently bounded.
 - b. Conduct an additional soil sampling effort at SB-2 and the vicinity, where soil contamination exceeding the cleanup level exists at this area and beyond the western boundary of the Property beneath the King County right-of-way beneath Renton Avenue South.
- C. Subsequent to confirmation that the horizontal limits of the Site have been determined and the RI updated and completed, Ecology must first concur that an environmental covenant (EC) is appropriate for the Property. The request for an EC must include documentation that the selected cleanup action will prevent recontamination of the Property by residual soil contamination present on the Site; that all remedial efforts have been done to the extent practicable; and that a thorough Feasibility Study and Disproportionate Cost Analysis have been completed and accepted by Ecology.
- D. Entry of Site data into EIM must be completed and confirmed prior to issuance of a NFA opinion letter. To date, the field collection end date for Site entered into EIM is October 18, 2016. Information regarding EIM can be found at:
<https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database>.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70A.305.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must

Greg Smith
March 16, 2021
Page 5

demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70A.305.080 and WAC 173-340-545.

3. State is immune from liability.

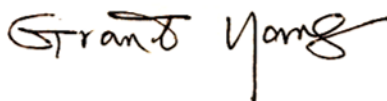
The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70A.305.170(6).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion or the termination of the Agreement, please contact me by phone at (425) 649-7126 or e-mail at grant.yang@ecy.wa.gov.

Sincerely,



Grant Yang
VCP Site Manager
Toxics Cleanup Program, NWRO

Enclosures (1): A - Description and Diagrams of the Site

cc: Chuck Lie, Terra Associates, Inc. (CLie@terra-associates.com)
Sonia Fernandez, VCP Coordinator, Ecology (sonia.fernandez@ecy.wa.gov)

Enclosure A

Site Description and Diagrams

Site Description

This enclosure provides Ecology's understanding and interpretation of Site conditions and forms part of the basis for the opinion expressed in the letter.

Site: The Site, defined as contamination in soil with petroleum hydrocarbons (TPH-G, TPH-D, and TPH-O), is located at 12640 Renton Avenue South, Seattle, Washington (the Property, **Figure 1**). The Property is situated between 76th Avenue South and Renton Avenue South and is 0.37 acres in size (**Figure 2**). The Property corresponds to King County tax parcel number 023100-0040.

Area and Property Description: The Property is located in unincorporated King County northwest of the City of Renton. Surrounding land use is retail stores, commercial offices and residential houses to the north, south, west and east (**Figure 2**).

Property History and Current Use: The Property operated as a retail gas service station until 1984. Historical records document that an automotive repair shop also operated at the facility before 1985. Subsequent descriptions listed the Site as being a commercial office in 1986, a fish restaurant in 1995, and a fruit stand in 1999. The King County public library currently located on the Property has been operated since it was built in 2015.

Source of Contamination: Releases to the soil and groundwater were discovered when two leaking underground storage tanks (LUSTs) were removed in 1984. Subsequent Site assessments confirmed that the LUSTs and the auto repair shop were the sources of contamination.

Physiographic Setting: The Site is situated along the eastern margin of the lowlands of the Puget Sound basin in western Washington. Elevations in the lowlands range from sea level up to several hundred feet. The topography is dominated by north-south trending valleys and low flat topped highlands cut by streams. The Puget Sound occupies a large part of the western portion of the basin, and lakes and streams occur frequently throughout the area.

Surface/Storm Water System: Green River is approximately 1.1 miles southwest of the Property, and the Cedar River and Lake Washington are approximately 1.2 miles northeast of the Property. The Site is primarily covered with impervious asphalt and concrete surface. Surface water and storm water runoff flow to the King County storm water drainage system.

Ecological Setting: The Property mostly covered by cement- and asphalt- paved materials, and is surrounded by commercial and residential land uses. Therefore, the urban environment prevents wildlife from feeding on plants, earthworms, insects, or other food sources in or on the soil affected by the Site.

Geology: The Site geology consists of Vashon glacial till inserted by outwash deposits at a thickness of over 55 feet. The materials are dominated with poorly sorted cobbles, gravel and sandy silt. Outwash deposits are also found in some areas with various depths.

Groundwater: Groundwater at the Site occurs under unconfined conditions in the glacial till and outwash deposits. Depths to groundwater reported at the Site range from 3.4 to 47.1 feet below ground surface (bgs). The shallow discontinuous zone of groundwater is perched on top of glacial till in all areas of the Site except the southern boundary, where the till is absent and groundwater is deeper. Data from former monitoring wells MW-1 through MW-5 indicated a flat gradient and slight flow direction to the northeast in the perched zone. Data from deeper monitoring wells has shown a flow direction to the southeast.

Water Supply: Public water supply is currently provided to the Site by the Skyway Water & Sewer District. Based on Ecology's well log database, no groundwater wells are found within approximately 1,000 feet of the Site.

Contamination and Remediation: Soil and groundwater contamination were found during removal of the two LUSTs in 1984. The sequential Site investigations completed between 2003 and 2014 further identified that the two LUSTs, the former auto repair shop, and an associated heating oil tank were the sources of contamination, and confirmed petroleum hydrocarbons and lead as the COCs in soil. The reports also initially characterized the nature and extent of the contamination at this Property.

Based on the 2014 Site assessment report, the COCs exceeding the cleanup levels were discovered at the following locations (**Figure 3**): 8-7, 8-13, 8-25, 9-15, 9-16, 9-18, 9-25, 9-26, 10-1, 10-2 and 10-3. The highest levels detected for TPH-G, TPH-D, TPH-O, BTEX, and lead in the soil samples are listed below:

COCs with the Highest Concentrations in the Soil Samples (mg/kg)

Sample ID	TPH-G	TPH-D	TPH-O	Benzene	Ethyl Benzene	Xylenes	Lead
8-7	3,800	4,600					
8-13			31,000				
9-15							860
9-25				22	50	150	

Subsequent to removal of the heating oil UST in late 2014, approximately 1,981 tons of petroleum- and lead-impacted soil were also excavated and disposed off-Site. The confirmation soil sampling results obtained from the bottom and side walls of the excavation (**Figure 3**, with depths of 13 to 15 feet) showed the COCs were at concentrations below the cleanup levels or undetectable, except at the three locations: 9-18, 10-1 and 10-3 (**Figure 3**). In addition, 4,500 gallons of contaminated groundwater were removed from the excavation during the soil cleanup action. The removed groundwater was treated at an off-Site facility.

In 2005, four of the monitoring wells were installed to identify contamination status in groundwater at the excavation and within the Site (**Figure 3**). Groundwater encountered at 6 feet bgs in MW-1, MW-2 and MW-4 (dry in MW-3) was collected for the COCs analysis. The laboratory results demonstrated that total lead was the only COC detected in MW-1 and MW-2 at concentrations of 17 micrograms per liter (µg/l) and 320 µg/l, respectively, exceeding the MTCA

Method A cleanup level of 15 µg/l. Total lead in former monitoring wells MW-1 through MW-4 was re-evaluated by sampling with field filtering, and analysis for dissolved lead. All results were below Method A.

The following five monitoring wells (**Figure 3**) were installed and screened in glacial till at depths between 10 feet to 50 feet bgs, and groundwater samples were taken for analysis between 2015 and 2016. The confirmation laboratory results indicated that all the COCs in groundwater were undetectable or below MTCA Method A cleanup levels for four consecutive quarterly events (**Table 2**).

In 2020, twelve additional soil samples were collected from four soil borings (SB-1, -2, -3 and -4; **Figure 2**) at intervals of 7.5 feet, 12.0 feet and 15.0 feet bgs for further assessing contamination in soil along the eastern and western boundaries of the Property. The analytical data (**Table 1**) showed contamination of the COCs exceeded the cleanup levels at SB-2. This supplemental Site investigation confirmed that the cleanup action was successfully completed on the Property, while soil contaminated with the COCs at concentrations exceeding cleanup levels remains at SB-2 and the vicinity along the southwestern Property boundary, and extends beneath the King County right-of-way (Renton Avenue S).

Site Diagrams

Figure 1 Site Location and Vicinity (Terra Associates, 2020)

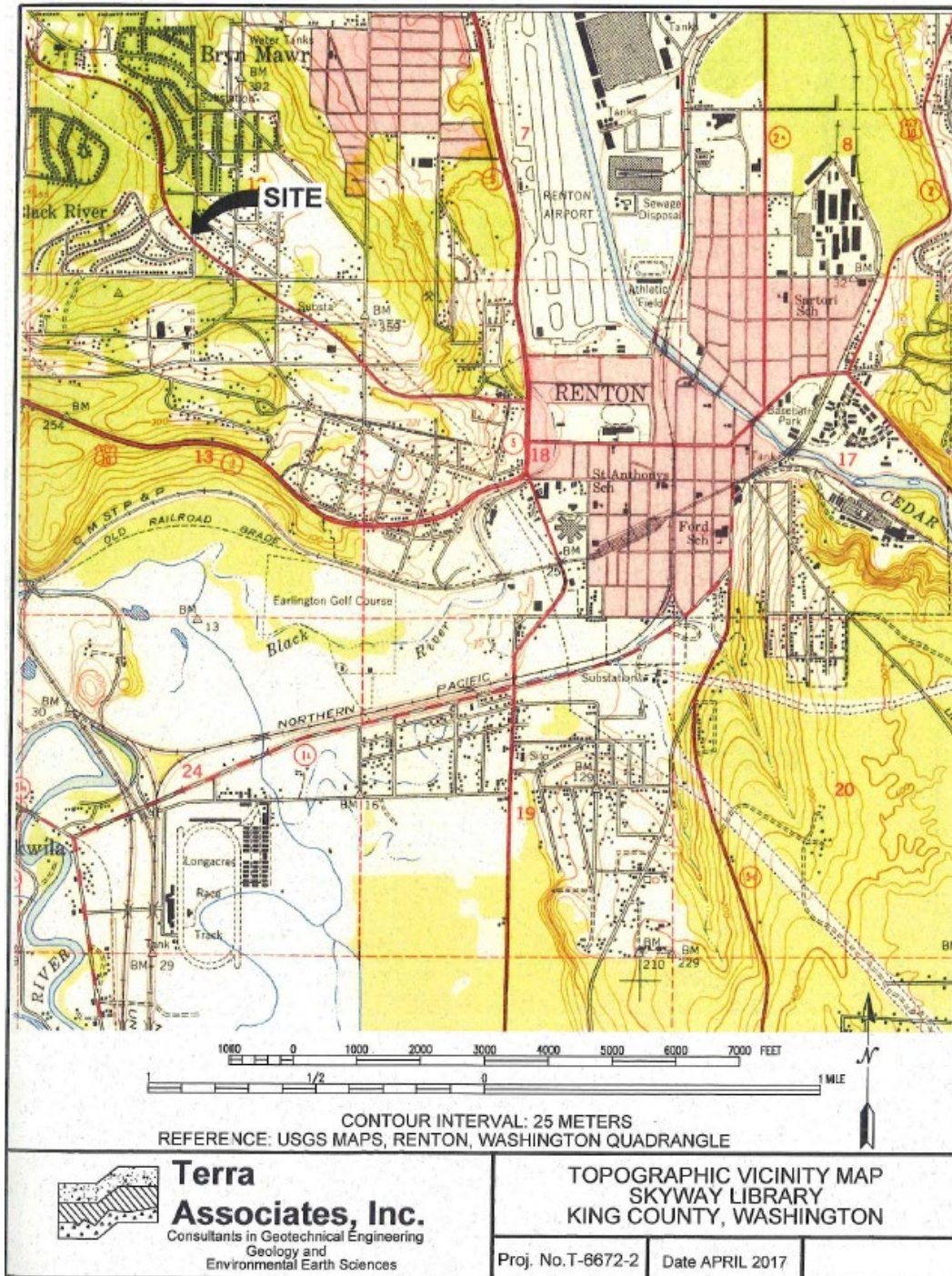


Figure 2 Supplemental Soil Sampling Locations and Laboratory Results
(Terra Associates, 2020)

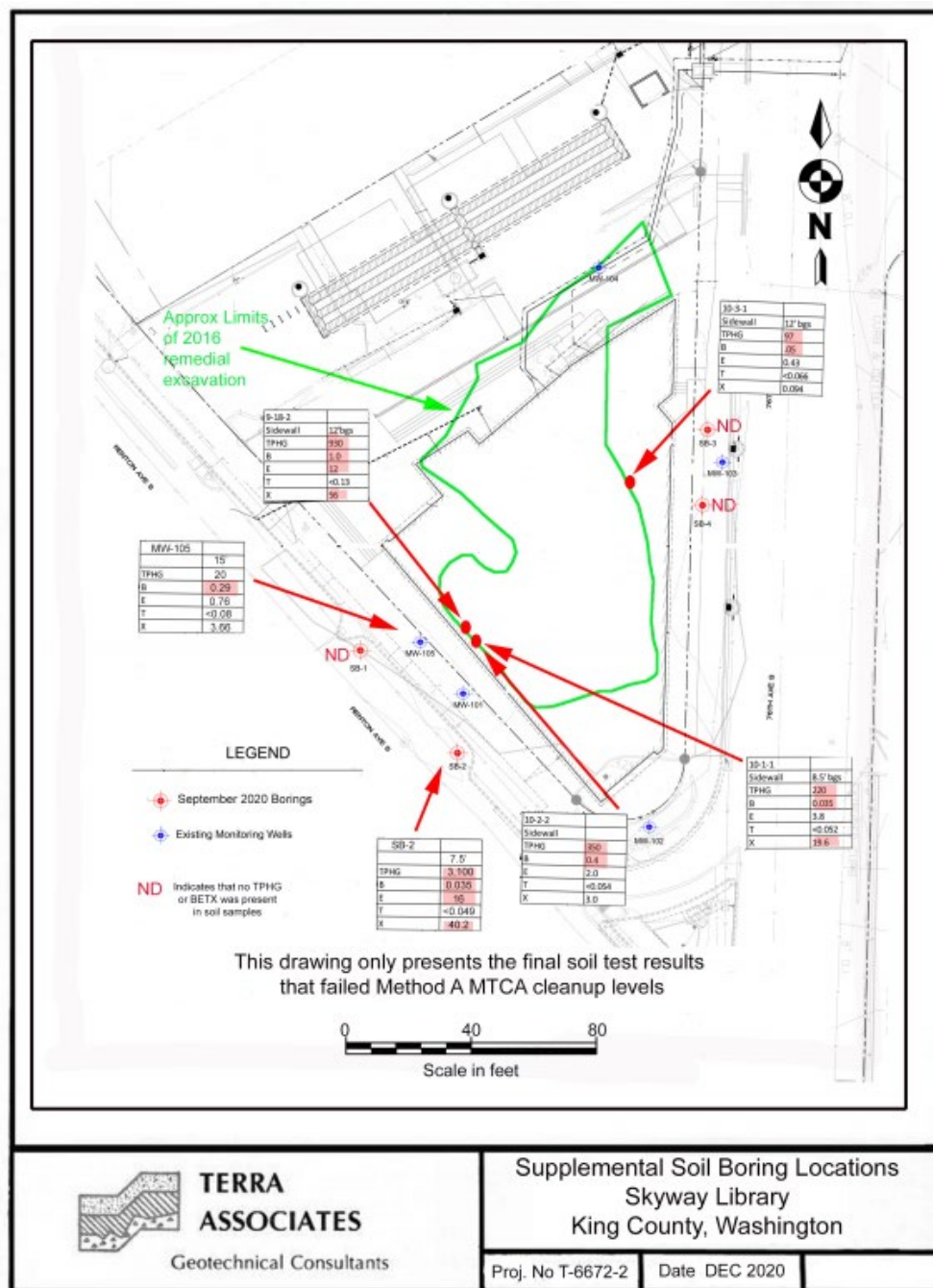


Figure 3 Groundwater Monitoring Wells, Soil Excavations and Soil Sampling Results
(Terra Associates, 2017)

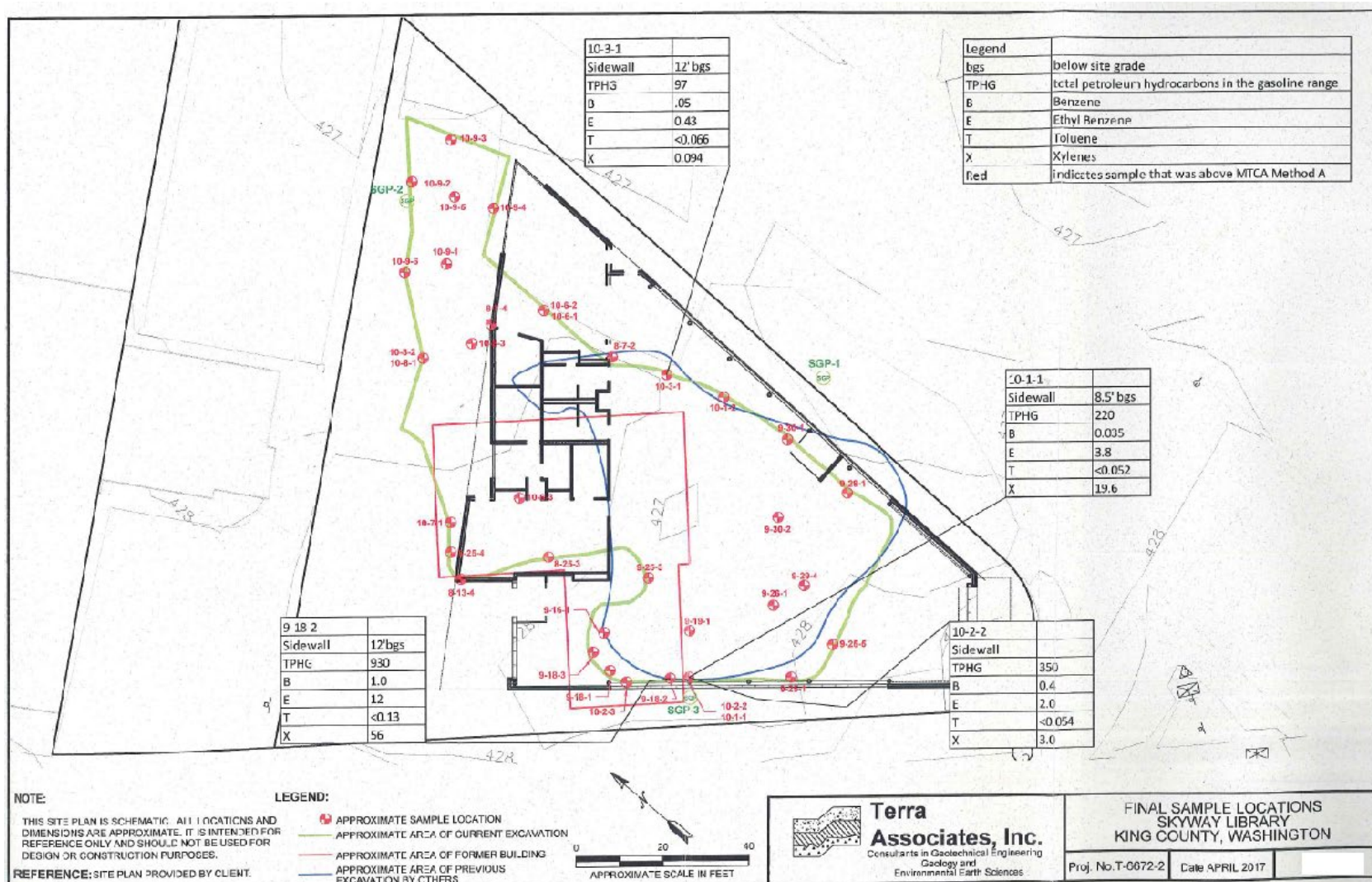


Table 1 Soil Sampling Analytical Summary

(Terra Associates, 2020)

Exploration	Depth	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	m,p- Xylene	o-Xylene
SB-1	7.5	5.0U	0.02U	0.05U	0.05U	0.05U	0.05U
	10	5.7U	0.02U	0.057U	0.057U	0.057U	0.057U
	15	4.8U	0.02U	0.048U	0.048U	0.048U	0.048U
SB-2	7.5	3,100	0.035	0.049U	16	36	4.2
	10	4.9U	0.02U	0.049U	0.049U	0.049U	0.049U
	15	5.7U	0.02U	0.057U	0.057U	0.057U	0.057U
SB-3	7.5	5.1U	0.02U	0.051U	0.051U	0.051U	0.051U
	12.5	6.0U	0.02U	0.06U	0.06U	0.06U	0.06U
	15	4.8U	0.02U	0.048U	0.048U	0.048U	0.048U
SB-4	2.5	8.2U	0.02U	0.066U	0.066U	0.066U	0.066U
	12.5	4.6U	0.02U	0.046U	0.046U	0.046U	0.046U
	15	5.1U	0.02U	0.051U	0.051U	0.051U	0.051U
MTCA Method A		800	0.03	7.0	6.0	9.0	

Notes: All units are mg/kg

All results are based on dry weight

Table 2 Groundwater Sampling Analytical Summary
(Terra Associates, 2020)

Monitoring Well Number	Date	Elapsed Time (days)	TPH Diesel Range	TPH Oil Range	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	m,p- Xylenes	o-Xylene	Total Lead	Dissolved lead
MW-101	10/23/2015	Dry										
	2/2/2016											
	4/29/2016											
	7/15/2016											
	10/17/2016											
	9/17/2020											
MW-102	2/2/2016		260U	410U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.7	1.0U
	4/29/2016	87	260U	410U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	2.5	1.0U
	7/15/2016	77	270U	430U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.1U	1.0U
	10/17/2016	94	260U	420U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.4	1.0U
	9/17/2020	n/a	NT	NT	100U	0.5U	1.0U	1.0U	1.0U	1.0U	NT	NT
MW-103	10/23/2015		260U	410U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.1U	1.0U
	2/2/2016	102	260U	440U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.1U	1.0U
	4/29/2016	87	260U	410U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.1U	1.0U
	7/15/2016	77	270U	430U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.1U	1.0U
	9/17/2020	n/a	100U	0.5U	1.0U	1.0U	1.0U	1.0U	100U	0.5U	NT	NT
MW-104	10/23/2015		270U	420U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	7.1	1.0U
	2/2/2016	102	260U	440U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.1U	1.0U
	4/29/2016	87	260U	410U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.1U	1.0U
	7/15/2016	77	260U	420U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	2.5	1.0U
	9/17/2020	n/a	NT	NT	100U	0.5U	1.0U	1.0U	1.0U	1.0U	NT	NT
MW-105	2/2/2016		260U	410U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.1U	1.0U
	4/29/2016	87	260U	410U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.1U	1.0U
	7/15/2016	77	280U	450U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.1U	1.0U
	10/17/2016	94	280U	450U	100U	0.5U	1.0U	1.0U	1.0U	1.0U	1.1U	1.0U
	9/17/2020	n/a	NT	NT	100U	0.5U	1.0U	1.0U	1.0U	1.0U	NT	NT
MTCA Method A			500	500	800	5	1,000	700	1,000		15	

Notes: All units are µg/l, parts per billion equivalent.
U modifier indicates that the analyte was not present at the numerical practical Quantitation Limit (PQL)



TERRA ASSOCIATES, Inc.

Consultants in Geotechnical Engineering, Geology
and
Environmental Earth Sciences

December 16, 2014
Project No. T-6672-1

Ms. Alyssa Moir
K&L Gates LLP
925 Fourth Avenue, Suite 2900
Seattle, Washington 98104

Subject: Technical Memorandum
Supplemental Site Remedial Action
New Skyway Library
Renton Avenue South
King County, Washington
VCP NW 2149
ERTS 651604

Dear Ms. Moir:

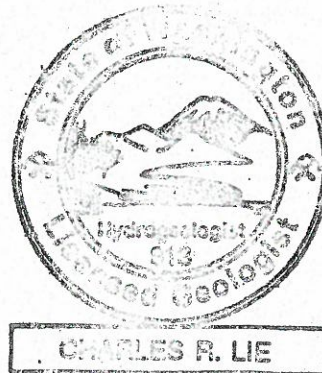
This technical memorandum summarizes our observations during the recent supplemental site remedial action at the new library site in Skyway, an unincorporated area between Seattle and Renton in King County, Washington. The site was previously a Richfield Service station and had undergone a remedial action in 2005 and was granted a No Further Action Determination in 2010 by the Washington State Department of Ecology. As discussed in this report, foundation excavations during the initial construction phase of the project encountered soils with a distinct hydrocarbon odor.

We trust the information presented is sufficient for your current needs. If you have any questions or require additional information, please call.

Sincerely yours,
TERRA ASSOCIATES, INC.


Charles R. Lie, L.E.G., L.H.G.
Project Manager

cc: Mr. Greg Smith, KCLS
Ms. Gayle Garbush, WDOE NWRO
Ms. Joyce Hsia, URS



**Technical Memorandum
Supplemental Site Remedial Action
New Skyway Library
Renton Avenue South
King County, Washington
VCP NW 2149
ERTS 651604 and 652695**

SUMMARY

This memo transmits the results of supplemental sampling and soil export from the new branch library being constructed in the Skyway Neighborhood of Seattle, Washington. The area of the new building was formerly a gasoline station site that had undergone remediation and had received a No Further Action (NFA) Determination from Ecology. On August 7, 2014, soils with a distinct hydrocarbon odor were encountered in several foundation excavations. Subsequent test pits found an area beneath the footprint of the new structure contaminated with petroleum hydrocarbons above their current Model Toxics Control Act Method A cleanup levels.

Prior to the discovery of the hazardous substances, KCLS' contractors had mobilized equipment and personnel to meet a tight construction timeline to build the library. To avoid delay and allow the construction to proceed, a supplemental remedial excavation was conducted to remove the accessible petroleum contaminated soils (PCS). On August 25, 2014, excavation and export of the PCS started. The details of the excavation and removal of PCS is discussed in more detail later in this memo.

The goal of the excavation and soil disposal work documented in this memo was to remove the soils that exceeded the MTCA Method A cleanup levels from as much of the building footprint as possible. The initial exposures of PCS were shallow and appeared to be a surface release of paint thinner/mineral spirits. As the excavation proceeded, we encountered gasoline-contaminated PCS. In order to remove all gasoline-contaminated PCS, we excavated to a depth of about 14 to 15 feet below existing grades. To preserve support for the perimeter sidewalks and right-of-way, the excavation was limited to a footprint that left a 45 degree projection down from the right-of-way to the base of the excavation in place.

The removal of PCS also required the removal of overburden above the deeper areas where PCS was present. The project site did not have sufficient room to segregate soils and stockpile pending test results. Further, the geotechnical report prepared by GeoEngineers recommends that the site soils not be used for structural fills on this site because they were highly variable in the amount of silt and organic material. The geotechnical report is attached in Appendix A.

Terra Associates provided excavation observation and sampling services during the removal of the accessible PCS. The supplemental remedial excavation and testing is discussed in more detail in the following sections of this memo.

PROJECT DESCRIPTION

The project consists of a new one-story library building with a slab-on-grade and a footprint of about 8,000 square feet. The building loads are supported on pin piles that extend the building loads down through the existing fills on-site to dense native soils. The floor slab will be provided with a 12-inch thick layer of clean aggregate.

PRIOR WORK ON-SITE

The site is a former gasoline station that was the subject of a remediation effort by the prior owner. According to the cleanup report prepared by Alkai Consultants dated August 17, 2005, the prior owner removed 1981 tons of petroleum contaminated soils impacted by gasoline, diesel, and waste oil. The report states that the soil contamination was removed until the residual concentrations were below the MTCA Method A levels.

Subsequent to the removal of the soils, Northwest HydroGeo Consultants performed a groundwater study and found that no hydrocarbons or benzene were present in the groundwater above MTCA cleanup levels. The Final Report by NW HydroGeo Consultants is dated March 17, 2009.

For our Phase I ESA dated March 13, 2012, we recommended that the groundwater wells on-site be sampled for halogenated compounds. The results of the groundwater sampling did not identify any common halogenated solvents or daughter products. The monitoring wells were subsequently abandoned prior to current construction activities.

Static groundwater levels below the site have been documented to be about six to nine feet below existing site grades in the prior study by Northwest HydroGeo Consultants and the current geotechnical report prepared by GeoEngineers.

The following documents present the results of earlier sampling on-site:

1. *Site Investigation Report* prepared by Northwest HydroGeo Consultants report, prepared for Mr. Ravinder Dillon, dated December 18, 2003
2. *Site Investigation Report, Continuation of the Environmental Site Assessment Phase II Soils and Groundwater Testing at a former service station*, prepared by Northwest HydroGeo Consultants report, prepared for Mr. Ravinder Dillon, dated March 17, 2004
3. *UST Decommission, Site Assessment and Independent Soil Remediation Action*, Alkai Consultants LLC, prepared for Mr. Ravinder Dillon, dated August 17, 2005
4. *Monitoring Well Installation Report*, Northwest HydroGeo Consultants, prepared for Mr. Ravinder Dillon, dated March 7, 2008
5. *Final Report Summary*, Northwest HydroGeo Consultants, prepared for Mr. Ravinder Dillon, dated March 17, 2009
6. *Testing for Dissolved Lead in Groundwater* Northwest HydroGeo Consultants, prepared for Mr. Ravinder Dillon, dated March 9, 2010

7. *NFA Notification, Eat Em Up Hut, former ARCO Station*, prepared by the Washington State Department of Ecology, for Mr. Ravinder Sing Dhillon, dated September 16, 2010
8. *Phase I ESA, Skyway Parcels*, Terra Associates Inc., prepared for King County Library System, dated March 13, 2012
9. *Geotechnical Services, Skyway Library, Seattle, Washington*, Geotechnical Report, prepared by GeoEngineers, dated December 4, 2013
10. *Limited Asbestos Survey*, Terra associates, Inc., prepared for King County Library System, dated August 26, 2014

SITE CONDITIONS

Figure 1 is a schematic vicinity map that shows the location of the site relative to the surrounding streets. Figure 2 is a topographic vicinity map that shows the local topography.

Figures 3 through 6 shows the site and the remedial excavation along with the footprint of the new building. The plan also shows the approximate extent of the prior remedial excavation and of the UST found during the recent excavation. At the time of our initial site visit on August 7, 2014, the site was relatively level at an elevation similar to the adjacent streets. The prior office building on the northern parcel had been demolished.

The excavation on-site exposed at least two episodes of fill. The first episode of fill appeared to have been done to level the site at an elevation that corresponded with the adjacent streets. The second episode of fill appears to consist of the backfill from the remedial excavation that occurred in 2005. Within the fills placed in 2005, a significant amount of building rubble was found. We prepared a Limited Asbestos Survey dated August 26, 2014 that addressed concerns about asbestos-containing materials in the building rubble. The results of the asbestos sampling found that there was asbestos associated with some roofing materials. The building rubble was handled as asbestos-containing waste. The source of the building rubble is not known.

EXCAVATION SEQUENCE

Our initial site visit to observe soils encountered in the foundation excavations was on August 7, 2014. On this date, five soil samples were taken from the foundation excavations and shallow test pits excavated by the general Contractor, Beisley Inc. Based on the initial testing, we performed additional soil sampling on August 13, 2014 using a track hoe operated by Beisley. Based on the testing conducted on the 7th and the 13th, a profile was established with Allied Waste for the disposal of 800 tons of soils. The initial testing showed the soils to be a mixture of gasoline, diesel, and oil range hydrocarbons. No halogenated volatile organics were found to be present in the surface soils. The initial soil samples are shown on Figure 3.

Rhine Demolition provided the equipment and the operator to remove both the PCS and the building rubble. The initial remedial excavation started on August 25, 2014. The excavation exposed a small UST. Limited excavation activities occurred on August 26, 2014. The presence of the UST precluded further export of PCS pending removal of the UST. The UST location is shown on Figure 3.

A notification to remove a UST was provided to the Washington State Department of Ecology (Ecology) on August 28, 2014 with a request to waive the 30-day notification in order to expedite the removal of the UST and allow the remedial excavation to continue. The waiver was approved by Ecology on September 2, 2014. The UST was removed by IO Environmental and Infrastructure on September 15, 2014. PBS Environmental, a subcontractor to IO Environmental and Infrastructure, was the assessor of record for the UST closures. Terra Associates was present during the UST removal and also obtained soil samples. During UST removal, a prominent hole was noted in the base of the UST and stained soils were observed. Terra Associates verbally notified Ecology of a release from the UST on September 16, 2014. The 30-day notice to Ecology and the PBS Environmental UST assessment are attached in Appendix B. The final UST capacity was found to be about 150 gallons.

Removal of the building rubble started on September 16, 2014. Three trucks of building rubble were removed. With the exception of the roofing materials discussed in our report dated, August 26, 2014, no new materials suspected to be ACMs were observed in the rubble that required additional sampling. The approximate distribution of the rubble is shown on Figure 3.

Removal of building rubble continued on September 17 and 18.

Excavation and export of soils with petroleum hydrocarbons commenced on September 17, 2014. Groundwater seepage accumulated in the excavation and was pumped out on a daily basis. From August 26, 2014 through October 13, 2014, a total of 157,800 gallons of water were removed for off-site treatment and disposal. The truck tickets for the water disposal are attached in Appendix C. 165 trucks of soils were exported from the site between August 25 and October 8, 2014. The scale tickets are attached in Appendix D. The total export was 4,519.5 tons of PCS and overburden.

The final limits of the excavation are shown on Figures 5 and 6.

FIELD SAMPLING/ANALYTICAL TESTING

During the initial excavation and in the excavation to remove the PCS, soils were initially screened in the field with a handheld photo ionization device (PID) using the headspace technique. This screening assisted in determining the optimum location to get soil cauterization samples as well as to help initial definitions of soils that were clean relative to the MTCA Method A cleanup values. At representative locations, we obtained soil samples for analytical testing. We obtained the soil samples by direct entry into shallow excavations that had side slopes that met state safety requirements. For deeper excavations, we obtained the samples from the center of the track hoe bucket.

We placed each sample into laboratory prepared glassware and refrigerated them pending delivery to the analytical laboratory. Samples that were to be analyzed for gasoline and/or volatiles were handled in accordance with EPA Method per EPA Method 5035A.

The analytical testing is summarized on Table 1. The locations of all of the samples are shown on Figure 5. The locations of the final samples are shown on Figure 6. Figure 7 shows the location of the former building and prior remedial excavation. The analytical test reports for the soils are attached in Appendix E. The results of analysis of the contents of the UST are attached in Appendix F.

CONCLUSION

Altogether, 4,519.5 tons of PCS and overburden was removed from the site. Some PCS above MTCA Method A cleanup levels remain because the excavation was limited by the sidewall stability of the loose soils on-site, the presence of seepage along the toe of the temporary cut, and the presence of the adjacent sidewalk and right-of-way along Renton Avenue South and South 76th Street. To address the impacts of the remaining PCS, KCLS will install a vapor intrusion mitigation system to redirect soil vapors from entering the interior of the library.

LIMITATIONS

The findings, conclusions, and recommendations presented in this memo are based on our documented site observations, our review of current Ecology databases, our recent local experience, and the analytical testing summarized in this report. Other information related to past site uses or current site conditions may exist. Laboratory and field measurements listed for dates prior to 2012 were made by others and are summarized in this document for information purposes only.

If further information on the site becomes available, Terra Associates, Inc. should review the information, as it may affect our conclusions.

We prepared our conclusions and recommendations in accordance with generally accepted local professional engineering practices in use at this time. We make no other warranty, either expressed, or implied. This report is the copyrighted property of Terra Associates, Inc. and is intended for specific application to the Skyway Library project in King County, Washington. This memo is for the exclusive use of the King County Library System and their authorized representatives.

Attachments: Table 1 – Soil Sampling Summary
Figure 1 – Vicinity Map
Figure 2 – Topographic Vicinity Map
Figure 3 – Initial Test Pit Locations
Figure 4 – Approximate Extent of Rubble Fill
Figure 5 – Sample Location Plan
Figure 6 – Final Sample Locations
Figure 7 – Former Building Footprint
Appendix A – Geotechnical Report
Appendix B – UST Closure Documentation
Appendix C– Water Disposal Tickets
Appendix D– Soil Disposal Tickets
Appendix E – Laboratory Reports-Soils
Appendix F – Laboratory Reports UST Contents

Table 1
Soil Sample Summary
KCLS Skyway

Sample Date	Sample ID	Depth	TPH Diesel Range	TPH Oil Range	TPH Gasoline Range	Benzene	Toluene	Ethyl Benzene	m,p Xylene	o Xylene	EDB	EDC	MTBE	Lead	Notes	Removed?
8-7-14	8-7-1	4	4,600	11,000	1,200	0.067	<0.13	0.42	0.86	<0.65	NT	NT	NT	NT	TP-1, C	YES
	8-7-2	5.5	<28	<56	10	<0.02	<0.058	<0.058	<0.058	<0.058	NT	NT	NT	NT	TP-2, C	No
	8-7-3	3.5	<28	<56	16	<0.02	<0.06	<0.06	<0.06	<0.06	NT	NT	NT	NT	TP-3, C	No
	8-7-4	2	<840	600	3,800	<0.02	<0.06	1.8	2.8	<1.2	NT	NT	NT	NT	TP-4, C	YES
	8-7-5	4.5	<100	290	770	<0.02	<0.064	0.19	0.63	<0.32	NT	NT	NT	NT	TP-5, C	YES
8-13-14	8-13-1	1.5	<130	580	<7.5	<0.2	<0.075	<0.075	<0.075	<0.075	NT	NT	NT	NT	TP-6, C	YES
	8-13-2	4.5	<63	<130	<25	NT	NT	NT	NT	NT	NT	NT	NT	NT	TP-7, C	No
	8-13-3	5	<58	<120	<23	NT	NT	NT	NT	NT	NT	NT	NT	NT	TP-8, C	No
	8-13-4	2	<59	<120	<24	NT	NT	NT	NT	NT	NT	NT	NT	NT	Grid Z1@11, C	YES
	8-13-5	5.5	<29	150	<7.1	<0.02	<0.071	<0.071	<0.071	<0.071	NT	NT	NT	NT	TP-9, C	YES
	8-13-6	2	<38	370	<23	NT	NT	NT	NT	NT	NT	NT	NT	NT	TP-9, C	YES
	8-13-7	6.5	2,400	31,000	860	0.68	<0.13	1.9	1.3	1.6	NT	NT	NT	NT	TP-10, C	YES
	8-13-8	7	130	660	180	0.028	<0.12	0.3	0.22	0.16	NT	NT	NT	NT	TP-11, C	YES
	8-13-9	2	<27	<54	<5.8	<0.02	<0.058	<0.058	<0.058	<0.058	NT	NT	NT	NT	TP-10, C	YES
	8-13-10	5.5	<55	<110	<22	NT	NT	NT	NT	NT	NT	NT	NT	NT	TP-12, C	YES
	8-13-11	2	<54	<110	<22	NT	NT	NT	NT	NT	NT	NT	NT	NT	TP-12, C	YES
	8-13-12	2.5	<150	870	<24	NT	NT	NT	NT	NT	NT	NT	NT	NT	TP-1, C	YES
8-25-14	8-25-1	10	270	1,300	430	<0.02	<0.098	0.2	0.45	<0.49	NT	NT	NT	NT	C	YES
	8-25-2	9	<28	80	1,400	<0.021	<0.1	0.57	1.7	<0.5	NT	NT	NT	NT	C	YES
	8-25-3	9	<55	<28	<5.5	<0.02	<0.55	<0.55	<0.55	<0.55	NT	NT	NT	NT	E	YES
	8-25-4	9	<29	<58	<6.2	<0.02	<0.062	<0.062	<0.062	<0.062	NT	NT	NT	NT	E	YES
	8-25-5	8	510	1300	670	<0.021	<0.11	0.43	0.42	<0.55	NT	NT	NT	NT	C	YES
8-26-14	8-26-1	13	<29	<57	<5.5	<0.02	<0.55	<0.55	<0.55	<0.55	NT	NT	NT	NT	D	YES
9-15-14	9-15-1	2.5	1,100	20,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	38	B, C, A	YES
	9-15-2	2.5	1,000	25,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	16	B, C, A	YES
	9-15-3	3.5	2200	30,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	860	B, C, A	YES
9-16-14	9-16-1	8	NT	NT	400	0.029	<0.12	1.2	0.71	0.52	NT	NT	NT	NT	A	YES
9-18-14	9-18-1	11	<28	<56	<11	<0.023	<0.11	0.14	<0.11	<0.11	NT	NT	NT	NT	E	No
	9-18-2	12	NT	NT	930	1.0	<0.13	12	45	11	NT	NT	NT	NT	E	No
	9-18-3	13	<30	<61	<7.0	<0.02	<0.7	<0.7	<0.7	<0.7	NT	NT	NT	NT	D	No
	9-18-4	9	NT	NT	230	0.18	<0.29	4.4	17	1.0	NT	NT	NT	NT	C	YES
9-19-14	9-19-1	13.5	<32	<65	<7.9	<0.02	<0.079	<0.079	<0.079	<0.079	NT	NT	NT	NT	D	No
9-25-14	9-25-1	13	<33	<65	<7.9	0.023	<0.079	<0.079	0.084	<0.079	NT	NT	NT	NT	D	No
	9-25-2	10	NT	NT	1,900	1.3	<0.11	50	150	5.5	<0.059	<0.059	<0.059	<5.5	C	YES
	9-25-3	12	NT	NT	<7.8	<0.02	<0.078	<0.078	<0.078	<0.078	NT	NT	NT	NT	D	No
	9-25-4	13	NT	NT	2,500	2.2	<0.14	19	33	0.53	NT	NT	NT	NT	C, A	YES
	9-25-5	13.5	<29	<59	<6.9	<0.02	<0.069	<0.069	<0.069	<0.069	<0.0012	<0.0012	<0.0012	<5.9	D	No
9-26-14	9-26-1	12.5	NT	NT	<6.1	<0.02	<0.061	<0.061	<0.061	<0.061	NT	NT	NT	NT	D	No
	9-26-2	12	NT	NT	150	0.17	<0.3	1.1	<0.3	<0.3	NT	NT	NT	NT	C	YES
	9-26-3	11	NT	NT	250	0.22	<0.34	3.3	8.3	0.34	NT	NT	NT	NT	C	YES
9-29-14	9-29-1	13	<29	<59	<6.4	<0.02	<0.064	<0.064	<0.064	<0.064	NT	NT	NT	NT	E	No
	9-29-4	13.5	<33	<65	<8.3	<0.02	<0.083	<0.083	<0.083	<0.083	<0.0013	<0.0013	<0.0013	<6.5	D	No
9-30-14	9-30-1	12	<30	<60	<6.9	<0.02	<0.069	<0.069	<0.069	<0.069	NT	NT	NT	NT	E	No
	9-30-2	4.5	NT	NT	<5.9	<0.02	<0.059	0.19	0.2	<0.059	NT	NT	NT	NT	D	No

Table 1
(continued)
Soil Sample Summary
KCLS Skyway

Sample Date	Sample ID	Depth	TPH Diesel Range	TPH Oil Range	TPH Gasoline Range	Benzene	Toluene	Ethyl Benzene	m,p Xylene	o Xylene	EDB	EDC	MTBE	Lead	Notes	Removed?
10-1-14	10-1-1	8.5	<28	<56	220	0.035	<0.052	3.8	15	4.6	NT	NT	NT	NT	E	No
	10-1-2	15	<47	280	<4.9	<0.02	<0.49	<0.49	<0.49	<0.49	<0.0011	<0.0011	<0.0011	<5.5	E	No
	10-1-3	11	760	2,600	1500	0.88	<0.11	13	0.58	<0.11	NT	NT	NT	NT	C,A	YES
10-2-14	10-2-1	10	640	5,400	330	0.78	<0.11	1.2	0.78	<0.11	NT	NT	NT	NT	C, A	YES
	10-2-2	12	<28	490	350	0.4	<0.054	2.0	0.99	<0.054	NT	NT	NT	NT	C, A	YES
	10-2-3	4.5	<28	<57	<5.7	<0.2	<0.057	<0.057	<0.057	<0.057	<0.0011	<0.0011	<0.0011	7.7	E	No
	10-2-4	8	900	630	3,000	<0.023	<0.12	0.83	1.2	1.8	NT	NT	NT	NT	C	No
10-3-14	10-3-1	12	<46	<140	97	0.05	<0.066	0.43	0.094	<0.066	<0.07	<0.07	<0.07	8.1	E	No
10-6-14	10-6-2	5	<33	110	29	<0.02	<0.08	<0.08	<0.08	<0.08	NT	NT	NT	NT	E	No
	10-6-3	15	<32	<63	<6.7	<0.02	<0.067	<0.067	<0.067	<0.067	NT	NT	NT	NT	D	No
10-7-14	10-7-1	5	<28	<50	<6.0	<0.02	<0.06	<0.06	<0.06	<0.06	NT	NT	NT	NT	E	No
10-8-14	10-8-1	8	47	190	16	<0.02	<0.088	<0.088	<0.088	<0.088	NT	NT	NT	NT	E	No
	10-8-2	5	<32	<63	<7.2	<0.02	<0.072	<0.072	<0.072	<0.072	NT	NT	NT	NT	D	No
10-9-14	10-9-1	5	<29	<57	<6.4	<0.02	<0.06	<0.06	<0.06	<0.06	NT	NT	NT	NT	E	No
	10-9-2	3	<33	130	<8.2	<0.02	<0.082	<0.082	<0.082	<0.082	NT	NT	NT	NT	E	No
	10-9-3	3	<32	<64	<7.7	<0.02	<0.077	<0.077	<0.077	<0.077	NT	NT	NT	NT	E	No
	10-9-4	3	<29	<58	<6.0	<0.02	<0.06	<0.06	<0.06	<0.06	NT	NT	NT	NT	E	No
	10-9-5	5	<29	<58	<5.4	<0.02	<0.054	<0.054	<0.054	<0.054	NT	NT	NT	NT	D	No
	10-9-6	2	<28	<55	<5.1	<0.02	<0.051	<0.051	<0.051	<0.051	NT	NT	NT	NT	E	No
MTCA			2,000	2,000	30	0.03	7	6	9					250		

Notes:

A indicates the area represented by the sample was removed for off-site disposal.

B indicates the samples were taken from the waste oil UST cavity during the UST assessment.

C indicates that the sample is a characterization sample.

D indicates that the sample is the final sample from the base of the excavation.

E indicates that the sample is a final sidewall sample.

NT indicates that the sample was not tested for the individual analyte.

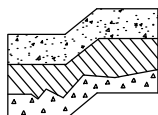
Values in italics are from HCID testing.

Shaded cells are values that exceed the MTCA Method A cleanup value.



REFERENCE: THOMAS BROTHERS GUIDE 2001

NOT TO SCALE



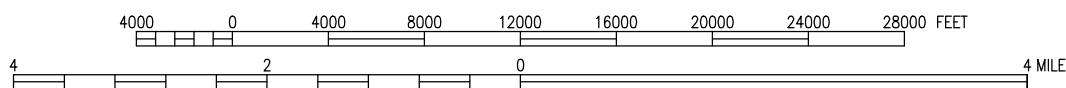
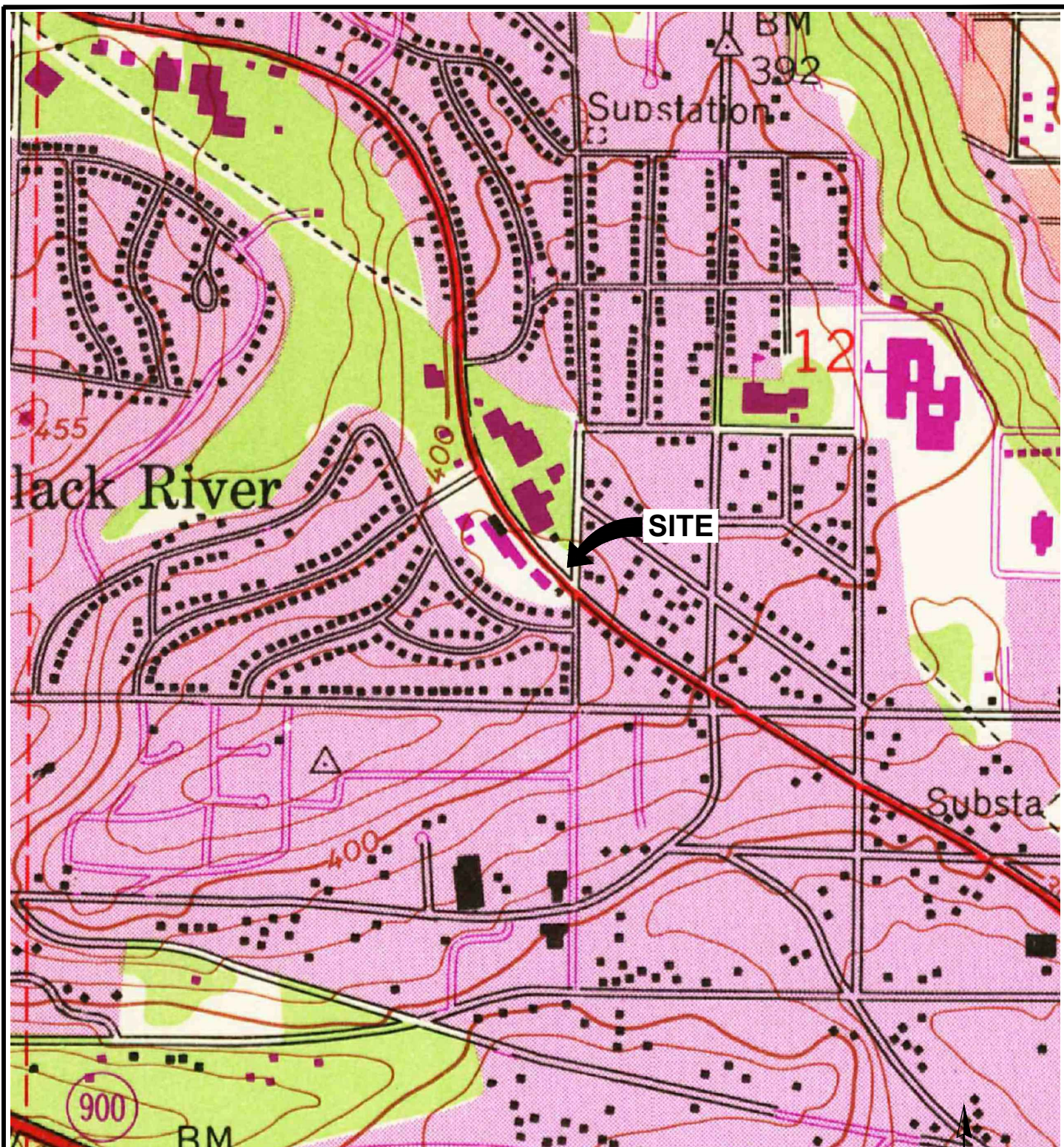
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VICINITY MAP
 SKYWAY KLCS
 KING COUNTY, WASHINGTON

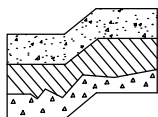
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Date DEC 2014

Figure 1



CONTOUR INTERVAL: 100 FEET
REFERENCE: USGS MAPS, RENTON, WASHINGTON QUADRANGLE



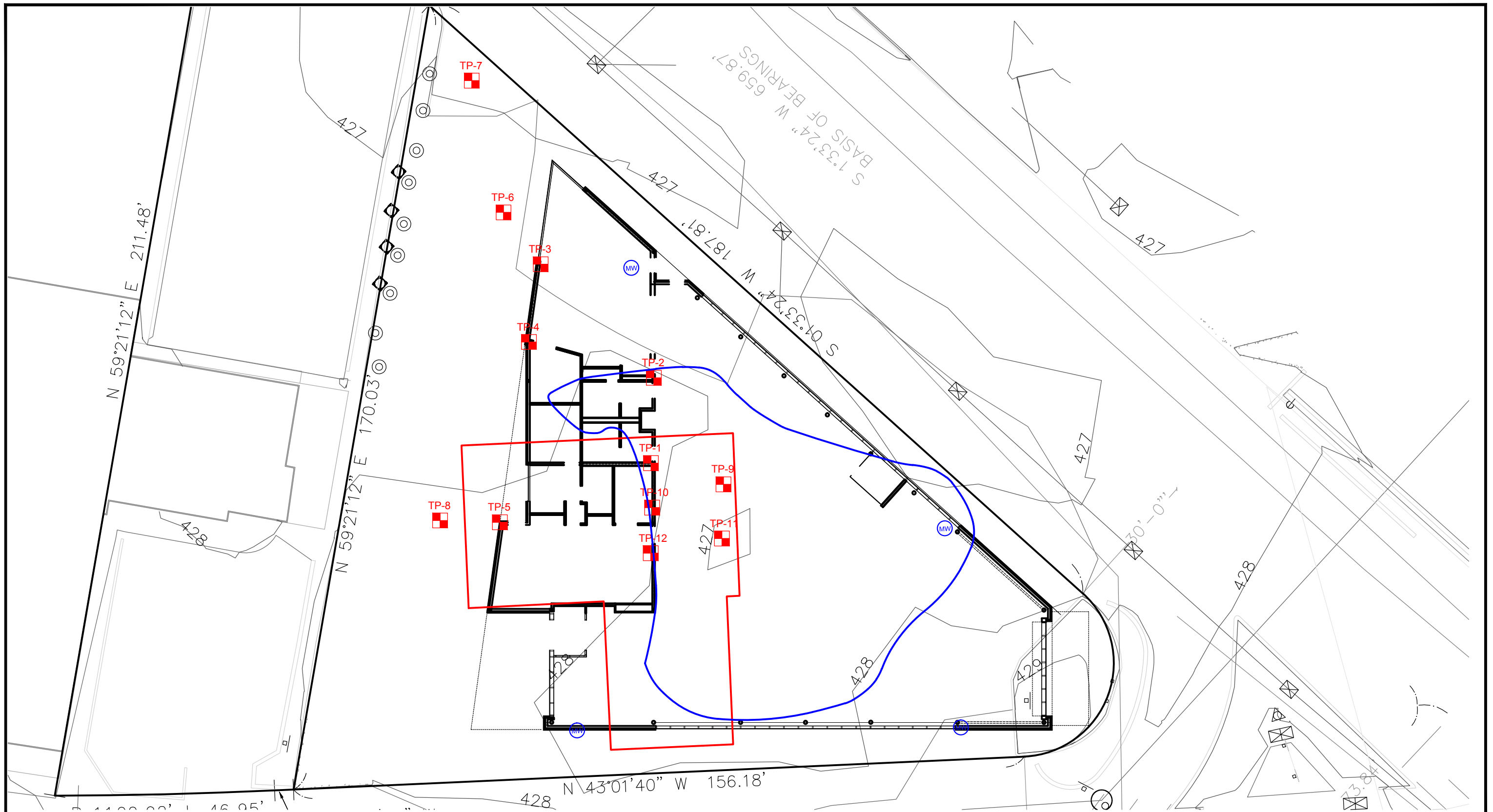
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TOPOGRAPHIC VICINITY MAP
SKYWAY KLCS
KING COUNTY, WASHINGTON

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Date DEC 2014

Figure 2



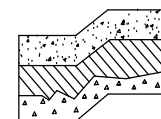
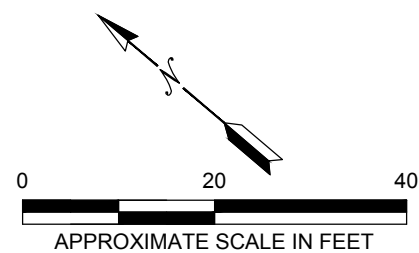
NOTE:

THIS SITE PLAN IS SCHEMATIC. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE. IT IS INTENDED FOR REFERENCE ONLY AND SHOULD NOT BE USED FOR DESIGN OR CONSTRUCTION PURPOSES.

REFERENCE: SITE PLAN PROVIDED BY CLIENT.

LEGEND:

- APPROXIMATE TEST PIT LOCATION
- APPROXIMATE AREA OF FORMER BUILDING
- APPROXIMATE AREA OF PREVIOUS EXCAVATION BY OTHERS
- APPROXIMATE MONITORING WELL LOCATIONS



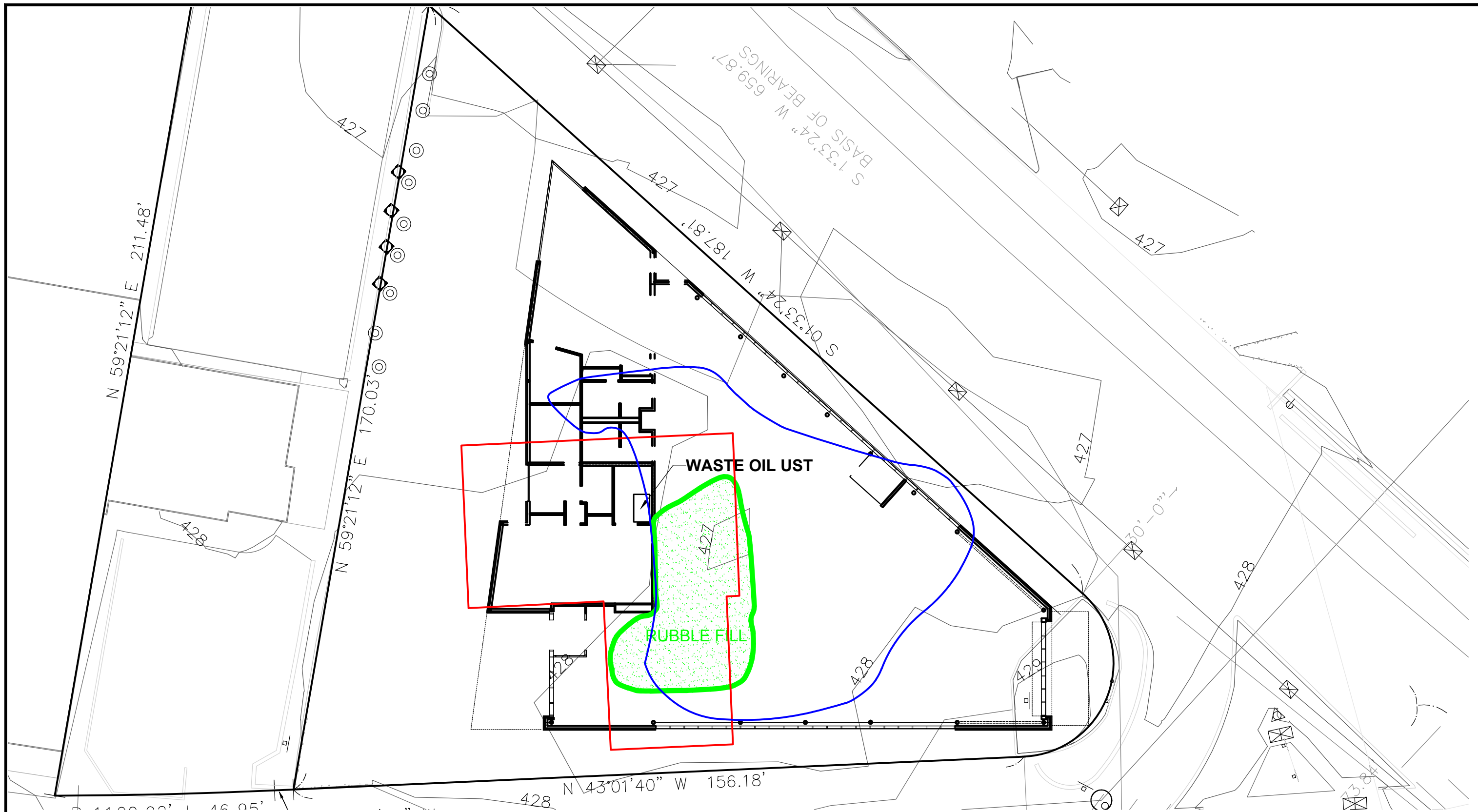
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INITIAL TEST PIT LOCATIONS
SKYWAY KCLS
KING COUNTY, WASHINGTON

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Figure 3



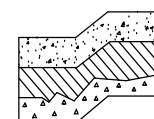
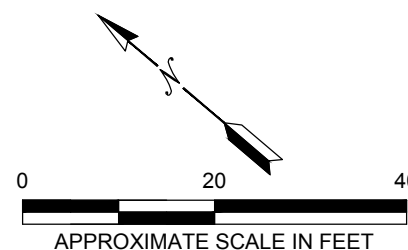
NOTE:

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REFERENCE: SITE PLAN PROVIDED BY CLIENT.

LEGEND:

- APPROXIMATE AREA OF RUBBLE FILL
- APPROXIMATE AREA OF FORMER BUILDING
- APPROXIMATE AREA OF PREVIOUS EXCAVATION BY OTHERS



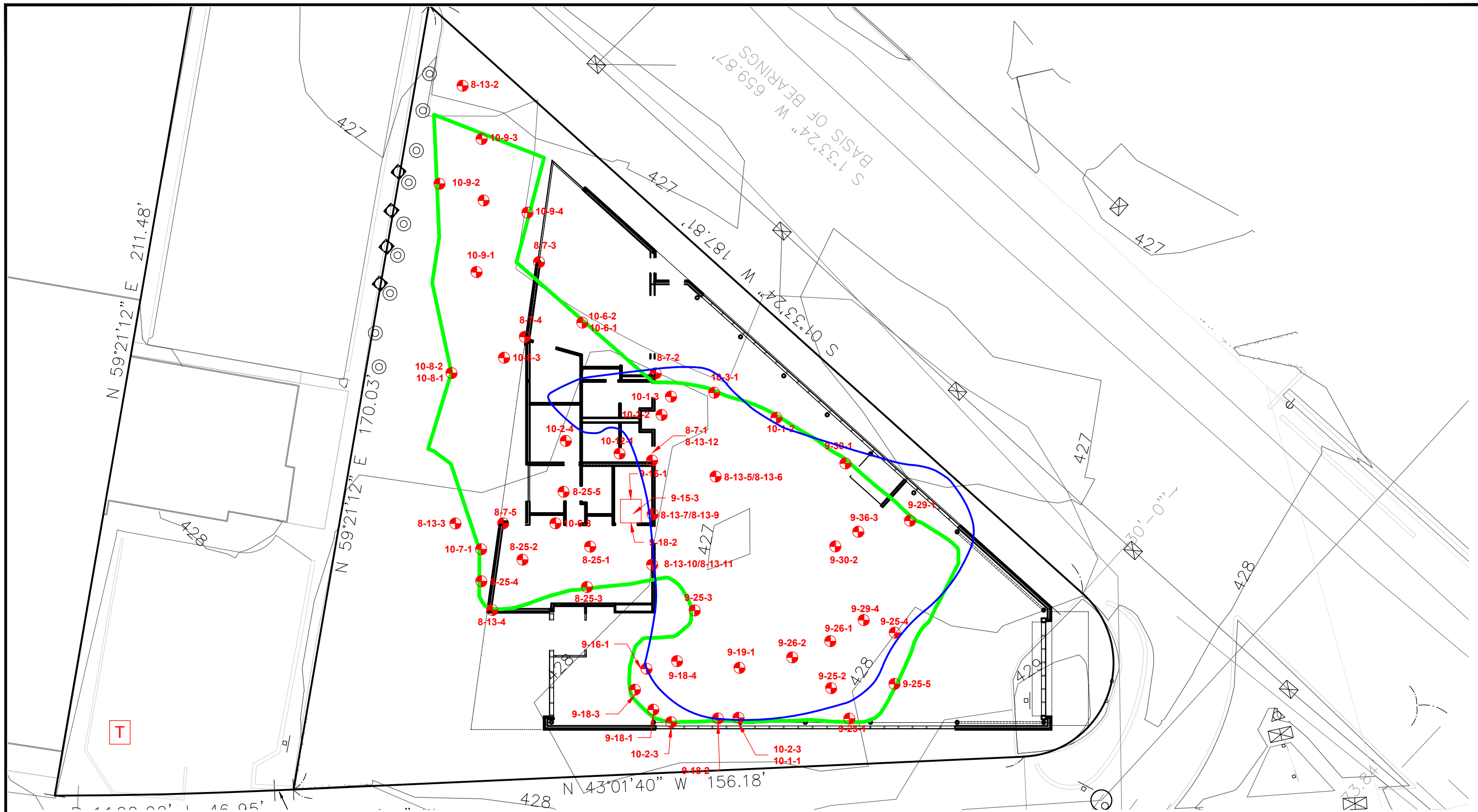
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**APPROXIMATE EXTENT OF RUBBLE FILL
 SKYWAY KCLS
 KING COUNTY, WASHINGTON**

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Date DEC 2014

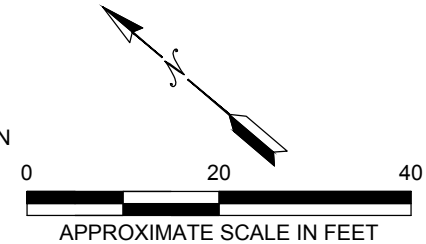
Figure 4



NOTE:
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REFERENCE: SITE PLAN PROVIDED BY CLIENT.

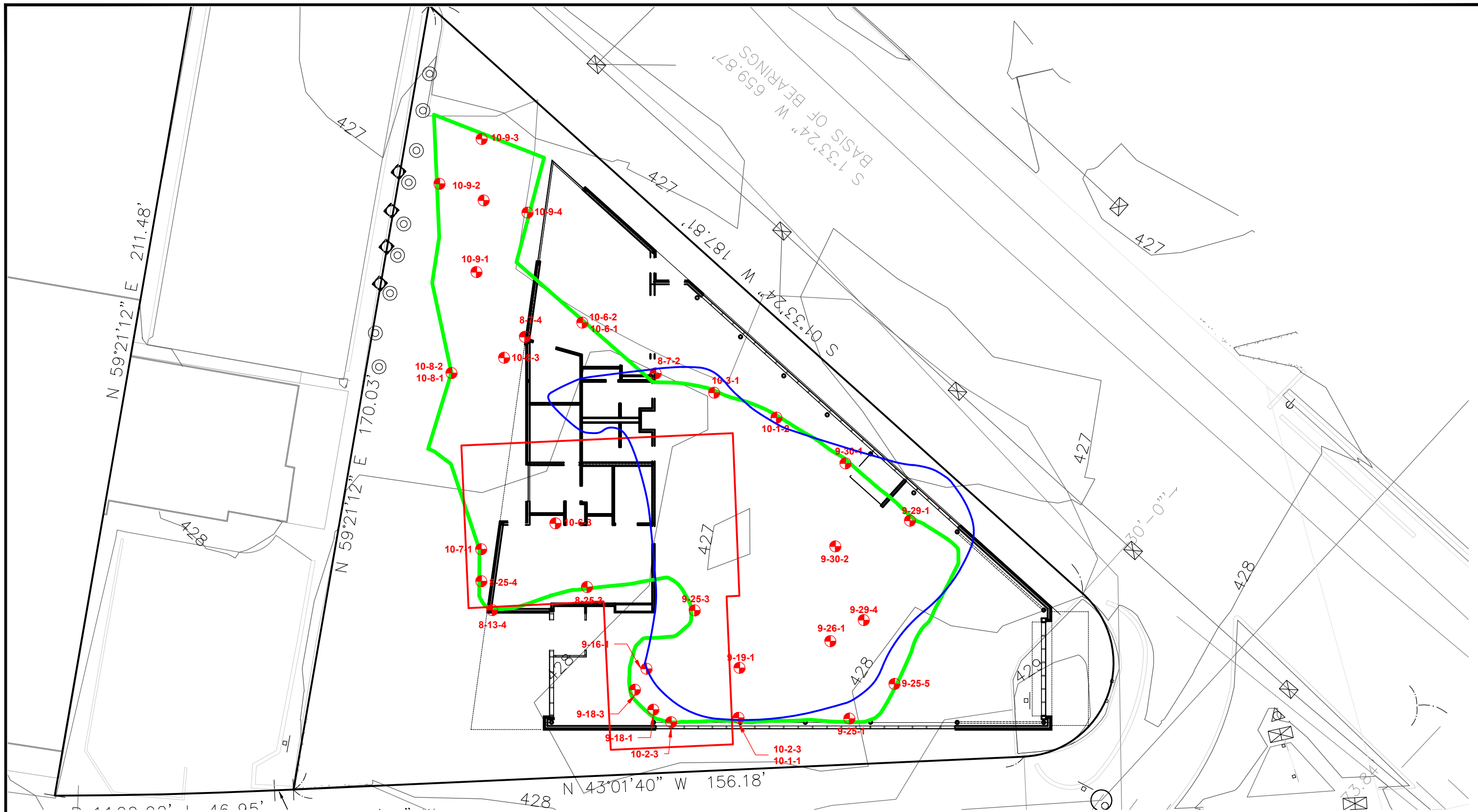
- LEGEND:**
- APPROXIMATE SAMPLE LOCATION
 - APPROXIMATE AREA OF CURRENT EXCAVATION
 - APPROXIMATE AREA OF PREVIOUS EXCAVATION BY OTHERS



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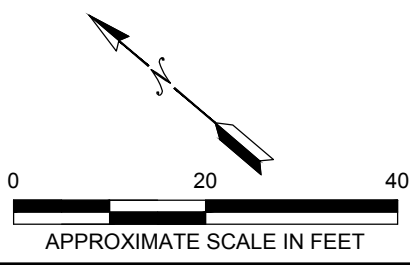
SAMPLE LOCATION PLAN SKYWAY KCLS KING COUNTY, WASHINGTON		
Proj. No.T-6672-1	Date DEC 2014	Figure 5



NOTE:
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REFERENCE: SITE PLAN PROVIDED BY CLIENT.

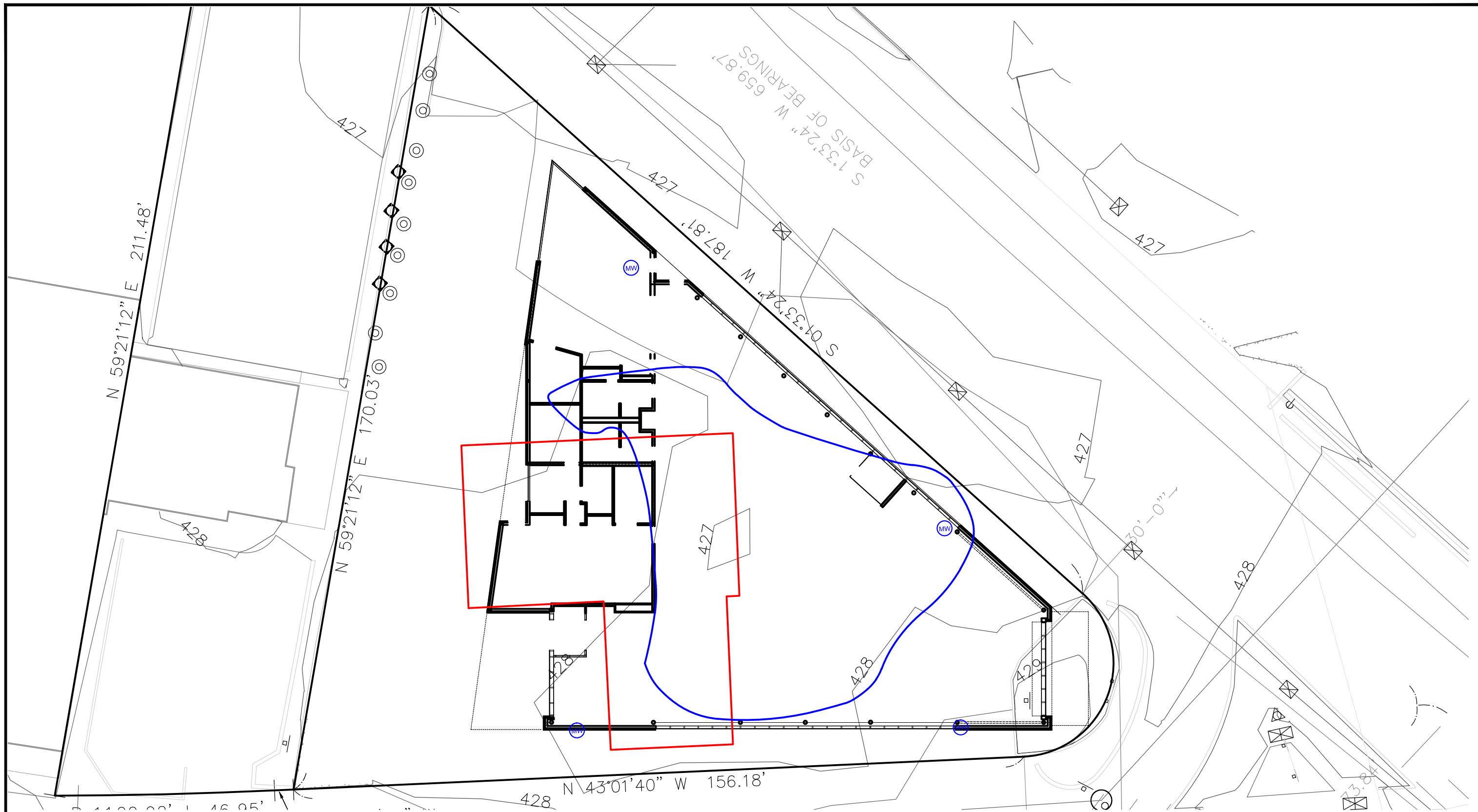
- LEGEND:**
- APPROXIMATE SAMPLE LOCATION
 - APPROXIMATE AREA OF CURRENT EXCAVATION
 - APPROXIMATE AREA OF FORMER BUILDING
 - APPROXIMATE AREA OF PREVIOUS EXCAVATION BY OTHERS



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FINAL SAMPLE LOCATIONS SKYWAY KCLS KING COUNTY, WASHINGTON		
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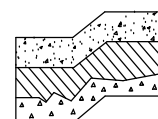
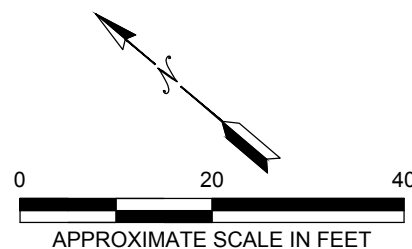
NOTE:

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REFERENCE: SITE PLAN PROVIDED BY CLIENT.

LEGEND:

- APPROXIMATE AREA OF FORMER BUILDING
- APPROXIMATE AREA OF PREVIOUS EXCAVATION BY OTHERS
- (MW) APPROXIMATE MONITORING WELL LOCATIONS



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**FORMER BUILDING FOOT PRINT
 SKYWAY KLCS
 KING COUNTY, WASHINGTON**

Proj. No.T-6672-1

Date DEC 2014

Figure 7

APPENDIX A

GEOTECHNICAL REPORT

Geotechnical Engineering Services

Skyway Library
Seattle, Washington

for
King County Library System

December 4, 2013



GEOENGINEERS 
Earth Science + Technology

Geotechnical Engineering Services

Skyway Library
Seattle, Washington

for
King County Library System

December 4, 2013



8410 154th Avenue NE
Redmond, Washington 98052
425.861.6000

Geotechnical Engineering Services

Skyway Library Seattle, Washington

File No. 1784-017-01

December 4, 2013

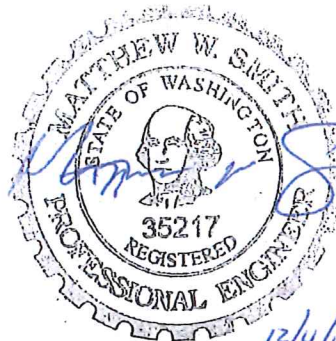
Prepared for:

King County Library System
960 Newport Way NW
Issaquah, Washington 98027-2702

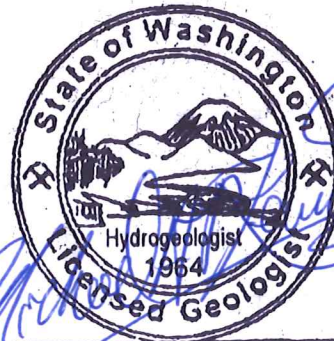
Attention: Gregory Smith

Prepared by:

GeoEngineers, Inc.
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HPD:MAPIK:MWS:nld

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INTRODUCTION

This report summarizes the results of GeoEngineers' geotechnical engineering services and groundwater mounding analysis for the proposed Skyway library to be located at 12690 Renton Avenue South in Seattle, Washington. The site, consisting of two parcels comprising about 0.59 acres, is bounded by 76th Avenue South to the east, Renton Avenue South to the west, and two existing masonry structures (retail stores) to the north. The site is shown on the Vicinity Map (Figure 1) and the Site Plan (Figure 2).

The purpose of this study is to provide geotechnical engineering and stormwater infiltration conclusions and recommendations for the design and construction of the planned library. Design considerations for the onsite management and disposal of stormwater via an infiltration facility led to an additional phase of site explorations in April 2013 with the information being used to conduct a groundwater mounding analysis of the proposed infiltration system.

GeoEngineers' geotechnical engineering services were completed in general accordance with our services agreement executed on July 11, 2012. We previously provided geotechnical engineering services for the project, the results of which are presented in our report dated September 21, 2012. The original groundwater mounding analysis was provided in our revised report dated April 22, 2013.

PROJECT DESCRIPTION

GeoEngineers' project understanding is based on information provided by URS Corporation, Weinstein A|U, and the project structural and civil engineers. This information included a memo outlining the geotechnical requirements for the project, a site plan showing the approximate location of the planned structure, and an Environmental Site Assessment Report prepared by Terra Associates, Inc. We understand that King County Library System (KCLS) is planning to demolish the existing building and plans to construct a new library at the site. The new building will consist of a single level building with no below-grade levels. Surface parking is planned in the northern portion of the site.

Stormwater infiltration is the preferred means of stormwater management for the project. The additional explorations of the site, and the accompanying groundwater mounding analysis, were performed to confirm that infiltration on site will be an effective stormwater disposal method for the project.

FIELD EXPLORATIONS AND LABORATORY TESTING

Field Explorations

GeoEngineers evaluated the subsurface conditions at the site by completing two borings, GEI-1 and GEI-2, on August 15, 2012, and one boring/monitoring well, GEI-3, on April 2, 2013. The borings were completed to depths ranging from 19 to 21½ feet below the existing ground surface. Also, two test pits were excavated at the site to complete small-scale Pilot Infiltration Tests (PITs), and a

third test pit was excavated to complete a large-scale PIT. The test pits were completed to depths of approximately 6 feet below existing ground surface (bgs). The approximate locations of the explorations are shown on the Site Plan, Figure 2. Descriptions of the field exploration program and the boring logs are presented in Appendix A.

Laboratory Testing

Soil samples were obtained from the explorations and were taken to GeoEngineers' laboratory for further evaluation. Selected samples were tested for the determination of fines content, and moisture content. A description of the laboratory testing and the test results are presented in Appendix B.

SITE CONDITIONS

Surface Conditions

A wood-frame building currently occupies a portion of the northwest corner of the site. The existing wood-frame building has an associated paved-surface parking lot that occupies the northwest and northeast portions of the site. The site topography is relatively flat with grades ranging from approximate Elevation 427 to 429 feet. The site is presently vegetated with ornamental landscaping and lawn areas in the vicinity of the existing structure, and scattered deciduous and coniferous trees/shrubs.

Subsurface Conditions

In general, soil types encountered in the explorations completed in the vicinity of the planned improvements (GEI-1, GEI-2 and GEI-3, and TP-1, TP-2 and TP-3) consisted of a shallow silty sand layer with variable gravel content, some of which may be undocumented fill, overlying glacially consolidated soils.

Silty Sand/Silt mixtures were encountered in each of the explorations completed and consisted of loose to medium dense/stiff silty sand/silt with variable gravel and cobble content. The silty sand/silt unit extended to depths ranging from approximately 7½ to 12½ feet below existing grades. Test pit TP-1 was terminated in the silty sand/fill at a depth of 6 feet. A thin (approximately 6-inch thick) former topsoil horizon consisting of soft peat was encountered immediately below the silty sand/fill in TP-2.

Glacially consolidated soils were observed below the silty sand/silt layer in each of the borings and at the bottom of test pit TP-2. The glacially consolidated soils consist of medium dense to very dense silty sand with varying amounts of gravel and hard silt with sand. The glacially consolidated soils extended to the depths explored. Occasional cobbles and boulders are typically present in the glacially consolidated soils. In the vicinity of the proposed infiltration facility (GEI-3), well graded sand with silt and trace gravel was encountered. Fines content at a depth of 17 feet was 9 percent, suggesting that this is a pocket of recessional outwash that locally overlies the glacial till.

Groundwater Conditions

Groundwater was encountered in the borings between depths of 6 and 12½ feet below site grades during drilling. However, borings completed without well installations do not typically provide reliable indications of the true groundwater level. A monitoring well was therefore installed in GEI-3 and the depth to groundwater was measured after the well had been fully developed. The groundwater level in GEI-3 was measured on April 3, 2013 at a depth of 6.1 feet (Elevation 421.9 feet). On November 8, 2013, groundwater was measured at a depth of 7.9 feet (Elevation 420.1 feet).

CONCLUSIONS AND RECOMMENDATIONS

General

A summary of the primary geotechnical considerations is provided below. The summary is presented for introductory purposes only and should be used in conjunction with the complete recommendations presented in this report.

- Due to the presence of poor quality and variable silty sand/silt and fill soils in the planned building area, the use of deep foundations is recommended to meet static and seismic settlement tolerances. Through discussions with the project team, the preferred foundation support option is the use of small diameter pin piles for support of foundations.
- Slabs on grade are feasible for the planned slab loading; however, subgrade improvement will be required.
- The site is best characterized as Site Class D per the 2009 International Building Code (IBC).
- The results of the small-scale PITs indicate that infiltration is feasible in the vicinity of the planned parking area. A design infiltration rate of 0.25 inches per hour is recommended based on the results of the PITs and gradation tests and applying appropriate correction factors.
- An additional large-scale PIT was conducted within the footprint of the proposed infiltration facility to confirm the design infiltration rate.
- A slug test performed in a monitoring well installed within the planned infiltration facility footprint indicated relatively high hydraulic conductivity of the water-bearing zone underlying the site that would receive infiltrated stormwater.
- Measurements of depth to groundwater in the monitoring well indicate the seasonal high groundwater level for the site is at Elevation 422 feet.
- The results of the groundwater mounding analysis indicate that the planned infiltration facility will function as designed.
- The near surface soils are soft/loose and have a high silt content. As a result, the near surface soils are anticipated to be highly moisture sensitive and will require specific subgrade preparation in pavement/hardscape areas.

Our specific geotechnical recommendations are presented in the following sections of this report.

Earthquake Engineering

General

GeoEngineers evaluated the site for seismic hazards including liquefaction. Our analyses indicate that the site has a low risk of liquefaction induced settlement during a design level earthquake. The liquefaction hazard and building code site coefficients are discussed in detail below.

Liquefaction

Liquefaction is a phenomenon where soils experience a rapid loss of internal strength as pore water pressures increase in response to strong ground shaking. The increased pore water pressure may temporarily meet or exceed soil overburden pressures to produce conditions that allow soil and water to flow, deform, or erupt from the ground surface. Ground settlement, lateral spreading and/or sand boils may result from soil liquefaction. Structures, such as buildings, supported on or within liquefied soils may suffer foundation settlement or lateral movement that can be damaging to the buildings.

The evaluation of liquefaction potential is a complex procedure and is dependent on numerous site parameters, including soil grain size, soil density, site geometry, static stresses, and the design ground acceleration. Typically, the liquefaction potential of a site is evaluated by comparing the cyclic shear stress ratio (the ratio of the cyclic shear stress to the initial effective overburden stress) induced by an earthquake to the cyclic shear stress ratio required to cause liquefaction. Estimation of the cyclic shear stress required to initiate liquefaction and the cyclic shear stress initiated by a design earthquake was completed using empirical methods. The cyclic shear stress ratio required to cause liquefaction at the site was estimated using empirical procedures based on correlations from the standard penetration tests (SPTs). Estimated ground settlement resulting from earthquake-induced liquefaction was analyzed using an empirical procedure that relates settlement to average SPT N-values. This analysis assumes a level ground surface.

Based on our analyses, the potential exists for liquefaction to occur within a thin layer of soil located at the transition between the silty sand/silt and native glacially consolidated soils. Due the thickness of saturated silty sand/silt layer, liquefaction induced settlement is anticipated to be less than 1 inch and within the settlement tolerances of the planned building.

Surface Fault Rupture

Because of the anticipated infrequent recurrence of earthquake events and the project site's location with respect to the nearest known fault, it is our opinion that the risk of ground rupture at the site resulting from surface faulting is low.

2009 IBC Seismic Design Information

We recommend the use of the following 2009 IBC parameters for soil profile type, short period spectral response acceleration (S_s), 1-second period spectral response acceleration (S_1) and seismic coefficients for the project site.

TABLE 1. 2009 IBC SEISMIC PARAMETERS

2009 IBC Parameter	Recommended Value
Site Class	D
Short Period Spectral Response Acceleration, S_s (percent g)	146
1-Second Period Spectral Response Acceleration, S_1 (percent g)	50
Seismic Coefficient, F_A	1.0
Seismic Coefficient, F_v	1.5

Stormwater Infiltration

A combination of laboratory grain size analyses and PITs were used to estimate the appropriate design (long-term) infiltration rate for the Skyway Library site. ASTM gradation testing, as discussed in Section 3.3.6 of the Stormwater Management Manual for Western Washington (Ecology, 2005), was completed on samples obtained from the explorations to estimate the long-term infiltration rate. The methodology and results of these two approaches are described below.

Infiltration Rates Based on Gradation Testing

ASTM gradation testing was completed to provide initial estimates of the long-term infiltration rate in general accordance with Section 3.3.6 of the Stormwater Management Manual for Western Washington (Ecology, 2005). The gradation testing consisted of completing laboratory grain size distribution analyses in general accordance with the ASTM D 422 test procedure. The results of the grain size analyses were classified in general accordance with the Unified Soil Classification System (USCS) and are presented in Figure B-1 and B-2.

Based on the results of the laboratory tests, the potential range of long-term infiltration rates using the Stormwater Management Manual for Western Washington procedure is approximately 0.2 inches per hour to 3 inches per hour. Taking into consideration the influent control, depth to groundwater, and the long term maintenance, a long term infiltration rate of 0.25 inches per hour is considered to be appropriate for the gradation testing approach.

Pilot Infiltration Tests

Two small-scale PITs (TP-1 and TP-2) were initially conducted at the project site following the methodology described in the document, “Stormwater Manual, Volume 3, Stormwater Flow Control and Water Quality Treatment Technical Requirements Manual” published jointly by Seattle Public Utilities (SPU) and the Seattle Department of Planning and Development (DPD) and dated November 2009. These small-scale PITs were completed to assess feasibility of stormwater infiltration for the project at locations in the general vicinity of the planned stormwater infiltration facility. The short-term infiltration rate measured in the final stage of each of the small-scale tests was 1.5 and 3 inches per hour (in/hr), for test pits TP-1 and TP-2, respectively. Full results of the tests are presented in Appendix A (Figures A-10 and A-11 respectively).

The referenced stormwater manuals recommend several correction factors be applied to the PIT results to estimate long-term design infiltration rates. The partial correction factors selected on the basis of infiltration system design, operation and maintenance anticipated for this site are:

- Site variability and number of locations tested, $CF_v = 2$;
- Degree of long-term maintenance to prevent siltation and bio-build-up, $CF_m = 3$; and
- Degree of influent control to prevent siltation and bio-build-up, $CF_i = 2$.

Based on these partial corrections factors, the total correction factor is 7, which would yield a design infiltration rate of between 0.2 to 0.4 inches per hour. This preliminary design infiltration rate was provided to the project civil engineer for the preliminary design of the infiltration facility.

A second phase of explorations was completed at the project site with the purpose of refining the preliminary design infiltration rate and validating the design. In the second phase of our explorations, an additional large-scale PIT was performed in TP-3 within the footprint of the proposed infiltration facility planned for the site, as shown on Figure 2. The large-scale PIT was conducted following the methodology described in the document, “Stormwater Management Manual for Western Washington, Volume V, Runoff Treatment BMPs” prepared by Washington State Department of Ecology Water Quality Program and dated August 2001, per the requirement in Section 5.4.1 of the “Surface Water Design Manual, King County, Washington” published by King County Department of Natural Resources and Parks and dated January 9, 2009.

The large-scale PIT was completed within the footprint of the planned infiltration facility at the appropriate test depth to confirm the preliminary design infiltration rate. The short-term infiltration rate measured in the final stage of the large scale PIT conducted in TP-3 was 1.35 in/hr. Results of the test are presented in Appendix A (Figure A-12).

To estimate the long-term design infiltration rate, a total correction factor of 5.5 was applied to the large-scale PIT result, which yields a design infiltration rate of 0.25 inches per hour. The total correction factor was revised from 7 to 5.5 by decreasing partial correction factor CF_v to 1.5 and CF_m to 2. The partial correction factors were modified based on the increased number of locations tested, the use of a large-scale PIT, reduced facility size and design runoff volumes, and high degree of certainty that long-term maintenance will be provided by KCLS, as described in the “Stormwater Manual, Volume 3, Stormwater Flow Control and Water Quality Treatment Technical Requirements Manual (SPU-DPD, 2009). The partial correction factor for CF_i remained at 2.

Slug Testing

Slug testing was performed in the monitoring well installed in boring GEI-3 at the location of the proposed infiltration facility. Results of the slug tests are presented in Appendix A (Figures A-8 and A-9). The tests confirmed that the hydraulic conductivity of the sandy glacially consolidated soils encountered beneath the proposed infiltration facility is relatively high at 23 feet per day (ft/d), or 8.3×10^{-2} centimeters per second (cm/s).

Groundwater Mounding Analysis

A design for the stormwater infiltration facility was developed by Springline Design as shown in Figure 2, based on the design infiltration rate of 0.25 in/hr. A groundwater mounding analysis of the proposed infiltration facility has been performed as described in Appendix C.

The results of the groundwater mounding analysis confirm that the stormwater infiltration facility will perform as designed by Springline Design, and will infiltrate 100% of the runoff directed to it without causing overflow, per the requirements of the King County Stormwater Manual (2009).

Foundation Support

The explorations completed in the planned building area encountered up to approximately 12½ feet of poor quality soils. Due to the variability of the soils in the building area and the anticipated settlement of conventional shallow foundations, this type of foundations for support of the planned building is not recommended. Ground improvement alternatives including removal of the shallow soils and replacement with structural fill, rammed aggregate piers, stone columns, soil mixing, and compaction grouting were evaluated but were determined to not be the preferred foundation support option due to anticipated costs for these options. Likewise, a structural mat foundation was considered, but due to cost and the concentration of building loads at the perimeter of the structure, the structural mat option was not selected.

Based on discussions with the project team, small diameter driven steel pipe piles (pin piles) are the preferred foundation support system. GeoEngineers' recommendations for steel pipe piles are presented in the following paragraphs.

Steel Pipe Piles

In our opinion, 4- to 6-inch-diameter driven steel pipe piles may be used for support of the proposed library. The pipe pile spacing should be determined by the project structural engineer.

As stated in the City of Seattle DPD Directors' Rule 10-2009 "It is recognized that the Seattle Building Code (SBC) requires 8 inch minimum diameter pipe for pipe pile installation. The appropriate analysis/evaluation and testing requirements in conformance with Director's Rule 10-2009 are provided to allow for use of piles less than 8 inches in diameter as required by section 104.10 of the SBC."

We recommend that 4- to 6-inch-diameter driven steel pipe piles be installed using a pneumatic impact equipment capable of penetrating a sufficient depth to develop the design loads. The pipe piles should be driven a sufficient depth to develop 20 kips (4-inch-diameter steel pipe piles) to 30 kips (6-inch-diameter steel pipe piles) allowable capacity. We estimate that the piles will extend about 20 to 30 feet below the bottom of the planned foundations. We estimate that total foundation settlements of less than ½ inch will develop for properly installed pipe piles. An American Society for Testing and Materials (ASTM) load test is required on at least one of the pipe piles, and no more than five piles (3 percent of piles installed) per Seattle DPD Directors' Rule 10-2009. Piles should not be designed to carry lateral loads.

For preliminary planning, a typical refusal criteria for 4 to 6-inch-diameter driven steel pipe piles is listed in the table below. Pile installation should be observed by a representative of GeoEngineers and the actual refusal criteria verified by the load test(s).

Hammer Weight	Refusal Criteria (seconds/inch)	Blows Per Minute
850 lbs*	14-16	550-1100
1100 lbs	10-12 (4-inch-diameter piles) 20-22 (6-inch-diameter piles)	550-1100

Note:

* This hammer weight to be used for 4-inch-diameter steel pipe piles. In case the 6-inch-diameter steel pipe piles are selected, the hammer weight should be a minimum of 1100 lbs.

Lateral Capacity

Resistance to lateral loads can be developed by passive pressure on the face of pile caps and other below-grade elements. Passive resistance may be estimated using an equivalent fluid density of 400 pounds per cubic foot (pcf) for short term loads such as seismic loads. This value includes a factor of safety of 1.5, and assumes that the pile caps are backfilled with granular fill compacted to at least 95 percent of the maximum dry density (MDD) determined in accordance with the ASTM D 1557 test method.

Slab-on-Grade Floors

Subgrade Preparation

Given the soft nature of the near surface soils, subgrade improvement is required. GeoEngineers recommends that a minimum of 12 inches of the existing fill be removed below the slab subgrade elevation and be replaced with a minimum 12-inch-thick capillary break layer consisting of clean crushed rock material meeting the requirements of Mineral Aggregate Type 22 ($\frac{3}{4}$ -inch crushed gravel), City of Seattle Standard Specification 9-03.16. Alternatively, the slab can bear on a 4-inch-thick capillary break layer comprised of Mineral Aggregate Type 22 overlying an 8-inch-thick layer of Mineral Aggregate Type 17 (bank run gravel), City of Seattle Standard Specification 9-03.16.

Prior to placement of the 12-inch-thick layer of Mineral Aggregate Type 22/17 described above, the exposed subgrade should be thoroughly compacted and evaluated by GeoEngineers. Proof-rolling with heavy, rubber-tired construction equipment should be used for this purpose during dry weather and if access for this equipment is practical. Probing should be used to evaluate the subgrade during periods of wet weather or if access is not feasible for construction equipment. The exposed soil should be firm and unyielding. Disturbed areas should be recompacted if possible or removed and replaced with compacted structural fill meeting the requirements of Mineral Aggregate Type 17.

Design Parameters

Conventional slabs may be supported on-grade, provided the subgrade soils are prepared as recommended in the "Subgrade Preparation" section above. For slabs designed as a beam on an

elastic foundation, a modulus of subgrade reaction of 100 pounds per cubic inch (pci) may be used for subgrade soils prepared as recommended.

Provided that loose soil is removed and the subgrade is prepared as recommended, we estimate that slabs-on-grade will settle less than 1 inch.

A vapor barrier should be used below slab-on-grade floors located in occupied portions of the building. Specification of the vapor barrier requires consideration of the performance expectations of the occupied space, the type of flooring planned and other factors, and is typically completed by other members of the project team.

Foundation Drains

We recommend that a perimeter foundation drain be installed around the building. The perimeter drain should be provided with cleanouts and should consist of a 4-inch-diameter perforated pipe placed on a 4-inch-thick bed of, and surrounded by 6 inches of, drainage aggregate enclosed in a non-woven geotextile fabric such as Mirafi 140N (or approved equivalent) to prevent fine soil from migrating into the drain material. Gradation recommendations for the drainage aggregate are presented below in the “Earthwork” section of this report.

We recommend that the drainpipe consist of either heavy-wall solid pipe (SDR-35 polyvinyl chloride [PVC], or equivalent) or rigid corrugated smooth interior polyethylene pipe (ADS N-12, or equivalent). We also recommend against using flexible tubing for foundation drainpipes. The perimeter drain should be sloped to drain by gravity, if practicable, to a suitable discharge point, preferably a storm drain. We recommend that the cleanouts be covered and be placed in flush-mounted utility boxes. Water collected in roof downspout lines must not be routed to the foundation drain lines.

Earthwork

Based on the subsurface soil conditions encountered in the borings, we expect the soils at the site may be excavated using conventional heavy duty construction equipment. The materials we encountered include fill and glacially consolidated soils. The glacial soils commonly contain cobbles and boulders that may be encountered during excavation. Asphalt, concrete, and debris from the previous development on the site may also be encountered.

The on-site soils contain significant fines (material passing the U.S. standard No. 200 sieve) and will be highly moisture-sensitive and susceptible to disturbance, especially when wet. Ideally, earthwork should be undertaken during extended periods of dry weather when the surficial soils will be less susceptible to disturbance and provide better support for construction equipment.

Trafficability on the site may be difficult, even during dry weather conditions, due to the loose, silty fill that will be exposed during grading. If exposed, the soils will be especially susceptible to disturbance from construction equipment during wet weather conditions and pumping and rutting of the exposed soils under equipment loads may occur. The contractor should be prepared to protect the site and prevent subgrade soils from deteriorating in wet weather conditions.

Clearing and Site Preparation

Construction of the proposed building will require demolition of existing structures, pavement, and other appurtenant structures. Concrete and asphalt may be recycled and reused as structural fill in limited areas; otherwise it should be removed from the site along with other construction debris. All existing utilities should be removed from the building footprint and rerouted if needed.

Areas to be developed or graded should be cleared of surface and subsurface deleterious matter including any debris, shrubs, trees and associated stumps and roots. Graded areas should be stripped of organic soils. Organic soils are likely only associated with the existing landscape areas.

The organic soils can be stockpiled and used later for landscaping purposes or may be spread over disturbed areas following completion of grading. If spread out, the organic strippings should be in a layer less than 1-foot-thick, should not be placed on slopes greater than 3H:1V (horizontal to vertical), and should be track-rolled to a uniformly compacted condition. Materials that cannot be used for landscaping or protection of disturbed areas should be removed from the project site.

Subgrade Preparation

Prior to placing new fills, pavement or hardscape base course materials, subgrade areas should be proof rolled to locate any soft or pumping soils. Proof rolling can be completed using a piece of heavy tire-mounted equipment such as a loaded dump truck. During wet weather, the exposed subgrade areas should be probed to determine the extent of soft soils. If soft or pumping soils are observed, they should be removed and replaced with structural fill meeting the requirements of Mineral Aggregate Type 17, City of Seattle Standard Specification 9-03.16.

Structural Fill

All fill supporting floor slabs, pavement areas, foundations, or placed against retaining walls or in utility trenches should meet the criteria for structural fill presented below. The suitability of soil for use as structural fill depends on its gradation and moisture content.

MATERIALS

Fill placed to support structures, placed behind retaining structures, and placed below pavements and sidewalks will need to be specified as structural fill as described below:

- If structural fill is necessary beneath or adjacent to building foundations, the structural fill should meet the requirements of Mineral Aggregate Type 17 (bank run gravel), City of Seattle Standard Specification 9-03.16.
- Structural fill placed as capillary break material should meet the requirements of Type 22 ($\frac{3}{4}$ -inch crushed gravel), City of Seattle Standard Specification 9-03.16.
- Structural fill placed behind retaining walls should meet the requirements of Mineral Aggregate Type 17 (bank run gravel), City of Seattle Standard Specification 9-03.16.
- Structural fill placed around perimeter footing drains and cast-in-place wall drains should meet the requirements of Mineral Aggregate Type 5 (1-inch washed gravel) or Type 22 ($\frac{3}{4}$ -inch crushed gravel), City of Seattle Standard Specification 9-03.16.

- Structural fill placed within utility trenches and below pavement and sidewalk areas should meet the requirements of Mineral Aggregate Type 17 (bank run gravel), City of Seattle Standard Specification 9-03.16.
- Structural fill placed as crushed surfacing base course below pavements and sidewalks should meet the requirements of Mineral Aggregate Type 2 (1¼-inch minus crushed rock), City of Seattle Standard Specification 9-03.16.

REUSE OF ON-SITE SOILS

The on-site soils are moisture-sensitive and generally have natural moisture contents higher than the anticipated optimum moisture content for compaction. As a result, the on-site soils will likely require moisture conditioning in order to meet the required compaction criteria during dry weather conditions and will not be suitable for reuse during wet weather. Furthermore, most of the fill soils required for the project have specific gradation requirements, and the on-site soils do not meet these gradation requirements. Therefore, imported structural fill meeting the requirements described above should be used where structural fill is necessary.

FILL PLACEMENT AND COMPACTION CRITERIA

Structural fill should be mechanically compacted to a firm, non-yielding condition. Structural fill should be placed in loose lifts not exceeding 1 foot in thickness. Each lift should be conditioned to the proper moisture content and compacted to the specified density before placing subsequent lifts. Structural fill should be compacted to the following criteria:

- Structural fill placed in building areas (around foundations or below slab-on-grade floors) and in pavement and sidewalk areas (including utility trench backfill) should be compacted to at least 95 percent of the MDD estimated in general accordance with ASTM D 1557.
- Structural fill placed against subgrade walls should be compacted to between 90 and 92 percent. Care should be taken when compacting fill against subsurface walls to avoid overcompaction and hence overstressing the walls.

We recommend that GeoEngineers be present during probing of the exposed subgrade soils in building and pavement areas, and during placement of structural fill. We will evaluate the adequacy of the subgrade soils and identify areas needing further work, perform in-place moisture-density tests in the fill to verify compliance with the compaction specifications, and advise on any modifications to the procedures that may be appropriate for the prevailing conditions.

Weather Considerations

During wet weather, some of the exposed soils could become muddy and unstable. If so affected, we recommend that:

- The ground surface in and around the work area should be sloped so that surface water is directed to a sump or discharge location. The ground surface should be graded such that areas of ponded water do not develop.
- Slopes with exposed soils should be covered with plastic sheeting or similar means.
- The site soils should not be left uncompacted and exposed to moisture. Sealing the surficial soils by rolling with a smooth-drum roller prior to periods of precipitation will reduce the extent to which these soils become wet or unstable.

- Construction activities should be scheduled so that the length of time that soils are left exposed to moisture is reduced to the extent practicable.

Temporary Slopes

Temporary slopes may be used around the site to facilitate early installation of shoring or in the transition between levels at the base of the excavation. We recommend that temporary slopes constructed in the fill and near surface soils be inclined at 1½H:1V. Flatter slopes may be necessary if seepage is present on the face of the cut slopes or if localized sloughing occurs. For open cuts at the site, we recommend that:

- No traffic, construction equipment, stockpiles or building supplies be allowed at the top of the cut slopes within a distance of at least 5 feet from the top of the cut;
- Exposed soil along the slope be protected from surface erosion by using waterproof tarps or plastic sheeting;
- Construction activities be scheduled so that the length of time the temporary cut is left open is reduced to the extent practicable;
- Erosion control measures be implemented as appropriate such that runoff from the site is reduced to the extent practicable;
- Surface water be diverted away from the slope; and
- The general condition of the slopes be observed periodically by the geotechnical engineer to confirm adequate stability.

Because the contractor has control of the construction operations, the contractor should be made responsible for the stability of cut slopes, as well as the safety of the excavations. Shoring and temporary slopes must conform to applicable local, state and federal safety regulations.

Permanent Cut and Fill Slopes

We recommend that permanent cut or fill slopes be constructed at inclinations of 3H:1V or flatter, and be blended into existing slopes with smooth transitions. To achieve uniform compaction, we recommend that fill slopes be slightly overbuilt and cut back to expose well-compacted fill.

To reduce erosion, newly constructed slopes should be planted or hydroseeded shortly after completion of grading. Until the vegetation is established, some sloughing and raveling of the slopes should be expected. This may necessitate localized repairs and reseeded. Temporary covering, such as clear heavy plastic sheeting, jute fabric, or erosion control blankets (such as American Excelsior Curlex 1 or North American Green S150) could be used to protect the slopes during periods of rainfall.

Utility Trenches

Trench excavation, pipe bedding, and trench backfilling should be completed using the general procedures described in the 2012 Washington State Department of Transportation (WSDOT) Standard Specifications or other suitable procedures specified by the project civil engineer. The silts and clays, glacial deposits, and fill soils encountered at the site are generally of low corrosivity based on our experience in the Puget Sound area.

Utility trench backfill should consist of structural fill and should be placed in lifts of 1 foot or less (loose thickness) such that adequate compaction can be achieved throughout the lift. Each lift must be compacted prior to placing the subsequent lift. Prior to compaction, the backfill should be moisture conditioned to within 3 percent of the optimum moisture content, if necessary. The backfill should be compacted in accordance with the criteria discussed above.

Pavement Recommendations

Subgrade Preparation

We recommend that the subgrade soils in new pavement and parking areas be evaluated as described above in the “Subgrade Preparation” portion of the “Earthwork” section of this report. We recommend that the upper 12 inches of the existing site soils be compacted to at least 95 percent of the MDD estimated in general accordance with ASTM D 1557 prior to placing pavement section materials. If the subgrade soils are loose or soft, it may be necessary to excavate the soils and replace them with structural fill. A layer of suitable woven geotextile fabric may be placed over soft subgrade areas to limit the thickness of structural fill required to bridge soft, yielding areas.

Asphalt Pavement

In light-duty pavement areas (for example, automobile parking), we recommend a pavement section consisting of at least a 2-inch-thick layer of ½-inch hot mix asphalt (HMA) (PG 58-22) conforming to Sections 5-04 and 9-03 of the WSDOT Standard Specifications, over a 6-inch-thick layer of densely compacted crushed rock base course conforming to Section 9-03.9(3) of the WSDOT Standard Specifications. In heavy-duty pavement areas (for example, truck traffic and materials delivery areas) around the building, we recommend a pavement section consisting of at least a 3-inch-thick layer of ½-inch HMA (PG 58-22) over a 6-inch-thick layer of densely compacted crushed rock base course. We recommend that proof-rolling of the compacted base course be observed by a representative from our firm prior to paving. Soft or yielding areas observed during proof-rolling may require overexcavation and replacement with compacted structural fill.

The pavement sections recommended above are based on our experience with similar building developments. Thicker asphalt sections may be needed based on the actual traffic data, intended use and performance expectations.

Portland Cement Concrete Pavement

If Portland cement concrete (PCC) pavement is specified for the project, GeoEngineers recommends that these pavements consist of at least 6 inches of PCC over 4 inches of crushed surfacing base course. This pavement section should bear on a subgrade prepared as described above. The base course should be compacted to at least 95 percent of the MDD estimated in general accordance with ASTM D 1557.

We recommend that PCC pavements incorporate construction joints and/or crack control joints that are spaced maximum distances of 12 feet apart, center-to-center, in both the longitudinal and transverse directions. Crack control joints may be created by placing an insert or groove into the fresh concrete surface during finishing, or by sawcutting the concrete after its initial setup. We recommend that the depth of the crack control joints be approximately one-fourth the thickness

of the concrete, or about 1½ inches deep for the recommended concrete thickness of 6 inches. We also recommend that the crack control joints be sealed with an appropriate sealant to help restrict water infiltration into the joints.

Recommended Additional Geotechnical Services

GeoEngineers should be retained to review the project plans and specifications when complete to confirm that our design recommendations have been implemented as intended.

During construction, GeoEngineers should observe the installation of the driven pipe piles, evaluate the suitability of the slab and pavement subgrades, observe installation of subsurface drainage measures, evaluate structural backfill, and provide a summary letter of our construction observation services. The purposes of GeoEngineers construction phase services are to confirm that the subsurface conditions are consistent with those observed in the explorations and other reasons described in Appendix D, Report Limitations and Guidelines for Use.

Additionally, King County requires full-scale testing of constructed stormwater infiltration facilities. GeoEngineers can provide the coordination, oversight, record-keeping, documentation and reporting of this commissioning requirement.

LIMITATIONS

We have prepared this report for the exclusive use of KCLS and their authorized agents for the Skyway Library project in Seattle, Washington.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted practices in the field of geotechnical engineering in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

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

Please refer to Appendix D titled “Report Limitations and Guidelines for Use” for additional information pertaining to use of this report.

We appreciate the opportunity to participate on this project. Should you have any questions concerning this report or if we can be of additional service, please call.

REFERENCES

Washington State Department of Ecology Water Quality Program, “Stormwater Management Manual for Western Washington, Volume V, Runoff Treatment BMPs,” August 2001.

King County Department of Natural Resources and Parks, “Surface Water Design Manual, King County, Washington,” January 9, 2009.

City of Seattle Department of Planning and Development. Directors' Rule 10-2009, "Small Diameter Pipe Piles (Pin Piles)," May 18, 2009.

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Washington State Department of Ecology, 2005, "Stormwater Management Manual for Western Washington."

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Butler, James J., Jr. and Garnett, Elizabeth J., (2000). Simple Procedures for Analysis of Slug Tests in Formations of High Hydraulic Conductivity using Spreadsheet and Scientific Graphics Software. KGS Open File Report 2000-40 December 2000 Kansas Geological Survey, Lawrence, Kansas.

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Map Revised: August 29, 2012 EL

Path: P:\11784017\GIS\178401700_F1_VicinityMap.mxd

Office: Redmond



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.
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Data Sources: ESRI Data & Maps, Street Maps 2005

Transverse Mercator, Zone 10 N North, North American Datum 1983
North arrow oriented to grid north



2,000 0 2,000
Feet

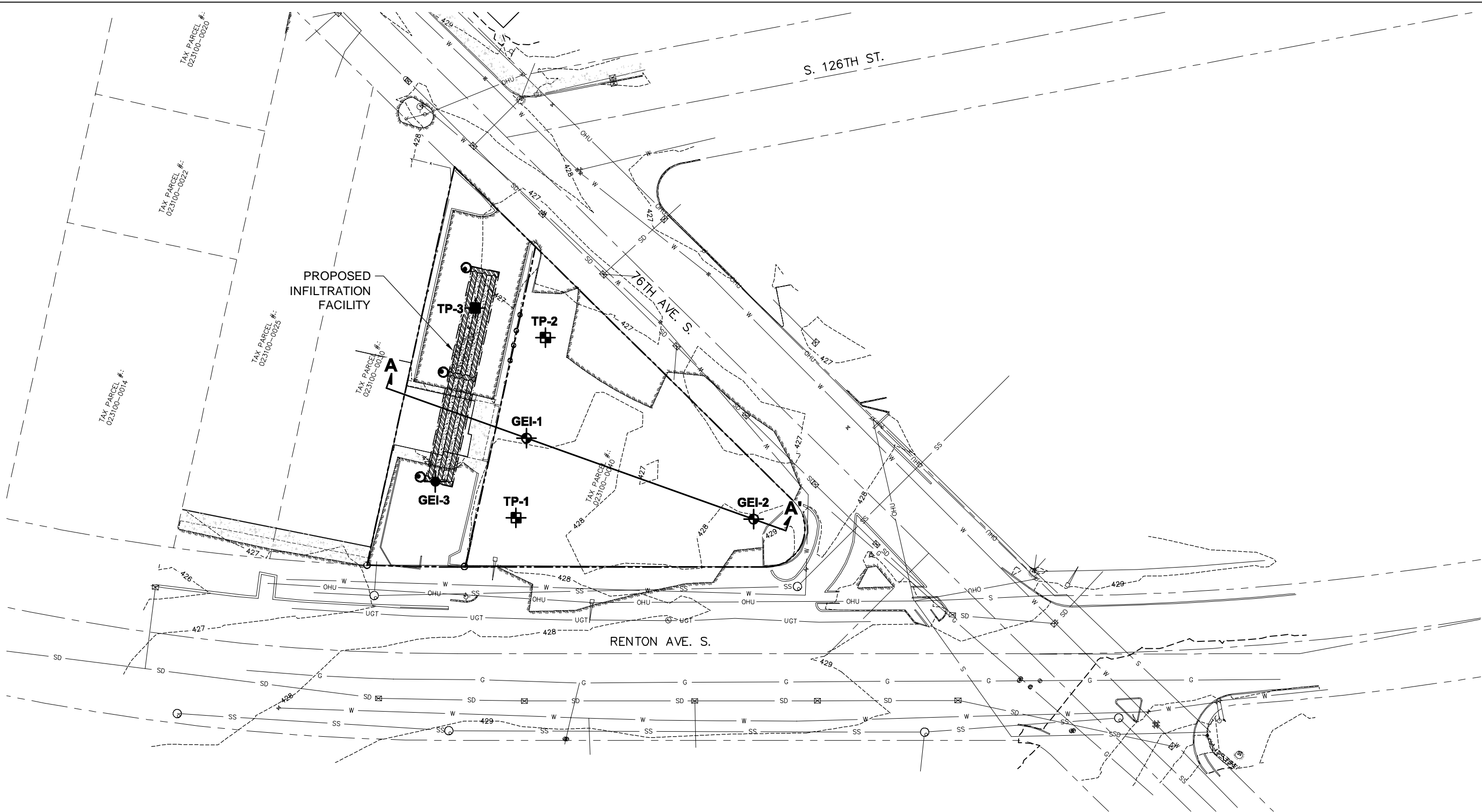
Vicinity Map

Skyway Library
Seattle, WA



Figure 1

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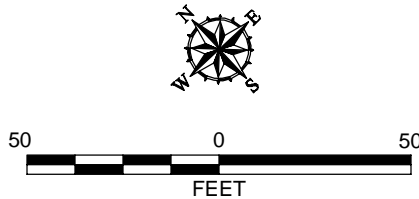
Notes

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

Reference: Base survey by MXP Consulting, Inc. dated 05/29/2012.

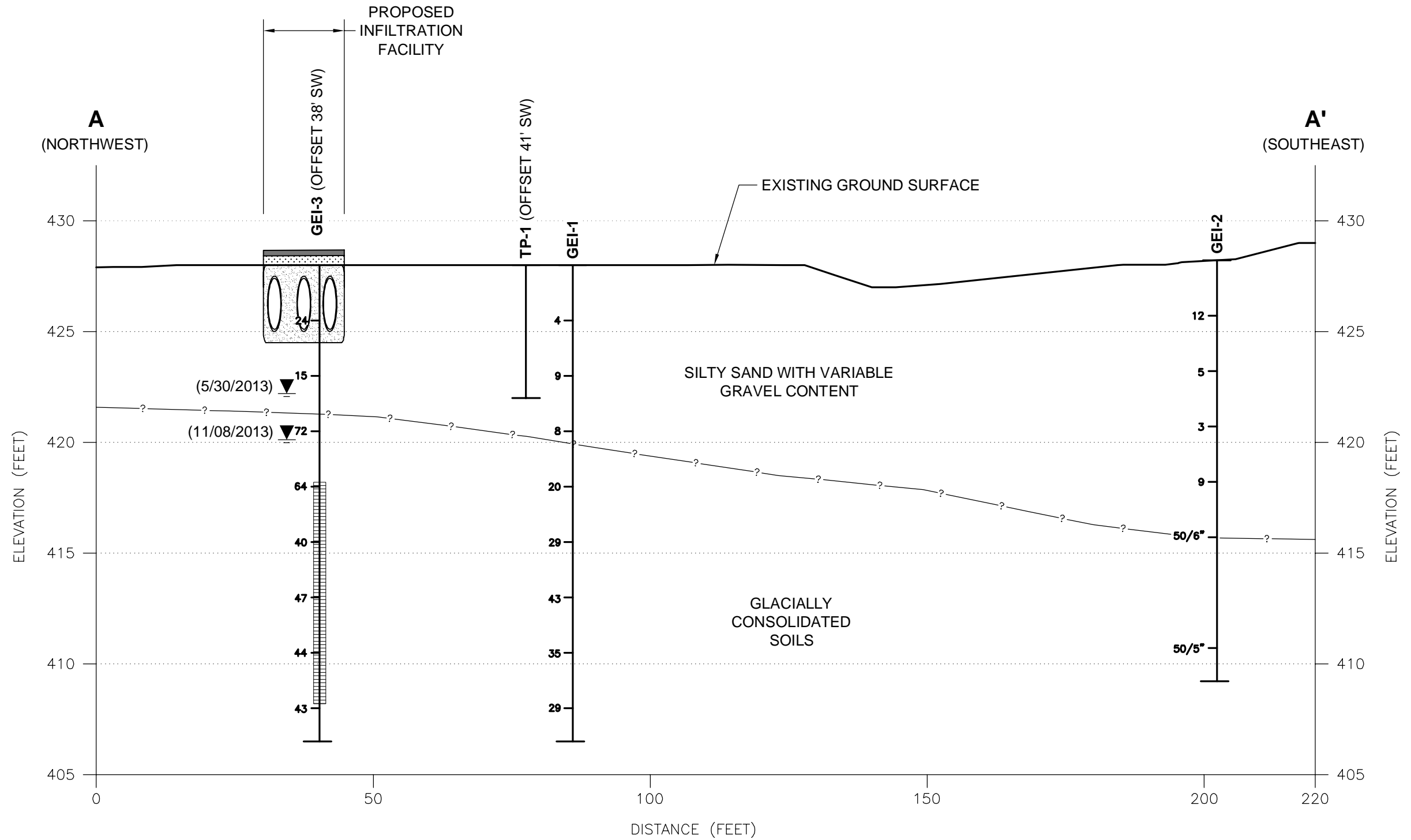
Legend

- GEI-3  Boring by GeoEngineers, 2013
- TP-3  Test Pit/PIT by GeoEngineers, 2013
- GEI-1  Boring by GeoEngineers, 2012
- TP-1  Test Pit by GeoEngineers, 2012



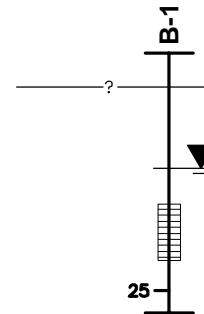
Site Plan	
Skyway Library Seattle, Washington	
GEOENGINEERS 	Figure 2

W:\REDMOND\PROJECTS\11784017\01\CAD\1784017-01 SITE PLAN AND CROSS-SECTION.DWG\TAB\CROSS SECTION MODIFIED BY THICHAUD ON DEC 05, 2013 - 11:24



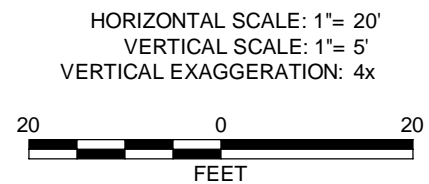
Notes

1. The subsurface conditions shown are based on interpolation between widely spaced explorations and should be considered approximate; actual subsurface conditions may vary from those shown.
2. This figure is for informational purposes only. It is intended to assist in the identification of features discussed in a related document. Data were compiled from sources as listed in this figure. The data sources do not guarantee these data are accurate or complete. There may have been updates to the data since the publication of this figure. This figure is a copy of a master document. The hard copy is stored by GeoEngineers, Inc. and will serve as the official document of record.
3. Datum: NAVD 88, unless otherwise noted.



Legend

- Boring
- Inferred Soil Contact
- Groundwater Level
- Observed in Piezometer
- Monitoring Well PVC Screen
- Blow Count



Cross-Section A-A'

Skyway Library
Seattle, Washington

GEOENGINEERS

Figure 3

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APPENDIX A
Field Explorations

APPENDIX A FIELD EXPLORATIONS

General

Subsurface conditions were explored at the site by drilling three borings (GEI-1, GEI-2 and GEI-3). The borings were completed to depths ranging from about 19 to 21½ feet below the existing ground surface. Also, three test pits were excavated at the site to complete Pilot Infiltration Tests (PITs), the test pits were completed to depths of up to 6 feet below existing ground surface. Subsurface exploration services were initially provided by Geologic Drill Exploration Inc. and Kelly's Excavating on August 15 and 16, 2012. A second phase of subsurface exploration took place between April 2 and April 4, 2013 when Geologic Drill Exploration Inc. drilled GEI-3 and installed a monitoring well, while Kelly's Excavating excavated TP-3 for conducting a large-scale PIT.

The locations of the explorations were estimated by taping/pacing from existing site features. The approximate exploration locations are shown on the Site Plan, Figure 2.

Borings

Borings were completed using trailer-mounted continuous-flight, hollow-stem auger drilling equipment. The borings were continuously monitored by a geotechnical engineer from our firm who examined and classified the soils encountered, obtained representative soil samples, observed groundwater conditions and prepared a detailed log of each exploration.

The soils encountered in the borings were generally sampled at 2½- or 5-foot vertical intervals with a 2-inch outside diameter split-barrel standard penetration test (SPT). The samples were obtained by driving the sampler 18 inches into the soil with either a 140-pound hammer with a rope and cathead free-falling 30 inches. The number of blows required for each 6 inches of penetration was recorded. The blow count ("N-value") of the soil was calculated as the number of blows required for the final 12 inches of penetration. This resistance, or N-value, provides a measure of the relative density of granular soils and the relative consistency of cohesive soils. Where very dense soil conditions preclude driving the full 18 inches, the penetration resistance for the partial penetration was entered on the logs. The blow counts are shown on the boring logs at the respective sample depths.

Soils encountered in the borings were visually classified in general accordance with the classification system described in Figure A-1. A key to the boring log symbols is also presented in Figure A-1. The logs of the borings are presented in Figures A-2, A-3 and A-4. The boring logs are based on our interpretation of the field and laboratory data and indicate the various types of soils and groundwater conditions encountered. The logs also indicate the depths at which these soils or their characteristics change, although the change may actually be gradual. If the change occurred between samples, it was interpreted. The densities noted on the boring logs are based on the blow count data obtained in the borings and judgment based on the conditions encountered.

Observations of groundwater conditions were made during drilling. Groundwater conditions observed during drilling represent a short-term condition and may or may not be representative of

the long-term groundwater conditions at the site. Groundwater conditions observed during drilling should be considered approximate.

Test Pits

Test pits were excavated using a small track backhoe under subcontract to GeoEngineers. Our representative continuously monitored excavation of the test pits, and maintained a log of the subsurface conditions. A detailed log of each test pit is presented in Figures A-5, A-6 and A-7.

Well Installation and Development

A 2-inch-diameter monitoring well was installed in GEI-3 to measure the groundwater level and conduct slug tests for determining the hydraulic conductivity of the soils below the water table at the location of the proposed infiltration facility. The construction of the monitoring well is shown on the boring log (Figure A-4).

The well was developed on April 3, 2013 by repeated pumping and bailing that involved the removal of over 150 gallons of groundwater, which was initially silty and turbid. At the completion of well development, the water pumped from the well was relatively clear, indicating that most of the fine grained material and drilling debris had been dislodged from the filter pack and removed from the well.

Slug Testing

A series of slug tests were conducted in GEI-3, in general accordance with ASTM D-4044 using a sealed PVC tube weighted with sand to create the required rapid displacement of the water level in the well.

Each of the four slug tests produced very similar hydraulic responses, which were analyzed assuming confined aquifer conditions with a fully penetrating well that generates radial (i.e., horizontal) flow toward or away from the well. The results of each test are shown in Figure A-8 and A-9. The water level in the monitoring well was above the top of the well screen at all times during testing, so no allowance was made for drainage of the filter pack. The tests were analyzed using the method of Butler and Garnett (2000) assuming fully confined conditions, with the value of hydraulic conductivity averaged over the length of the well screen.

The resulting value for the horizontal hydraulic conductivity of the glacially consolidated soils underlying the site was established at 23 feet per day (ft/d), or 8.3×10^{-2} centimeters per second (cm/s).

Water Level Monitoring

The water level at the Skyway Library site has been measured in the monitoring well GEI-3 beginning on April 3, 2013, when the well was developed. Depth to groundwater was measured from the top of the well casing, and from the ground surface, which is at an approximate elevation of 428 feet relative to the North American Vertical Datum 1988 (NAVD 88). Measurements are listed in Table A-1:

TABLE A-1. GROUNDWATER MEASUREMENTS IN MONITORING WELL GEI-3

Date	Time	Depth to Water below Ground Surface (feet bgs)	Depth to Water below Top of Casing (feet btoc)	Groundwater Elevation (ft NAVD88) ²
April 3, 2013	07:43	6.13	5.86	421.87
April 3, 2013	11:00 ¹	6.75 ¹	6.48 ¹	421.25 ¹
April 3, 2013	12:00	6.19	5.92	421.81
April 3, 2013	14:40	6.07	5.80	421.93
May 30, 2013	15:10	6.57	6.30	421.43
November 8, 2013	07:30	7.87	7.60	420.13

Notes:

¹ Water level depressed after removing ~150 gallons during well development;² Elevations are calculated assuming a ground surface of 428 ft NAVD88.

Pilot Infiltration Tests

The PITs were excavated and performed using a small track backhoe, flow meter, water hoses and operator under subcontract to GeoEngineers. Our representative continuously monitored excavation of the PIT, monitored flow rates, measured water levels and maintained a log of the subsurface conditions.

Small-Scale PITs

Two test pits (TP-1 and TP-2) were excavated at the site by backhoe at the locations shown in Figure 2. Test pit TP-1 was excavated to a depth of approximately 6 feet below the existing ground surface (bgs) and the soil generally consisted of approximately 6 inches of silty sand with gravel and occasional cobbles which was underlain by approximately 2 inches of asphalt. The asphalt was underlain by silty sand with gravel and occasional cobbles and extended to the depth excavated. The dimension of the test pit was 3½ feet wide by 4¼ feet long, and extended to a depth of 3½ feet bgs at the time the PIT was completed.

Test pit TP-2 was excavated to a depth of approximately 6 feet bgs and the soil generally consisted of approximately 6 inches of silty sand with gravel and occasional cobbles which was underlain by approximately 2 inches of asphalt. The asphalt was underlain by silty sand with gravel and occasional cobbles. A layer of peat, approximately 6 inches thick, was encountered at about 5 feet bgs on TP-2. The dimension of test pit TP-2 was 3¾ feet wide by approximately 6 feet long, and extended to a depth of 3½ feet bgs at the time the PIT was completed.

For the small-scale PITs, a stake was placed approximately in the middle of each test pit to facilitate the measurement of water levels. A pressure transducer was installed at the base of each stake to record the water levels by electronic means. Initial filling and maintaining water level was done in general accordance with the referenced stormwater manual until the infiltration rate was observed to have stabilized. After the infiltration rate stabilized, the test pits were topped-up to a level of 3½ feet and left overnight to infiltrate.

For both small-scale PITs, the water was allowed to infiltrate over a period of approximately 24 hours. Plots of the apparent infiltration rate measured during this time period are presented in Figures A-10 and A-11 for test pits TP-1 and TP-2, respectively. Each plot presents the short-term infiltration rates calculated from 15-second readings of the pressure transducer. The short-term infiltration rate was determined over the last 4 hours of the test.

Large-Scale PIT

In the subsequent field explorations, TP-3 was excavated as a full-size test pit to facilitate a large-scale PIT as described in the August 2001 Stormwater Management Manual for Western Washington, per the requirement in Section 5.4.1 of the KCSWMM (2009).

Test pit TP-3 was excavated to a depth of approximately 4½ feet bgs and the soil generally consisted of approximately 12 inches of silty sandy gravel underlain by approximately 4 feet of silt/sand with variable gravel content and occasional cobbles. The silt/sand mixture was underlain by silty sand with gravel and occasional cobbles and extended to the depth excavated. The dimension of the test pit was approximately 10 feet wide by 10 feet long, and was extended to a depth of 6½ feet bgs to sample the underlying soils after the PIT was completed and before TP-3 was backfilled.

For the large-scale PIT, a measuring rod was placed approximately in the middle of the test pit to facilitate the measurement of water levels. A pressure transducer was installed at the base of the measuring rod to record the water levels accurately by electronic means. TP-3 was initially filled to a depth of 4 feet using approximately 380 ft³ of water delivered from a water truck. The water depth was maintained between 3 and 4 feet, as required by the Department of Ecology (DOE), by topping the level up with a measured volume of water and then allowing it to drop by approximately 2 inches before topping up again. In this way, a direct and accurate measure of the transient infiltration rate was obtained at each successive stage of the test, to compliment the flow measurements collected in general accordance with DOE requirements.

After the last stage of the day, the water level was topped back up and left overnight to infiltrate. The following morning, the water level was again topped up and the staged process was repeated for three stages additional stages to confirm that the infiltration rate had stabilized.

A full record of the water depth in TP-3 throughout the duration of the test is shown in the upper portion of Figure A-12. The infiltration rate was calculated directly from the transducer readings for each of the falling head stages of the test. The resulting infiltration rates calculated at each stage are shown in the lower portion of Figure A-12.

Allowing for at least 17 hours of saturation time, the apparent infiltration rate determined from the final stage of the large-scale PIT in TP-3 was 1.35 inches per hour (in/hr).

SOIL CLASSIFICATION CHART

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

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

Sampler Symbol Descriptions

	2.4-inch I.D. split barrel
	Standard Penetration Test (SPT)
	Shelby tube
	Piston
	Direct-Push
	Bulk or grab

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

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

ADDITIONAL MATERIAL SYMBOLS

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

Groundwater Contact



Measured groundwater level in exploration, well, or piezometer



Measured free product in well or piezometer

Graphic Log Contact



Distinct contact between soil strata or geologic units



Approximate location of soil strata change within a geologic soil unit

Material Description Contact



Distinct contact between soil strata or geologic units



Approximate location of soil strata change within a geologic soil unit

Laboratory / Field Tests

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

Sheen Classification

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

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

KEY TO EXPLORATION LOGS

Start Drilled 8/15/2012	End 8/15/2012	Total Depth (ft) 21.5	Logged By Checked By MJP HPD	Driller Geologic Drill	Drilling Method Hollow-stem Auger
Surface Elevation (ft) Vertical Datum 428			Hammer Data 140 (lbs) / 30 (in) Drop		Drilling Equipment Deep Rock XL
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured Depth to Water (ft) Elevation (ft)
Notes:					

Elevation (feet)	FIELD DATA					MATERIAL DESCRIPTION	Moisture Content, %	Dry Density, (pcf)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing				
0									
25	8	4			1	Brown silty fine to medium sand with occasional gravel and organics (loose, moist) (fill)			
5	8	9			2		68		
20	18	8			3	Dark brown silt with sand and occasional gravel and organics (stiff, moist)			
10	12	20			4	Grayish brown silty fine to medium sand, orange mottling (loose, wet)			
15	6	43			6	Gray silty fine to medium sand with gravel (medium dense, wet) (glacially consolidated soils)			
45	3	29			5	Becomes dense, moist to wet			
10	3	35			7 %F	Grayish brown silty fine to medium sand (dense, moist)	17		%F = 14
20	12	29			8	Becomes medium dense, moist to wet			

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

Log of Boring GEI-1




Project: Skyway Library
Project Location: Seattle, Washington
Project Number: 1784-017-01

Figure A-2
Sheet 1 of 1

Start Drilled 8/15/2012	End 8/15/2012	Total Depth (ft) 19	Logged By Checked By MJP HPD	Driller Geologic Drill	Drilling Method Hollow-stem Auger
Surface Elevation (ft) Vertical Datum 428			Hammer Data 140 (lbs) / 30 (in) Drop		Drilling Equipment Deep Rock XL
Easting (X) Northing (Y)			System Datum		<u>Groundwater</u> <u>Date Measured</u> <u>Depth to</u> <u>Water (ft)</u> <u>Elevation (ft)</u>
Notes:					

Elevation (feet)	FIELD DATA					MATERIAL DESCRIPTION	Moisture Content, %	Dry Density, (pcf)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing				
0									
25	18	12			1	Light brown silty fine to medium sand with gravel and organics (medium dense, moist) (fill)			Gravels to 4 feet
5	18	5			2	Brown silty fine to medium sand with gravel and occasional silt pockets (loose, moist)			
20	4	3			3	Becomes very loose, wet			
10	18	9			4	Grayish brown silty fine to coarse sand with occasional gravel (loose, wet)			
						Dark gray fine to medium sand with silt (loose, wet)			
15	18	50/6"			5	Brown silt with sand, orange mottling (hard, wet) (glacially consolidated soils)			
10	11	50/5"			6	Grayish silty fine to medium sand with gravel (very dense, moist to wet)			

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

Log of Boring GEI-2		
	Project:	Skyway Library
	Project Location:	Seattle, Washington
	Project Number:	1784-017-01
		Figure A-3 Sheet 1 of 1

Redmond: Date: 4/15/13 Path: \\REDIP\PROJECTS\1178401700\GINT\178401700.GPJ DBTTemplate1.bdtTemplate\GEOENGINEERS8.GDT\GEI8_GEO TECH_STANDARD

Date Excavated: 8/15/2012

Logged By: MJP

Equipment: Track mounted excavator

Total Depth (ft) 6.0

Elevation (feet)	Depth (feet)	SAMPLE		Graphic Log	Group Classification	Encountered Water	MATERIAL DESCRIPTION	Moisture Content, %	REMARKS
		Testing Sample	Sample Name Testing						
427	1				SM		Light brown silty fine to medium sand with gravel and cobbles (fill)		
					AC		Asphalt concrete pavement		
					SM		Brown silty fine to medium sand with gravel and cobbles (medium dense, moist)		
426	2								
425	3		1 SA					12	SA (%F = 27)
424	4								
423	5								
422	6		2						

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

Log of Test Pit TP-1



Project: Skyway Library
 Project Location: Seattle, Washington
 Project Number: 1784-017-01







Figure A-5
 Sheet 1 of 1

Date Excavated: 8/15/2012

Logged By: MJP

Equipment: Track mounted excavator

Total Depth (ft) 6.0

Elevation (feet)	Depth (feet)	SAMPLE		Graphic Log	Group Classification	Encountered Water	MATERIAL DESCRIPTION	Moisture Content, %	REMARKS
		Testing Sample	Sample Name Testing						
426	1		1 SA		SM AC SM		Light brown silty fine to medium sand with gravel and cobbles (fill) Asphalt concrete pavement Brown silty fine to medium sand with gravel and cobbles (medium dense, moist)	10	SA (%F = 15)
425	2								
424	3								
423	4								
422	5		2		PEAT		Dark brown peat (soft, moist) (former topsoil horizon)	120	
421	6		3		SM		Brown silty fine to medium sand with gravel (medium dense, moist) (glacially consolidated soils)		

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

Log of Test Pit TP-2



Project: Skyway Library
 Project Location: Seattle, Washington
 Project Number: 1784-017-01

Figure A-6
 Sheet 1 of 1

Date Excavated: 4/2/2013
 Equipment: Track mounted excavator

Logged By: SLG
 Total Depth (ft) 6.5

Elevation (feet)	Depth (feet)	SAMPLE		Graphic Log	Group Classification	Encountered Water	MATERIAL DESCRIPTION	Moisture Content, %	REMARKS
		Testing Sample	Sample Name Testing						
426	1				AC		2 inches asphalt concrete pavement		
					GW-GM		Brown silty sandy gravel (loose to medium dense, moist) (fill)		
425	2				ML		Brownish gray silt with sand, gravel, wood waste (tree roots and branches) and occasional cobbles (soft to medium stiff, moist)		
424	3								
423	4								
422	5				SM		Brown silty fine to medium sand with trace gravel and orange staining (dense, moist)		
421	6								
			1 SA					21	SA (%F = 49)

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

Log of Test Pit TP-3

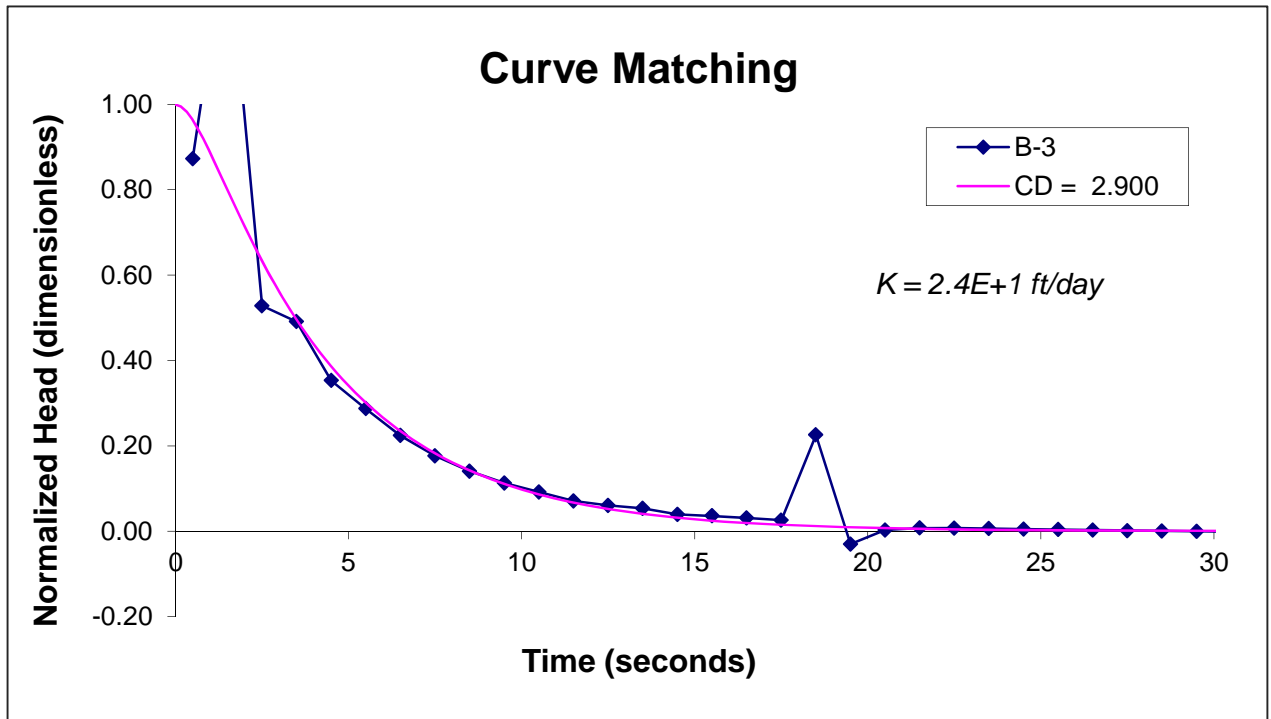


Project: Skyway Library
 Project Location: Seattle, Washington
 Project Number: 1784-017-01

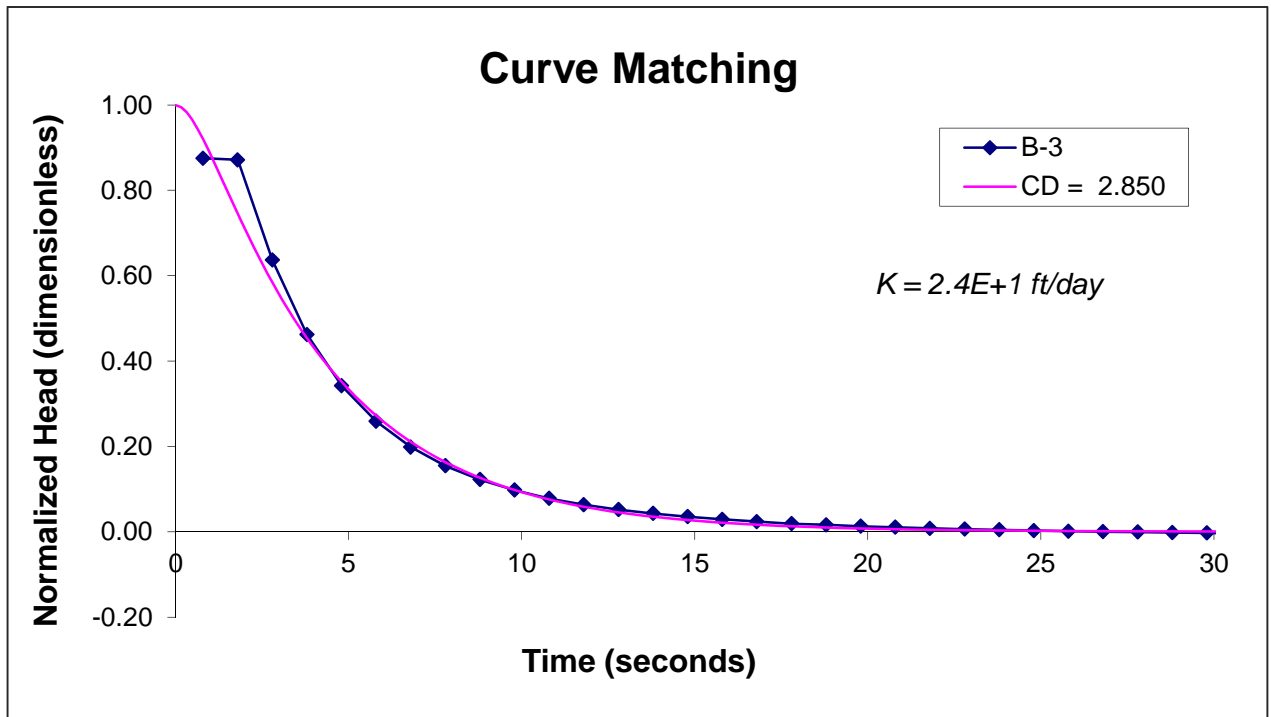
Figure A-7
 Sheet 1 of 1

O:\c:\p:\xx\proj\folder\xx\finals\filename.ppt AAA:bbb mm/dd/yy

Falling Head



Rising Head



Notes:

1. Slug Test conducted in Monitoring Well B-3 on 4/4/2013.
2. Underdamped slug test response analyzed using Butler & Garnett (2000) method for High-K.
3. Formation thickness, $B = 13.9$ ft used to calculate hydraulic conductivity, K .

Aquifer Slug Test 1, B-3

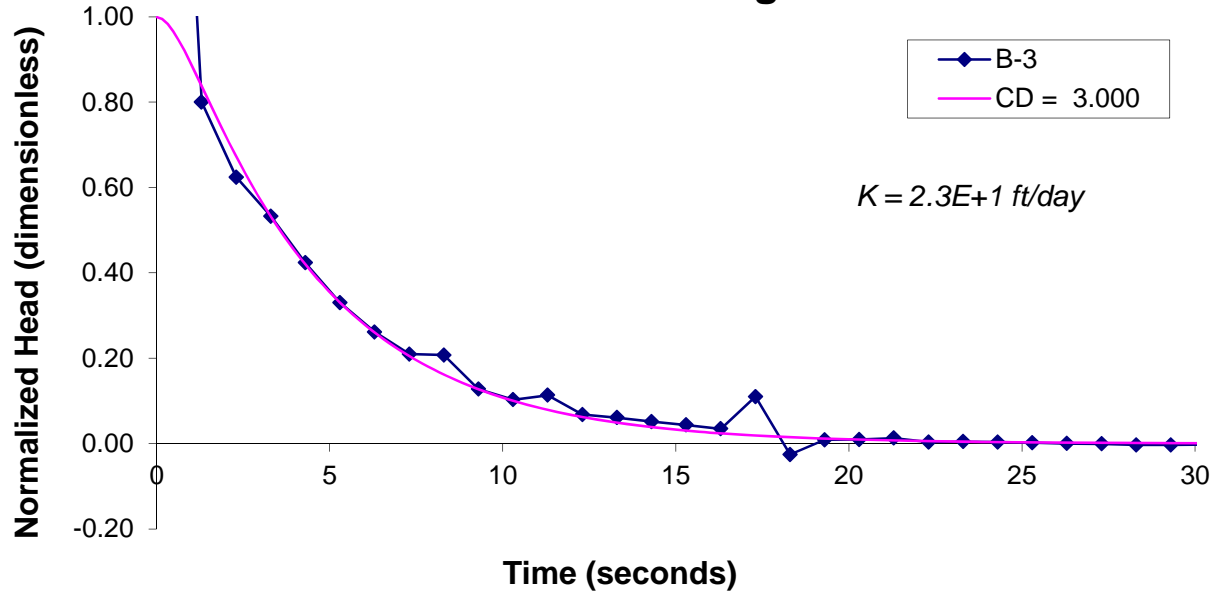
Skyway Library
Seattle, Washington

GEOENGINEERS

Figure A-8

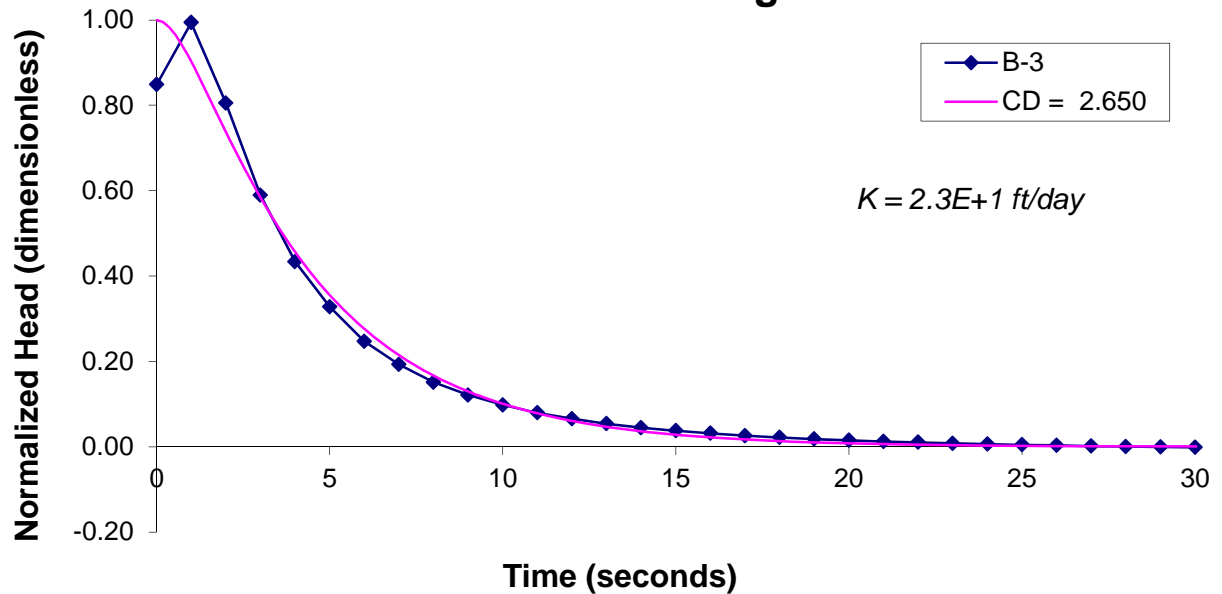
Falling Head

Curve Matching



Rising Head

Curve Matching



Notes:

1. Slug Test conducted in Monitoring Well B-3 on 4/4/2013.
2. Underdamped slug test response analyzed using Butler & Garnett (2000) method for High-K.
3. Formation thickness, $B = 13.9 \text{ ft}$ used to calculate hydraulic conductivity, K .

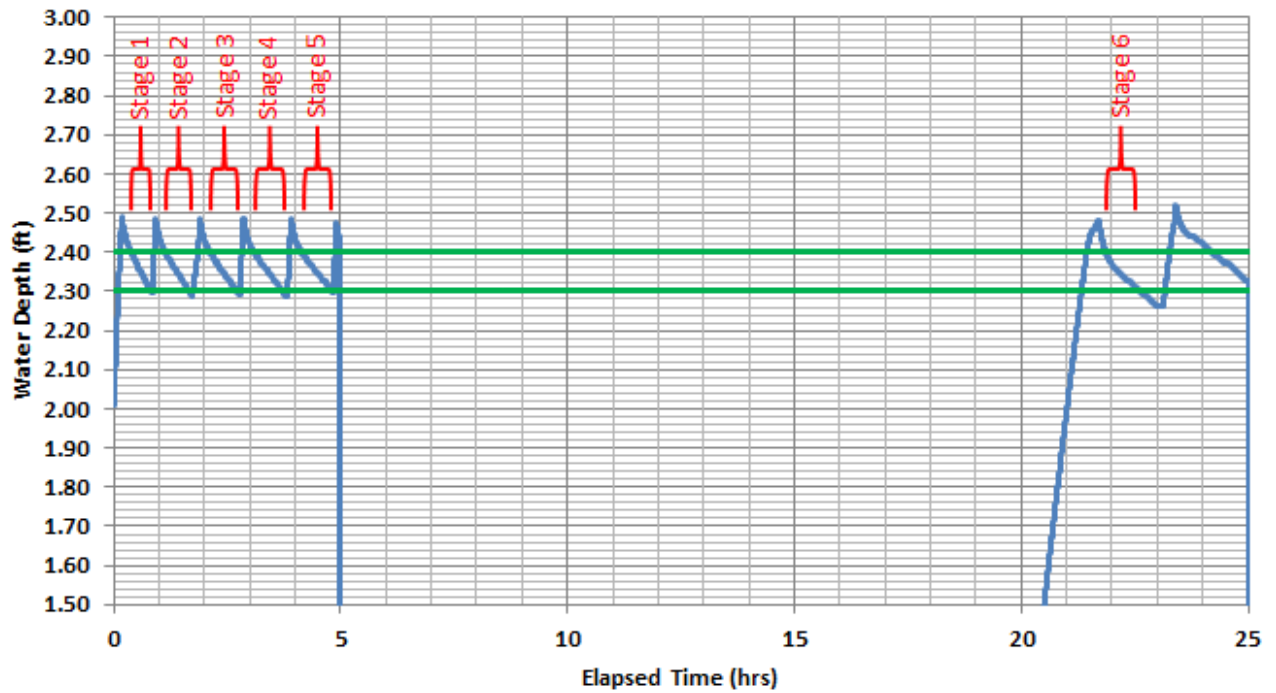
Aquifer Slug Test 2, B-3

Skyway Library
Seattle, Washington

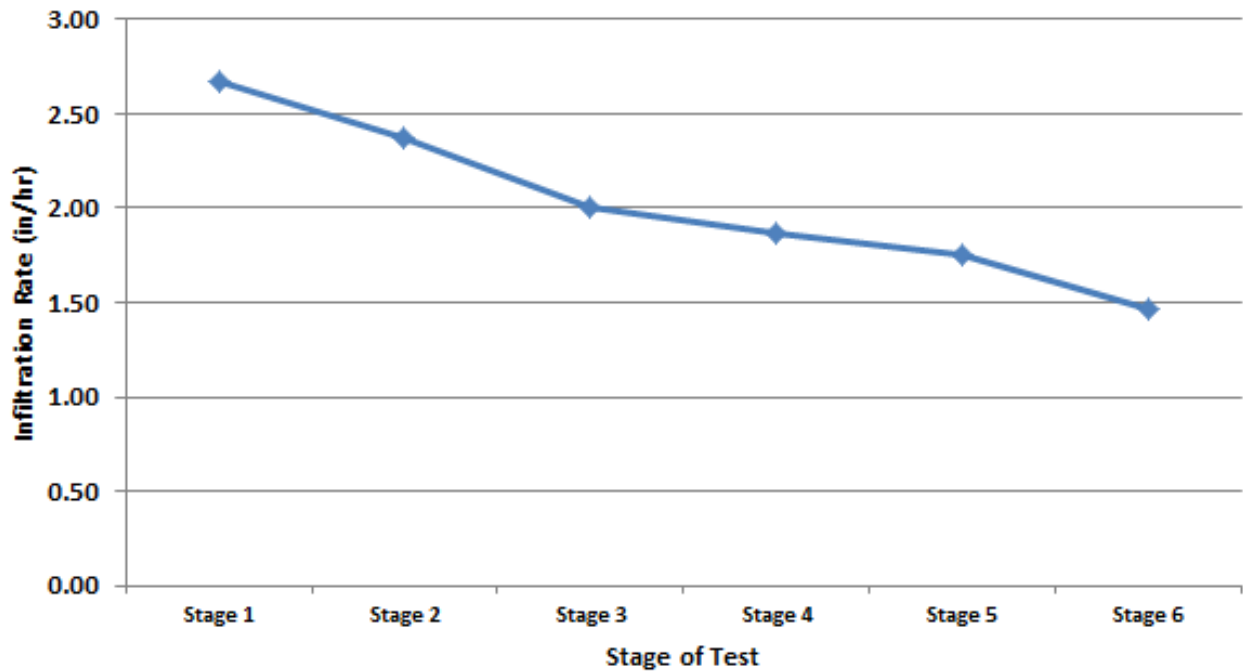
GEOENGINEERS

Figure A-9

Water Depth During Infiltration Test



Short-Term Infiltration Rate



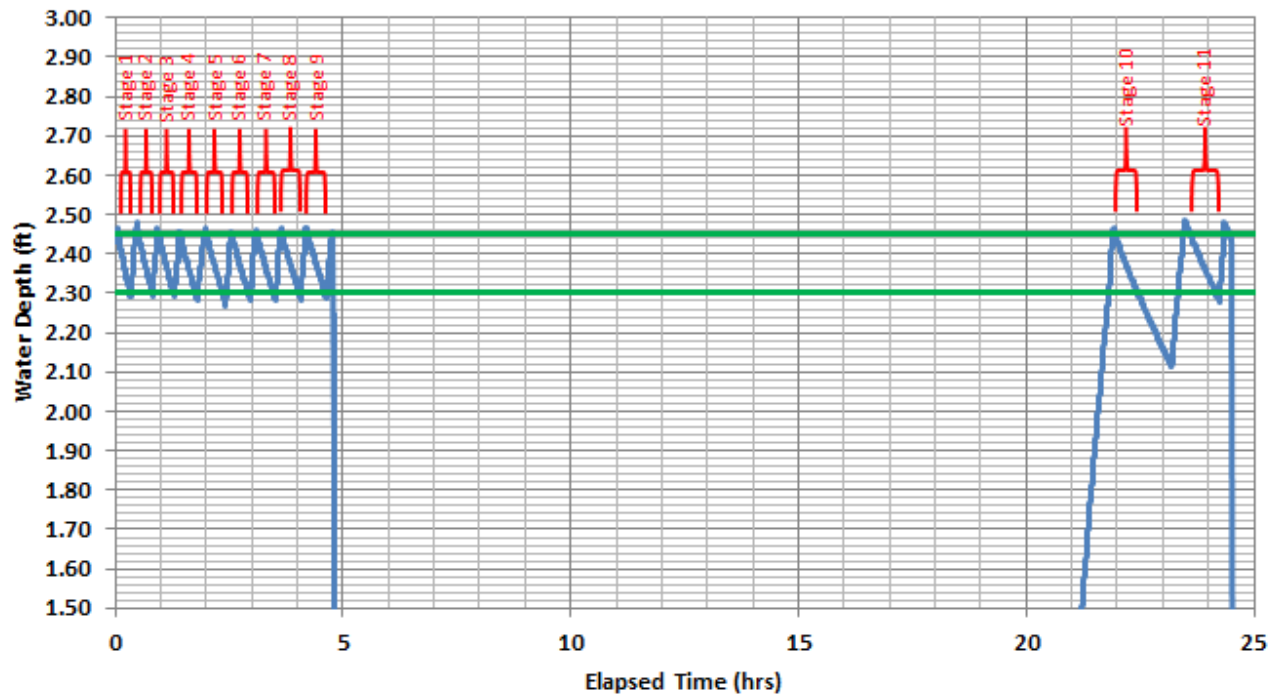
Pilot Infiltration Test Results (PIT-1)

Skyway Library
Seattle, Washington

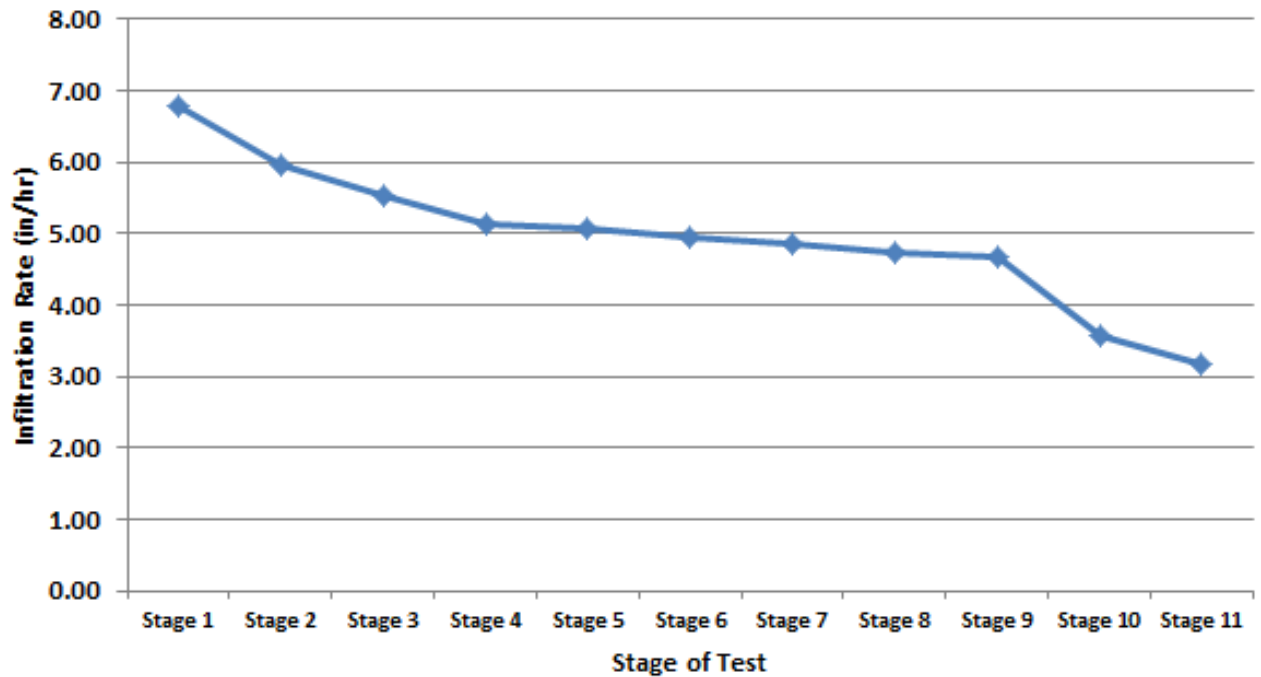
GEOENGINEERS 

Figure A-10

Water Depth During Infiltration Test



Short-Term Infiltration Rate



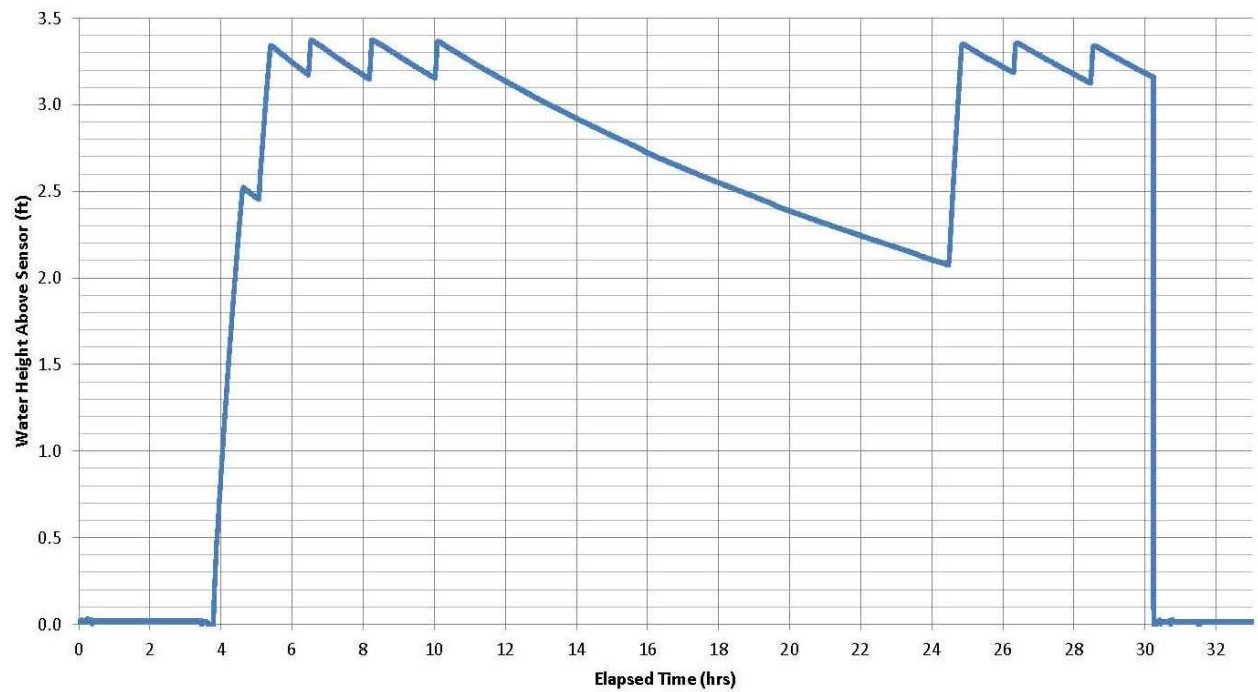
Pilot Infiltration Test Results (PIT-2)

Skyway Library
Seattle, Washington

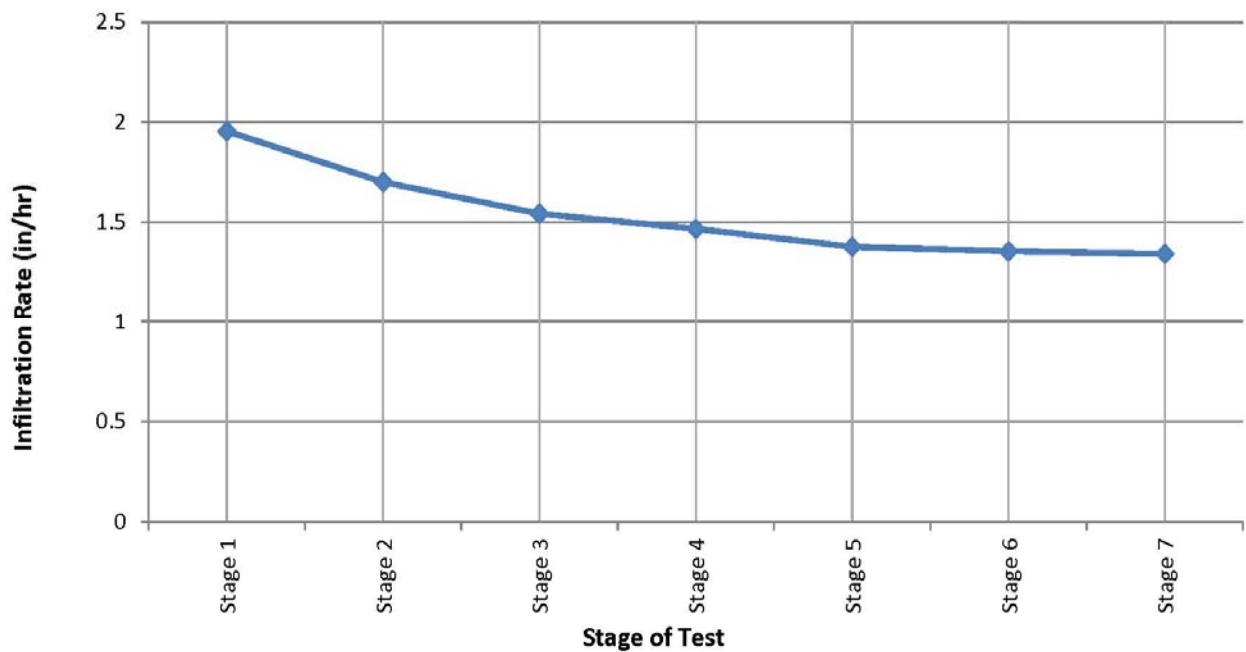
GEOENGINEERS 

Figure A-11

Water Depth During Infiltration Test



Short-Term Infiltration Rate



Pilot Infiltration Test Results (PIT-3)

Skyway Library
Seattle, Washington



Figure A-12

The background of the page features a series of blue contour lines, similar to a topographic map, with a dashed blue line winding through the lower-left and central portions of the image.

APPENDIX B

Laboratory Testing

APPENDIX B

LABORATORY TESTING

Soil samples obtained from the explorations were transported to GeoEngineers' laboratory and evaluated to confirm or modify field classifications, as well as to evaluate engineering properties of the soil samples. Representative samples were selected for laboratory testing to determine the moisture content and percent fines (material passing the U.S. No. 200 sieve). The tests were performed in general accordance with test methods of ASTM International (ASTM) or other applicable procedures.

The results of the moisture content and percent fines determinations are presented at the respective sample depths on the exploration logs in Appendix A.

Moisture Content

Moisture content tests were completed in general accordance with ASTM D 2216 for representative samples obtained from the explorations. The results of these tests are presented on the exploration logs in Appendix A at the depths at which the samples were obtained.

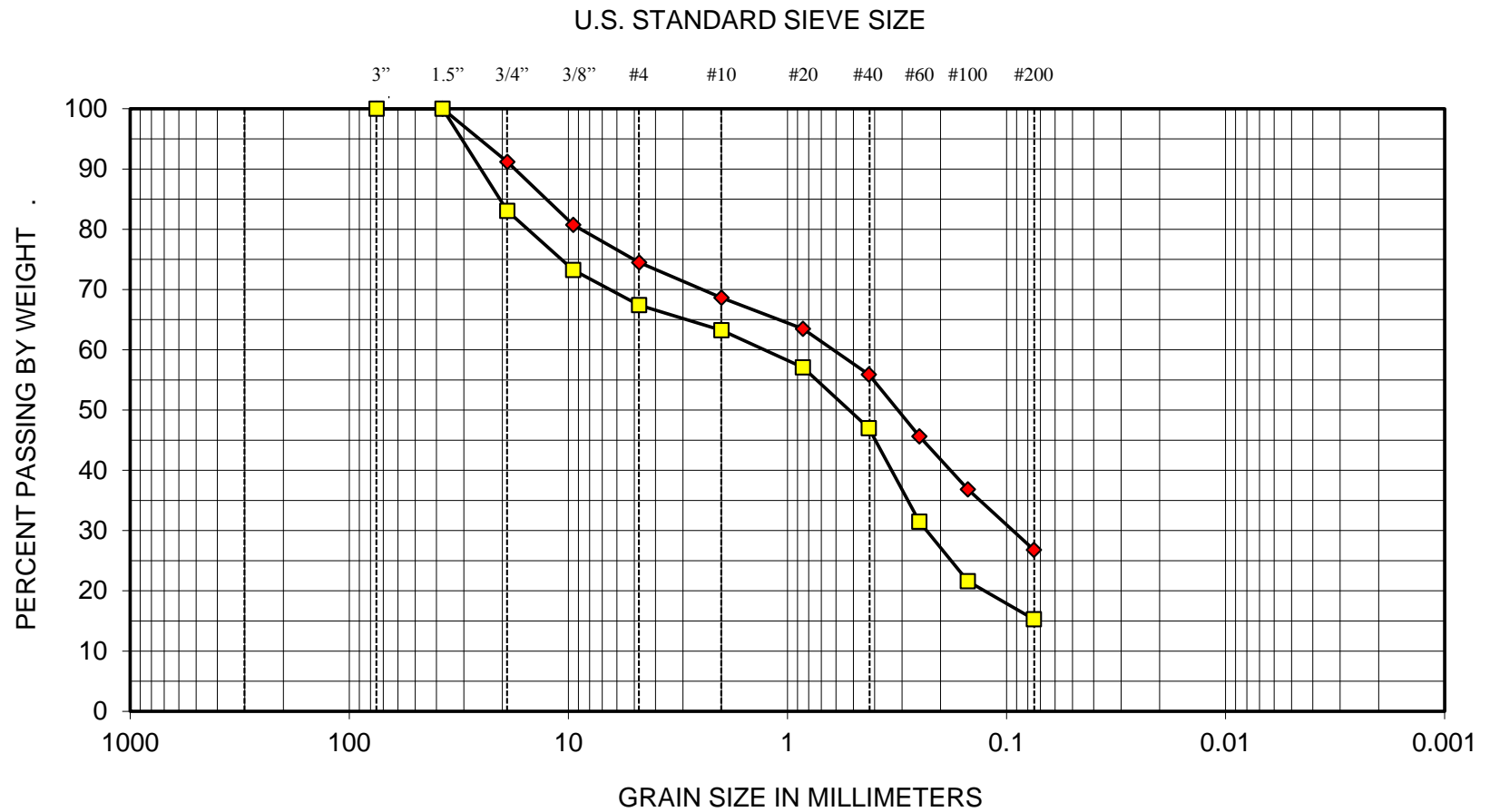
Percent Passing U.S. No. 200 Sieve (%F)

Selected samples were "washed" through the U.S. No. 200 mesh sieve to estimate the relative percentages of coarse- and fine-grained particles in the soil. The percent passing value represents the percentage by weight of the sample finer than the U.S. No. 200 sieve. These tests were conducted to verify field descriptions and to estimate the fines content for analysis purposes. The tests were conducted in accordance with ASTM D 1140, and the results are shown on the exploration logs in Appendix A at the respective sample depths.



Sieve Analyses

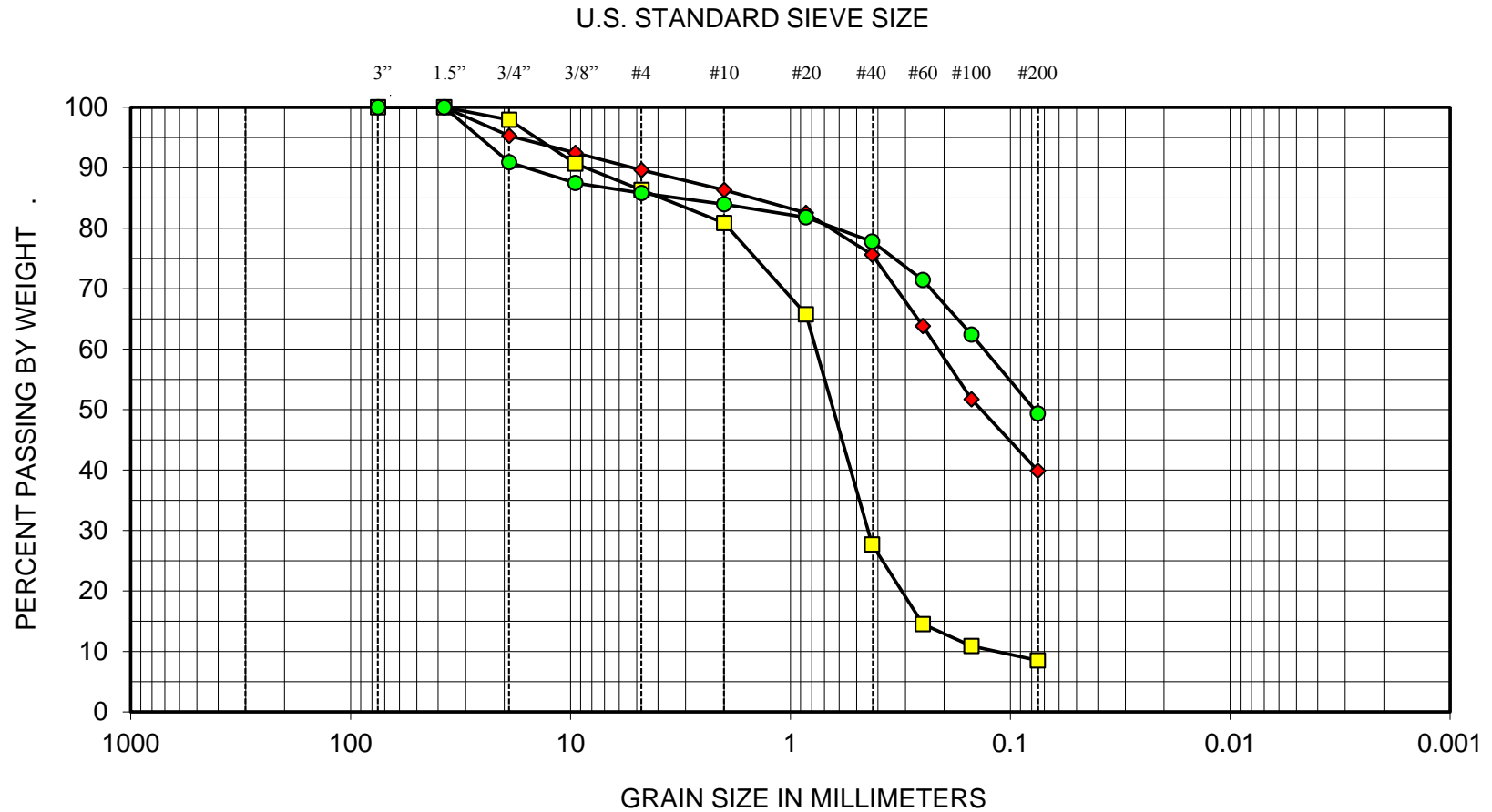
Sieve analyses were performed on selected samples in general accordance with ASTM D 422 to determine the sample grain size distribution. The wet sieve analysis method was used to determine the percentage of soil greater than the U.S. No. 200 mesh sieve. The results of the sieve analyses were plotted, were classified in general accordance with the Unified Soil Classification System (USCS) and are presented in Figure B-1.

Additional samples were selected for sieve analysis from boring GEI-3 and test pit TP-3 to support the final design of the infiltration facility. The results of these analyses are presented in Figure B-2.



BOULDERS	COBBLES	GRAVEL		SAND			SILT OR CLAY
		COARSE	FINE	COARSE	MEDIUM	FINE	

SYMBOL	EXPLORATION NUMBER	DEPTH (ft)	SOIL CLASSIFICATION
	TP-1	3½	Silty sand with gravel (SM)
	TP-2	1	Silty sand with gravel (SM)



BOULDERS	COBBLES	GRAVEL		SAND			SILT OR CLAY
		COARSE	FINE	COARSE	MEDIUM	FINE	

SYMBOL	EXPLORATION NUMBER	DEPTH (ft)	SOIL CLASSIFICATION
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="color: red;">◆</div> <div style="color: yellow;">■</div> <div style="color: green;">●</div> </div>	GEI-3 GEI-3 TP-3	5 17½ 6	Silty sand (SM) Well-graded sand with silt (SW-SM) Silty sand (SM)



APPENDIX C

Groundwater Mounding Analysis

APPENDIX C

GROUNDWATER MOUNDING ANALYSIS

Improvement plans for the Skyway Library include a stormwater infiltration facility to dispose of runoff generated from a portion of the site. This appendix presents the results of the groundwater mounding analysis completed for the proposed infiltration facility, which has been designed by Springline Design of Seattle.

The results of the groundwater mounding analysis confirm that the planned infiltration facility will infiltrate 100% of the runoff directed to it without causing overflow, per the requirements of the King County Surface Water Design Manual (2009)..

Hydrogeologic Setting

The Skyway Library site lies within the Taylor Creek subbasin of the Cedar/Sammamish watershed in Water Resource Inventory Area (WRIA) 8. Most of the basin is developed, with a significant portion of development resulting in the construction of impervious surfaces that limit infiltration and generate runoff. Direct infiltration of stormwater onsite is encouraged by King County.

Subsurface Conditions

Subsurface soil and groundwater conditions encountered at the Skyway Library site have been described in Appendix A and are summarized as follows:

- The shallow surficial soils on site include silty sand with variable gravel content overlying glacially consolidated soils which include glacial till at depth.
- The till locally forms an extensive relatively low-permeability layer that regionally acts as a confining layer or aquitard which limits the normal downward percolation of moisture that has infiltrated through surface soils.

In places, the till is overlain by recessional outwash soils with relatively high sand and gravel content. The recessional outwash soils exhibit high permeability and provide groundwater storage and recharge potential within a shallow water-bearing zone beneath the proposed infiltration facility.

Based on the water level monitoring conducted to date, the seasonal high ground water elevation for the Skyway Library site is assumed to be 422 feet NAVD 88.

Hydraulic Properties of Deeper Aquifer Soils

The slug tests provide a value for the average horizontal hydraulic conductivity of the aquifer beneath the Skyway Library site (see Appendix A):.

- The recessional outwash aquifer underlying the site has an average horizontal hydraulic conductivity of 23 feet per day (ft/d), or 8.3×10^{-2} centimeters per second (cm/s), per the slug tests results.
- Sedimentary deposits are commonly anisotropic in permeability, with the value of the horizontal hydraulic conductivity (HHC) typically greater than the vertical hydraulic conductivity

(VHC). In accordance with King County guidance for groundwater mounding analyses, the anisotropy ratio (HHC:VHC) is assumed to lie between 1½:1 for homogeneous soils and 3:1 for layered soils.

Given the sedimentary nature of the recessional outwash aquifer at the Skyway Library site, we have selected an HHC:VHC ratio of 2:1. On this basis, the VHC for the recessional outwash aquifer is assigned a VHC value of 11.5 ft/d, or 4.2×10^{-2} cm/s.

Hydraulic Properties of Shallow Infiltration Soils

A large-scale PIT was performed in a full-size test pit (TP-3) excavated within the footprint of the proposed infiltration facility to obtain a direct measurement of the infiltration rate for the shallower silty sand/silt layer in which the proposed infiltration facility will be constructed:

- The short-term infiltration rate determined from the large-scale PIT in TP-3 was 1.35 inches per hour (in/hr) or 2.7 ft/d.
- King County guidance requires that the short-term infiltration rate be reduced by a calibration factor depending on the testing method to calculate the VHC. For a large-scale PIT, the apparent rate is reduced by a calibration factor of 1½:1. Therefore the VHC of the soil underlying the facility is 1.8 ft/d.
- Given the layered nature of the shallow soils excavated in TP-3, an anisotropy ratio of 3:1 is assumed. Therefore the horizontal hydraulic conductivity of the soil directly underlying the facility is 5.4 ft/d.

Infiltration Facility Design

The groundwater mounding analysis has been developed based on the following aspects of the infiltration facility design as documented in the Technical Information Report (TIR) prepared for the project by Springline Design (2013):

- The 8-year runoff hydrograph developed from 11,495 ft² of the project site that is routed to the infiltration facility.
- Overall sizing of the facility developed using KCRTS based on the design infiltration rate of 0.25 inches per hour.
- The facility is designed with three parallel chambers, each 2.5 feet in diameter, installed beneath the northwest portion of the site as shown in Figure 2.
- The infiltration facility is 14.5 feet wide and 114 feet in length. At each end and at the middle, additional chambers are laid transversely to form a manifold to distribute inflow within the facility and provide access. The total area of the facility is 1,653 square feet (ft²).
- The base of the facility is set a uniform elevation of 425 feet, at a depth of approximately 4 feet below the finished site grade.
- The infiltration facility will be constructed of perforated aluminized corrugated metal pipe (CMP), backfilled with drain rock having a porosity of 30 percent.
- The working storage depth within the facility is 2.5 feet, with an overflow pipe at Elevation 427.4 feet, just below the crown of the chambers.

Facility Inflow

Springline Design has provided GeoEngineers with runoff volumes and facility inflow for the full 8-year time series.

- The inflow hydrograph required for groundwater mounding analysis is the 30-day period within the 8-year time series that produces the peak total volume of runoff.
- Inspection of the full 8-year hydrograph generated by Springline Design shows that this 30-day period starts on February 12, 2003 and extends through March 14, 2003. The total runoff volume to be infiltrated over this period is 11,843 cubic feet (ft³).
- For increased accuracy, we used hourly generated hydrograph data with the start time set at 00:00 hours on February 12, 2003, and a duration extending for 750 hours, or 31.4 days.
- The inflow hydrograph was converted to facility outflow as infiltration, up to the maximum (design) infiltration rate of 0.25 in/hr, with storage occurring in the facility for inflows that exceed the design infiltration rate.

The resulting infiltration hydrograph applied to each of the three chambers in the facility is shown in Figure C-1, expressed in ft³/hr per lineal foot of chamber.

Geotechnical Design

The geotechnical design parameters required for the mounding analysis relate to the geology, geometry, soil and groundwater conditions at the facility location:

- Existing ground elevation (parking lot): 428 feet;
- Final ground elevation (after construction): 429 feet;
- Silty soils extend from beneath the parking lot to between Elevation 420 and 421 feet, increasing in thickness to the south east;
- Recessional outwash soils beneath the surficial soils are composed of gravelly sand with some silt;
- The invert elevation of the infiltration facility is at Elevation 425 feet;
- The facility includes 6 inches of gravel as bedding material beneath the infiltration chambers; and,
- The anticipated seasonal high groundwater level is at Elevation 422 feet.

The required minimum vertical separation of 3 feet above the anticipated seasonal high groundwater elevation is achieved as measured from the invert elevation of the infiltration facility.

Groundwater Mounding Analysis

The mounding analysis is performed to confirm that mounding would not cause the facility to overflow under runoff volumes developed using King County's design criteria. Accordingly, the Skyway Library infiltration facility is designed to infiltrate 100 percent of the full 8-year inflow hydrograph, a total volume of 221,604 ft³ without overflow.

Modeling Approach

Use of simulation program MODRET was considered but it does not allow full representation of the soil layering present at the Skyway Library site, nor does it correctly simulate the saturation and drainage of unsaturated soils above the water table, which are expected to significantly influence the performance of the facility. The rectangular shape of the Skyway Library infiltration facility and its shallow cross-section is amenable to simulation in the vertical plane, using an alternative modeling package that allows more accurate representation of the site conditions and infiltration processes.

A groundwater flow simulation software package called SEEP/W was chosen to complete the analysis, which is part of the GeoStudio 2012 suite of specialist geotechnical software programs published by Geo-Slope Inc. SEEP/W is a groundwater flow simulation program that is well suited to performing mounding analyses because it can simulate groundwater seepage in both saturated and unsaturated conditions. It solves the complex mathematical equations that describe groundwater flow in the subsurface by using a mesh of finite elements to represent the subsurface materials and is capable of representing both fully saturated flow with anisotropic permeability below the water table, as well as partially saturated flow, including infiltration above the water table.

SEEP/W is superior to other groundwater flow programs, such as MODFLOW or MODRET, for conducting a groundwater mounding analysis in that it explicitly models the unsaturated seepage from the base of the infiltration facility with the correct hydraulic gradients that control flow for the infiltration process and downward percolation to the water table.

Model Domain

The mounding analysis was conducted by developing a seepage profile within the SEEP/W modeling software that represents a vertical cross-section through the Skyway Library infiltration facility and the subsurface soils based on the information summarized above. Given the large aspect ratio of the planned facility (length is about 7.8 times the width) a cross-section drawn from the midpoint of the infiltration facility and representing flow within the defined vertical plane provides the most conservative analysis, ignoring three-dimensional end-effects.

The model domain developed within SEEP/W to represent the proposed facility, as shown in Figure C-2, includes the following features:

- The two main geologic formations encountered in the borings are represented in the model as: silty sand (green) overlying gravelly sand with silt (yellow).
- The existing ground surface is represented by the green line at approximate Elevation 428 feet.
- The site will be surfaced up to Elevation 429 feet, represented by the gray layer at the top of the model. This material is defined as impervious in the model.
- The infiltration facility is represented in cross-section, showing the three longitudinal chambers comprising the main central portion of the facility.
- The infiltration chambers are set within a trench that is backfilled with drain rock (pink).
- The base of the infiltration facility includes 6 inches of gravel bedding beneath the chambers.

- The cross-section represents conditions at a vertical slice through the center of the facility with a nominal width of 1 foot, giving the modeled portion of the facility a floor area of 14.5 ft².
- The model domain represents subsurface soils extending laterally to each side of the infiltration facility, to a maximum offset distance of 180 feet.
- The seasonal high groundwater level in the subsurface soils is defined as a hydraulic boundary condition on the outer boundary of the model, with a fixed groundwater head set at an elevation of 422 feet. This also represents the seasonal high groundwater level.
- Each soil layer is represented by a mesh of finite elements which are assigned material properties and boundary conditions that allow the mathematical equations describing groundwater flow to be solved numerically. The mesh is finest around the infiltration facility, for increased accuracy where the highest hydraulic gradients and most rapidly changing groundwater conditions are expected.
- The base of the model domain extends to Elevation 405 feet (the limit of our explorations), where we expect dense glacially consolidated soils to be encountered; a conservative assumption is made by assuming that minimal groundwater flow occurs below this depth.
- An initial steady-state run is performed in SEEP/W with the boundary conditions applied to generate the steady-state “hydrostatic” groundwater condition throughout the model domain that is assumed to precede the 30-day peak inflow period. This is illustrated in Figure C-3 and depicts uniformly increasing pressure head with depth below the seasonal high water table at Elevation 422 feet.

Material Properties

Material properties are assigned within SEEP/W in accordance with the slug test and PIT results, adjusted as described previously to include estimates for vertical and horizontal hydraulic conductivity.

For materials above the water table, properties governing unsaturated flow have been developed using typical water retention curves for similar materials to help define the hydraulic conductivity and moisture retention as functions of the matric suction pressure within the soil. In the absence of measured values for the site soils, published example curves are adopted from similar example soils provided within the SEEP/W model. The resulting characteristic curves for the unsaturated volumetric water content and hydraulic conductivity in terms of matric suction pressure in pounds per square foot (psf) are shown in Figure C-4.

Stormwater Infiltration

Stormwater creates outflow from each of the three chambers that varies with time as the storm intensity, generated runoff volumes, and storage depths change during the 30-day peak inflow period of the simulation. To begin the transient simulation, stormwater is introduced to the base of each infiltration chamber, using a hydraulic boundary condition applied in the model in which the inflow rate is specified as in Figure C-1. The SEEP/W model then simulates discharge of water to the subgrade and infiltration to the water table, as shown in Figure C-5.

Mounding Analysis Results

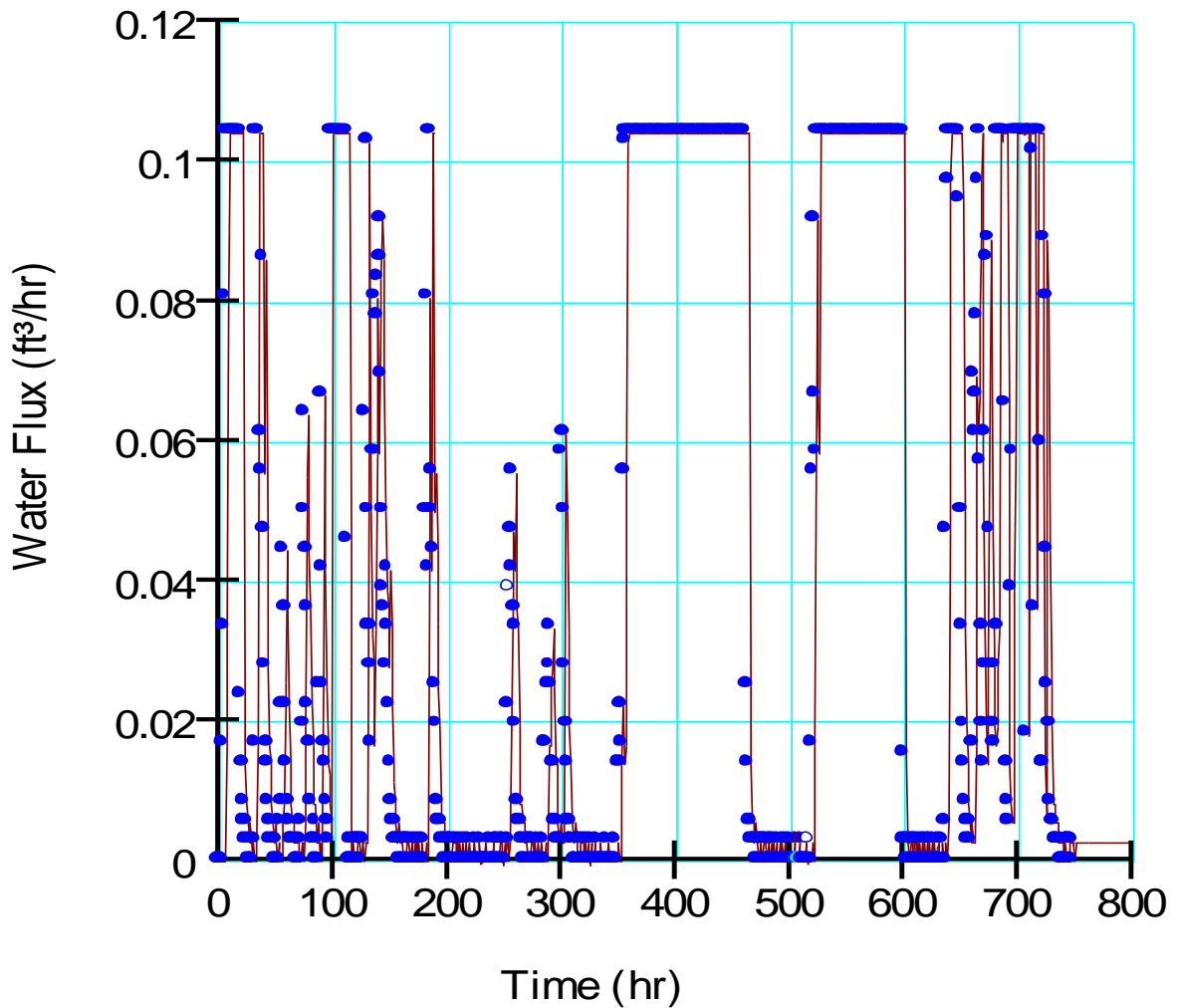
The mounding analysis was completed by running a transient analysis with the SEEP/W model, using 750 hourly time steps to include the full 30-day peak volume inflow period. Model output was saved for every sixth hour of the simulation, and shows the extent of mounding occurring beneath the facility. As examples, close-ups of the peak mounding beneath the facility are shown after 460 and 600 hours of the simulation in Figure C-6.

The variation in water level below and within the facility is provided by the graph in Figure C-7, which depicts the total pressure head at the bottom of the infiltration facility for 6-hour intervals throughout the 750-hour simulation. As can be seen, the water level remains below the bottom of the infiltration facility (Elevation 425 feet) except during the largest storms. Excess inflowing stormwater is held in storage within the infiltration chambers, and infiltrates as the facility inflow from the larger storm events subsides, per the design.

The simulation shows a maximum water level of Elevation 426 feet at the end of the second major storm within the 30-day inflow hydrograph. The model shows dissipation of high water levels after storm peaks have passed, with relatively rapid drainage of the facility and subgrade soils back toward the ambient water table elevation. The model indicates that the underlying water table will increase by up to 1.5 feet in elevation after the largest storms have passed. The model then shows slow recession of the groundwater mound back toward the seasonal high water table elevation as infiltrated water moves away from the facility over time.

The mounding analysis confirms that the stormwater infiltration facility as developed by Springline Design will be feasible at the site, and will function as designed without overflow occurring from the facility.

30-day Pipe Inflow (per 5 ft²)



Notes:

1. Inflow function for each pipe in SEEP/W model.
2. Revised Inflow Hydrograph provided by Springline Design.
3. Water Flux (ft³/hr) is for each 1-foot length of infiltration tank, assuming uniform application over 5 ft² of infiltration trench bottom area.

Reference: Graphical Output from SEEP/W Model file:
Skyway_Library_3.gsz.

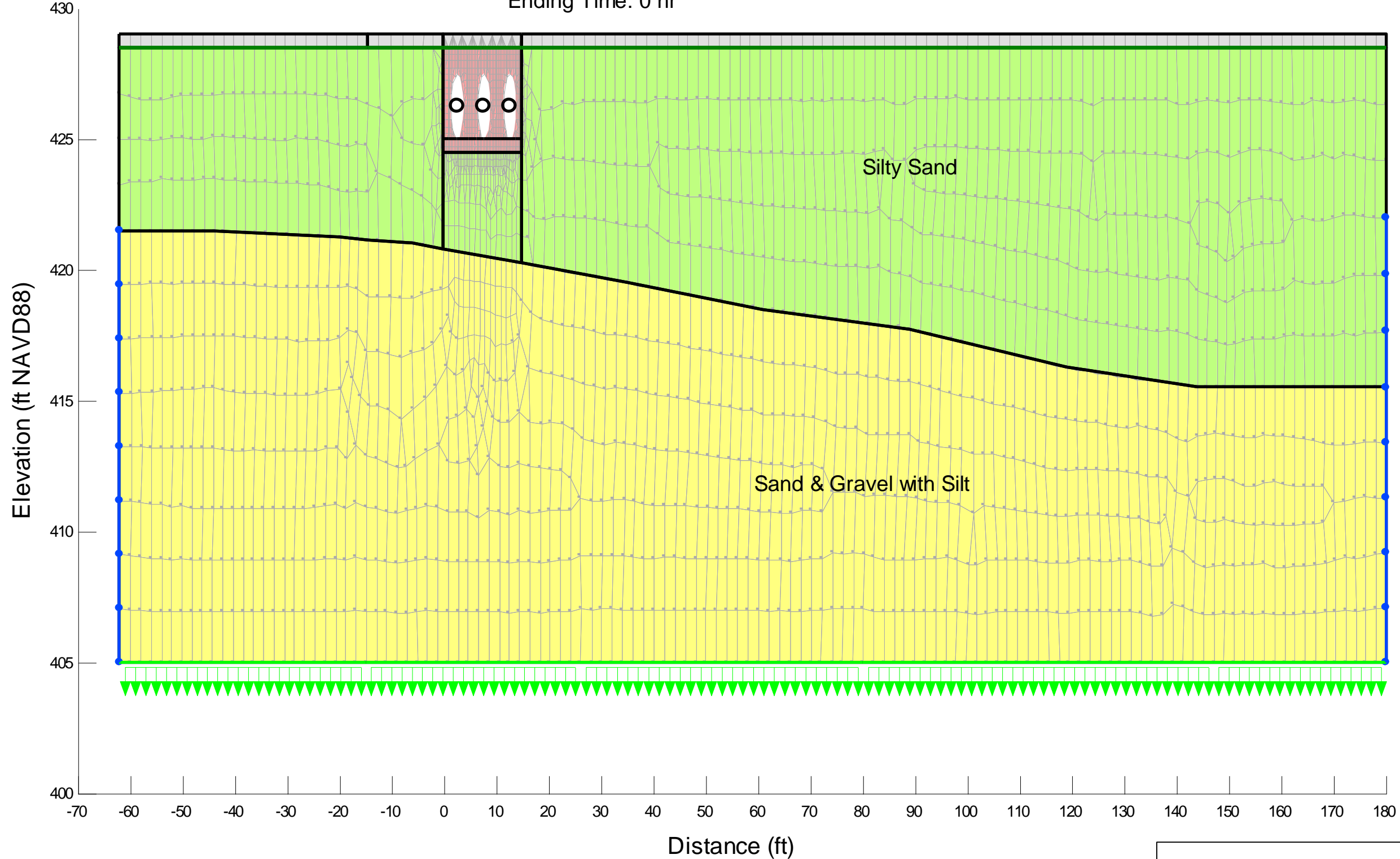
Infiltration Facility Inflow Hydrograph

Skyway Library
Seattle, Washington

GEOENGINEERS

Figure C-1

Title: Skyway Library Infiltration Facility
Name: Static High Groundwater
Ending Time: 0 hr



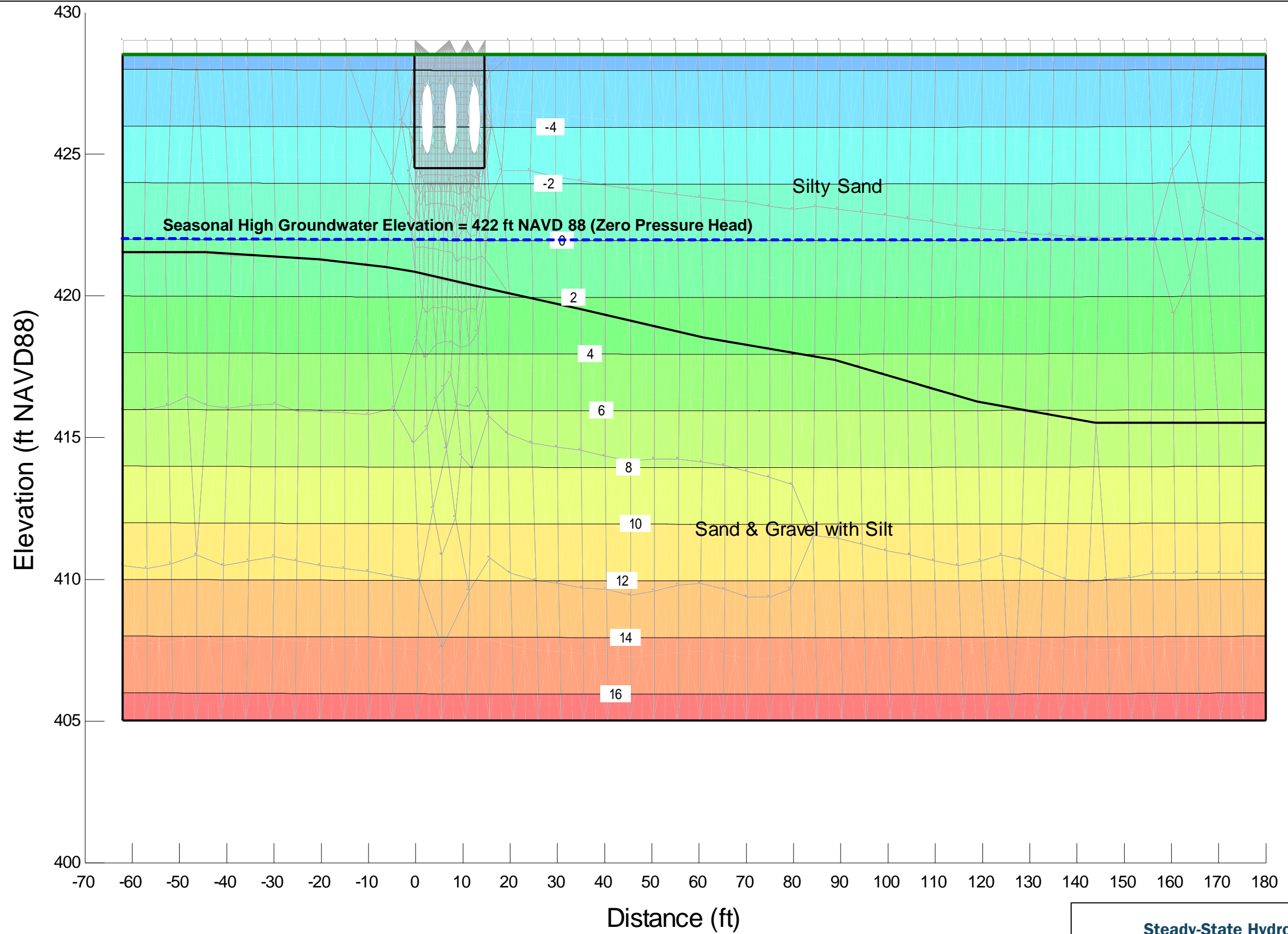
Notes:

1. Vertical scale is exaggerated 6 times the horizontal scale.
2. Seasonal high groundwater level defined by constant head boundary (Blue line and circles) at Elevation 422 feet along the sides of the model domain.
3. Limited downward seepage into underlying glacial till applied at bottom of Model Domain (green line and arrows) at a nominal 10 inches per year.

Reference: Graphical Output from SEEP/W Model file: Skyway_Library_3.gsz.

SEEP/W Model Domain	
Skyway Library Seattle, Washington	
GEOENGINEERS	Figure C-2

SP:\0178401701\Technical Analysis\Figures\App C Figs (L).pptx MAPK 04/23/13



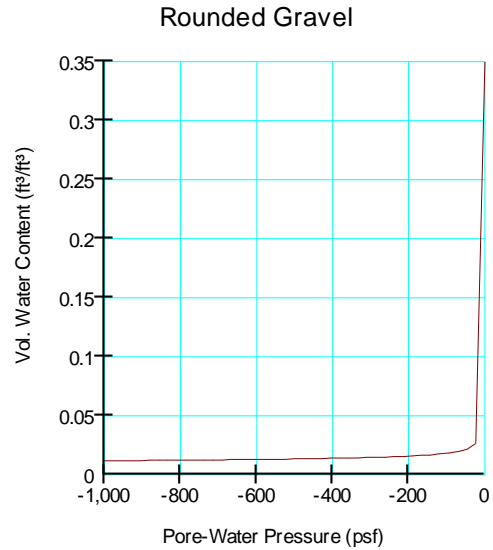
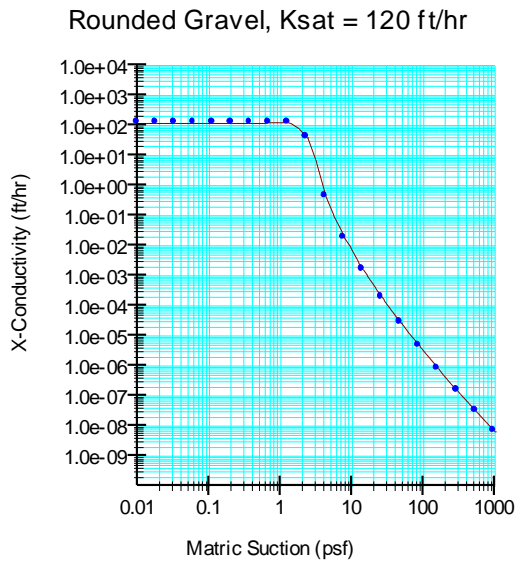
Notes:

1. Vertical scale is exaggerated 6 times the horizontal scale.
2. Contours are of pressure head in feet of water, Zero pressure head represents the static water table.

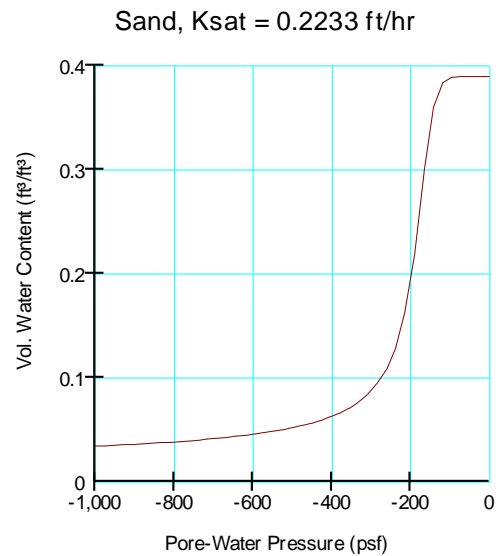
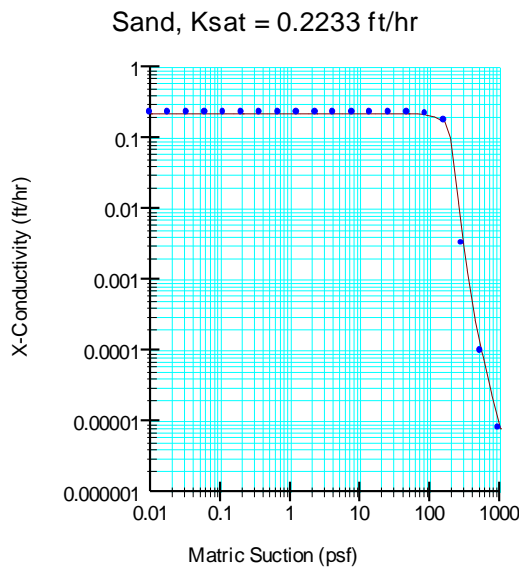
Reference: Graphical Output from SEEP/W Model file: Skyway_Library_3.gsz.

Steady-State Hydrostatic Profile	
Skyway Library Seattle, Washington	
GEOENGINEERS	Figure C-3

(a) Drain Rock (Infiltration Trench backfill material)



(b) Silty Sand



(c) Gravely Sand with Silt

Saturated Only. $K_{sat} = 0.9706$ ft/hr K -ratio = 0.5 Volumetric Water Content = 0.35 ft³/ft³

Notes:

1. Input parameter functions for material in the SEEP/W model that include full saturated and unsaturated hydraulic responses.

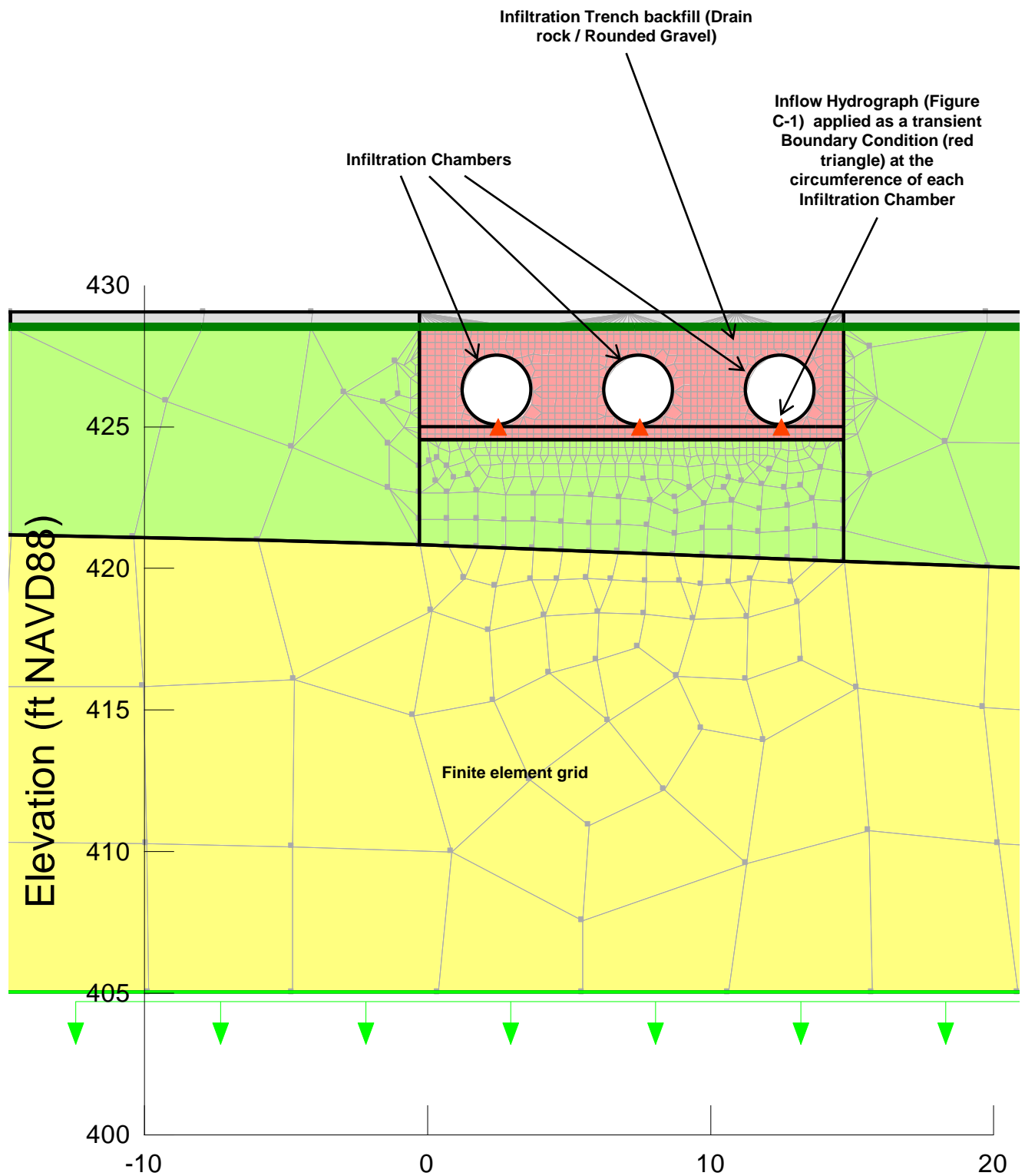
Reference: Graphical Output from SEEP/W Model file: Skyway_Library_3.gsz.

Unsaturated Hydraulic Functions

**Skyway Library
Seattle, Washington**



Figure C-4



Notes:

1. Inflow boundary condition for Infiltration Tanks is applied as a transient hourly flowrate discharged from each pipe into the gravel backfill of the infiltration trench.
2. Maximum flowrate is limited to the equivalent of the design infiltration rate, 0.25 in/hr, for the facility

Reference: Graphical Output from SEEP/W Model file:
Skyway_Library_3.gsz.

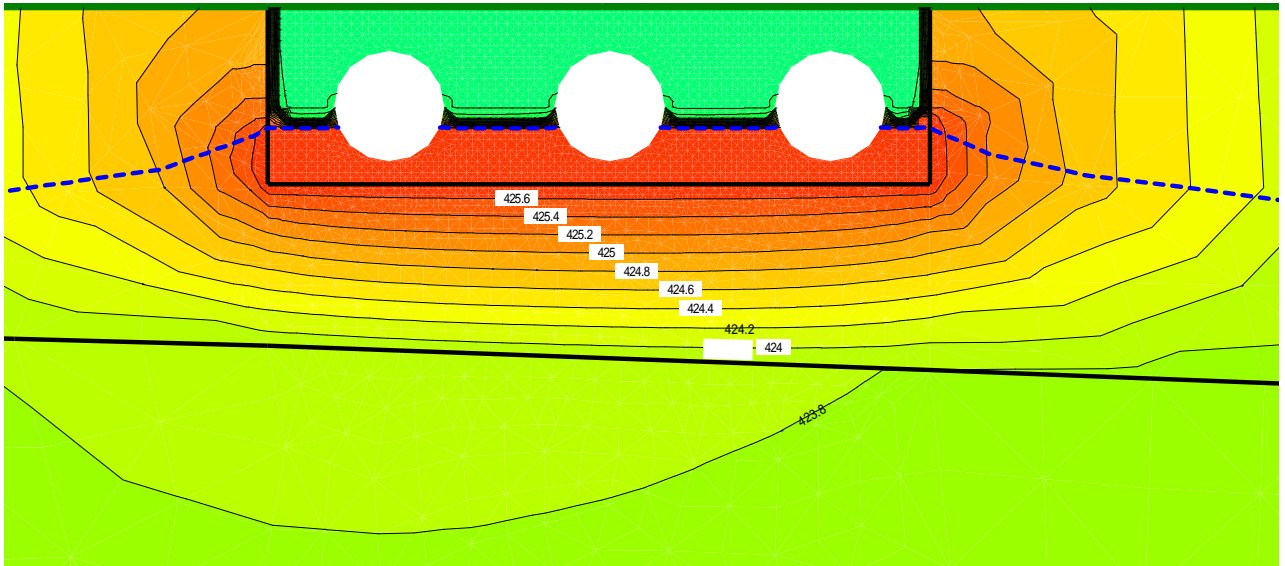
Facility Inflow Boundary Condition

**Skyway Library
Seattle, Washington**

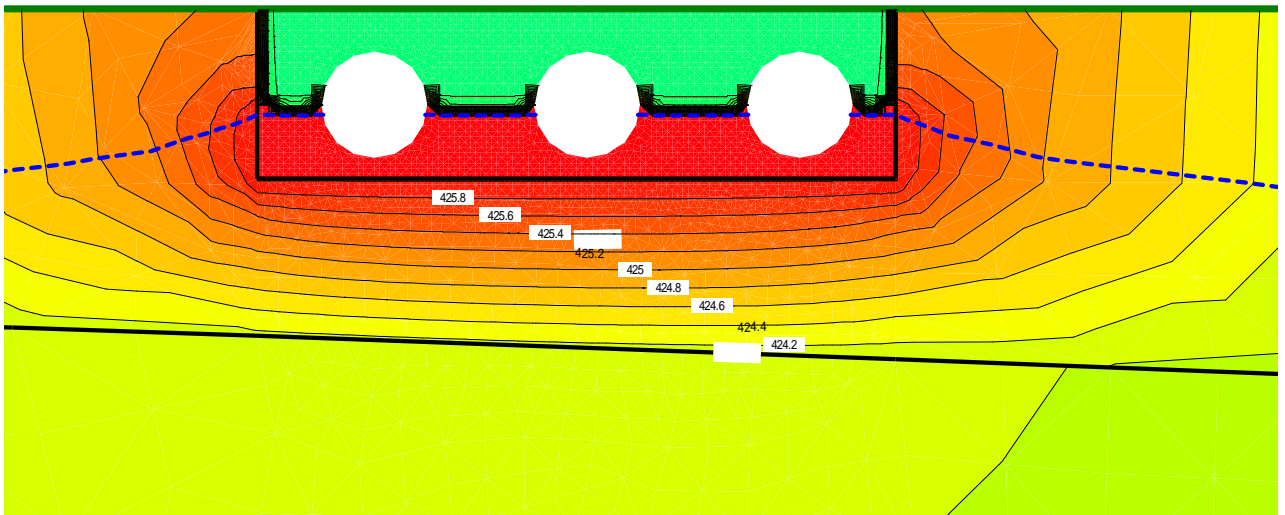


Figure C-5

(a) Mounding after 460 hours



(b) Mounding after 600 hours



Notes:

1. Contours are total head in feet relative to NAVD 88
2. Total hydraulic head profiles are output from SEEP/W at selected intervals of peak mounding during the 750-hour model simulation representing the 30-day peak runoff volume.

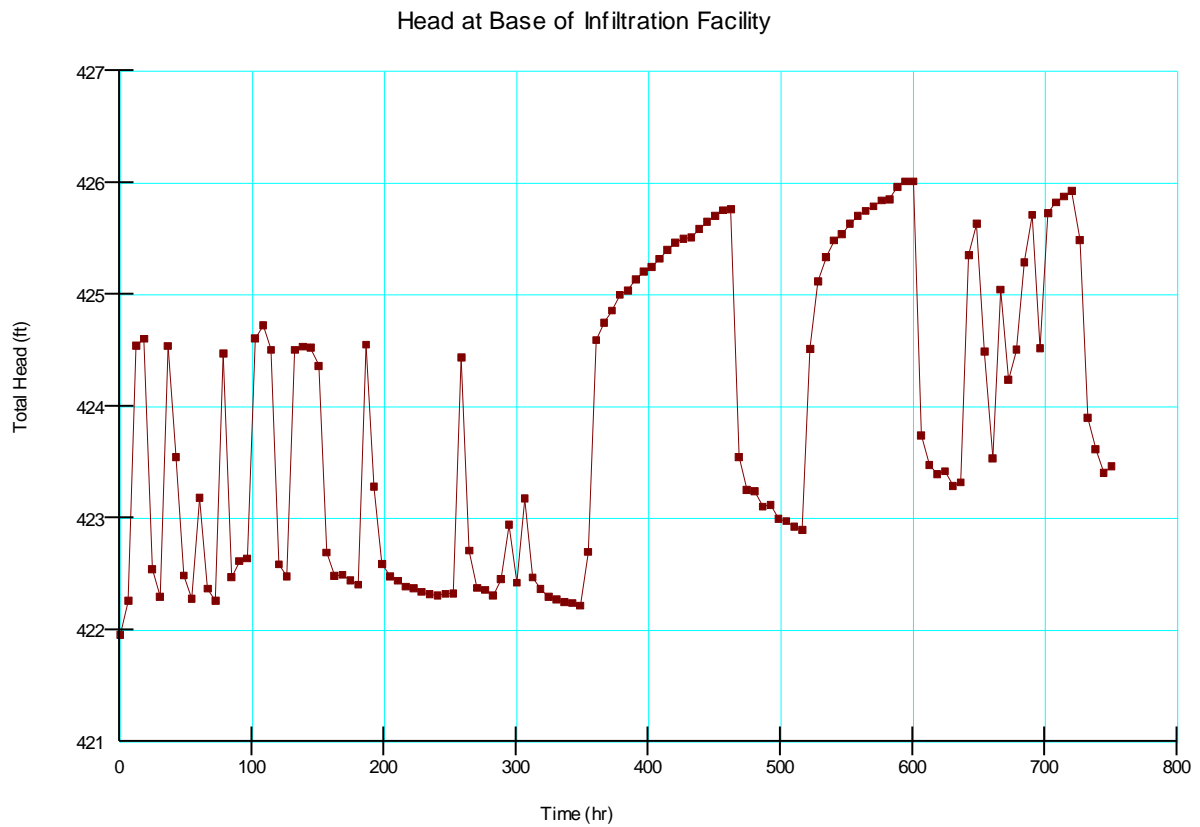
Reference: Graphical Output from SEEP/W Model file:
Skyway_Library_3.gsz.

Peak Mounding after 460 and 600 hours

**Skyway Library
Seattle, Washington**



Figure C-6



Notes:

1. Graph shows total hydraulic head at the base of the infiltration facility.
2. Total hydraulic head is output from SEEP/W model at 6-hour intervals throughout the 750-hour model simulation representing the 30-day peak runoff volume.

Reference: Graphical Output from SEEP/W Model file:
Skyway_Library_3.gsz.

Total Head in Infiltration Facility

**Skyway Library
Seattle, Washington**



Figure C-7



APPENDIX D
Report Limitations and Guidelines for Use

APPENDIX D

REPORT LIMITATIONS AND GUIDELINES FOR USE¹

This appendix provides information to help you manage your risks with respect to the use of this report.

Geotechnical Services Are Performed for Specific Purposes, Persons and Projects

This report has been prepared for the exclusive use of King County Library System and other project team members for the Skyway Library project. This report is not intended for use by others, and the information contained herein is not applicable to other sites.

GeoEngineers structures our services to meet the specific needs of our clients. For example, a geotechnical or geologic study conducted for a civil engineer or architect may not fulfill the needs of a construction contractor or even another civil engineer or architect that are involved in the same project. Because each geotechnical or geologic study is unique, each geotechnical engineering or geologic report is unique, prepared solely for the specific client and project site. Our report is prepared for the exclusive use of our Client. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and generally accepted geotechnical practices in this area at the time this report was prepared. This report should not be applied for any purpose or project except the one originally contemplated.

A Geotechnical Engineering or Geologic Report Is Based on a Unique Set of Project-specific Factors

This report has been prepared for the Skyway Library project in Seattle, Washington. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, do not rely on this report if it was:

- not prepared for you;
- not prepared for your project;
- not prepared for the specific site explored; or
- completed before important project changes were made.

For example, changes that can affect the applicability of this report include those that affect:

- the function of the proposed structure;
- elevation, configuration, location, orientation or weight of the proposed structure;
- composition of the design team; or
- project ownership.

¹ Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences; www.asfe.org.

If important changes are made after the date of this report, GeoEngineers should be given the opportunity to review our interpretations and recommendations and provide written modifications or confirmation, as appropriate.

Subsurface Conditions Can Change

This geotechnical or geologic report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the site, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Always contact GeoEngineers before applying a report to determine if it remains applicable.

Most Geotechnical and Geologic Findings Are Professional Opinions

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

Geotechnical Engineering Report Recommendations Are Not Final

Do not over-rely on the preliminary construction recommendations included in this report. These recommendations are not final, because they were developed principally from GeoEngineers' professional judgment and opinion. GeoEngineers' recommendations can be finalized only by observing actual subsurface conditions revealed during construction. GeoEngineers cannot assume responsibility or liability for this report's recommendations if we do not perform construction observation.

Sufficient monitoring, testing and consultation by GeoEngineers should be provided during construction to confirm that the conditions encountered are consistent with those indicated by the explorations, to provide recommendations for design changes should the conditions revealed during the work differ from those anticipated, and to evaluate whether or not earthwork activities are completed in accordance with our recommendations. Retaining GeoEngineers for construction observation for this project is the most effective method of managing the risks associated with unanticipated conditions.

A Geotechnical Engineering or Geologic Report Could Be Subject to Misinterpretation

Misinterpretation of this report by other design team members can result in costly problems. You could lower that risk by having GeoEngineers confer with appropriate members of the design team after submitting the report. Also retain GeoEngineers to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering or geologic report. Reduce that risk by having GeoEngineers participate in pre-bid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Exploration Logs

Geotechnical engineers and geologists 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 a geotechnical engineering or geologic report should never be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, but recognize that separating logs from the report can elevate risk.

Give Contractors a Complete Report and Guidance

Some owners and design professionals believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering or geologic report, but preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with GeoEngineers and/or to conduct additional study to obtain the specific types of information they need or prefer. A pre-bid conference can also be valuable. Be sure contractors have sufficient time to perform additional study. Only then might an owner be in a position to give contractors the best information available, while requiring them to at least share the financial responsibilities stemming from unanticipated conditions. Further, a contingency for unanticipated conditions should be included in your project budget and schedule.

Contractors Are Responsible for Site Safety on Their Own Construction Projects

Our geotechnical recommendations are not intended to direct the contractor's procedures, methods, schedule or management of the work site. The contractor is solely responsible for job site safety and for managing construction operations to minimize risks to on-site personnel and to adjacent properties.

Read These Provisions Closely

Some clients, design professionals and contractors may not recognize that the geoscience practices (geotechnical engineering or geology) are far less exact than other engineering and natural science disciplines. This lack of understanding can create unrealistic expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory "limitations" provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you are unclear how these "Report Limitations and Guidelines for Use" apply to your project or site.

Geotechnical, Geologic and Environmental Reports Should Not Be Interchanged

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding a specific project.

Biological Pollutants

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

If Client desires these specialized services, they should be obtained from a consultant who offers services in this specialized field.

Have we delivered World Class Client Service?

Please let us know by visiting **[www. geoengineers.com/feedback](http://www.geoengineers.com/feedback)**.



APPENDIX B

UST CLOSURE DOCUMENTATION



Engineering +
Environmental

Underground Storage Tank Removal Report

Waste Oil Tank

12690 Renton Ave S
Seattle, WA 98178

Prepared for:
Jeff Keller
IO Environmental and Infrastructure
2200 118th Avenue SE
Bellevue, WA 98006

September 24, 2014
Project No.: 41299

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3.0 UST DECOMMISSIONING BY REMOVAL.....	1
4.0 SOIL SAMPLING.....	1
5.0 RESULTS.....	2
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SUPPORTING DATA

FIGURES Figure 1 – Site Vicinity Map
 Figure 2 – Site Plan with Soil Sample Locations

TABLES Table 1 – Soil Analytical Results

APPENDICES

Appendix I – WDOE Notice and King County Permit Documentation

Appendix II – UST and UST Contents Disposal Documentation

Appendix III – Laboratory Report and Chain-of-Custody

Appendix IV – UST Site Assessment Checklist

1.0 INTRODUCTION

PBS Engineering and Environmental Inc. (PBS) provided consulting services to IO Environmental and Infrastructure Inc. (IO), in relation to the removal of an underground storage tank (UST) from the property located at 12690 Renton Avenue South in Seattle, Washington (Site). The removal of the UST was part of the larger demolition and new construction project underway at the time this report was issued.

2.0 SITE DESCRIPTION AND UST INFORMATION

The Site is located at 12690 Renton Avenue South in Seattle, Washington (refer to Figure 1 - Site Vicinity Map), and is currently undergoing a renovation project which includes the new construction of a library. The site is located along Renton Avenue's commercial zone.

The UST was of cylindrical, steel construction, measuring 5'-0" long by 2'-6" diameter and having a capacity of approximately 200 gallons. The tank held approximately 50 gallons of oil which was noted to have a relatively high viscosity and a petroleum hydrocarbon odor. The UST was reportedly used to store waste oil.

3.0 UST DECOMMISSIONING BY REMOVAL

Prior to UST removal, notice was given to the Washington State Department of Ecology (WDOE) and a permit was obtained from King County. UST removal notice and permit documentation is included in Appendix I.

Rhine Demolition of Tacoma, Washington removed the UST from the site on September 15, 2014. Approximately 50 gallons of waste oil and sludge was pumped from the tank prior to removal. The tank appeared in fair/poor condition upon removal with moderate corrosion and a small leak at the base. The UST contents disposal documentation is included in Appendix II.

Ken Nogeire of PBS, a Washington State Certified Site Assessor, was on site and observed the removal of the tank. A tank pit excavation was approximately six feet in length in a northeast-southwest direction, three feet wide in a southeast-northwest direction and approximately three feet deep. Odorous and stained soil was observed at the base of the excavation. The UST excavation was part of a larger soil removal excavation, primarily to the north and west of the UST.

At the time this report was issued the UST disposal documentation was not available to PBS. That documentation should be added to Appendix II when it is available.

4.0 SOIL SAMPLING

Soil at the UST location was observed to be medium dense, brown silty sand (SM) with minor sub-rounded gravel.

Groundwater was not encountered during this assessment.

A total of three soil samples were collected from the excavation, one from the base and one from each the northeast and southwest sidewalls. Soil samples were collected directly from the excavation. Samples were screened for volatiles using a hand held photoionization detector (PID). Detected volatiles ranged from 10.5 parts per million (ppm) at the southwest sidewall sample location (TP1-WSW) to 47 ppm at the base sample (TP1-B).

Soil samples were collected using protocols specified in WDOE's *Guidance for Site Checks and Site Assessments for Underground Storage Tanks*. Samples were placed into laboratory provided glass jars and/or vials and stored on ice, under chain of custody documentation, until delivery to Fremont Analytical laboratory in Seattle, Washington.

Based on the use of the UST to store waste oil, analysis conducted to identify if a release occurred included the following:

- Total petroleum hydrocarbons (TPH) as gasoline by Method NWTPH-Gx
- Total petroleum hydrocarbons (TPH) as diesel by Method NWTPH-Dx
- Volatile Organic Compounds (VOCs) by EPA Method 8260C
- Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270D SIM
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082A
- Select metals by EPA Method 200.8

5.0 RESULTS

Model Toxics Control Act (MTCA) Method A Cleanup Levels for Unrestricted Land Use were the adopted Cleanup Levels for the site.

Concentrations of gasoline and heavy oil range TPHs, cadmium and lead exceeded the adopted Cleanup Levels.

Analytical results are presented in Tables 1. A copy of the laboratory report and chain-of-custody form is presented in Appendix III. The UST Site Assessment Checklist is presented in Appendix IV.

6.0 CONCLUSIONS

One waste oil UST, of approximately 200 gallon capacity, was decommissioned by removal at the subject property on September 15, 2014. Analytical results indicate that a release has occurred in relation to the UST.

PBS was informed on September 19th that the owner reported the release to the WDOE in accordance with WAC 173-360-360.

7.0 LIMITATIONS

PBS has prepared this report for use by IO, and is not intended for use by others without the written consent of PBS. This study was limited to the tests, locations and depths as indicated to determine the absence or presence of certain contaminants. The site as a whole may have other contamination that was not characterized by this study. The findings and conclusions of this report are not scientific certainties, but rather probabilities based on professional judgment concerning the significance of the data gathered during the course of this investigation. PBS is not able to represent that the site or adjoining land contain no hazardous waste, oil or other latent conditions beyond that detected or observed by PBS.

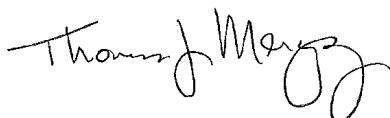
PBS ENGINEERING AND ENVIRONMENTAL



September 24, 2014

Ken Nogeire, LHG
Senior Geologist

Date



September 24, 2014

Thomas Mergy, L.G.
Environmental Services Manager

Date

FIGURES



SOURCE: © 2011 GOOGLE EARTH PRO, © 2012 GOOGLE



SCALE: 1" = 2,000'

PREPARED FOR: IO ENVIRONMENTAL



PROJECT #
41299.000

DATE
SEP 2014

SITE PLAN
12690 RENTON AVENUE SOUTH
SEATTLE, WASHINGTON

FIGURE

1



SOURCE: © 2011 GOOGLE EARTH PRO, © 2012 GOOGLE

LEGEND

● TP1 SOIL SAMPLE NUMBER AND LOCATION



SCALE: 1" = 20'

PREPARED FOR: IO ENVIRONMENTAL



PROJECT #
41299.000

DATE
SEP 2014

SOIL SAMPLE LOCATION MAP

12690 RENTON AVENUE SOUTH
SEATTLE, WASHINGTON

FIGURE

2

TABLE

TABLE 1 SOIL ANALYTICAL RESULTS

Site: 12690 Renton Avenue South, Seattle, WA

Project No: 41299

Result mg/kg (milligrams per kilogram)																		
Sample Identification	Description	Gx	Dx	Heavy Oil	Benzene	Toluene	Ethyl Benzene	Xylene	Remaining VOCs	PCBs	arsenic	cadmium	chromium	lead	mercury	B(a)P	Naph	Carcinogenic PAHs
Confirmation soil sampling: July 21, 2014																		
TP1-ESW	Silty sand	-	273	7,480	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP1-WSW	Silty sand	-	162	9,530	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP1-B	Silty sand	153	<23	14,800	<0.027	<0.027	0.099	0.489	3 compounds*	ND	4.29	2.58	26.2	864	<0.297	<0.061	4.21	0.006
Adopted Criteria	MTCA Method A Soil Cleanup for Unrestricted Land Use	100	2,000	2,000	0.03	7	6	9	various	1	20	2	2,000	250	2	0.1	5	0.1**

BOLD indicates above MTCA Method A Cleanup Levels for Soil

mg/kg - milligrams of contaminant per kilogram of dry weight soil

< 0.1 - not detected above laboratory method reporting limit

(-) - not analyzed

ND - not detected above laboratory method reporting limit

PCBs - polychlorinated biphenols

VOCs - volatile organic compounds

TPH - total petroleum hydrocarbons

APPENDIX I

WDOE Notice and King County Permit Documentation



DEPARTMENT OF
ECOLOGY
State of Washington

Request to Waive 30 Day Waiting Period

****To be completed by Person Submitting Request****

UST ID # (if known):

Full Site Address: 12640 Renton Ave S, Seattle, WA 98178

Owner/ Operator: current property owner-King County Library System, attn. Mr. Greg Smith

Contact Phone #: 425-369-3237

Waiver Requested for 30 Day Notice to:

(Circle one or both)

DECOMMISSION

INSTALL

Person and Company Submitting Request: Charles Lie-Terra Associates Inc

Contact phone #: 425.821.7777

Reason for Submitting Request: ENVIRONMENTAL HAZARD

HEALTH HAZARD

(Circle all that apply)

OTHER

Explain Reason: UST encountered in active construction site-- project is on hold pending UST removal

Date Request Submitted: 8/28/2014

Date and Time of Construction: 8/29/14 requested date

For all that apply	Name	Contact Phone Number	ICC Certification Number
INSTALLER	n/a		
DECOMMISSIONER	Northwest Environment Solutions	253-241-6213	5012674
SITE ASSESSOR	Nicolas Hoffman	425.821.7777	8252265

Completed 30 Day Notice Attached to Waiver Request Form?

(Circle one)

YES

NO

Department of Ecology Response to Request (to be completed by UST Inspector):

WAVIER GRANTED

WAIVER DENIED

Inspector:

Andrew A. Truke

Signature and Date:

Richard P. Kula 09/02/2014

****DECOMMISSIONER(S) SHALL HAVE A COPY OF 30 DAY NOTICE AND A COPY OF THE WAIVER REQUEST FORM ON SITE DURING ALL DECOMMISSIONING RELATED ACTIONS *****

Instructions

Please Read Carefully

AFTER COMPLETING THIS FORM, RETURN TO:

DEPARTMENT OF ECOLOGY
TOXICS CLEANUP PROGRAM
P.O. BOX 47655
OLYMPIA, WA 98504-7655

GENERAL

Under WAC 173-360-200 and 173-360-385, owners and operators are required to notify Ecology 30 days prior to beginning underground storage tank (UST) installation or decommissioning projects. Please use a separate form for each activity. Once this form is received and processed by Ecology, it is date stamped and returned to the owner listed on the form. Installation and decommissioning projects may begin 30 days after the date stamped on the form. If a project cannot meet the deadlines described below, you must submit an additional 30-Day Notice. The 30-day wait period may be waived on these additional 30-Day Notices by contacting the inspector in your region.

SITE AND OWNER INFORMATION

Fill in the site and owner information and be sure to provide telephone numbers and email addresses so that any problems can be resolved quickly. Include the facility compliance tag or UBI number for tank closures.

TANK INFORMATION

List tanks to be installed or closed, substance stored (e.g. gas, diesel, etc), tank size and date the project is expected to begin. **The contact person listed on this form must confirm the exact date an installation and/or decommissioning project will begin at least three business days before proceeding.** Please report tank ID number(s) for tanks to be closed and assign new Tank ID number(s) to tanks being installed. If you are installing new tanks, do not assign a Tank ID number that has previously been used at the facility. Use the Comments box to include additional information, such as when product was removed so that no more than one inch of residue remains in the system.

TANK INSTALLATIONS

List the installation company. The date stamped on the form indicates the beginning of a 90-day period in which an installation project must begin. Once, processed, this form also allows you to receive a one-time drop of product, for UST system testing purposes only. The fuel drop is not required to occur within this 90-day period.

To dispense product and receive additional deliveries, you must complete the Business License registration and obtain your facility compliance tag from Ecology. The registration information must be submitted to the Department of Revenue within 30 days of installation to receive a Business License with the appropriate tank endorsement(s). **If, at any time, your tank(s) store greater than one inch of product, you must begin using an acceptable release detection method to monitor for leaks every month.**

PERMANENT TANK CLOSURES

List the closure and site assessor companies. Upon receiving a completed 30-day closure form, Ecology will stamp the date received on the form and return a copy to the owner. Decommissioning projects must be completed 90 days after the stamped date. **No work may begin within the first 30 days unless a waiver has been obtained from Ecology.**

Contact your local fire marshal and planning department prior to tank closure to find out if any additional permits are required by county or other local jurisdictions. Compliance with the State Environmental Policy Act (SEPA) Rules, Chapter 197-11 WAC, may be required.

A site assessment is required at the time of closure. Contamination found or suspected at the site must be reported to the appropriate Ecology regional office within 24 hours. If the contamination is confirmed, a site characterization report must be submitted to the regional office within 90 days; if contamination is not confirmed, a site assessment report must be submitted to the above address within 30 days.

The following are examples of tanks that are exempt from notification requirements.

- ❖ Farm or residential tanks, 1,100 gallons or less, used to store motor fuel for personal or farm use only.
The fuel must be used for farm purposes and cannot be for resale.
- ❖ Tanks used for storing heating oil that is used solely for the purpose of heating the premises.
- ❖ Tanks with a capacity of 110 gallons or less.
- ❖ Equipment or machinery tanks such as hydraulic lifts or electrical equipment tanks.
- ❖ Emergency overflow tanks, catch basins, or sumps.

If you need this document in a format for the visually impaired, call Toxics Cleanup Program at (360) 407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with speech disability, call (877) 833-6341.

ECY 020-95 (Rev. Feb. 2012)



UNDERGROUND STORAGE TANK (UST) 30-DAY NOTICE

(See back of form for instructions)

FOR OFFICE USE ONLY

Site ID # _____

FS ID # _____

Please ✓ the appropriate box:

☐ Intent
to Install

☒ Intent
to Close

HQ (360)407-7170 / Central (509)575-2490 / Eastern (509)329-3400 / Northwest (425)649-7000 / Southwest (360)407-6300

SITE INFORMATION

Tag or UBI number

Former Arco, Former Eat Em Up Hut, current library construction site

Site Name

12640 Renton Ave South

Site Physical Address

Seattle, Washington 98178

City

Zip Code

Site Phone Number

OWNER INFORMATION

(this form will be returned to this address)

Arco last known owner, current property owner King County Library System

UST Owner/Operator

KCLS, attn Greg Smith, 960 Newport Way S

Mailing Address/PO Box

Issaquah, WA 98027

City

425-369-3237

Zip Code

Owner/Operator Phone Number

ggsmith@kcls.org

Owner/Operator Email Address

TANK INFORMATION

Tank ID	Substance Stored	Capacity	Date Project is Expected to Begin	Comments:
3	Hydraulic Oil? Waste Oil	300 g +/-	8-29-14	UST was uncovered during removal of residual petroleum contaminated soils encountered during foundation preparation

1) SERVICE PROVIDER INFORMATION - check the appropriate boxes

PLEASE NOTE: INDIVIDUALS PERFORMING UST SERVICES MUST BE ICC CERTIFIED OR HAVE PASSED ANOTHER QUALIFYING EXAM APPROVED BY THE DEPARTMENT OF ECOLOGY.

☐ Installer ☐ Decommissioner ☒ Site Assessor

Terra Associates Inc

Service Provider Company Name

Nicolas Hoffman

Certified Service Provider Name

8252265

ICC Certification #

Charles Lie

Contact Person

425.821.7777

Contact Phone Number

clie@terra-associates.com

Contact Email Address

2) SERVICE PROVIDER INFORMATION (REQUIRED IF USING MORE THAN ONE PROVIDER) - check the appropriate boxes

☐ Installer ☒ Decommissioner ☐ Site Assessor

Northwest Environmental Sol.

Service Provider Company Name

Certified Service Provider Name

5012674

ICC Certification #

Contact Person

253-241-6213

Contact Phone Number

Contact Email Address



Department of Permitting
and Environmental Review
35030 SE Douglas St., Ste. 210
Snoqualmie, WA 98065-9266
206-296-6600 TTY Relay 711

FIRE PERMIT - SYSTEMS & EVENTS

Permit type, Subtype: Fire Permit Systems, Tank
Title: KC LIBRARY TANK 12690 RENTON AVE S

Description: REMOVE (1) 350 GAL NON DISPENSING OIL
UNDERGROUND TANK

List of Parcels: 0231000040

Site Address: 12601 76TH AVE S 98178

Valuation: \$0.00

Applicant Name: IO ENVIRONMENTAL & INFRASTRUCTURE

Applicant Address: 2200 118TH AVE SE BELLEVUE, WA
98006

Permit Number: FIRP14-0290

Date Issued:

Expiration Date:

Permit Status: Application Complete

Comments and Conditions

1. **Work Subject to Approved Plans and Conditions.** Work Authorized by this permit is subject to the approved plans and corrections shown thereon and the attached conditions of permit approval. Failure to comply with all conditions once construction is begun may necessitate an immediate work stoppage until such time as compliance with the stipulated conditions is attained.

2. **Posting on the job site.** This permit must be posted on the job site at all times in a visible and readily accessible location.

3. **Permit Status & Inspections; Scheduling, Est. Arrival Times* & Results.** (*Building only)

Online: aca.accela.com/kingcounty

Inspection cutoff: 3:00 pm for next day inspections. Fire Inspection and land use requests will be confirmed and scheduled by a return phone call. Additional inspection information including IVR/Web info:
<http://www.kingcounty.gov/property/permits/info/inspections.aspx>. Written inspection results left at the job site will be phased out.

IVR: 1-888-546-7728 - Inspection Help: 206-296-6630

4. **Expiration.** Please note the expiration date on this permit located in the upper right corner. Permits are valid for one year from date of issuance or date of extension. Work must be substantially commenced within two years of permit issuance. Extensions beyond the third year shall only be granted to allow completion of the structure.

5. **Compliance with State and Federal laws and the Endangered Species Act.** The applicant is responsible for making a diligent inquiry regarding the need for concurrent state or federal permits to engage in the Work requested under this permit, and to obtain the required permits prior to issuance of this permit. It is understood that the granting of this permit shall not be construed as satisfying the requirements of other applicable Federal, State or Local laws or regulations. In addition this permit does not authorize the violation of regulations. In addition, the granting of this permit does not authorize the violation such "take" restrictions would be violated by work pursuant to this permit, and is precluded by Federal law from undertaking work authorized by this permit if that work would violate the "take" restrictions set forth at 16 U.S.C. 8, 50 C.F.R. §17.21, 50 C.F.R. §223 and 50 C.F.R. §224.



King County

Department of Permitting
and Environmental Review

35030 SE Douglas St., Ste. 210
Snoqualmie, WA 98065-9266

206-296-6600 TTY Relay 711

Permit: **FIRP14-0290**

Date Issued:

Expiration Dat

Permit Status: Application Complete

FIRE INSPECTION REPORT CARD

New Construction Fire Inspection 24-Hour Request Line

New Construction Fire Inspection General Information

1-888-546-7728

206-296-6630

APPROVALS: (Followed by 3-digit inspection codes for use with the inspection Request Line)

1. Placement - Tank (291)

By: _____

2. Device Placement (259)

By: _____

3. Nozzle/Head Placement
(283)

By: _____

4. Flow/Trip Test (273)

By: _____

5. Device/Panel Test (261)

By: _____

6. Flush Test (274)

By: _____

7. Run Test (191)

By: _____

8. Pressure Test (168)

By: _____

9. Insulation Cover (280)

By: _____

10. Rack/Pipe Inspection
(298)

By: _____

11. Emergency Shut Off (067)

By: _____

12. Underground (235)

By: _____

13. Hydrant/Watermain
(245)

By: _____

14. Other (134)

By: _____

15. Final Acceptance (077)

By: 9-13-14
[Signature]

Notes:

ALL PERMITS:

- Responsibility for the building's compliance with the provisions of the applicable King County Codes and for maintenance of the building rests exclusively with the permit applicants and their agents and the property owners.
- King County inspection of the building and real property are spot checks designed to foster and encourage compliance with the applicable codes. Neither the approvals above nor the issuance of a Certificate of Occupancy guarantees or assures compliance with all applicable codes.
- The Owner/Applicant's copy of any applicable manufacturer's installation instructions, the approved set of plans, and the permit shall be available at the time of inspection.

APPENDIX II

UST and UST Contents Disposal Documentation



TRIPLE RINSE CERTIFICATE

This document certifies that IO Environmental & Infrastructure Inc. performed a Triple Rinse of the Underground Storage Tank (UST) per Chapter 173-360 of the Revised Code of Washington (RCW) and International Code Council (ICC) and uniform Fire Code guidelines:

UST Name/Number: 007

Address: 12690 Renton AVE S

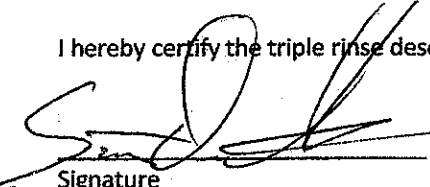
Skyway WA

UST Size: 140 GALLONS

UST Contents: Loaded Gasoline / sludge

Date of Triple Rinse: 9/15/14

I hereby certify the triple rinse described above:


Signature

SCOTT OVERDICK
Printed Name

8178938
ICC Lic. #



IO Environmental & Infrastructure Inc.
2200 118th Ave. S.E.
Bellevue, WA 98005
(425)-454-1086

APPENDIX III

Laboratory Report and Chain-of-Custody



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PBS Engineering & Environmental
Ken Nogeire
2517 Eastlake Ave, E #100
Seattle, WA 98102

RE: Skyway
Lab ID: 1409149

September 16, 2014

Attention Ken Nogeire:

Fremont Analytical, Inc. received 3 sample(s) on 9/15/2014 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.
Gasoline by NWTPH-Gx
Mercury by EPA Method 7471
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)
Polychlorinated Biphenyls (PCB) by EPA 8082
Sample Moisture (Percent Moisture)
Total Metals by EPA Method 6020
Volatile Organic Compounds by EPA Method 8260

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager



Date: 09/16/2014

CLIENT: PBS Engineering & Environmental
Project: Skyway
Lab Order: 1409149

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1409149-001	TP1-ESW	09/15/2014 1:05 PM	09/15/2014 3:25 PM
1409149-002	TP1-WSW	09/15/2014 1:10 PM	09/15/2014 3:25 PM
1409149-003	TP1-B	09/15/2014 1:20 PM	09/15/2014 3:25 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: PBS Engineering & Environmental**Project:** Skyway

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



Analytical Report

WO#: 1409149

Date Reported: 9/16/2014

CLIENT: PBS Engineering & Environmental

Project: Skyway

Lab ID: 1409149-001

Client Sample ID: TP1-ESW

Collection Date: 9/15/2014 1:05:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 8711

Analyst: EC

Diesel (Fuel Oil)	ND	21.2		mg/Kg-dry	1	9/15/2014 7:38:00 PM
Diesel Range Organics (C12-C24)	273	21.2		mg/Kg-dry	1	9/15/2014 7:38:00 PM
Heavy Oil	7,480	53.0		mg/Kg-dry	1	9/15/2014 7:38:00 PM
Surr: 2-Fluorobiphenyl	111	50-150		%REC	1	9/15/2014 7:38:00 PM
Surr: o-Terphenyl	101	50-150		%REC	1	9/15/2014 7:38:00 PM

NOTES:

DRO - Indicates the presence of unresolved compounds eluting from dodecane through tetracosane (C12-C24).

Sample Moisture (Percent Moisture)

Batch ID: R16762

Analyst: TK

Percent Moisture	13.0			wt%	1	9/15/2014 1:22:52 PM
------------------	------	--	--	-----	---	----------------------

Lab ID: 1409149-002

Client Sample ID: TP1-WSW

Collection Date: 9/15/2014 1:10:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 8711

Analyst: EC

Diesel (Fuel Oil)	ND	21.2		mg/Kg-dry	1	9/15/2014 8:41:00 PM
Diesel Range Organics (C12-C24)	162	21.2		mg/Kg-dry	1	9/15/2014 8:41:00 PM
Heavy Oil	9,530	53.1		mg/Kg-dry	1	9/15/2014 8:41:00 PM
Surr: 2-Fluorobiphenyl	108	50-150		%REC	1	9/15/2014 8:41:00 PM
Surr: o-Terphenyl	111	50-150		%REC	1	9/15/2014 8:41:00 PM

NOTES:

DRO - Indicates the presence of unresolved compounds eluting from dodecane through tetracosane (C12-C24).

Sample Moisture (Percent Moisture)

Batch ID: R16762

Analyst: TK

Percent Moisture	9.98			wt%	1	9/15/2014 1:22:52 PM
------------------	------	--	--	-----	---	----------------------

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



Fremont
Analytical

Analytical Report

WO#: 1409149

Date Reported: 9/16/2014

CLIENT: PBS Engineering & Environmental

Project: Skyway

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1409149

Date Reported: 9/16/2014

CLIENT: PBS Engineering & Environmental

Project: Skyway

Lab ID: 1409149-003

Collection Date: 9/15/2014 1:20:00 PM

Client Sample ID: TP1-B

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Polychlorinated Biphenyls (PCB) by EPA 8082

Batch ID: 8714

Analyst: NG

Aroclor 1016	ND	0.114		mg/Kg-dry	1	9/15/2014 6:26:00 PM
Aroclor 1221	ND	0.114		mg/Kg-dry	1	9/15/2014 6:26:00 PM
Aroclor 1232	ND	0.114		mg/Kg-dry	1	9/15/2014 6:26:00 PM
Aroclor 1242	ND	0.114		mg/Kg-dry	1	9/15/2014 6:26:00 PM
Aroclor 1248	ND	0.114		mg/Kg-dry	1	9/15/2014 6:26:00 PM
Aroclor 1254	ND	0.114		mg/Kg-dry	1	9/15/2014 6:26:00 PM
Aroclor 1260	ND	0.114		mg/Kg-dry	1	9/15/2014 6:26:00 PM
Aroclor 1262	ND	0.114		mg/Kg-dry	1	9/15/2014 6:26:00 PM
Aroclor 1268	ND	0.114		mg/Kg-dry	1	9/15/2014 6:26:00 PM
Total PCBs	ND	0.114		mg/Kg-dry	1	9/15/2014 6:26:00 PM
Surr: Decachlorobiphenyl	84.5	50.2-159		%REC	1	9/15/2014 6:26:00 PM
Surr: Tetrachloro-m-xylene	86.1	60.3-134		%REC	1	9/15/2014 6:26:00 PM

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 8711

Analyst: EC

Diesel (Fuel Oil)	ND	23.0		mg/Kg-dry	1	9/15/2014 9:12:00 PM
Heavy Oil	14,800	57.6		mg/Kg-dry	1	9/15/2014 9:12:00 PM
Surr: 2-Fluorobiphenyl	108	50-150		%REC	1	9/15/2014 9:12:00 PM
Surr: o-Terphenyl	139	50-150		%REC	1	9/15/2014 9:12:00 PM

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Batch ID: 8721

Analyst: NG

Naphthalene	ND	61.2		µg/Kg-dry	1	9/16/2014 2:01:00 PM
2-Methylnaphthalene	2,390	61.2		µg/Kg-dry	1	9/16/2014 2:01:00 PM
1-Methylnaphthalene	1,820	61.2		µg/Kg-dry	1	9/16/2014 2:01:00 PM
Acenaphthylene	ND	61.2		µg/Kg-dry	1	9/16/2014 2:01:00 PM
Acenaphthene	ND	61.2		µg/Kg-dry	1	9/16/2014 2:01:00 PM
Fluorene	246	61.2		µg/Kg-dry	1	9/16/2014 2:01:00 PM
Phenanthrene	696	61.2		µg/Kg-dry	1	9/16/2014 2:01:00 PM
Anthracene	193	61.2		µg/Kg-dry	1	9/16/2014 2:01:00 PM
Fluoranthene	486	61.2		µg/Kg-dry	1	9/16/2014 2:01:00 PM
Pyrene	1,780	61.2		µg/Kg-dry	1	9/16/2014 2:01:00 PM
Benz(a)anthracene	ND	61.2		µg/Kg-dry	1	9/16/2014 2:01:00 PM
Chrysene	613	61.2		µg/Kg-dry	1	9/16/2014 2:01:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1409149

Date Reported: 9/16/2014

CLIENT: PBS Engineering & Environmental

Project: Skyway

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Batch ID: 8721

Analyst: NG

Benzo(b)fluoranthene	ND	61.2	µg/Kg-dry	1	9/16/2014 2:01:00 PM
Benzo(k)fluoranthene	ND	61.2	µg/Kg-dry	1	9/16/2014 2:01:00 PM
Benzo(a)pyrene	ND	61.2	µg/Kg-dry	1	9/16/2014 2:01:00 PM
Indeno(1,2,3-cd)pyrene	ND	61.2	µg/Kg-dry	1	9/16/2014 2:01:00 PM
Dibenz(a,h)anthracene	ND	61.2	µg/Kg-dry	1	9/16/2014 2:01:00 PM
Benzo(g,h,i)perylene	ND	61.2	µg/Kg-dry	1	9/16/2014 2:01:00 PM
Surr: 2-Fluorobiphenyl	95.7	42.7-132	%REC	1	9/16/2014 2:01:00 PM
Surr: Terphenyl-d14 (surr)	111	48.8-157	%REC	1	9/16/2014 2:01:00 PM

Gasoline by NWTPH-Gx

Batch ID: R16796

Analyst: EM

Gasoline	153	6.68	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Surr: Toluene-d8	102	65-135	%REC	1	9/16/2014 3:07:00 PM
Surr: 4-Bromofluorobenzene	109	65-135	%REC	1	9/16/2014 3:07:00 PM

Volatile Organic Compounds by EPA Method 8260

Batch ID: 8735

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0801	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Chloromethane	ND	0.0801	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Vinyl chloride	ND	0.00267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Bromomethane	ND	0.120	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0668	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Chloroethane	ND	0.0801	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,1-Dichloroethene	ND	0.0668	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Methylene chloride	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
trans-1,2-Dichloroethene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0668	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,1-Dichloroethane	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
2,2-Dichloropropane	ND	0.0668	mg/Kg-dry	1	9/16/2014 3:07:00 PM
cis-1,2-Dichloroethene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Chloroform	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,1-Dichloropropene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Carbon tetrachloride	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,2-Dichloroethane (EDC)	ND	0.0401	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Benzene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Trichloroethene (TCE)	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,2-Dichloropropane	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Bromodichloromethane	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1409149

Date Reported: 9/16/2014

CLIENT: PBS Engineering & Environmental

Project: Skyway

Volatile Organic Compounds by EPA Method 8260

Batch ID: 8735

Analyst: EM

Dibromomethane	ND	0.0534	mg/Kg-dry	1	9/16/2014 3:07:00 PM
cis-1,3-Dichloropropene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Toluene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
trans-1,3-Dichloropropylene	ND	0.0401	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,1,2-Trichloroethane	ND	0.0401	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,3-Dichloropropane	ND	0.0668	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Tetrachloroethene (PCE)	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Dibromochloromethane	ND	0.0401	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,2-Dibromoethane (EDB)	ND	0.00668	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Chlorobenzene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0401	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Ethylbenzene	0.0988	0.0401	mg/Kg-dry	1	9/16/2014 3:07:00 PM
m,p-Xylene	0.331	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
o-Xylene	0.158	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Styrene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Isopropylbenzene	ND	0.107	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Bromoform	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
n-Propylbenzene	0.0701	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Bromobenzene	ND	0.0401	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,3,5-Trimethylbenzene	0.458	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
2-Chlorotoluene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
4-Chlorotoluene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
tert-Butylbenzene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,2,3-Trichloropropane	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,2,4-Trichlorobenzene	ND	0.0668	mg/Kg-dry	1	9/16/2014 3:07:00 PM
sec-Butylbenzene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
4-Isopropyltoluene	0.0675	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,3-Dichlorobenzene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,4-Dichlorobenzene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
n-Butylbenzene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,2-Dichlorobenzene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0401	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,2,4-Trimethylbenzene	1.65	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Hexachlorobutadiene	ND	0.134	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Naphthalene	2.38	0.0401	mg/Kg-dry	1	9/16/2014 3:07:00 PM
1,2,3-Trichlorobenzene	ND	0.0267	mg/Kg-dry	1	9/16/2014 3:07:00 PM
Surr: Dibromofluoromethane	104	63.7-129	%REC	1	9/16/2014 3:07:00 PM
Surr: Toluene-d8	102	61.4-128	%REC	1	9/16/2014 3:07:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1409149

Date Reported: 9/16/2014

CLIENT: PBS Engineering & Environmental

Project: Skyway

Volatile Organic Compounds by EPA Method 8260

Batch ID: 8735

Analyst: EM

Surr: 1-Bromo-4-fluorobenzene	107	63.1-141	%REC	1	9/16/2014 3:07:00 PM
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Mercury by EPA Method 7471

Batch ID: 8726

Analyst: MW

Mercury	ND	0.297	mg/Kg-dry	1	9/16/2014 11:28:28 AM
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Total Metals by EPA Method 6020

Batch ID: 8727

Analyst: TN

Arsenic	4.29	0.104	mg/Kg-dry	1	9/16/2014 11:33:33 AM
Cadmium	2.58	0.208	mg/Kg-dry	1	9/16/2014 11:33:33 AM
Chromium	26.2	0.104	mg/Kg-dry	1	9/16/2014 11:33:33 AM
Lead	864	0.208	mg/Kg-dry	1	9/16/2014 11:33:33 AM

Sample Moisture (Percent Moisture)

Batch ID: R16762

Analyst: TK

Percent Moisture	19.0	wt%	1	9/15/2014 1:22:52 PM
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Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Total Metals by EPA Method 6020

Sample ID: MB-8727	SampType: MBLK	Units: mg/Kg			Prep Date: 9/16/2014			RunNo: 16779			
Client ID: MBLKS	Batch ID: 8727				Analysis Date: 9/16/2014			SeqNo: 337215			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100									
Cadmium	ND	0.200									
Chromium	ND	0.100									
Lead	ND	0.200									

Sample ID: LCS-8727	SampType: LCS	Units: mg/Kg				Prep Date: 9/16/2014			RunNo: 16779		
Client ID: LCSS	Batch ID: 8727					Analysis Date: 9/16/2014			SeqNo: 337216		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	110	0.100	104.0	0	105	69.5	130.8				
Cadmium	111	0.200	92.80	0	120	73.3	127.2				
Chromium	73.7	0.100	62.90	0	117	67.9	132				
Lead	324	0.200	319.0	0	101	75.9	124.1				

Sample ID: 1409140-001ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/16/2014			RunNo: 16779		
Client ID: BATCH	Batch ID: 8727					Analysis Date: 9/16/2014			SeqNo: 337218		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.04	0.115						3.948	2.23	30	
Cadmium	0.271	0.230						0.2947	8.48	30	
Chromium	29.4	0.115						32.87	11.1	30	
Lead	138	0.230						130.9	5.59	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Total Metals by EPA Method 6020

Sample ID: 1409140-001AMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 9/16/2014			RunNo: 16779		
Client ID: BATCH		Batch ID: 8727					Analysis Date: 9/16/2014			SeqNo: 337220	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	54.6	0.116	58.09	3.948	87.2	75	125				
Cadmium	3.86	0.232	2.905	0.2947	123	75	125				
Chromium	91.9	0.116	58.09	32.87	102	75	125				
Lead	154	0.232	29.05	130.9	79.2	75	125				

Sample ID: 1409140-001AMSD	SampType: MSD	Units: mg/Kg-dry				Prep Date: 9/16/2014			RunNo: 16779		
Client ID: BATCH	Batch ID: 8727					Analysis Date: 9/16/2014			SeqNo: 337221		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	50.1	0.115	57.62	3.948	80.1	75	125	54.62	8.65	30	
Cadmium	3.13	0.230	2.881	0.2947	98.4	75	125	3.856	20.8	30	
Chromium	83.8	0.115	57.62	32.87	88.3	75	125	91.89	9.25	30	
Lead	159	0.230	28.81	130.9	96.8	75	125	153.9	3.12	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT

Mercury by EPA Method 7471

Sample ID: MB-8726	SampType: MBLK	Units: mg/Kg			Prep Date: 9/16/2014			RunNo: 16780			
Client ID: MBLKS	Batch ID: 8726				Analysis Date: 9/16/2014			SeqNo: 337237			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	ND	0.250									
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Sample ID: LCS-8726		SampType: LCS		Units: mg/Kg		Prep Date: 9/16/2014			RunNo: 16780		
Client ID: LCSS		Batch ID: 8726					Analysis Date: 9/16/2014			SeqNo: 337238	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	5.06	0.250	5.000	0	101	80	120				
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Sample ID: 1409140-002ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/16/2014				RunNo: 16780		
Client ID: BATCH	Batch ID: 8726					Analysis Date: 9/16/2014				SeqNo: 337240		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Mercury	ND	0.257						0		20	
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Sample ID: 1409140-002AMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 9/16/2014			RunNo: 16780		
Client ID: BATCH		Batch ID: 8726					Analysis Date: 9/16/2014			SeqNo: 337241	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.510	0.252	0.5036	0.002053	101	70	130				
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Sample ID: 1409140-002AMSD	SampType: MSD	Units: mg/Kg-dry			Prep Date: 9/16/2014			RunNo: 16780			
Client ID: BATCH	Batch ID: 8726	Analysis Date: 9/16/2014						SeqNo: 337242			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.539	0.262	0.5233	0.002053	103	70	130	0.5096	5.61	20	
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Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: LCS-8711		SampType: LCS		Units: mg/Kg		Prep Date: 9/15/2014			RunNo: 16772		
Client ID: LCSS		Batch ID: 8711					Analysis Date: 9/15/2014			SeqNo: 336926	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	448	20.0	500.0	0	89.5	65	135				
Surr: 2-Fluorobiphenyl	17.9		20.00		89.4	50	150				
Surr: o-Terphenyl	21.5		20.00		107	50	150				

Sample ID: MB-8711	SampType: MBLK	Units: mg/Kg			Prep Date: 9/15/2014			RunNo: 16772			
Client ID: MBLKS	Batch ID: 8711				Analysis Date: 9/15/2014			SeqNo: 336927			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	17.1		20.00		85.5	50	150				
Surr: o-Terphenyl	18.2		20.00		91.1	50	150				

Sample ID: 1409149-001ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/15/2014			RunNo: 16772		
Client ID: TP1-ESW	Batch ID: 8711	Analysis Date: 9/15/2014							SeqNo: 337398		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	20.9						0		30	
Diesel Range Organics (C12-C24)	256	20.9						273.5	6.70	30	
Heavy Oil	6,920	52.2						7,485	7.79	30	
Surr: 2-Fluorobiphenyl	23.2		20.89		111	50	150		0		
Surr: o-Terphenyl	22.2		20.89		106	50	150		0		

NOTES:

DRO - Indicates the presence of unresolved compounds eluting from dodecane through tetracosane (C12-C24).

Qualifiers:	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: MB-8721	SampType: MBLK	Units: µg/Kg				Prep Date: 9/15/2014			RunNo: 16793		
Client ID: MBLKS	Batch ID: 8721					Analysis Date: 9/16/2014			SeqNo: 337559		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	50.0									
2-Methylnaphthalene	ND	50.0									
1-Methylnaphthalene	ND	50.0									
Acenaphthylene	ND	50.0									
Acenaphthene	ND	50.0									
Fluorene	ND	50.0									
Phenanthrene	ND	50.0									
Anthracene	ND	50.0									
Fluoranthene	ND	50.0									
Pyrene	ND	50.0									
Benz(a)anthracene	ND	50.0									
Chrysene	ND	50.0									
Benzo(b)fluoranthene	ND	50.0									
Benzo(k)fluoranthene	ND	50.0									
Benzo(a)pyrene	ND	50.0									
Indeno(1,2,3-cd)pyrene	ND	50.0									
Dibenz(a,h)anthracene	ND	50.0									
Benzo(g,h,i)perylene	ND	50.0									
Surr: 2-Fluorobiphenyl	844		1,000		84.4	42.7	132				
Surr: Terphenyl-d14 (surr)	1,180		1,000		118	48.8	157				

Sample ID: LCS-8721	SampType: LCS	Units: µg/Kg				Prep Date: 9/15/2014			RunNo: 16793		
Client ID: LCSS	Batch ID: 8721					Analysis Date: 9/16/2014			SeqNo: 337560		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1,030	50.0	1,000	0	103	61.6	125				
2-Methylnaphthalene	1,020	50.0	1,000	0	102	58.2	129				
1-Methylnaphthalene	1,020	50.0	1,000	0	102	56.4	132				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: LCS-8721	SampType: LCS	Units: µg/Kg				Prep Date: 9/15/2014			RunNo: 16793		
Client ID: LCSS	Batch ID: 8721					Analysis Date: 9/16/2014			SeqNo: 337560		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthylene	1,060	50.0	1,000	0	106	52.2	133				
Acenaphthene	1,050	50.0	1,000	0	105	54	131				
Fluorene	1,050	50.0	1,000	0	105	53.4	131				
Phenanthrene	1,040	50.0	1,000	0	104	55.6	128				
Anthracene	1,040	50.0	1,000	0	104	51	132				
Fluoranthene	1,070	50.0	1,000	0	107	48.4	134				
Pyrene	1,090	50.0	1,000	0	109	48.6	135				
Benz(a)anthracene	1,180	50.0	1,000	0	118	41.9	136				
Chrysene	1,020	50.0	1,000	0	102	51.4	135				
Benzo(b)fluoranthene	985	50.0	1,000	0	98.5	39.7	137				
Benzo(k)fluoranthene	1,120	50.0	1,000	0	112	45.7	138				
Benzo(a)pyrene	1,150	50.0	1,000	0	115	45.3	135				
Indeno(1,2,3-cd)pyrene	939	50.0	1,000	0	93.9	45.4	137				
Dibenz(a,h)anthracene	955	50.0	1,000	0	95.5	45.8	134				
Benzo(g,h,i)perylene	778	50.0	1,000	0	77.8	45	134				
Surr: 2-Fluorobiphenyl	1,020		1,000		102	42.7	132				
Surr: Terphenyl-d14 (surr)	1,140		1,000		114	48.8	157				

Sample ID: 1409122-009BDUP	SampType: DUP	Units: µg/Kg				Prep Date: 9/15/2014			RunNo: 16793		
Client ID: BATCH	Batch ID: 8721					Analysis Date: 9/16/2014			SeqNo: 337571		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1,570	48.8						1,308	18.1	30	
2-Methylnaphthalene	2,270	48.8						1,892	18.0	30	
1-Methylnaphthalene	1,500	48.8						1,241	18.9	30	
Acenaphthylene	ND	48.8						0		30	
Acenaphthene	ND	48.8						0		30	
Fluorene	ND	48.8						0		30	

Qualifiers:
B Analyte detected in the associated Method Blank
D Dilution was required
E Value above quantitation range

H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not detected at the Reporting Limit

R RPD outside accepted recovery limits
RL Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: 1409122-009BDUP		SampType: DUP		Units: µg/Kg		Prep Date: 9/15/2014		RunNo: 16793			
Client ID: BATCH		Batch ID: 8721				Analysis Date: 9/16/2014		SeqNo: 337571			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	ND	48.8						0		30	
Anthracene	ND	48.8						0		30	
Fluoranthene	ND	48.8						0		30	
Pyrene	ND	48.8						0		30	
Benz(a)anthracene	ND	48.8						0		30	
Chrysene	ND	48.8						0		30	
Benzo(b)fluoranthene	ND	48.8						0		30	
Benzo(k)fluoranthene	ND	48.8						0		30	
Benzo(a)pyrene	ND	48.8						0		30	
Indeno(1,2,3-cd)pyrene	ND	48.8						0		30	
Dibenz(a,h)anthracene	ND	48.8						0		30	
Benzo(g,h,i)perylene	ND	48.8						0		30	
Surr: 2-Fluorobiphenyl	930		975.6		95.3	42.7	132		0		
Surr: Terphenyl-d14 (surr)	1,080		975.6		110	48.8	157		0		

Sample ID: 1409149-003AMS		SampType: MS		Units: µg/Kg-dry		Prep Date: 9/15/2014		RunNo: 16793			
Client ID: TP1-B		Batch ID: 8721				Analysis Date: 9/16/2014		SeqNo: 337572			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	2,510	61.2	1,224	0	205	42.9	138				S
2-Methylnaphthalene	4,140	61.2	1,224	2,391	143	42.8	151				
1-Methylnaphthalene	3,380	61.2	1,224	1,823	127	41.6	148				
Acenaphthylene	1,560	61.2	1,224	0	127	32.6	160				
Acenaphthene	1,510	61.2	1,224	0	123	46.3	142				
Fluorene	1,670	61.2	1,224	245.5	116	43.4	153				
Phenanthrene	2,170	61.2	1,224	695.7	121	45.5	140				
Anthracene	1,590	61.2	1,224	193.5	114	32.6	160				
Fluoranthene	1,720	61.2	1,224	486.4	101	44.6	161				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1409149

CLIENT: PBS Engineering & Environmental

Project: Skyway

QC SUMMARY REPORT
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: 1409149-003AMS	SampType: MS	Units: µg/Kg-dry			Prep Date: 9/15/2014			RunNo: 16793			
Client ID: TP1-B	Batch ID: 8721				Analysis Date: 9/16/2014			SeqNo: 337572			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pyrene	3,020	61.2	1,224	1,784	101	48.3	158				
Benz(a)anthracene	1,180	61.2	1,224	0	96.7	57.5	169				
Chrysene	1,850	61.2	1,224	613.1	101	45.2	146				
Benzo(b)fluoranthene	1,130	61.2	1,224	0	92.3	42.2	168				
Benzo(k)fluoranthene	1,310	61.2	1,224	0	107	48	161				
Benzo(a)pyrene	1,430	61.2	1,224	0	117	34.4	179				
Indeno(1,2,3-cd)pyrene	787	61.2	1,224	0	64.3	41.1	165				
Dibenz(a,h)anthracene	778	61.2	1,224	0	63.5	38.1	166				
Benzo(g,h,i)perylene	725	61.2	1,224	0	59.2	45.6	157				
Surr: 2-Fluorobiphenyl	944		1,224		77.1	42.7	132				
Surr: Terphenyl-d14 (surr)	1,330		1,224		109	48.8	157				

NOTES:

S - Outlying QC recoveries were associated with this sample. The method is in control as indicated by the LCS.

Qualifiers: B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

D Dilution was required
 J Analyte detected below quantitation limits
 RL Reporting Limit

E Value above quantitation range
 ND Not detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: MB-8714	SampType: MBLK	Units: mg/Kg			Prep Date: 9/15/2014			RunNo: 16768			
Client ID: MBLKS	Batch ID: 8714				Analysis Date: 9/15/2014			SeqNo: 336860			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.100									
Aroclor 1221	ND	0.100									
Aroclor 1232	ND	0.100									
Aroclor 1242	ND	0.100									
Aroclor 1248	ND	0.100									
Aroclor 1254	ND	0.100									
Aroclor 1260	ND	0.100									
Aroclor 1262	ND	0.100									
Aroclor 1268	ND	0.100									
Total PCBs	ND	0.100									
Surr: Decachlorobiphenyl	42.0		50.00		84.1	50.2	159				
Surr: Tetrachloro-m-xylene	38.7		50.00		77.3	60.3	134				

Sample ID: LCS-8714	SampType: LCS	Units: mg/Kg				Prep Date: 9/15/2014			RunNo: 16768		
Client ID: LCSS	Batch ID: 8714					Analysis Date: 9/15/2014			SeqNo: 336861		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.09	0.100	1.000	0	109	45.8	133				
Aroclor 1260	1.11	0.100	1.000	0	111	57	134				
Surr: Decachlorobiphenyl	43.8		50.00		87.6	50.2	159				
Surr: Tetrachloro-m-xylene	40.5		50.00		81.0	60.3	134				

Sample ID: 1409034-003ADUP	SampType: DUP	Units: mg/Kg				Prep Date: 9/15/2014			RunNo: 16768		
Client ID: BATCH	Batch ID: 8714					Analysis Date: 9/15/2014			SeqNo: 336863		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.0978						0		30	
Aroclor 1221	ND	0.0978						0		30	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: 1409034-003ADUP	SampType: DUP	Units: mg/Kg				Prep Date: 9/15/2014			RunNo: 16768		
Client ID: BATCH	Batch ID: 8714					Analysis Date: 9/15/2014			SeqNo: 336863		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1232	ND	0.0978						0		30	
Aroclor 1242	ND	0.0978						0		30	
Aroclor 1248	ND	0.0978						0		30	
Aroclor 1254	ND	0.0978						0		30	
Aroclor 1260	ND	0.0978						0		30	
Aroclor 1262	ND	0.0978						0		30	
Aroclor 1268	ND	0.0978						0		30	
Total PCBs	ND	0.0978						0		30	
Surr: Decachlorobiphenyl	40.1		48.88		82.1	50.2	159		0		
Surr: Tetrachloro-m-xylene	37.3		48.88		76.4	60.3	134		0		

Sample ID: 1409140-001AMS	SampType: MS	Units: mg/Kg-dry				Prep Date: 9/15/2014			RunNo: 16768		
Client ID: BATCH	Batch ID: 8714					Analysis Date: 9/15/2014			SeqNo: 336865		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.25	0.138	1.378	0	91.0	61.7	139				
Aroclor 1260	1.25	0.138	1.378	0	90.6	63.1	138				
Surr: Decachlorobiphenyl	51.6		68.92		74.9	50.2	159				
Surr: Tetrachloro-m-xylene	48.9		68.92		71.0	60.3	134				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT**Gasoline by NWTPH-Gx**

Sample ID: 1409149-003BDUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/16/2014			RunNo: 16796		
Client ID: TP1-B	Batch ID: R16796	Analysis Date: 9/16/2014							SeqNo: 337493		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	139	6.68						152.9	9.90	30	
Surr: Toluene-d8	3.37		3.339		101	65	135		0		
Surr: 4-Bromofluorobenzene	3.58		3.339		107	65	135		0		

Sample ID: LCS-R16796		SampType: LCS			Units: mg/Kg		Prep Date: 9/16/2014			RunNo: 16796		
Client ID: LCSS		Batch ID: R16796			Analysis Date: 9/16/2014					SeqNo: 337495		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	28.4	5.00	25.00	0	114	65	135				
Surr: Toluene-d8	2.56		2.500		103	65	135				
Surr: 4-Bromofluorobenzene	2.69		2.500		107	65	135				

Sample ID: MB-R16796	SampType: MBLK	Units: mg/Kg			Prep Date: 9/16/2014			RunNo: 16796			
Client ID: MBLKS	Batch ID: R16796				Analysis Date: 9/16/2014			SeqNo: 337496			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00									
Surr: Toluene-d8	2.45		2.500		98.0	65	135				
Surr: 4-Bromofluorobenzene	2.57		2.500		103	65	135				

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260

Sample ID: 1409149-003BDUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/16/2014			RunNo: 16795		
Client ID: TP1-B	Batch ID: 8735	Analysis Date: 9/16/2014							SeqNo: 337486		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0801						0		30	
Chloromethane	ND	0.0801						0		30	
Vinyl chloride	ND	0.00267						0		30	
Bromomethane	ND	0.120						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0668						0		30	
Chloroethane	ND	0.0801						0		30	
1,1-Dichloroethene	ND	0.0668						0		30	
Methylene chloride	ND	0.0267						0		30	
trans-1,2-Dichloroethene	ND	0.0267						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0668						0		30	
1,1-Dichloroethane	ND	0.0267						0		30	
2,2-Dichloropropane	ND	0.0668						0		30	
cis-1,2-Dichloroethene	ND	0.0267						0		30	
Chloroform	ND	0.0267						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0267						0		30	
1,1-Dichloropropene	ND	0.0267						0		30	
Carbon tetrachloride	ND	0.0267						0		30	
1,2-Dichloroethane (EDC)	ND	0.0401						0		30	
Benzene	ND	0.0267						0		30	
Trichloroethene (TCE)	ND	0.0267						0		30	
1,2-Dichloropropane	ND	0.0267						0		30	
Bromodichloromethane	ND	0.0267						0		30	
Dibromomethane	ND	0.0534						0		30	
cis-1,3-Dichloropropene	ND	0.0267						0		30	
Toluene	ND	0.0267						0		30	
trans-1,3-Dichloropropylene	ND	0.0401						0		30	
1,1,2-Trichloroethane	ND	0.0401						0		30	
1,3-Dichloropropane	ND	0.0668						0		30	
Tetrachloroethene (PCE)	ND	0.0267						0		30	

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260

Sample ID: 1409149-003BDUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/16/2014			RunNo: 16795		
Client ID: TP1-B	Batch ID: 8735	Analysis Date: 9/16/2014						SeqNo: 337486			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	0.0401						0		30	
1,2-Dibromoethane (EDB)	ND	0.00668						0		30	
Chlorobenzene	ND	0.0267						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0401						0		30	
Ethylbenzene	0.0895	0.0401						0.09885	9.93	30	
m,p-Xylene	0.289	0.0267						0.3313	13.8	30	
o-Xylene	0.149	0.0267						0.1583	6.09	30	
Styrene	ND	0.0267						0		30	
Isopropylbenzene	ND	0.107						0		30	
Bromoform	ND	0.0267						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0267						0		30	
n-Propylbenzene	0.0601	0.0267						0.07013	15.4	30	
Bromobenzene	ND	0.0401						0		30	
1,3,5-Trimethylbenzene	0.416	0.0267						0.4575	9.48	30	
2-Chlorotoluene	ND	0.0267						0		30	
4-Chlorotoluene	ND	0.0267						0		30	
tert-Butylbenzene	ND	0.0267						0		30	
1,2,3-Trichloropropane	ND	0.0267						0		30	
1,2,4-Trichlorobenzene	ND	0.0668						0		30	
sec-Butylbenzene	ND	0.0267						0		30	
4-Isopropyltoluene	0.0862	0.0267						0.06746	24.3	30	
1,3-Dichlorobenzene	ND	0.0267						0		30	
1,4-Dichlorobenzene	ND	0.0267						0		30	
n-Butylbenzene	ND	0.0267						0		30	
1,2-Dichlorobenzene	ND	0.0267						0		30	
1,2-Dibromo-3-chloropropane	ND	0.0401						0		30	
1,2,4-Trimethylbenzene	1.47	0.0267						1.646	11.4	30	
Hexachlorobutadiene	ND	0.134						0		30	
Naphthalene	3.17	0.0401						2.382	28.4	30	

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260

Sample ID: 1409149-003BDUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/16/2014			RunNo: 16795		
Client ID: TP1-B	Batch ID: 8735					Analysis Date: 9/16/2014			SeqNo: 337486		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	0.0267						0		30	
Surr: Dibromofluoromethane	3.51		3.339		105	63.7	129		0		
Surr: Toluene-d8	3.54		3.339		106	61.4	128		0		
Surr: 1-Bromo-4-fluorobenzene	3.46		3.339		104	63.1	141		0		

Sample ID: 1409149-003BMS	SampType: MS	Units: mg/Kg-dry			Prep Date: 9/16/2014			RunNo: 16795			
Client ID: TP1-B	Batch ID: 8735	Analysis Date: 9/16/2014						SeqNo: 337487			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.66	0.0759	1.265	0	131	43.5	121				S
Chloromethane	1.48	0.0759	1.265	0	117	45	130				
Vinyl chloride	1.48	0.00253	1.265	0	117	51.2	146				
Bromomethane	0.262	0.114	1.265	0	20.7	21.3	120				S
Trichlorofluoromethane (CFC-11)	1.20	0.0632	1.265	0	95.2	35	131				
Chloroethane	0.351	0.0759	1.265	0	27.8	43.8	117				S
1,1-Dichloroethene	0.974	0.0632	1.265	0	77.0	61.9	141				
Methylene chloride	0.689	0.0253	1.265	0	54.5	54.7	142				S
trans-1,2-Dichloroethene	1.38	0.0253	1.265	0	109	52	136				
Methyl tert-butyl ether (MTBE)	1.33	0.0632	1.265	0	105	54.4	132				
1,1-Dichloroethane	1.42	0.0253	1.265	0	113	51.8	141				
2,2-Dichloropropane	1.93	0.0632	1.265	0	153	36	123				S
cis-1,2-Dichloroethene	1.32	0.0253	1.265	0	105	58.6	136				
Chloroform	1.40	0.0253	1.265	0	111	53.2	129				
1,1,1-Trichloroethane (TCA)	1.51	0.0253	1.265	0	119	58.3	145				
1,1-Dichloropropene	1.57	0.0253	1.265	0	124	55.1	138				
Carbon tetrachloride	1.51	0.0253	1.265	0	119	53.3	144				
1,2-Dichloroethane (EDC)	1.30	0.0379	1.265	0	103	51.3	139				
Benzene	1.44	0.0253	1.265	0	114	63.5	133				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260

Sample ID: 1409149-003BMS	SampType: MS	Units: mg/Kg-dry				Prep Date: 9/16/2014			RunNo: 16795		
Client ID: TP1-B	Batch ID: 8735	Analysis Date: 9/16/2014							SeqNo: 337487		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	1.40	0.0253	1.265	0	110	68.6	132				
1,2-Dichloropropane	1.32	0.0253	1.265	0	105	59	136				
Bromodichloromethane	1.46	0.0253	1.265	0	115	50.7	141				
Dibromomethane	1.28	0.0506	1.265	0	101	50.6	137				
cis-1,3-Dichloropropene	1.53	0.0253	1.265	0	121	50.4	138				
Toluene	1.31	0.0253	1.265	0.02204	102	63.4	132				
trans-1,3-Dichloropropylene	1.78	0.0379	1.265	0	141	44.1	147				
1,1,2-Trichloroethane	1.34	0.0379	1.265	0	106	51.6	137				
1,3-Dichloropropane	1.31	0.0632	1.265	0	104	53.1	134				
Tetrachloroethene (PCE)	1.35	0.0253	1.265	0	107	35.6	158				
Dibromochloromethane	1.31	0.0379	1.265	0	104	55.3	140				
1,2-Dibromoethane (EDB)	1.24	0.00632	1.265	0	98.3	50.4	136				
Chlorobenzene	1.29	0.0253	1.265	0	102	60	133				
1,1,1,2-Tetrachloroethane	1.30	0.0379	1.265	0	103	53.1	142				
Ethylbenzene	1.39	0.0379	1.265	0.09885	102	54.5	134				
m,p-Xylene	2.96	0.0253	2.530	0.3313	104	53.1	132				
o-Xylene	1.45	0.0253	1.265	0.1583	102	53.3	139				
Styrene	1.32	0.0253	1.265	0	105	51.1	132				
Isopropylbenzene	1.31	0.101	1.265	0	103	58.9	138				
Bromoform	1.21	0.0253	1.265	0	96.0	57.9	130				
1,1,2,2-Tetrachloroethane	2.41	0.0253	1.265	0	191	51.9	131				S
n-Propylbenzene	1.43	0.0253	1.265	0.07013	107	53.6	140				
Bromobenzene	1.24	0.0379	1.265	0	98.2	54.2	140				
1,3,5-Trimethylbenzene	1.86	0.0253	1.265	0.4575	111	51.8	136				
2-Chlorotoluene	1.33	0.0253	1.265	0	105	51.6	136				
4-Chlorotoluene	1.28	0.0253	1.265	0	101	50.1	139				
tert-Butylbenzene	1.14	0.0253	1.265	0	90.1	50.5	135				
1,2,3-Trichloropropane	1.44	0.0253	1.265	0	114	50.5	131				
1,2,4-Trichlorobenzene	1.39	0.0632	1.265	0	110	50.8	130				

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260

Sample ID: 1409149-003BMS	SampType: MS	Units: mg/Kg-dry				Prep Date: 9/16/2014			RunNo: 16795		
Client ID: TP1-B	Batch ID: 8735	Analysis Date: 9/16/2014							SeqNo: 337487		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	1.29	0.0253	1.265	0	102	52.6	141				
4-Isopropyltoluene	0.167	0.0253	1.265	0.06746	7.87	52.9	134				S
1,3-Dichlorobenzene	1.27	0.0253	1.265	0	100	52.6	131				
1,4-Dichlorobenzene	1.12	0.0253	1.265	0	88.9	52.9	129				
n-Butylbenzene	1.71	0.0253	1.265	0	135	52.6	130				S
1,2-Dichlorobenzene	1.24	0.0253	1.265	0	97.7	55.8	129				
1,2-Dibromo-3-chloropropane	2.26	0.0379	1.265	0	178	40.5	131				S
1,2,4-Trimethylbenzene	3.64	0.0253	1.265	1.646	158	50.6	137				S
Hexachlorobutadiene	1.13	0.126	1.265	0	89.4	40.6	158				
Naphthalene	6.44	0.0379	1.265	2.382	321	52.3	124				S
1,2,3-Trichlorobenzene	1.24	0.0253	1.265	0	98.3	54.4	124				
Surr: Dibromofluoromethane	3.20		3.162		101	63.7	129				
Surr: Toluene-d8	3.18		3.162		101	61.4	128				
Surr: 1-Bromo-4-fluorobenzene	3.22		3.162		102	63.1	141				

NOTES:

S - Outlying QC recoveries were observed. The method is in control as indicated by the LCS.

Sample ID: CCV-8735	SampType: CCV	Units: µg/L			Prep Date: 9/16/2014			RunNo: 16795			
Client ID: CCV	Batch ID: 8735				Analysis Date: 9/16/2014			SeqNo: 337489			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromomethane	22.0	0.0900	20.00	0	110	80	120				
Chloroethane	19.2	0.0600	20.00	0	96.0	80	120				
Surr: Dibromofluoromethane	51.3		50.00		103	63.7	129				
Surr: Toluene-d8	47.8		50.00		95.7	61.4	128				
Surr: 1-Bromo-4-fluorobenzene	51.0		50.00		102	63.1	141				

Qualifiers:

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: LCS-8735	SampType: LCS	Units: mg/Kg				Prep Date: 9/16/2014			RunNo: 16795		
Client ID: LCSS	Batch ID: 8735	Analysis Date: 9/16/2014							SeqNo: 337490		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.32	0.0600	1.000	0	132	37.7	136				
Chloromethane	1.09	0.0600	1.000	0	109	38.8	132				
Vinyl chloride	1.15	0.00200	1.000	0	115	56.1	130				
Bromomethane	0.283	0.0900	1.000	0	28.3	41.3	148				S
Trichlorofluoromethane (CFC-11)	0.998	0.0500	1.000	0	99.8	42.9	147				
Chloroethane	0.218	0.0600	1.000	0	21.8	37.1	144				S
1,1-Dichloroethene	0.778	0.0500	1.000	0	77.8	49.7	142				
Methylene chloride	0.831	0.0200	1.000	0	83.1	54.5	131				
trans-1,2-Dichloroethene	1.08	0.0200	1.000	0	108	68	130				
Methyl tert-butyl ether (MTBE)	0.945	0.0500	1.000	0	94.5	59.1	138				
1,1-Dichloroethane	1.10	0.0200	1.000	0	110	65.5	132				
2,2-Dichloropropane	1.56	0.0500	1.000	0	156	28.1	149				S
cis-1,2-Dichloroethene	1.05	0.0200	1.000	0	105	71.6	123				
Chloroform	1.10	0.0200	1.000	0	110	67.5	129				
1,1,1-Trichloroethane (TCA)	1.14	0.0200	1.000	0	114	69	132				
1,1-Dichloropropene	1.17	0.0200	1.000	0	117	72.7	131				
Carbon tetrachloride	1.16	0.0200	1.000	0	116	63.4	137				
1,2-Dichloroethane (EDC)	1.02	0.0300	1.000	0	102	61.9	136				
Benzene	1.07	0.0200	1.000	0	107	74.6	124				
Trichloroethene (TCE)	1.03	0.0200	1.000	0	103	65.5	137				
1,2-Dichloropropane	0.989	0.0200	1.000	0	98.9	63.2	142				
Bromodichloromethane	1.10	0.0200	1.000	0	110	76.1	136				
Dibromomethane	0.998	0.0400	1.000	0	99.8	70	130				
cis-1,3-Dichloropropene	1.16	0.0200	1.000	0	116	59.1	143				
Toluene	1.02	0.0200	1.000	0	102	67.3	138				
trans-1,3-Dichloropropylene	1.30	0.0300	1.000	0	130	49.2	149				
1,1,2-Trichloroethane	0.933	0.0300	1.000	0	93.3	74.5	129				
1,3-Dichloropropane	0.976	0.0500	1.000	0	97.6	70	130				
Tetrachloroethene (PCE)	1.03	0.0200	1.000	0	103	52.7	150				

Qualifiers:	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1409149

CLIENT: PBS Engineering & Environmental

Project: Skyway

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: LCS-8735	SampType: LCS	Units: mg/Kg				Prep Date: 9/16/2014			RunNo: 16795		
Client ID: LCSS	Batch ID: 8735	Analysis Date: 9/16/2014							SeqNo: 337490		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	0.974	0.0300	1.000	0	97.4	70.6	144				
1,2-Dibromoethane (EDB)	0.986	0.00500	1.000	0	98.6	70	130				
Chlorobenzene	0.992	0.0200	1.000	0	99.2	76.1	123				
1,1,1,2-Tetrachloroethane	0.985	0.0300	1.000	0	98.5	74.8	131				
Ethylbenzene	1.04	0.0300	1.000	0	104	74	129				
m,p-Xylene	2.10	0.0200	2.000	0	105	79.8	128				
o-Xylene	1.00	0.0200	1.000	0	100	72.7	124				
Styrene	1.04	0.0200	1.000	0	104	76.8	130				
Isopropylbenzene	1.11	0.0800	1.000	0	111	70	130				
Bromoform	0.926	0.0200	1.000	0	92.6	67	154				
1,1,2,2-Tetrachloroethane	0.963	0.0200	1.000	0	96.3	60	130				
n-Propylbenzene	1.12	0.0200	1.000	0	112	74.8	125				
Bromobenzene	0.966	0.0300	1.000	0	96.6	49.2	144				
1,3,5-Trimethylbenzene	0.990	0.0200	1.000	0	99.0	74.6	123				
2-Chlorotoluene	1.06	0.0200	1.000	0	106	76.7	129				
4-Chlorotoluene	1.03	0.0200	1.000	0	103	77.5	125				
tert-Butylbenzene	1.08	0.0200	1.000	0	108	66.2	130				
1,2,3-Trichloropropane	1.01	0.0200	1.000	0	101	67.9	136				
1,2,4-Trichlorobenzene	1.15	0.0500	1.000	0	115	65.6	137				
sec-Butylbenzene	1.16	0.0200	1.000	0	116	75.6	133				
4-Isopropyltoluene	1.14	0.0200	1.000	0	114	76.8	131				
1,3-Dichlorobenzene	1.03	0.0200	1.000	0	103	72.8	128				
1,4-Dichlorobenzene	0.928	0.0200	1.000	0	92.8	72.6	126				
n-Butylbenzene	1.22	0.0200	1.000	0	122	65.3	136				
1,2-Dichlorobenzene	0.961	0.0200	1.000	0	96.1	72.8	126				
1,2-Dibromo-3-chloropropane	0.892	0.0300	1.000	0	89.2	61.2	139				
1,2,4-Trimethylbenzene	1.08	0.0200	1.000	0	108	77.5	129				
Hexachlorobutadiene	1.16	0.100	1.000	0	116	42	151				
Naphthalene	1.01	0.0300	1.000	0	101	62.3	134				

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

D Dilution was required

J Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit

S Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260

Sample ID: LCS-8735	SampType: LCS	Units: mg/Kg			Prep Date: 9/16/2014			RunNo: 16795			
Client ID: LCSS	Batch ID: 8735				Analysis Date: 9/16/2014			SeqNo: 337490			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	1.03	0.0200	1.000	0	103	62.1	140				
Surr: Dibromofluoromethane	2.66		2.500		106	63.7	129				
Surr: Toluene-d8	2.47		2.500		98.9	61.4	128				
Surr: 1-Bromo-4-fluorobenzene	2.57		2.500		103	63.1	141				

NOTES:

S - Outlying QC recoveries were observed. Adequate sensitivity for Bromomethane and Chloroethane is demonstrated by the CCV. There were no detections of 2,2-Dichloropropane (high bias); therefore, no further action required.

Sample ID: MB-8735	SampType: MBLK	Units: mg/Kg				Prep Date: 9/16/2014			RunNo: 16795		
Client ID: MBLKS	Batch ID: 8735					Analysis Date: 9/16/2014			SeqNo: 337491		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0600									
Chloromethane	ND	0.0600									
Vinyl chloride	ND	0.00200									
Bromomethane	ND	0.0900									
Trichlorofluoromethane (CFC-11)	ND	0.0500									
Chloroethane	ND	0.0600									
1,1-Dichloroethene	ND	0.0500									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0500									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.0500									
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									

Qualifiers:	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260

Sample ID: MB-8735	SampType: MBLK	Units: mg/Kg				Prep Date: 9/16/2014			RunNo: 16795		
Client ID: MBLKS	Batch ID: 8735	Analysis Date: 9/16/2014							SeqNo: 337491		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloroethane (EDC)	ND	0.0300									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0400									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									

Qualifiers:	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/16/2014

Work Order: 1409149
CLIENT: PBS Engineering & Environmental
Project: Skyway

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260

Sample ID: MB-8735	SampType: MBLK	Units: mg/Kg				Prep Date: 9/16/2014			RunNo: 16795		
Client ID: MBLKS	Batch ID: 8735					Analysis Date: 9/16/2014			SeqNo: 337491		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.0300									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	2.53		2.500		101	63.7	129				
Surr: Toluene-d8	2.54		2.500		102	61.4	128				
Surr: 1-Bromo-4-fluorobenzene	2.52		2.500		101	63.1	141				

Qualifiers:	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Client Name: **PBS**
 Logged by: **Erica Silva**

Work Order Number: **1409149**
 Date Received: **9/15/2014 3:25:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Required ☒
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all coolers received at a temperature of >0°C to 10.0°C? Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is the headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: Date:
 By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
 Regarding:
 Client Instructions:

19. Additional remarks:

Item Information

Item #	Temp °C	Condition
Sample	10.0	Good



Fremont

Analytical

Chain of Custody Record

3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3790
Fax: 206-352-7178

Date: 9/15/14

Laboratory Project No (Internal): 1409149
Page: 1 of 1

Client: PBS

Project Name:

Address:

Location:

City, State, Zip

Collected By:

SKY
RATON
C. Nogueira

Reports To (PM): Ken.nogueira@pbssau.com

Email:

Project No: 42300

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, VW = Waste Water

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOC (EPA 8260)	GC/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Semi Vol (EPA 8270)	PAH (EPA 8270)	PCBs (EPA 8082)	Metals** (6020 / 200.5)	Total (T) / Dissolved (D)	Anions (IC)**	EDB (8011)	Comments/Depth
1 TPI-ESW	9/15/14	1305	Soil													
2 TPI-WSW		1310														
3 TPI-B		1320														
4																
5																
6																
7																
8																
9																
10																

**Metals Analysis (Circle): MTCA RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Tl Ti U V Zn

***Anions (Circle): None Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)

Relinquished Date/Time: 9/15/14 15:25 Received Date/Time: 9/15/14 15:25

Relinquished Ken Nogueira Received SKY RATON C. Nogueira

TAT -> SameDay/NextDay/2 Day/3 Day STD

*Please coordinate with the lab in advance

APPENDIX IV

UST Site Assessment Checklist



UNDERGROUND STORAGE TANK Site Check/Site Assessment Checklist

FOR OFFICE USE ONLY

Site #: _____

Facility Site ID #: _____

INSTRUCTIONS

When a release has not been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person certified by ICC or a Washington registered professional engineer who is competent, by means of examination, experience, or education, to perform site assessments. **The results of the site check or site assessment must be included with this checklist.** This form must be submitted to Ecology at the address shown below within 30 days after completion of the site check/site assessment.

SITE INFORMATION: Include the Ecology site ID number if the tanks are registered with Ecology. This number may be found on the tank owner's invoice or tank permit.

TANK INFORMATION: Please list all tanks for which the site check or site assessment is being conducted. Use the owner's tank ID numbers if available, and indicate tank capacity and substance stored.

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT: Please check the appropriate item.

CHECKLIST: Please initial each item in the appropriate box.

SITE ASSESSOR INFORMATION: This information must be signed by the registered site assessor who is responsible for conducting the site check/site assessment.

Underground Storage Tank Section
Department of Ecology
PO Box 47655
Olympia WA 98504-7655

SITE INFORMATION

Site ID Number (Available from Ecology if the tanks are registered): NA

Site/Business Name: NA

Site Address: 12690 Renton Avenue South Telephone: (509) 512-8163

Seattle WA 98178
City State Zip Code

TANK INFORMATION

Tank ID No.

TPI (PBS named)

Tank Capacity

200 gallons

Substance Stored

Waste Oil

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

Check one:

- ☐ Investigate suspected release due to on-site environmental contamination.
- ☐ Investigate suspected release due to off-site environmental contamination.
- ☐ Extend temporary closure of UST system for more than 12 months.
- ☐ UST system undergoing change-in-service.
- ☒ UST system permanently closed with tank removed.
- ☐ Abandoned tank containing product.
- ☐ Required by Ecology or delegated agency for UST system closed before 12/22/88.
- ☐ Other (describe): _____

CHECKLIST

Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below.

	YES	NO
1. The location of the UST site is shown on a vicinity map.	✓	
2. A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in site assessment guidance)	✓	
3. A summary of UST system data is provided. (see Section 3.1.)	✓	
4. The soils characteristics at the UST site are described. (see Section 5.2)	✓	
5. Is there any apparent groundwater in the tank excavation?		✓
6. A brief description of the surrounding land use is provided. (see Section 3.1)	✓	
7. Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses.	✓	
8. A sketch or sketches showing the following items is provided:		
- location and ID number for all field samples collected	✓	
- groundwater samples distinguished from soil samples (if applicable)		NA
- samples collected from stockpiled excavated soil		NA
- tank and piping locations and limits of excavation pit	✓	
- adjacent structures and streets	✓	
- approximate locations of any on-site and nearby utilities		NA
9. If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4)		NA
10. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method.	✓	
11. Any factors that may have compromised the quality of the data or validity of the results are described.		NA
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred.	✓	

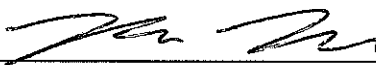
SITE ASSESSOR INFORMATION

Ken Nogere PBS Engineering and Environmental
Person registered with Ecology Firm Affiliated with
Business Address: 2517 Enstate Ave. E. Telephone: (509) 512-8163
Street
Seattle WA 98102
City State Zip Code

I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 173.360 WAC.

9.19.14

Date



Signature of Person Registered with Ecology

If you need this publication in an alternate format, please contact Toxics Cleanup Program at (360) 407-7170. For persons with a speech or hearing impairment call 711 for relay service or 800-833-6388 for TTY.

APPENDIX C

WATER DISPOSAL DOCUMENTATION

MARINE VACUUM SERVICE, INC.**INVOICE**

PO BOX 24263
SEATTLE, WA 98124

Phone # 206-762-0240

ACCOUNTING@MARINEVACUUM.COM

Fax # 206-763-8084

Date	Invoice #
8/31/2014	51923

Bill To

BEISLEY, INC.
PO BOX 2355
BELFAIR, WA 98528

Ship To

PUMP AS DIRECTED
12690 RENTON AVE S
SEATTLE

P.O. No.	Terms
	Net 30

Quantity	U/M	Description	Rate	Amount
1		08/26/2014***** PUMP AS DIRECTED		0.00
2	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	250.00
250		FUEL SURCHARGE	0.13	32.50
3,000	GAL	WASTE WATER	0.20	600.00
1				0.00
1		08/27/2014***** PUMP AS DIRECTED		0.00
5.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	687.50
687.5		FUEL SURCHARGE	0.13	89.38
3,700	GAL	WASTE WATER	0.20	740.00
1				0.00
1		08/28/2014***** PUMP AS DIRECTED		0.00
3.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	437.50
437.5		FUEL SURCHARGE	0.13	56.88
2,500	GAL	WASTE WATER	0.20	500.00
1				0.00
1		8/29/2014***** PUMP AS DIRECTED		0.00
3	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	375.00
2,500	GAL	WASTE WATER	0.20	500.00
375		FUEL SURCHARGE	0.13	48.75

Due Date	9/30/2014	Sales Tax (0.0%)	\$0.00	TOTAL:	\$4,317.51
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MARINE VACUUM SERVICE, INC.**INVOICE**PO BOX 24263
SEATTLE, WA 98124Phone # 206-762-0240
Fax # 206-763-8084

ACCOUNTING@MARINEVACUUM.COM

Date	Invoice #
8/31/2014	52007

Bill To

BEISLEY, INC.
PO BOX 2355
BELFAIR, WA 98528

Ship To

PUMP AS DIRECTED
12690 RENTON AVE S
SEATTLE

P.O. No.

Terms

Net 30

Quantity	U/M	Description	Rate	Amount
4	HR	08/31/2014***** PUMP AS DIRECTED		0.00
660		PREVAILING VAC TRUCK & DRIVER OVERTIME	165.00	660.00
3,700	GAL	FUEL SURCHARGE	0.13	85.80
		WASTE WATER	0.20	740.00
Due Date		9/30/2014	Sales Tax (0.0%)	
			\$0.00	TOTAL: \$1,485.80

MARINE VACUUM SERVICE, INC.**INVOICE**

PO BOX 24263
SEATTLE, WA 98124

Phone # 206-762-0240
Fax # 206-763-8084

ACCOUNTING@MARINEVACUUM.COM

Date	Invoice #
9/25/2014	52107

Bill To

BEISLEY, INC.
PO BOX 2355
BELFAIR, WA 98528

Ship To

PUMP AS DIRECTED
12690 RENTON AVE S
SEATTLE

P.O. No.

Terms

Net 30

Quantity	U/M	Description	Rate	Amount
1		09/02/2014***** PUMP AS DIRECTED		0.00
3	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	375.00
375		FUEL SURCHARGE	0.13	48.75
3,800	GAL	WASTE WATER	0.20	760.00
1				0.00
1		09/03/2014***** PUMP AS DIRECTED		0.00
2	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	250.00
250		FUEL SURCHARGE	0.13	32.50
2,950	GAL	WASTE WATER	0.20	590.00
1				0.00
1		09/04/2014***** PUMP AS DIRECTED		0.00
3	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	375.00
375		FUEL SURCHARGE	0.13	48.75
2,950	GAL	WASTE WATER	0.20	590.00
1				0.00
1		09/05/2014***** PUMP AS DIRECTED		0.00
2.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	312.50
312.5		FUEL SURCHARGE	0.13	40.63
2,800	GAL	WASTE WATER	0.20	560.00
1				0.00
1		09/08/2014***** PUMP AS DIRECTED		0.00
3.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	437.50
437.5		FUEL SURCHARGE	0.13	56.88
4,000	GAL	WASTE WATER	0.20	800.00
1				0.00
1		09/09/2014***** PUMP AS DIRECTED		0.00
2	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	250.00
250		FUEL SURCHARGE	0.13	32.50
2,500	GAL	WASTE WATER	0.20	500.00
1				0.00
1		09/10/2014***** PUMP AS DIRECTED		0.00
3	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	375.00
375		FUEL SURCHARGE	0.13	48.75
2,500	GAL	WASTE WATER	0.20	500.00
1				0.00
Due Date		10/25/2014	Sales Tax (0.0%)	
TOTAL:				

MARINE VACUUM SERVICE, INC.**INVOICE**

PO BOX 24263
SEATTLE, WA 98124

Phone # 206-762-0240
Fax # 206-763-8084

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Date	Invoice #
9/25/2014	52107

Bill To

BEISLEY, INC.
PO BOX 2355
BELFAIR, WA 98528

Ship To

PUMP AS DIRECTED
12690 RENTON AVE S
SEATTLE

P.O. No.

Terms

Net 30

Quantity	U/M	Description	Rate	Amount
1		09/11/2014***** PUMP AS DIRECTED		0.00
3	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	375.00
375		FUEL SURCHARGE	0.13	48.75
2,000	GAL	WASTE WATER	0.20	400.00
1				0.00
1		09/12/2014***** PUMP AS DIRECTED		0.00
2.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	312.50
312.5		FUEL SURCHARGE	0.13	40.63
1,800	GAL	WASTE WATER	0.20	360.00
1				0.00
1		09/15/2014***** PUMP AS DIRECTED		0.00
5.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	687.50
687.5		FUEL SURCHARGE	0.13	89.38
2,900	GAL	WASTE WATER	0.20	580.00
50	GAL	BLACK OIL	0.55	27.50
1				0.00
1		09/16/2014***** PUMP AS DIRECTED		0.00
3	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	375.00
375		FUEL SURCHARGE	0.13	48.75
1,500	GAL	WASTE WATER	0.20	300.00
1				0.00
1		09/17/2014***** PUMP AS DIRECTED		0.00
2.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	312.50
312.5		FUEL SURCHARGE	0.13	40.63
1,500	GAL	WASTE WATER	0.20	300.00
1				0.00
1		09/18/2014***** PUMP AS DIRECTED		0.00
2	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	250.00
250		FUEL SURCHARGE	0.13	32.50
1,500	GAL	WASTE WATER	0.20	300.00
1				0.00
1		09/19/2014***** PUMP AS DIRECTED		0.00
4.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	562.50
562.5		FUEL SURCHARGE	0.13	73.13
4,500	GAL	WASTE WATER	0.20	900.00
Due Date		10/25/2014	Sales Tax (0.0%)	
TOTAL:				

INVOICE

Phone # 206-762-0240 ACCOUNTING@MARINEVACUUM.COM
Fax # 206-763-8084

Date	Invoice #
9/25/2014	52107

Bill To

Ship To

BEISLEY, INC.
PO BOX 2355
BELFAIR, WA 98528

PUMP AS DIRECTED
12690 RENTON AVE S
SEATTLE

P.O. No.	Terms
	Net 30

Quantity	U/M	Description	Rate	Amount
1				0.00
1		09/22/2014***** PUMP AS DIRECTED		0.00
4.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	562.50
7,500	GAL	WASTE WATER	0.20	1,500.00
562.5		FUEL SURCHARGE	0.13	73.13
1				0.00
1		09/23/2014***** PUMP AS DIRECTED		0.00
4.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	562.50
4,900	GAL	WASTE WATER	0.20	980.00
562.5		FUEL SURCHARGE	0.13	73.13
1				0.00
1		09/24/2014***** PUMP AS DIRECTED		0.00
4.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	562.50
4,150	GAL	WASTE WATER	0.20	830.00
562.5		FUEL SURCHARGE	0.13	73.13
			TOTAL:	\$18,616.92

Due Date

10/25/2014

Sales Tax (0.0%)

\$0.00

TOTAL:

\$18,616.92

MARINE VACUUM SERVICE, INC.**INVOICE**PO BOX 24263
SEATTLE, WA 98124

Phone # 206-762-0240

ACCOUNTING@MARINEVACUUM.COM

Fax # 206-763-8084

Date	Invoice #
9/30/2014	52285

Bill To

BEISLEY, INC.
PO BOX 2355
BELFAIR, WA 98528

Ship To

PUMP AS DIRECTED
12690 RENTON AVE S
SEATTLE

P.O. No.

Terms

Net 30

Quantity	U/M	Description	Rate	Amount
1		09/25/2014***** PUMP AS DIRECTED		0.00
4.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	562.50
562.5		FUEL SURCHARGE	0.13	73.13
4,900	GAL	WASTE WATER	0.20	980.00
1				0.00
1		09/26/2014***** PUMP AS DIRECTED		0.00
4.5	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	562.50
562.5		FUEL SURCHARGE	0.13	73.13
4,800	GAL	WASTE WATER	0.20	960.00
1				0.00
1		09/29/2014***** PUMP AS DIRECTED		0.00
10	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	1,250.00
0.5	HR	PREVAILING VAC TRUCK & DRIVER OVERTIME	165.00	82.50
1,332.5		FUEL SURCHARGE	0.13	173.23
11,300	GAL	WASTE WATER	0.20	2,260.00
1				0.00
1		09/30/2014***** PUMP AS DIRECTED		0.00
6	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	125.00	750.00
750		FUEL SURCHARGE	0.13	97.50
5,500	GAL	WASTE WATER	0.20	1,100.00
			TOTAL:	\$8,924.49
Due Date	10/30/2014	Sales Tax (0.0%)	\$0.00	

MARINE VACUUM SERVICE, INC.**INVOICE**

PO BOX 24263
SEATTLE, WA 98124

Phone # 206-762-0240
Fax # 206-763-8084

ACCOUNTING@MARINEVACUUM.COM

Date	Invoice #
10/14/2014	52320

Bill To

BEISLEY, INC.
PO BOX 2355
BELFAIR, WA 98528

Ship To

PUMP AS DIRECTED
12690 RENTON AVE S., RENTON

P.O. No.

Terms

Net 30

Quantity	U/M	Description	Rate	Amount
		***** PUMP AS DIRECTED 10/1/14		0.00
3	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	137.00	411.00
3,000	GAL	WASTE WATER	0.22	660.00
411		FUEL SURCHARGE	0.13	53.43
				0.00
8	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	137.00	1,096.00
2	HR	PREVAILING VAC TRUCK & DRIVER OVERTIME	165.00	330.00
3,900	GAL	WASTE WATER	0.22	858.00
1,426		FUEL SURCHARGE	0.13	185.38
				0.00
		***** PUMP & WASH AS DIRECTED 10/1/14		0.00
3.5	HR	VACTOR TRUCK & DRIVER PREVAILING WAGE STRAIGHT TIME	155.00	542.50
0.5	HR	VACTOR TRUCK & DRIVER PREVAILING WAGE OVERTIME	190.00	95.00
3.5	HR	PREVAILING WAGE LABOR	72.00	252.00
0.5	HR	PREVAILING WAGE LABOR OVERTIME	98.00	49.00
650	GAL	WASTE WATER	0.22	143.00
637.5		FUEL SURCHARGE	0.13	82.88
				0.00
		***** PUMP AS DIRECTED 10/2/14		0.00
7	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	137.00	959.00
9,000	GAL	WASTE WATER	0.22	1,980.00
959		FUEL SURCHARGE	0.13	124.67
				0.00
		***** PUMP AS DIRECTED 10/3/14		0.00
4	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	137.00	548.00
5,800	GAL	WASTE WATER	0.22	1,276.00
548		FUEL SURCHARGE	0.13	71.24
				0.00
		***** PUMP AS DIRECTED 10/6/14		0.00
8	HR	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME	137.00	1,096.00
15,000	GAL	WASTE WATER	0.22	3,300.00
1,096		FUEL SURCHARGE	0.13	142.48
				0.00
		***** PUMP AS DIRECTED 10/7/14		0.00
Due Date			11/13/2014	
Sales Tax (0.0%)			TOTAL:	

INVOICE

Phone # 206-762-0240 ACCOUNTING@MARINEVACUUM.COM
Fax # 206-763-8084

Date	Invoice #
10/14/2014	52320

Bill To

Ship To

BEISLEY, INC.
PO BOX 2355
BELFAIR, WA 98528

PUMP AS DIRECTED
12690 RENTON AVE S., RENTON

P.O. No.	Terms
	Net 30

Quantity	U/M	Description	Rate	Amount
5.5 8,000 753.5	HR GAL	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME WASTE WATER FUEL SURCHARGE	137.00 0.22 0.13	753.50 1,760.00 97.96
		***** PUMP AS DIRECTED 10/8/14		0.00
5 5,000 685	HR GAL	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME WASTE WATER FUEL SURCHARGE	137.00 0.22 0.13	0.00 685.00 1,100.00
		***** PUMP AS DIRECTED 10/9/14		89.05
4.5 4,500 616.5	HR GAL	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME WASTE WATER FUEL SURCHARGE	137.00 0.22 0.13	0.00 616.50 990.00
		***** PUMP AS DIRECTED 10/10/14		80.15
4 1,800 548	HR GAL	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME WASTE WATER FUEL SURCHARGE	137.00 0.22 0.13	0.00 548.00 396.00
		***** PUMP AS DIRECTED 10/13/14		71.24
5 5,500 685	HR GAL	PREVAILING VAC TRUCK & DRIVER STRAIGHT TIME WASTE WATER FUEL SURCHARGE	137.00 0.22 0.13	0.00 685.00 1,210.00
				89.05
Due Date 11/13/2014 Sales Tax (0.0%) \$0.00			TOTAL:	\$23,427.03

APPENDIX D

TRUCK DISPOSAL TICKETS

SKYWAY
CONTAMINATED SOIL

DATE	TICKET	TONNAGE
8/25/2014	242787	26.87
8/25/2014	235681	27.54
8/25/2014	235669	28.95
10/9/2014	239051	29.62
10/8/2014	239070	25.53
10/9/2014	239112	24.46
10/9/2014	239049	32.13
10/9/2014	239095	30.89
10/2/2014	238124	31.12
10/1/2014	238120	30.02
10/2/2014	238143	21.04
10/2/2014	238142	22.78
10/2/2014	238145	23.37
10/1/2014	238078	29.96
10/1/2014	238121	27.14
10/9/2014	239048	25.63
10/9/2014	239050	21.77
10/9/2014	239052	25.14
10/3/2014	238180	24.87
10/6/2014	238182	33.02
10/6/2014	238184	30.92
10/6/2014	238186	26.37
10/6/2014	238188	24.24
10/6/2014	238972	25.83
10/7/2014	238978	25.81
10/7/2014	238976	28.45
10/7/2014	238974	29.19
10/6/2014	238983	27.2
10/7/2014	239000	24.39
10/7/2014	238999	22.82
10/7/2014	239003	24.97
10/8/2014	239005	25.79
10/8/2014	239007	27.65
10/8/2014	239009	26.36
10/8/2014	239011	24.66
10/8/2014	239046	25.75
10/8/2014	239066	25.57
10/8/2014	239071	24.24
10/6/2014	238970	26.58
10/6/2014	238973	31.54

10/7/2014	238975	28.07
10/7/2014	238977	25.55
10/7/2014	238979	28.47
10/7/2014	239001	26.62
10/7/2014	239002	23.59
10/7/2014	239068	22.63
10/8/2014	239047	24.52
10/8/2014	239012	24.53
10/8/2014	239010	22.25
10/8/2014	239008	24.69
10/7/2014	239004	30.1
10/8/2014	239006	28.59
10/6/2014	238185	23.58
10/3/2014	238179	31.31
10/6/2014	238183	31.6
10/3/2014	238175	23.14
10/3/2014	238173	24.76
10/3/2014	238867	28.88
10/3/2014	238894	24.02
10/3/2014	238177	22.18
10/2/2014	238162	25.21
9/29/2014	236732	29.87
9/29/2014	236698	32.64
9/29/2014	236736	29.91
9/26/2014	236723	29.59
9/26/2014	236709	27.82
9/26/2014	236715	27.02
9/26/2014	236720	24.8
9/26/2014	236693	25.52
9/29/2014	238067	28.75
9/30/2014	236702	29.08
9/29/2014	238101	27.49
9/30/2014	236704	26.03
9/30/2014	238073	30.51
10/3/2014	238181	31.16
10/6/2014	238187	27.93
9/25/2014	236584	30.14
9/25/2014	236523	33.36
9/25/2014	238834	29.24
9/25/2014	238838	28.12
9/25/2014	238843	24.64
9/18/2014	236430	32.48
9/19/2014	236576	32.76
9/25/2014	238832	25.98
9/26/2014	236681	31.28
9/26/2014	236688	34.01
9/19/2014	236433	31.83

9/18/2014	236511	32.96
10/1/2014	238115	29.57
10/1/2014	238109	31.86
9/30/2014	238076	30.8
10/1/2014	238112	27.13
10/2/2014	238123	30.41
10/2/2014	238125	28.35
10/2/2014	238869	22.64
10/2/2014	238144	26.72
10/2/2014	238146	23.66
10/2/2014	238149	23.76
10/3/2014	238893	23.33
10/3/2014	238150	26.77
10/3/2014	238868	26.59
10/3/2014	238174	26.19
10/3/2014	238176	24.47
10/3/2014	238178	25.37
10/1/2014	238864	30.21
10/2/2014	238122	26.52
10/1/2014	238119	26.57
10/1/2014	238111	30.33
10/1/2014	238114	28.56
10/1/2014	238077	29.16
9/30/2014	238106	31.01
9/30/2014	238074	31.95
9/30/2014	236706	26.51
9/30/2014	236705	29.45
9/30/2014	236703	24.92
9/30/2014	236701	25.03
9/29/2014	238068	28.59
9/29/2014	236721	24.1
9/29/2014	236727	27.34
9/29/2014	236696	30.19
9/29/2014	236697	28.36
9/29/2014	236700	21.88
9/26/2014	236687	31.86
9/26/2014	236689	30.24
9/26/2014	236694	23.47
9/26/2014	236716	27.1
9/26/2014	236710	23.89
9/26/2014	236718	25.57
9/25/2014	236524	31.58
9/25/2014	236525	26.92
9/25/2014	236526	31.97
9/25/2014	238839	28.74
9/25/2014	236527	28.04
9/25/2014	236529	28.3

8/25/2014	242837	20.84
8/25/2014	235666	26.24
8/25/2014	235679	25.7
8/25/2014	235675	26.55
9/15/2014	236405	31.83
9/18/2014	236428	31.8
9/18/2014	236497	33.66
9/18/2014	236470	29.18
9/15/2014	235926	24.73
9/19/2014	236435	28.38
9/19/2014	236434	32.75
9/19/2014	236432	32.26
9/19/2014	236573	31.48
9/18/2014	236512	28.26
9/18/2014	236431	32.62
9/18/2014	236429	33.76
9/18/2014	236498	19.84
8/25/2014	242734	26.4
8/25/2014	242836	25.09
8/25/2014	235684	25.84
8/25/2014	235688	20.24
8/25/2014	235695	28.46
8/26/2014	236086	24.48
8/25/2014	242518	28.3
8/26/2014	236093	29.85
8/25/2014	242514	25.24
8/25/2014	235696	24.14
8/25/2014	235682	22.82
8/25/2014	242835	22.33
8/25/2014	235668	25.95
8/25/2014	242513	25.11

Total	4519.5
Base Bid	-700
Per Ton	3819.5

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1534

235681

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB
11862

DATE:

8/25 20

CONT #

TOLU 422 268

CITY

34

3961

CUSTOMER #

PHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1534

242787

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB
11842

DATE:

8/25 20/14

CONT #

TOLU 458/48

CITY

34

3961

CUSTOMER #

PHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1534

235669

DISPOSAL RECEIPT

92880

34980

GROSS

TARE

NET

28.95

ACCT #

10385

JOB #

11862

DATE:

8/25

20

CONT #

GCEU 425967

CITY

34

3961

[Signature]

[Signature]

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

45

239051

ACCT #

10385

JOB #

11802

DATE:

10/10/14

20

CONT #

EGTU 420695

CITY

3961

34

GROSS

TARE

NET

100900

41660

29.62

CUSTOMER #

RITINE W

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

45

239070

GROSS

TARE

NET

93420

42360

25.53 Tons

ACCT #

10385

JOB #

TRB 11862

DATE:

10/8/14

CONT #

GCEU435395

CITY

3961

34

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

45

239112

GROSS

TARE

NET

89720

40880

24.46

ACCT #

10385

JOB #

TRB 11862

DATE:

10/9/20

CONT #

GCEO 426831

CITY

3961

34

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 45 239049

106020	GROSS
41760	TARE
32.13	NET

ACCT # 10385 JOB # TB 11862 DATE: 10/19 2014
CONT # CB50 200278
CITY _____

34

3961

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 45 239095

104540	GROSS
42760	TARE
30.89	NET

ACCT # 10385 JOB # TB 11862 DATE: 10/19 2014
CONT # TOLU 459552
CITY _____

34

3961

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RECEIVED

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMR 17 238124

ACCT # 10385 JOB # TB 11862 DATE: 10/2/14 20
CONT # TRLU 901725
CITY _____

99726	GROSS
37480	TARE
31.12	NET

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMR 17 238120

ACCT # 10385 JOB # TB 11862 DATE: 10/1/14 20
CONT # EGTU 920670
CITY _____

96320	GROSS
36320	TARE
30.02	NET

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMR 12 238143

75780	GROSS
33700	TARE
	NET

ACCT # 10385 JOB # TB 11862 DATE: 10/2 20 ✓

CONT # EGT4 420761

CITY _____

2104

34 3961

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMR 17 238142

81540	GROSS
35980	TARE
	NET

22.78

ACCT # 10385 JOB # TB 11862 DATE: 10/2 20 ✓

CONT # AW54 200017

CITY _____

34 3961

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JMR 12

238145

GROSS

TARE

NET

ACCT #

10385

JOB #

TB
11862

DATE:

10/2/14

20

CONT #

RBSU 200410

CITY

34

3961

DISPOSAL RECEIPT

CUSTOMER COPY

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JMR 17

238078

GROSS

TARE

NET

ACCT #

10385

JOB #

TB
11862

DATE:

10/11/14

20

CONT #

EGTU 420172

CITY

34

3901

DISPOSAL RECEIPT

CUSTOMER COPY

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JMR 17

238121

GROSS

TARE

NET

ACCT #

10385

JOB #

TB
11862

DATE:

10/1

20

14

CONT #

FGTU 420134

CITY

10/2/14

34

3961

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

239048

GROSS

TARE

NET

ACCT #

10385

JOB #

TB
11862

DATE:

10/9

20

CONT #

KBSU 200219

CITY

34

Job #
3961

Handwritten signature

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

239050

DISPOSAL RECEIPT

CUSTOMER COPY

88000

GROSS

ACCT #

10385

JOB #

TRB 11862

DATE:

10/9

20

CONT #

6CEU

431840

CITY

TARE

NET

39460

21.77T

34

Job # 3961

WHS

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

239052

DISPOSAL RECEIPT

CUSTOMER COPY

91000

GROSS

ACCT #

10385

JOB #

TRB 11862

DATE:

10/9

20

CONT #

AWI U 8186

CITY

TARE

NET

40780

25.14T

34

3961

WHS

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238180

GROSS

TARE

NET

ACCT # 10385 JOB # TB 11862 DATE: 123 20

CONT # TCU469221

CITY _____

24.87T

Job #
3961

[Signature]

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238182

GROSS

TARE

NET

ACCT # 10385 JOB # TB 11862 DATE: 10/6 20

CONT # GCEU432163

CITY _____

33.02T

Job #
3961

[Signature]

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238184

18/240
GROSS

TARE

39400
NET

ACCT # 10385 JOB # 11862 DATE: 10/6 20

CONT # TRUV900680

CITY

30,92T

[Signature]

34

Job # 3961

CUSTOMER # *RHINE*

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DISPOSAL RECEIPT

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238186

92620
GROSS

TARE

39880
NET

ACCT # 10385 JOB # 11862 DATE: 10/6 20

CONT # TOLU459380

CITY

26,37T

Job # 3961

[Signature]

CUSTOMER # *RHINE*

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DISPOSAL RECEIPT

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

238188

88900

GROSS

40420

TARE

NET

ACCT #

10385

JOB #

TB 11882

DATE:

10/16

20

CONT #

GCEU425968

CITY

24.24T

Job # 3961

RHINE

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

238972

91280

39620

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

10/18

20

CONT #

AWSU 2000065

CITY

25.83T

Job # 3961

Rhine

CUSTOMER #

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DISPOSAL RECEIPT

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238978

90120	GROSS
39100	TARE
	NET

25.81T

ACCT # 10385 JOB # 11862 DATE: 10/7 2014
CONT # EGTU 420560
CITY _____

34

Job #
3961

[Handwritten signature]

CUSTOMER # Rhine

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DISPOSAL RECEIPT

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238976

94900	GROSS
38060	TARE
	NET

28.45T

ACCT # 10385 JOB # 11862 DATE: 10.7 2014
CONT # TOLU 476859
CITY _____

34

Job #
3961

[Handwritten signature]

CUSTOMER # Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238974

97060	GROSS
38880	TARE
	NET

ACCT # 10385 JOB # 11862 DATE: 10/7 2014
CONT # GCEU 440215
CITY _____

29.19T

Job #
3961

34

[Signature]

CUSTOMER # Rhine

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DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238983

74280	GROSS
39880	TARE
	NET

ACCT # 10385 JOB # 11862 DATE: 10/6 2014
CONT # TRU 902611
CITY _____

27.20T

Job #
3961

34

[Signature]

CUSTOMER # Rhine

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DISPOSAL RECEIPT

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 239000

8,810
39320

GROSS
TARE
NET

ACCT # 10385 JOB # TB 11862
CONT # GCEU 435175
CITY _____

DATE: 10/7 20 14

24,395

Job #
3961

34

[Signature]

CUSTOMER # RHINE

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DISPOSAL RECEIPT

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238999

87520
41840

GROSS
TARE
NET

ACCT # 10385 JOB # TB 11862
CONT # GCEU 425688
CITY _____

DATE: 10/7 20 14

22,825

Job #
3961

34

[Signature]

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

239003

ACCT #

10385

JOB #

TB
11862

DATE:

10.7

20

CONT #

LCFU430259

CITY

GROSS

TARE

NET

24.97T

Job #

3961

CUSTOMER #

RHINE

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DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

239005

ACCT #

10385

JOB #

TB
11862

DATE:

10/8

20

CONT #

UPCU 411444

CITY

GROSS

TARE

NET

25.79T

Job #

3961

CUSTOMER #

RHINE

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DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

239007

96580

GROSS

41280

TARE

NET

27.65T

ACCT #

10385

JOB #

TB 11862

DATE:

10/8

20

CONT #

AW54 200056

CITY

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

239009

90680

GROSS

37900

TARE

NET

26.36T

ACCT #

10385

JOB #

TB 11862

DATE:

10.8

20

CONT #

10LW468777

CITY

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 239011

8960	GROSS
40380	TARE
	NET

ACCT # 10385 JOB # 11862 DATE: 10/8 2010
CONT # GCEU425731
CITY _____

24.66 T

Job #
3961

[Signature]

CUSTOMER # RHINE

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DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1533 239046

91960	GROSS
40740	TARE
	NET

ACCT # 10385 JOB # 11862 DATE: 10/8 2014
CONT # AW1U200005
CITY _____

25.75 T

Job #
3961

[Signature]

CUSTOMER # RHINE

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DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1537

239066

DISPOSAL RECEIPT

CUSTOMER COPY

89540

GROSS

ACCT #

10385

JOB #

TB 11862

DATE:

10/8

20

CONT #

RB50 200257

CITY

TARE

NET

38800

25.57T

34

Sub A
3961

[Signature]

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

239071

DISPOSAL RECEIPT

CUSTOMER COPY

86400

GROSS

ACCT #

10385

JOB #

TB

11862

DATE:

10-8

20

CONT #

TRLU 900194

CITY

TARE

NET

37920

24.24T

34

Sub A

3961

[Signature]

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JMR 12

238970

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

10/6

20

CONT #

AWSU 200019

CITY

2p.58

3961

34

[Signature]

CUSTOMER #

Phone

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JMR 12/45

238973

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

10/6/14

CONT #

AWSU 200077

CITY

99860
36780

3.54

3961

34

CUSTOMER #

MAN

Phone

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

45

238975

98340

GROSS

42200

TARE

NET

28.67

ACCT #

10385

JOB #

TB
11862

DATE:

10/7/2014

CONT #

AW54 200049

CITY

34

fuel

CUSTOMER #

Phine MANN

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DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

45

238977

92840

GROSS

41740

TARE

NET

25.55

ACCT #

10385

JOB #

TB
11862

DATE:

10/7/2014

CONT #

RB54 200432

CITY

34

fuel

CUSTOMER #

Phine MANN

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

45

238979

100040 GROSS

ACCT #

10385

JOB #

TB 11862

DATE:

10/7/14

43100 TARE

CONT #

AW SA

200007

NET

CITY

34

28.47

3961

CUSTOMER #

Rhine Maw

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

45

239001

91840 GROSS

ACCT #

10385

JOB #

TB 11862

DATE:

10/7/14

39800 TARE

CONT #

GCEU43204

NET

CITY

34

20.02

3961

CUSTOMER #

RHINE MAW

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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CUSTOMER COPY

RANCO COMPANY

2735 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 45 239002

98420
43240
23.59

GROSS
TARE
NET

ACCT # 10385 JOB # 11862
CONT # AWSL200043
CITY _____

DATE: 10/7 2014

3961 34

CUSTOMER # _____

RHINE WNW

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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CUSTOMER COPY

RANCO COMPANY

2735 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 45 239068

27260
42000
22.63 Tons

GROSS
TARE
NET

ACCT # 10385 JOB # 11862
CONT # GCE U 435241
CITY _____

DATE: 10/1 2014

3961 34

CUSTOMER # _____

Rhine WNW

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

27 1st AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 45 239047

90780	GROSS
41740	TARE
	NET
24.52	Tons

ACCT # 10385 JOB # TP 11862 DATE: 10/8 2014
CONT # GREU435451
CITY _____

3961

34

CUSTOMER #

RHINE www

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 45 239012

91900	GROSS
42840	TARE
	NET
24.53	Tons

ACCT # 10385 JOB # TP 11862 DATE: 10/8 20____
CONT # GREU431835
CITY _____

3961

34

CUSTOMER #

RHINE www

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DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 523-4080

TRUCK #

45

239010

85680

GROSS

ACCT #

10385

JOB #

TP 11862

DATE:

10/18

20

CONT #

EGTU420135

CITY

TARE

41180

NET

22.25

Tons.

24.53 Tons

3461

34

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 523-4080

TRUCK #

45

239008

3680

GROSS

ACCT #

10385

JOB #

TP 11862

DATE:

10/18

20

CONT #

AWSU200033

CITY

TARE

44300

NET

24.69 Tons.

3461

34

CUSTOMER #

RHINE

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

45

239004

DISPOSAL RECEIPT

CUSTOMER COPY

10/500
41300

GROSS

TARE

NET

30.10 TONS

ACCT #

10385

JOB #

TB
11862

DATE:

10-7

20

CONT #

TCLW469150

CITY

34

3961

CUSTOMER #

RHINE WAW

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

45

239006

DISPOSAL RECEIPT

CUSTOMER COPY

98640
41460

GROSS

TARE

NET

28.59

ACCT #

10385

JOB #

TB
11862

DATE:

10/8

20

CONT #

RBSU200260

CITY

34

3961

CUSTOMER #

RHINE WAW

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # IMR 12 238185

83820
36660
23.58

GROSS
TARE
NET

ACCT # 10385 RHINE JOB # TB 11862 DATE: 10/6 20__
CONT # AWIU8241
CITY _____

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # IMR 12 238179

99320
36700
31.31

GROSS
TARE
NET

ACCT # 10385 RHINE JOB # TB 11862 DATE: 10/3 20__
CONT # TAU457282
CITY _____

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JMR 12 238183

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CUSTOMER COPY

98760	GROSS
35500	TARE
3.60	NET

ACCT #

10385

JOB #

TB 11862

DATE:

20

CONT #

TOLU457858

CITY

3961

36

[Signature]

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JMR 12 238175

DISPOSAL RECEIPT

CUSTOMER COPY

82780	GROSS
36500	TARE
23.14	NET

ACCT #

10385

JOB #

TB 11862

DATE:

20

CONT #

TOLU 476122

CITY

3961

36

[Signature]

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JMR12

238173

ACCT #

10385

JOB #

TB 11862

DATE:

10/3/14

20

CONT #

UPCU 44439

CITY

3961

36

Dm H

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JMR12

238867

ACCT #

10385

JOB #

TB 11862

DATE:

10/3/14

20

CONT #

TOLU 458663

CITY

3961

36

Dm H

CUSTOMER #

RHINE

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JMR 12 238894

84440

GROSS

36400

TARE

NET

24.02

ACCT #

10385

JOB #

11862

DATE:

10/19

20

CONT #

UPCU 411506

CITY

3961

34

DMH

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JMR 12 238177

79320

GROSS

34960

TARE

NET

22.18

ACCT #

10385

JOB #

11862

DATE:

10/31

20

CONT #

RB81200257

CITY

3961

34

DMH

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 12 JMR 238162

GROSS

TARE

NET

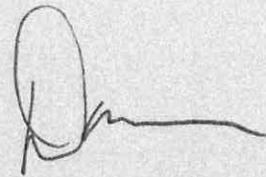
ACCT # 10385 JOB # TB 11862 DATE: 10/2 2014

CONT # RBSU 200299

CITY

3961

34



CUSTOMER # Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMR 1 236732

GROSS

TARE

NET


ACCT # 10385 JOB # TB 11862 DATE: 9/29 2014

CONT # TRU 901671

CITY

3961

34



CUSTOMER # Rhine

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RABANCO COMPANY

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SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMA1

236698

DISPOSAL RECEIPT

100880	GROSS
35600	TARE
32600	NET

ACCT # 10385 JOB # TB 11862 DATE: 9/27 20__
CONT # GCEU 432846
CITY _____

3961

34
[Signature]

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMA 10

236736

DISPOSAL RECEIPT

95460	GROSS
35640	TARE
2991	NET

ACCT # 10385 JOB # TB 11862 DATE: 9/27 20__
CONT # AWFU 8448
CITY _____

3961

34
[Signature]

CUSTOMER # Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

IMR 1

236723

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/26

20

14

CONT #

TOLU 459722

CITY

34

3961

[Signature]

98040

38860

29.59

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1 Im

236709

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/26

20

CONT #

TOLU 458613

CITY

34

3961

IM-1

92920

37280

27.82

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

Sm-1

236715

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/26/17

20

CONT #

ABSU 200087

CITY

27.02

3961

34

JM-1

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JM1

236720

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/26/20

20

CONT #

TOLU 467941

CITY

88/40

38540

24.0

34 3961

JM-1

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JM 1

236693

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/26 2014

CONT #

ESTU 420444

CITY

34

3961

88700

37600

25.52

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JM 1

238067

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/29 2014

CONT #

GCE 430744

CITY

34

3961

91240

33740

28.75

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMR 12

236702

94200	GROSS
36040	TARE
	NET
29.04	

ACCT # 10385 ^{TB} JOB # 11862 DATE: 9/30/14
CONT # AW54 200024
CITY _____

DISPOSAL RECEIPT

CUSTOMER # Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 12 JMR

238101

88800	GROSS
33820	TARE
	NET
27.44	

ACCT # 10385 ^{TB} JOB # 11862 DATE: 9/29/14
CONT # TRU901821
CITY _____

DISPOSAL RECEIPT

CUSTOMER # Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMR 12

236704

DISPOSAL RECEIPT

87240
35180
2603

GROSS
TARE
NET

ACCT # 10385 JOB # TB 11862 DATE: 9/30 2014
CONT # RBSU 200233
CITY _____

394

34

[Signature]

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMR 12 238073

DISPOSAL RECEIPT

94660
33640
3051

GROSS
TARE
NET

ACCT # 10385 JOB # TB 11862 DATE: 9/30 20____
CONT # TOLU 460481
CITY _____

394

34

[Signature]

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMR 12 238181

GROSS

TARE

NET

ACCT # 10585 JOB # TB 11862 DATE: 10/13 20

CONT # AWSU200050

CITY

36

3961

[Signature]

CUSTOMER # RHINE

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CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMR 12 238187

GROSS

TARE

NET

ACCT # 10385 JOB # TB 11862 DATE: 10/16 20

CONT # GCEU431724

CITY

3961

38

[Signature]

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

236584

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

JOB #

DATE:

20

CONT #

CITY

93960

33680

30.14

10385

TB 11862

9/19/14

CONT # GCEU 425804

9/25/14

34

3961

CUSTOMER #

RHINE SM-1

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

236523

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

JOB #

DATE:

20

CONT #

CITY

106160

39440

33.20

10385

TB 11862

9/25/14

CONT # AW SU 20042

34

3961

CUSTOMER #

RHINE SM-1

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JM 1

238834

ACCT #

10385

JOB #

TB
11862

DATE:

9/25 2014

CONT #

AWSU 200002

CITY

34

3961

GROSS

97420

TARE

38940

NET

29.24

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JM 1

238838

ACCT #

10385

JOB #

TB
11862

DATE:

9/25 2014

CONT #

RBSU 200393

CITY

34

3961

GROSS

94420

TARE

38180

NET

28.12

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

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SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JM1

238843

Rhine

GROSS

TARE

NET

ACCT #

10385

JOB #

TR862

DATE:

9/25

20

CONT #

TDU460018

CITY

34

3901

JM1

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

12JMR

236430

GROSS

TARE

NET

ACCT #

10385

JOB #

TR862

DATE:

9/18/14

20

CONT #

UPCU411420

CITY

34

3901

[Signature]

CUSTOMER #

RHINE

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

12 JMR

236576

GROSS

TARE

NET

ACCT #

10385

JOB #

TB
11862

DATE:

9/19/2014

CONT #

RB54 20000203

CITY

100380
348600

31.10

CUSTOMER #

Rhine

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1 JM

238832

GROSS

TARE

NET

ACCT #

10385

JOB #

TB
11862

DATE:

9/25/20

CONT #

RB54 240283

CITY

89680
37720

25.98

CUSTOMER #

Rhine

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CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # Sm1

236681

99700	GROSS
37140	TARE
	NET
31.28	

ACCT # 10385 JOB # 11862
CONT # 6EU432020
CITY 34

DATE: 9/25 2014
9/26/14

DISPOSAL RECEIPT

CUSTOMER # Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JM-1

236688

105080	GROSS
37001	TARE
	NET
34.01	

ACCT # 10385 JOB # 11862
CONT # RBSU 200305
CITY 34

DATE: 9/26/14 2014

DISPOSAL RECEIPT

CUSTOMER # Rhine JM-1

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 12 JMR

236433

DISPOSAL RECEIPT

99160
35500
31.83

GROSS
TARE
NET

ACCT # 10385 JOB # TB 11862 DATE: 9/19/14 20
CONT # BCFU 431988
CITY _____

3961

34
[Signature]

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 12 JMR

236511

DISPOSAL RECEIPT

101720
35800
32.96

GROSS
TARE
NET

ACCT # 10385 JOB # TB 11862 DATE: 9/18/14 20
CONT # EGTU 420553
CITY _____

34
[Signature] 3961

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMR 17 238115

GROSS

TARE

NET

ACCT #

JOB #

DATE:

20

CONT #

CITY

76820
37680
29.57

10385 ^{TB} 11862
AWTH 9500

10/1/14

34

3961

CUSTOMER #

RHINE

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # JMR 12 238109

GROSS

TARE

NET

ACCT #

JOB #

DATE:

20

CONT #

CITY

98580
34860

10385 ^{TB} 11862
SCXU 297728

9/30/14

10/1/14

31.86

34

3961

CUSTOMER #

Rhine

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

JME 12 238076

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/30

20

CONT #

RBS4 200265

CITY

3961

34

[Signature]

96640

35040

30.00

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

Jm 12 17 238112

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

10/1/14

20

CONT #

GCEU 425068

CITY

3961

34

[Signature]

92280

38000

27.13

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238123

97980	GROSS
37160	TARE
	NET

ACCT # 10385 JOB # TB 11862 DATE: 10/2/14
CONT # TOLU 456714
CITY _____

30.41T

Job # 3961

34
H H H

RHINE

CUSTOMER # _____

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238125

97080	GROSS
40380	TARE
	NET

ACCT # 10385 JOB # TB 11862 DATE: 10/2/14
CONT # AWSL 200052
CITY _____

28.35T

Job # 3961

34
H H H

RHINE

CUSTOMER # _____

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

238869

ACCT #

10385

JOB #

11862

DATE:

10/2

20

CONT #

NVR4300179

CITY

GROSS

TARE

NET

83900

38620

22.64T

Job #
3961

34

Walt

RHINE

CUSTOMER #

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

238144

ACCT #

10385

JOB #

11862

DATE:

10/2

20

CONT #

EGT4 420601

CITY

GROSS

TARE

NET

92560

39120

26.72T

Job #
3961

34

Walt

RHINE

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238146

86280
38960

GROSS

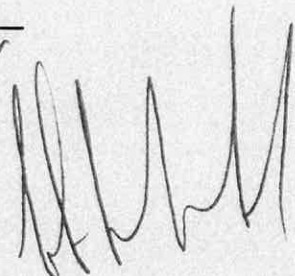
TARE

NET

ACCT # 10385 JOB # TB 11862 DATE: 10/2/14 20
CONT # RB50 200441
CITY _____

23.66T

Job #
3961

34


CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238149

86800
39280

GROSS

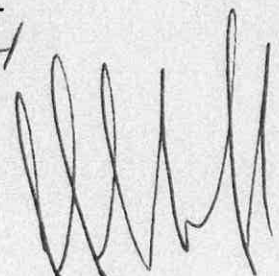
TARE

NET

ACCT # 10385 JOB # TB 11862 DATE: 10/2/14 20
CONT # RB54 200220
CITY _____

23.76T

Job #
3961

34


CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238893

ACCT # 10385 JOB # TB 11862 DATE: 10/3 2014
CONT # AW 10 20005
CITY _____

87800	GROSS
41140	TARE
	NET

23.33T

CUSTOMER # RHINE

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SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238150

ACCT # 10385 JOB # TB 11862 DATE: 10/3/14 2014
CONT # EGTU 420050
CITY _____

92680	GROSS
39140	TARE
	NET

26.77T

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

238868

92340

GROSS

TARE

NET

39180

ACCT #

10385

JOB #

TB 11862

DATE:

10/3/14

20

CONT #

AWFO 8037

CITY

34

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~~26.59T~~

26.59T

Job # 3961

RHINE

CUSTOMER #

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2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

238174

91380

GROSS

TARE

NET

39000

ACCT #

10385

JOB #

TB 11862

DATE:

10/3/14

20

CONT #

GCEU 440070

CITY

34

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26.19T

Job # 3961

RHINE

CUSTOMER #

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RABANCO COMPANY

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SEATTLE, WA 98134
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TRUCK # 1532 238176

87560	GROSS
30620	TARE
	NET

ACCT # 10385 JOB # 11862 DATE: 10/3 20__
CONT # RBSU200412
CITY _____

24.47T

Job #
3961

34

CUSTOMER # RHINE

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238178

89380	GROSS
30600	TARE
	NET

ACCT # 10385 JOB # 11862 DATE: 10/3 20__
CONT # LCQU435211
CITY _____

25.37T

Job #
3961

34

CUSTOMER # RHINE

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

238864

ACCT #

10385

JOB #

TB
11862

DATE:

10/1

20

14

CONT #

GCEU 432240

CITY

GROSS

TARE

NET

98420

38000

30.21T

Job #
3961

34

WHL

CUSTOMER #

Rhine

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CUSTOMER COPY

RABANCO COMPANY

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SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

238122

ACCT #

10385

JOB #

TB
11862

DATE:

10/1

20

CONT #

FGTY 422298

CITY

GROSS

TARE

NET

92880

39840

26.52T

Job #
3961

34

WHL

CUSTOMER #

RHINE

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RABANCO COMPANY

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SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238119

GROSS

TARE

NET

ACCT # 10385 JOB # 11862

DATE: 12/1 2014

CONT # TPH 6252009

CITY _____

26.57T

Job #

3961

RHINE

CUSTOMER # _____

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238111

GROSS

TARE

NET

ACCT # 10385 JOB # 11862

DATE: 10/1/14 2014

CONT # UPCU 111575

CITY _____

30.33T

Job #

3961

RHINE

CUSTOMER # _____

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

238114

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

10/1/2014

CONT #

A WTH 8174

CITY

34

Job #

3961

RHINE

CUSTOMER #

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2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

238077

GROSS

TARE

NET

ACCT #

14385

JOB #

TB 11862

DATE:

10/1/14

CONT #

EBTU 420383

CITY

34

Job #

3961

RHINE

CUSTOMER #

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532

238106

DISPOSAL RECEIPT

100800
38780

GROSS

TARE

NET

ACCT #

CONT #

CITY

JOB #

DATE:

20

10385 TB 11862
ECCU 440180

9/30/14
10/1/14

31.01T

506 #
3961

34

CUSTOMER #

Rhine

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CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532

238074

DISPOSAL RECEIPT

182660
38760

GROSS

TARE

NET

ACCT #

CONT #

CITY

JOB #

DATE:

20

10385 TB 11862
ECCU 432163

9/30/14

31.95T

506 #
3961

34

CUSTOMER #

RHINE

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CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

236706

94460

41440

GROSS

TARE

NET

ACCT #

10385

JOB #

TB

11862

DATE:

9/30

20

CONT #

AWSU 200033

CITY

26.51T

Job #
3961

34

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CUSTOMER #

Rhine

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DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

236705

97400

38500

GROSS

TARE

NET

ACCT #

10385

JOB #

TB

11862

DATE:

9/30

20

14

CONT #

GCEU 435018

CITY

29,45T

Job #
3961

34

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CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532

236703

91800

GROSS

ACCT #

10385

JOB #

TB 11862

DATE:

9/30/14

20

CONT #

AWSU 200043

CITY

TARE

NET

41460

24.92T

Job #3961

Rhine

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532

236701

88120

GROSS

ACCT #

10385

JOB #

TB 11862

DATE:

9/29/14

20

CONT #

GREU430945

CITY

TARE

NET

38000

25.03T

Job #3961

Rhine

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 238068

97700
40520
28.59

GROSS
TARE
NET

ACCT # 1385 JOB # 11862 DATE: 9/29 2014
CONT # AWI 48144
CITY 34

Job #
3961

28.59T

CUSTOMER # Phone

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DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 236721

90320
42120
24.10

GROSS
TARE
NET

ACCT # 1385 JOB # 11862 DATE: 9/26 2014
CONT # TOW 467800
CITY 34

Job #
3961

24.10T

CUSTOMER # Phone

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

236727

95600	GROSS
40980	TARE
	NET
27.34	

ACCT #

10385

JOB #

TB 11862

DATE:

9/29/14

20

CONT #

AWSU 200014

CITY

Job #
3961

34

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27.34

Rhine

CUSTOMER #

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DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

236696

180420	GROSS
40040	TARE
30.19	NET

ACCT #

10385

JOB #

TB 11802

DATE:

9/29/14

20

CONT #

TOLU 459552

CITY

Job #
3961

34

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30.19

Rhine

CUSTOMER #

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DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1531

236697

DISPOSAL RECEIPT

96440
39720
28.34

GROSS
TARE
NET

ACCT # 10385 JOB # TB 11862 DATE: 9/29 2014
CONT # ANUSA 200041
CITY _____

Job #
3961

34
[Signature]

28.36T

CUSTOMER # Rhine

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532

236700

DISPOSAL RECEIPT

86520
41760
21.88

GROSS
TARE
NET

ACCT # 10385 JOB # TB 11862 DATE: 9/29/14 2014
CONT # GCEU 431305
CITY _____

Job #
3961

34
[Signature]

21.88T

CUSTOMER # Rhine

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1536

236687

DISPOSAL RECEIPT

106180

GROSS

42460

TARE

31.86

NET

ACCT #

10385

JOB #

11862

DATE:

9/26

20

CONT #

6CE0

425648

CITY

3961

J. J. A

34

~~25113~~

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1536

236689

DISPOSAL RECEIPT

102500

GROSS

42020

TARE

30.24

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/26/14

20

CONT #

RB 54

200293

CITY

3961

J. J. A

34

~~25113~~

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1536

236694

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/26/2014

CONT #

UPCU 411578

CITY

3961

34

[Signature]

[Signature]

Rhine

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1536

236716

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/26/2014

CONT #

TOLU 457401

CITY

3961

34

[Signature]

[Signature]

Rhine

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1536

236710

DISPOSAL RECEIPT

8900

GROSS

41320

TARE

NET

23.89

ACCT #

10385

JOB #

TB 11862

DATE:

9/26

20

14

CONT #

TU 453771

CITY

3961

J.S. 34

Bake

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1536

236718

DISPOSAL RECEIPT

93640

GROSS

42500

TARE

NET

25.57

ACCT #

10385

JOB #

TB 11862

DATE:

9/20

20

14

CONT #

TU 458060

CITY

3961

J.S. 34

Bake

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1534

236524

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/25/14

20

CONT #

TOLU 422004

CITY

Jeb 3961

34

JB

RHINE

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1534

236525

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/25/14

20

CONT #

TOLU 469150

CITY

Jeb 3961

34

JB

3961

RHINE

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1534

236526

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB
11802

DATE:

9/25 20 14

CONT #

TOLU 468 LAZ

CITY

3961

34

[Signature]

RHINE

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1534

238839

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB
11802

DATE:

9/25 20

CONT #

TOLU 467693

CITY

3961

34

[Signature]

Rhine

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1534

236527

DISPOSAL RECEIPT

93660	GROSS
3758	TARE
	NET

28.01

ACCT #

10385

JOB #

TB 11862

DATE:

9/25/14

20

CONT #

EGTU42050

CITY

3961

34

[Signature]

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1534

236529

DISPOSAL RECEIPT

94260	GROSS
37660	TARE
	NET

28.3

ACCT #

10385

JOB #

TB 11862

DATE:

9/25

20

CONT #

GCEU 420284

CITY

3961

34

[Signature]

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 12 MIC 242837

76820
35140
20.84

GROSS
TARE
NET

ACCT # 10385 JOB # 11862
CONT # GCEU420306
CITY 34

DATE: 8/25/14 20

3961

~~3040~~

[Signature]

CUSTOMER # RHINE

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DISPOSAL RECEIPT

CUSTOMER COPY

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TRUCK # 12 TMR 235666

88120
35640
26.24

GROSS
TARE
NET

ACCT # 10385 JOB # 11862
CONT # TO LU 96865
CITY 34

DATE: 8/25 20

3961

~~3040~~

[Signature]

CUSTOMER # Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

CUSTOMER COPY

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

12 JMR

235679

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

8/25

20

CONT #

TOLLY 459910

CITY

DISPOSAL RECEIPT

CUSTOMER COPY

86980
35580
25.70

3961

~~3640~~

34
[Signature]

CUSTOMER #

Rhine

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RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

12 JMR

235675

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

8/25

20

CONT #

TOLLY 456746

CITY

DISPOSAL RECEIPT

87120
34020
26.55

3961

~~3640~~

34
[Signature]

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1535

236405

ACCT #

10385

JOB #

TB-11862
11875

DATE:

9/18/14

20

CONT #

TOLV466648

CITY

34

GROSS

TARE

NET

99860

36200

31.83

Job #

3961

RHINE

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

12Jmr.

236428

ACCT #

10385

JOB #

TB
11862

DATE:

9/18/14

20

CONT #

RBSU 200407

CITY

34

GROSS

TARE

NET

98240

34640

31.80

3961

RHINE

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

12 JMR

236497

ACCT #

10385

JOB #

TB 11862

DATE:

9/18/14

20

CONT #

RBSU200248

CITY

3961

57 34
D.L.

GROSS

TARE

NET

10200

3468

33.66

Rhine

CUSTOMER #

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

12 JMR

236470

ACCT #

10385

JOB #

TB 11862
4875

DATE:

9/17/14

20

CONT #

TALU422644

CITY

3961

57
D.L.

GROSS

TARE

NET

9320
34840

24.18

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1538/12 35926

TB-11862

86880
37420
GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/15/14

CONT #

TRU 900446

CITY

DISPOSAL RECEIPT

24.73

3961

3357

[Signature]

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1535

236435

7024 059401

91400

GROSS

ACCT #

10385

JOB #

TB
11862

DATE:

9/19/14

20

34640

TARE

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CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1535

236434

100560

GROSS

ACCT #

10385

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CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1535

236432

DISPOSAL RECEIPT

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ACCT # 10385

JOB # 11862

DATE: 9/19

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CITY _____

Job #
3961

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CUSTOMER # _____

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1535

236573

DISPOSAL RECEIPT

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TARE

NET

ACCT # 10385

JOB # 11862

DATE: 9/18

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CITY _____

Job #
3961

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CUSTOMER # _____

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1535

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DISPOSAL RECEIPT

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ACCT #

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JOB #

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CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1535

236431

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

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9/18/14

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CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1535

236429

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

9/18/14

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CONT #

GEU 43550

CITY

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Job #

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CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1535

236498

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

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AWIU 20004

CITY

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Job #

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CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1520 242734

95240
42440
26.4

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TARE
NET

ACCT # 10385 JOB # TB 11862 DATE: 8/25/14
CONT # GCEU 426091
CITY 34

DISPOSAL RECEIPT

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1520 242836

91320
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GROSS
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ACCT # 10385 JOB # TB 11862 DATE: 8/25 20 14
CONT # GCEU 431157
CITY 34

DISPOSAL RECEIPT

CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1520

235684

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

JOB #

DATE:

20

CONT #

CITY

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CUSTOMER #

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rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1520

235688

DISPOSAL RECEIPT

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ACCT #

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DATE:

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CONT #

CITY

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CUSTOMER #

Rhine Ann

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1520

235695

DISPOSAL RECEIPT

98240

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ACCT #

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JOB #

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DATE:

8/25

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CITY

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CUSTOMER #

Rhine dco petr

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

236086

DISPOSAL RECEIPT

84901

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ACCT #

10385

JOB #

TB 11862

DATE:

8/26

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CITY

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3961

CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532

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93220	GROSS
36620	TARE
28.3	NET

ACCT # 10385 ^{TB} JOB # 11862
CONT # TOLU466762
CITY _____

DATE: 8/25 2014

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CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532

236093

95640	GROSS
35940	TARE
29.85	NET

ACCT # 10385 ^{TB} JOB # 11862
CONT # RPSU200313
CITY _____

DATE: 8/26 2014

34 3901
[Signature]

CUSTOMER # Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

DISPOSAL RECEIPT

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 242514

DISPOSAL RECEIPT

87440
36960
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ACCT # 10385 JOB # TB 11862 DATE: 8/25/14 20
CONT # TOLU 459646
CITY _____

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CUSTOMER # RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK # 1532 235696

DISPOSAL RECEIPT

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TARE
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ACCT # 10385 JOB # TB 11882 DATE: 8/25 20
CONT # GCEU 435079
CITY _____

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[Signature]

CUSTOMER # Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

235682

DISPOSAL RECEIPT

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ACCT #

JOB #

DATE: 8/25 20

CONT #

CITY

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CUSTOMER #

Rhine

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

242835

DISPOSAL RECEIPT

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NET

ACCT #

JOB #

DATE: 8/25 2014

CONT #

CITY

TB 11862

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CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1532

235668

DISPOSAL RECEIPT

GROSS

TARE

NET

ACCT #

10385

JOB #

TB 11862

DATE:

8/25

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CONT #

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CITY

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[Signature]

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

RABANCO COMPANY

2733 3rd AVENUE SOUTH
SEATTLE, WA 98134
(206) 623-4080

TRUCK #

1534

242513

DISPOSAL RECEIPT

GROSS

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ACCT #

10385

JOB #

TB 11862

DATE:

8/25/14

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CONT #

GCEU

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CITY

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3961

[Signature]

CUSTOMER #

RHINE

NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

APPENDIX E

ANALYTICAL TESTING-SOILS



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

August 13, 2014

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6672
Laboratory Reference No. 1408-054

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on August 7, 2014.

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,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister
Project Manager

Enclosures

Date of Report: August 13, 2014
Samples Submitted: August 7, 2014
Laboratory Reference: 1408-054
Project: 6672

Case Narrative

Samples were collected on August 7, 2014 and received by the laboratory on August 7, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

NWTPH Gx/BTEX Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

The chromatogram for sample 8-7-1 is similar to mineral spirits with diesel.

The chromatograms for samples 8-7-2, 8-7-3, 8-7-4 and 8-7-5 are similar to mineral spirits.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Volatiles EPA 8260C Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Method 5035A VOA vials were not provided for the Method 8260 analysis of samples 8-7-1 and 8-7-4. Therefore, the extracts from the NWTPH-Gx/BTEX analysis were analyzed under Method 8260, including the associated Method Blank. Because different spiking agents are used for each analysis, SB/SBD data is not included.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: August 13, 2014
 Samples Submitted: August 7, 2014
 Laboratory Reference: 1408-054
 Project: 6672

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-7-1					
Laboratory ID:	08-054-01					
Benzene	0.067	0.026	EPA 8021B	8-7-14	8-7-14	
Toluene	ND	0.13	EPA 8021B	8-7-14	8-7-14	
Ethyl Benzene	0.42	0.13	EPA 8021B	8-7-14	8-7-14	
m,p-Xylene	0.86	0.13	EPA 8021B	8-7-14	8-7-14	
o-Xylene	ND	0.65	EPA 8021B	8-7-14	8-7-14	U1
Gasoline	1200	130	NWTPH-Gx	8-7-14	8-8-14	Z
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	71-121				
Client ID:	8-7-2					
Laboratory ID:	08-054-02					
Benzene	ND	0.020	EPA 8021B	8-7-14	8-7-14	
Toluene	ND	0.058	EPA 8021B	8-7-14	8-7-14	
Ethyl Benzene	ND	0.058	EPA 8021B	8-7-14	8-7-14	
m,p-Xylene	ND	0.058	EPA 8021B	8-7-14	8-7-14	
o-Xylene	ND	0.058	EPA 8021B	8-7-14	8-7-14	
Gasoline	10	5.8	NWTPH-Gx	8-7-14	8-8-14	Z1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	71-121				
Client ID:	8-7-3					
Laboratory ID:	08-054-03					
Benzene	ND	0.020	EPA 8021B	8-7-14	8-7-14	
Toluene	ND	0.060	EPA 8021B	8-7-14	8-7-14	
Ethyl Benzene	ND	0.060	EPA 8021B	8-7-14	8-7-14	
m,p-Xylene	ND	0.060	EPA 8021B	8-7-14	8-7-14	
o-Xylene	ND	0.060	EPA 8021B	8-7-14	8-7-14	
Gasoline	16	6.0	NWTPH-Gx	8-7-14	8-7-14	Z1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	104	71-121				

Date of Report: August 13, 2014
 Samples Submitted: August 7, 2014
 Laboratory Reference: 1408-054
 Project: 6672

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-7-4					
Laboratory ID:	08-054-04					
Benzene	ND	0.020	EPA 8021B	8-7-14	8-7-14	
Toluene	ND	0.060	EPA 8021B	8-7-14	8-7-14	
Ethyl Benzene	1.8	0.060	EPA 8021B	8-7-14	8-7-14	
m,p-Xylene	2.8	0.060	EPA 8021B	8-7-14	8-7-14	
o-Xylene	ND	1.2	EPA 8021B	8-7-14	8-7-14	U1
Gasoline	3800	300	NWTPH-Gx	8-7-14	8-8-14	Z1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	100	71-121				
Client ID:	8-7-5					
Laboratory ID:	08-054-05					
Benzene	ND	0.020	EPA 8021B	8-7-14	8-7-14	
Toluene	ND	0.064	EPA 8021B	8-7-14	8-7-14	
Ethyl Benzene	0.19	0.064	EPA 8021B	8-7-14	8-7-14	
m,p-Xylene	0.63	0.064	EPA 8021B	8-7-14	8-7-14	
o-Xylene	ND	0.32	EPA 8021B	8-7-14	8-7-14	U1
Gasoline	770	64	NWTPH-Gx	8-7-14	8-8-14	Z1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	106	71-121				

Date of Report: August 13, 2014
 Samples Submitted: August 7, 2014
 Laboratory Reference: 1408-054
 Project: 6672

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0807S2					
Benzene	ND	0.020	EPA 8021B	8-7-14	8-7-14	
Toluene	ND	0.050	EPA 8021B	8-7-14	8-7-14	
Ethyl Benzene	ND	0.050	EPA 8021B	8-7-14	8-7-14	
m,p-Xylene	ND	0.050	EPA 8021B	8-7-14	8-7-14	
o-Xylene	ND	0.050	EPA 8021B	8-7-14	8-7-14	
Gasoline	ND	5.0	NWTPH-Gx	8-7-14	8-7-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	104	71-121				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-043-06							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
Surrogate:								
Fluorobenzene				108	114	71-121		

SPIKE BLANKS

Laboratory ID:	SB0807S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.996	1.01	1.00	1.00	100	101	73-121	1	10
Toluene	1.06	1.10	1.00	1.00	106	110	75-124	4	10
Ethyl Benzene	1.07	1.11	1.00	1.00	107	111	75-125	4	9
m,p-Xylene	1.08	1.11	1.00	1.00	108	111	75-126	3	9
o-Xylene	1.08	1.09	1.00	1.00	108	109	74-123	1	8
Surrogate:									
Fluorobenzene					105	109	71-121		

Date of Report: August 13, 2014
 Samples Submitted: August 7, 2014
 Laboratory Reference: 1408-054
 Project: 6672

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-7-1					
Laboratory ID:	08-054-01					
Diesel Range Organics	4600	150	NWTPH-Dx	8-7-14	8-8-14	M,N
Lube Oil	11000	290	NWTPH-Dx	8-7-14	8-8-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	94	50-150				
Client ID:	8-7-2					
Laboratory ID:	08-054-02					
Diesel Range Organics	ND	28	NWTPH-Dx	8-7-14	8-7-14	
Lube Oil Range Organics	ND	56	NWTPH-Dx	8-7-14	8-7-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	84	50-150				
Client ID:	8-7-3					
Laboratory ID:	08-054-03					
Diesel Range Organics	ND	28	NWTPH-Dx	8-7-14	8-7-14	
Lube Oil Range Organics	ND	57	NWTPH-Dx	8-7-14	8-7-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				
Client ID:	8-7-4					
Laboratory ID:	08-054-04					
Diesel Range Organics	ND	840	NWTPH-Dx	8-7-14	8-7-14	U1
Lube Oil	600	57	NWTPH-Dx	8-7-14	8-7-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	83	50-150				
Client ID:	8-7-5					
Laboratory ID:	08-054-05					
Diesel Range Organics	ND	100	NWTPH-Dx	8-7-14	8-7-14	U1
Lube Oil	290	59	NWTPH-Dx	8-7-14	8-7-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	87	50-150				

Date of Report: August 13, 2014
 Samples Submitted: August 7, 2014
 Laboratory Reference: 1408-054
 Project: 6672

**NWTPH-Dx
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0807S2					
Diesel Range Organics	ND	25	NWTPH-Dx	8-7-14	8-7-14	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-7-14	8-7-14	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	103	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-054-05							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	U1
Lube Oil	248	240	NA	NA	NA	3	NA	
Surrogate:								
o-Terphenyl				87	89	50-150		

Date of Report: August 13, 2014
 Samples Submitted: August 7, 2014
 Laboratory Reference: 1408-054
 Project: 6672

VOLATILES EPA 8260C

Page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-7-1					
Laboratory ID:	08-054-01					
Dichlorodifluoromethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Chloromethane	ND	0.32	EPA 8260C	8-7-14	8-11-14	
Vinyl Chloride	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Bromomethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Chloroethane	ND	0.32	EPA 8260C	8-7-14	8-11-14	
Trichlorofluoromethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,1-Dichloroethene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Acetone	ND	0.65	EPA 8260C	8-7-14	8-11-14	
Iodomethane	ND	0.32	EPA 8260C	8-7-14	8-11-14	
Carbon Disulfide	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Methylene Chloride	ND	0.32	EPA 8260C	8-7-14	8-11-14	
(trans) 1,2-Dichloroethene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Methyl t-Butyl Ether	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,1-Dichloroethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Vinyl Acetate	ND	0.32	EPA 8260C	8-7-14	8-11-14	
2,2-Dichloropropane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
(cis) 1,2-Dichloroethene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
2-Butanone	ND	0.32	EPA 8260C	8-7-14	8-11-14	
Bromochloromethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Chloroform	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,1,1-Trichloroethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Carbon Tetrachloride	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,1-Dichloropropene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Benzene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,2-Dichloroethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Trichloroethene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,2-Dichloropropane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Dibromomethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Bromodichloromethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
2-Chloroethyl Vinyl Ether	ND	0.55	EPA 8260C	8-7-14	8-11-14	
(cis) 1,3-Dichloropropene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Methyl Isobutyl Ketone	ND	0.32	EPA 8260C	8-7-14	8-11-14	
Toluene	ND	0.32	EPA 8260C	8-7-14	8-11-14	
(trans) 1,3-Dichloropropene	ND	0.065	EPA 8260C	8-7-14	8-11-14	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-7-1					
Laboratory ID:	08-054-01					
1,1,2-Trichloroethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Tetrachloroethene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,3-Dichloropropane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
2-Hexanone	ND	0.32	EPA 8260C	8-7-14	8-11-14	
Dibromochloromethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,2-Dibromoethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Chlorobenzene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,1,1,2-Tetrachloroethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Ethylbenzene	0.45	0.065	EPA 8260C	8-7-14	8-11-14	
m,p-Xylene	0.95	0.13	EPA 8260C	8-7-14	8-11-14	
o-Xylene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Styrene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Bromoform	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Isopropylbenzene	0.36	0.065	EPA 8260C	8-7-14	8-11-14	
Bromobenzene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,1,2,2-Tetrachloroethane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,2,3-Trichloropropane	ND	0.065	EPA 8260C	8-7-14	8-11-14	
n-Propylbenzene	1.1	0.065	EPA 8260C	8-7-14	8-11-14	
2-Chlorotoluene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
4-Chlorotoluene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,3,5-Trimethylbenzene	0.24	0.065	EPA 8260C	8-7-14	8-11-14	
tert-Butylbenzene	0.093	0.065	EPA 8260C	8-7-14	8-11-14	
1,2,4-Trimethylbenzene	6.5	0.065	EPA 8260C	8-7-14	8-11-14	
sec-Butylbenzene	0.87	0.065	EPA 8260C	8-7-14	8-11-14	
1,3-Dichlorobenzene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
p-Isopropyltoluene	2.3	0.065	EPA 8260C	8-7-14	8-11-14	
1,4-Dichlorobenzene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
1,2-Dichlorobenzene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
n-Butylbenzene	2.1	0.065	EPA 8260C	8-7-14	8-11-14	
1,2-Dibromo-3-chloropropane	ND	0.32	EPA 8260C	8-7-14	8-11-14	
1,2,4-Trichlorobenzene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
Hexachlorobutadiene	ND	0.32	EPA 8260C	8-7-14	8-11-14	
Naphthalene	7.9	0.065	EPA 8260C	8-7-14	8-11-14	
1,2,3-Trichlorobenzene	ND	0.065	EPA 8260C	8-7-14	8-11-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>109</i>	<i>65-129</i>				
<i>Toluene-d8</i>	<i>109</i>	<i>77-122</i>				
<i>4-Bromofluorobenzene</i>	<i>124</i>	<i>73-124</i>				

Date of Report: August 13, 2014
 Samples Submitted: August 7, 2014
 Laboratory Reference: 1408-054
 Project: 6672

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-7-4					
Laboratory ID:	08-054-04					
Dichlorodifluoromethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Chloromethane	ND	0.30	EPA 8260C	8-7-14	8-12-14	
Vinyl Chloride	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Bromomethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Chloroethane	ND	0.30	EPA 8260C	8-7-14	8-12-14	
Trichlorofluoromethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,1-Dichloroethene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Acetone	ND	0.60	EPA 8260C	8-7-14	8-12-14	
Iodomethane	ND	0.30	EPA 8260C	8-7-14	8-12-14	
Carbon Disulfide	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Methylene Chloride	ND	0.30	EPA 8260C	8-7-14	8-12-14	
(trans) 1,2-Dichloroethene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Methyl t-Butyl Ether	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,1-Dichloroethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Vinyl Acetate	ND	0.30	EPA 8260C	8-7-14	8-12-14	
2,2-Dichloropropane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
(cis) 1,2-Dichloroethene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
2-Butanone	ND	0.30	EPA 8260C	8-7-14	8-12-14	
Bromochloromethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Chloroform	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,1,1-Trichloroethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Carbon Tetrachloride	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,1-Dichloropropene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Benzene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,2-Dichloroethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Trichloroethene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,2-Dichloropropane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Dibromomethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Bromodichloromethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
2-Chloroethyl Vinyl Ether	ND	0.49	EPA 8260C	8-7-14	8-12-14	
(cis) 1,3-Dichloropropene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Methyl Isobutyl Ketone	ND	0.30	EPA 8260C	8-7-14	8-12-14	
Toluene	ND	0.30	EPA 8260C	8-7-14	8-12-14	
(trans) 1,3-Dichloropropene	ND	0.060	EPA 8260C	8-7-14	8-12-14	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-7-4					
Laboratory ID:	08-054-04					
1,1,2-Trichloroethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Tetrachloroethene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,3-Dichloropropane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
2-Hexanone	ND	0.30	EPA 8260C	8-7-14	8-12-14	
Dibromochloromethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,2-Dibromoethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Chlorobenzene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,1,1,2-Tetrachloroethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Ethylbenzene	0.40	0.060	EPA 8260C	8-7-14	8-12-14	
m,p-Xylene	1.0	0.12	EPA 8260C	8-7-14	8-12-14	
o-Xylene	0.17	0.060	EPA 8260C	8-7-14	8-12-14	
Styrene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Bromoform	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Isopropylbenzene	1.7	0.060	EPA 8260C	8-7-14	8-12-14	
Bromobenzene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,1,2,2-Tetrachloroethane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,2,3-Trichloropropane	ND	0.060	EPA 8260C	8-7-14	8-12-14	
n-Propylbenzene	5.2	0.060	EPA 8260C	8-7-14	8-12-14	
2-Chlorotoluene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
4-Chlorotoluene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,3,5-Trimethylbenzene	2.6	0.060	EPA 8260C	8-7-14	8-12-14	
tert-Butylbenzene	0.52	0.060	EPA 8260C	8-7-14	8-12-14	
1,2,4-Trimethylbenzene	90	1.2	EPA 8260C	8-7-14	8-12-14	
sec-Butylbenzene	6.2	0.060	EPA 8260C	8-7-14	8-12-14	
1,3-Dichlorobenzene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
p-Isopropyltoluene	9.6	0.060	EPA 8260C	8-7-14	8-12-14	
1,4-Dichlorobenzene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
1,2-Dichlorobenzene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
n-Butylbenzene	9.3	0.060	EPA 8260C	8-7-14	8-12-14	
1,2-Dibromo-3-chloropropane	ND	0.30	EPA 8260C	8-7-14	8-12-14	
1,2,4-Trichlorobenzene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
Hexachlorobutadiene	ND	0.30	EPA 8260C	8-7-14	8-12-14	
Naphthalene	2.1	0.060	EPA 8260C	8-7-14	8-12-14	
1,2,3-Trichlorobenzene	ND	0.060	EPA 8260C	8-7-14	8-12-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>109</i>	<i>65-129</i>				
<i>Toluene-d8</i>	<i>112</i>	<i>77-122</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>73-124</i>				

Date of Report: August 13, 2014
 Samples Submitted: August 7, 2014
 Laboratory Reference: 1408-054
 Project: 6672

VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0807S2						
Dichlorodifluoromethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Chloromethane	ND	0.25	EPA 8260C	8-7-14	8-11-14	
Vinyl Chloride	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Bromomethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Chloroethane	ND	0.25	EPA 8260C	8-7-14	8-11-14	
Trichlorofluoromethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,1-Dichloroethene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Acetone	ND	0.50	EPA 8260C	8-7-14	8-11-14	
Iodomethane	ND	0.25	EPA 8260C	8-7-14	8-11-14	
Carbon Disulfide	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Methylene Chloride	ND	0.25	EPA 8260C	8-7-14	8-11-14	
(trans) 1,2-Dichloroethene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Methyl t-Butyl Ether	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,1-Dichloroethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Vinyl Acetate	ND	0.25	EPA 8260C	8-7-14	8-11-14	
2,2-Dichloropropane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
(cis) 1,2-Dichloroethene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
2-Butanone	ND	0.25	EPA 8260C	8-7-14	8-11-14	
Bromochloromethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Chloroform	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,1,1-Trichloroethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Carbon Tetrachloride	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,1-Dichloropropene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Benzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,2-Dichloroethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Trichloroethene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,2-Dichloropropane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Dibromomethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Bromodichloromethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
2-Chloroethyl Vinyl Ether	ND	0.43	EPA 8260C	8-7-14	8-11-14	
(cis) 1,3-Dichloropropene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Methyl Isobutyl Ketone	ND	0.25	EPA 8260C	8-7-14	8-11-14	
Toluene	ND	0.25	EPA 8260C	8-7-14	8-11-14	
(trans) 1,3-Dichloropropene	ND	0.050	EPA 8260C	8-7-14	8-11-14	

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VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0807S2						
1,1,2-Trichloroethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Tetrachloroethene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,3-Dichloropropane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
2-Hexanone	ND	0.25	EPA 8260C	8-7-14	8-11-14	
Dibromochloromethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,2-Dibromoethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Chlorobenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,1,1,2-Tetrachloroethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Ethylbenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
m,p-Xylene	ND	0.10	EPA 8260C	8-7-14	8-11-14	
o-Xylene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Styrene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Bromoform	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Isopropylbenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Bromobenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,1,2,2-Tetrachloroethane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,2,3-Trichloropropane	ND	0.050	EPA 8260C	8-7-14	8-11-14	
n-Propylbenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
2-Chlorotoluene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
4-Chlorotoluene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,3,5-Trimethylbenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
tert-Butylbenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,2,4-Trimethylbenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
sec-Butylbenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,3-Dichlorobenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
p-Isopropyltoluene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,4-Dichlorobenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,2-Dichlorobenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
n-Butylbenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,2-Dibromo-3-chloropropane	ND	0.25	EPA 8260C	8-7-14	8-11-14	
1,2,4-Trichlorobenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
Hexachlorobutadiene	ND	0.25	EPA 8260C	8-7-14	8-11-14	
Naphthalene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
1,2,3-Trichlorobenzene	ND	0.050	EPA 8260C	8-7-14	8-11-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>65-129</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>77-122</i>				
<i>4-Bromofluorobenzene</i>	<i>132</i>	<i>73-124</i>				

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Date of Report: August 13, 2014
 Samples Submitted: August 7, 2014
 Laboratory Reference: 1408-054
 Project: 6672

PCBs EPA 8082A

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-7-1					
Laboratory ID:	08-054-01					
Aroclor 1016	ND	0.058	EPA 8082A	8-11-14	8-11-14	
Aroclor 1221	ND	0.058	EPA 8082A	8-11-14	8-11-14	
Aroclor 1232	ND	0.058	EPA 8082A	8-11-14	8-11-14	
Aroclor 1242	0.36	0.058	EPA 8082A	8-11-14	8-11-14	
Aroclor 1248	ND	0.058	EPA 8082A	8-11-14	8-11-14	
Aroclor 1254	ND	0.058	EPA 8082A	8-11-14	8-11-14	
Aroclor 1260	ND	0.058	EPA 8082A	8-11-14	8-11-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	<i>89</i>	<i>51-138</i>				

Date of Report: August 13, 2014
 Samples Submitted: August 7, 2014
 Laboratory Reference: 1408-054
 Project: 6672

**PCBs EPA 8082A
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0811S1					
Aroclor 1016	ND	0.050	EPA 8082A	8-11-14	8-11-14	
Aroclor 1221	ND	0.050	EPA 8082A	8-11-14	8-11-14	
Aroclor 1232	ND	0.050	EPA 8082A	8-11-14	8-11-14	
Aroclor 1242	ND	0.050	EPA 8082A	8-11-14	8-11-14	
Aroclor 1248	ND	0.050	EPA 8082A	8-11-14	8-11-14	
Aroclor 1254	ND	0.050	EPA 8082A	8-11-14	8-11-14	
Aroclor 1260	ND	0.050	EPA 8082A	8-11-14	8-11-14	
Surrogate:	Percent Recovery	Control Limits				
DCB	115	51-138				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB0811S1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	0.488	0.452	0.500	0.500	N/A	98	90	66-120	8	14	
Surrogate:											
DCB						112	103	51-138			

Date of Report: August 13, 2014
 Samples Submitted: August 7, 2014
 Laboratory Reference: 1408-054
 Project: 6672

**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Lab ID:	08-054-01					
Client ID:	8-7-1					
<hr/>						
Arsenic	ND	12	6010C	8-12-14	8-12-14	
Barium	87	2.9	6010C	8-12-14	8-12-14	
Cadmium	ND	0.58	6010C	8-12-14	8-12-14	
Chromium	42	0.58	6010C	8-12-14	8-12-14	
Lead	20	5.8	6010C	8-12-14	8-12-14	
Mercury	ND	0.29	7471B	8-12-14	8-12-14	
Selenium	ND	12	6010C	8-12-14	8-12-14	
Silver	ND	1.2	6010C	8-12-14	8-12-14	

Lab ID: 08-054-04
Client ID: 8-7-4

Lead	15	5.7	6010C	8-12-14	8-12-14	
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Date of Report: August 13, 2014
Samples Submitted: August 7, 2014
Laboratory Reference: 1408-054
Project: 6672

**TOTAL METALS
EPA 6010C/7471B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 8-12-14

Date Analyzed: 8-12-14

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: MB9812SM1&MB0812S1

Analyte	Method	Result	PQL
Arsenic	6010C	ND	10
Barium	6010C	ND	2.5
Cadmium	6010C	ND	0.50
Chromium	6010C	ND	0.50
Lead	6010C	ND	5.0
Mercury	7471B	ND	0.25
Selenium	6010C	ND	10
Silver	6010C	ND	1.0

Date of Report: August 13, 2014
Samples Submitted: August 7, 2014
Laboratory Reference: 1408-054
Project: 6672

**TOTAL METALS
EPA 6010C/7471B
DUPLICATE QUALITY CONTROL**

Date Extracted: 8-12-14

Date Analyzed: 8-12-14

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 08-054-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	10	
Barium	74.6	75.8	2	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	35.5	38.5	8	0.50	
Lead	17.5	17.1	3	5.0	
Mercury	ND	ND	NA	0.25	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	

Date of Report: August 13, 2014
 Samples Submitted: August 7, 2014
 Laboratory Reference: 1408-054
 Project: 6672

**TOTAL METALS
 EPA 6010C/7471B
 MS/MSD QUALITY CONTROL**

Date Extracted: 8-12-14

Date Analyzed: 8-12-14

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 08-054-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	92.7	93	93.9	94	1	
Barium	100	170	95	169	94	0	
Cadmium	50.0	47.8	96	48.2	96	1	
Chromium	100	127	91	128	93	1	
Lead	250	256	95	260	97	1	
Mercury	0.500	0.424	85	0.436	87	3	
Selenium	100	94.0	94	95.4	95	2	
Silver	25.0	22.2	89	22.3	89	1	

Date of Report: August 13, 2014
Samples Submitted: August 7, 2014
Laboratory Reference: 1408-054
Project: 6672

% MOISTURE

Date Analyzed: 8-7-14

Client ID	Lab ID	% Moisture
8-7-1	08-054-01	15
8-7-2	08-054-02	11
8-7-3	08-054-03	12
8-7-4	08-054-04	12
8-7-5	08-054-05	15



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 - The sample chromatogram is similar to mineral spirits with diesel.
- Z1 - The sample chromatogram is similar to mineral spirits.



Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
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Chain of Custody

Page 1 of 1[illegible]



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August 15, 2014

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6672-1
Laboratory Reference No. 1408-091

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on August 13, 2014.

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,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister
Project Manager

Enclosures

Date of Report: August 15, 2014
Samples Submitted: August 13, 2014
Laboratory Reference: 1408-091
Project: 6672-1

Case Narrative

Samples were collected on August 13, 2014 and received by the laboratory on August 14, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

NWTPH Gx/BTEX Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: August 15, 2014
 Samples Submitted: August 13, 2014
 Laboratory Reference: 1408-091
 Project: 6672-1

NWTPH-HCID

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-13-2					
Laboratory ID:	08-091-02					
Gasoline Range Organics	ND	25	NWTPH-HCID	8-13-14	8-13-14	
Diesel Range Organics	ND	63	NWTPH-HCID	8-13-14	8-13-14	
Lube Oil Range Organics	ND	130	NWTPH-HCID	8-13-14	8-13-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	98	50-150				

Client ID:	8-13-3					
Laboratory ID:	08-091-03					
Gasoline Range Organics	ND	23	NWTPH-HCID	8-13-14	8-13-14	
Diesel Range Organics	ND	58	NWTPH-HCID	8-13-14	8-13-14	
Lube Oil Range Organics	ND	120	NWTPH-HCID	8-13-14	8-13-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				

Client ID:	8-13-4					
Laboratory ID:	08-091-04					
Gasoline Range Organics	ND	24	NWTPH-HCID	8-13-14	8-13-14	
Diesel Range Organics	ND	59	NWTPH-HCID	8-13-14	8-13-14	
Lube Oil Range Organics	ND	120	NWTPH-HCID	8-13-14	8-13-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	94	50-150				

Client ID:	8-13-6					
Laboratory ID:	08-091-06					
Gasoline Range Organics	ND	23	NWTPH-HCID	8-13-14	8-13-14	
Diesel Range Organics	ND	56	NWTPH-HCID	8-13-14	8-13-14	
Lube Oil	Detected	110	NWTPH-HCID	8-13-14	8-13-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	97	50-150				

Client ID:	8-13-10					
Laboratory ID:	08-091-10					
Gasoline Range Organics	ND	22	NWTPH-HCID	8-13-14	8-13-14	
Diesel Range Organics	ND	55	NWTPH-HCID	8-13-14	8-13-14	
Lube Oil Range Organics	ND	110	NWTPH-HCID	8-13-14	8-13-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				

Date of Report: August 15, 2014
 Samples Submitted: August 13, 2014
 Laboratory Reference: 1408-091
 Project: 6672-1

NWTPH-HCID

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-13-11					
Laboratory ID:	08-091-11					
Gasoline Range Organics	ND	22	NWTPH-HCID	8-13-14	8-13-14	
Diesel Range Organics	ND	54	NWTPH-HCID	8-13-14	8-13-14	
Lube Oil Range Organics	ND	110	NWTPH-HCID	8-13-14	8-13-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				

Client ID:	8-13-12					
Laboratory ID:	08-091-12					
Gasoline Range Organics	ND	24	NWTPH-HCID	8-13-14	8-13-14	
Diesel Range Organics	ND	130	NWTPH-HCID	8-13-14	8-13-14	U1
Lube Oil	Detected	120	NWTPH-HCID	8-13-14	8-13-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	97	50-150				

Date of Report: August 15, 2014
 Samples Submitted: August 13, 2014
 Laboratory Reference: 1408-091
 Project: 6672-1

**NWTPH-HCID
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0813S1					
Gasoline Range Organics	ND	20	NWTPH-HCID	8-13-14	8-13-14	
Diesel Range Organics	ND	50	NWTPH-HCID	8-13-14	8-13-14	
Lube Oil Range Organics	ND	100	NWTPH-HCID	8-13-14	8-13-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>102</i>	<i>50-150</i>				

Date of Report: August 15, 2014
 Samples Submitted: August 13, 2014
 Laboratory Reference: 1408-091
 Project: 6672-1

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-13-1					
Laboratory ID:	08-091-01					
Benzene	ND	0.020	EPA 8021B	8-14-14	8-14-14	
Toluene	ND	0.075	EPA 8021B	8-14-14	8-14-14	
Ethyl Benzene	ND	0.075	EPA 8021B	8-14-14	8-14-14	
m,p-Xylene	ND	0.075	EPA 8021B	8-14-14	8-14-14	
o-Xylene	ND	0.075	EPA 8021B	8-14-14	8-14-14	
Gasoline	ND	7.5	NWTPH-Gx	8-14-14	8-14-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	88	71-121				
Client ID:	8-13-5					
Laboratory ID:	08-091-05					
Benzene	ND	0.020	EPA 8021B	8-14-14	8-14-14	
Toluene	ND	0.071	EPA 8021B	8-14-14	8-14-14	
Ethyl Benzene	ND	0.071	EPA 8021B	8-14-14	8-14-14	
m,p-Xylene	ND	0.071	EPA 8021B	8-14-14	8-14-14	
o-Xylene	ND	0.071	EPA 8021B	8-14-14	8-14-14	
Gasoline	ND	7.1	NWTPH-Gx	8-14-14	8-14-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	87	71-121				
Client ID:	8-13-7					
Laboratory ID:	08-091-07					
Benzene	0.68	0.025	EPA 8021B	8-14-14	8-14-14	
Toluene	ND	0.13	EPA 8021B	8-14-14	8-14-14	
Ethyl Benzene	1.9	0.13	EPA 8021B	8-14-14	8-14-14	
m,p-Xylene	1.3	0.13	EPA 8021B	8-14-14	8-14-14	
o-Xylene	1.6	0.13	EPA 8021B	8-14-14	8-14-14	
Gasoline	860	13	NWTPH-Gx	8-14-14	8-14-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	95	71-121				

Date of Report: August 15, 2014
 Samples Submitted: August 13, 2014
 Laboratory Reference: 1408-091
 Project: 6672-1

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-13-8					
Laboratory ID:	08-091-08					
Benzene	0.028	0.024	EPA 8021B	8-14-14	8-14-14	
Toluene	ND	0.12	EPA 8021B	8-14-14	8-14-14	
Ethyl Benzene	0.30	0.12	EPA 8021B	8-14-14	8-14-14	
m,p-Xylene	0.22	0.12	EPA 8021B	8-14-14	8-14-14	
o-Xylene	0.16	0.12	EPA 8021B	8-14-14	8-14-14	
Gasoline	180	12	NWTPH-Gx	8-14-14	8-14-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>90</i>	<i>71-121</i>				
Client ID:	8-13-9					
Laboratory ID:	08-091-09					
Benzene	ND	0.020	EPA 8021B	8-14-14	8-14-14	
Toluene	ND	0.058	EPA 8021B	8-14-14	8-14-14	
Ethyl Benzene	ND	0.058	EPA 8021B	8-14-14	8-14-14	
m,p-Xylene	ND	0.058	EPA 8021B	8-14-14	8-14-14	
o-Xylene	ND	0.058	EPA 8021B	8-14-14	8-14-14	
Gasoline	ND	5.8	NWTPH-Gx	8-14-14	8-14-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>92</i>	<i>71-121</i>				

Date of Report: August 15, 2014
 Samples Submitted: August 13, 2014
 Laboratory Reference: 1408-091
 Project: 6672-1

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0814S1					
Benzene	ND	0.020	EPA 8021B	8-14-14	8-14-14	
Toluene	ND	0.050	EPA 8021B	8-14-14	8-14-14	
Ethyl Benzene	ND	0.050	EPA 8021B	8-14-14	8-14-14	
m,p-Xylene	ND	0.050	EPA 8021B	8-14-14	8-14-14	
o-Xylene	ND	0.050	EPA 8021B	8-14-14	8-14-14	
Gasoline	ND	5.0	NWTPH-Gx	8-14-14	8-14-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	89	71-121				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-091-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				88	86	71-121		

SPIKE BLANKS

Laboratory ID:	SB0814S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	1.00	1.06	1.00	1.00	100	106	73-121	6	10
Toluene	1.03	1.08	1.00	1.00	103	108	75-124	5	10
Ethyl Benzene	1.04	1.08	1.00	1.00	104	108	75-125	4	9
m,p-Xylene	1.05	1.07	1.00	1.00	105	107	75-126	2	9
o-Xylene	1.03	1.09	1.00	1.00	103	109	74-123	6	8
Surrogate:									
Fluorobenzene					88	94	71-121		

Date of Report: August 15, 2014
 Samples Submitted: August 13, 2014
 Laboratory Reference: 1408-091
 Project: 6672-1

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-13-1					
Laboratory ID:	08-091-01					
Diesel Range Organics	ND	130	NWTPH-Dx	8-13-14	8-13-14	U1
Lube Oil	580	61	NWTPH-Dx	8-13-14	8-13-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	66	50-150				
Client ID:	8-13-5					
Laboratory ID:	08-091-05					
Diesel Range Organics	ND	29	NWTPH-Dx	8-13-14	8-14-14	
Lube Oil	150	57	NWTPH-Dx	8-13-14	8-14-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	70	50-150				
Client ID:	8-13-7					
Laboratory ID:	08-091-07					
Diesel Range Organics	2400	590	NWTPH-Dx	8-13-14	8-14-14	
Lube Oil	31000	1200	NWTPH-Dx	8-13-14	8-14-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	---	50-150				S
Client ID:	8-13-8					
Laboratory ID:	08-091-08					
Diesel Range Organics	130	30	NWTPH-Dx	8-13-14	8-13-14	
Lube Oil	660	60	NWTPH-Dx	8-13-14	8-13-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	84	50-150				
Client ID:	8-13-9					
Laboratory ID:	08-091-09					
Diesel Range Organics	ND	27	NWTPH-Dx	8-13-14	8-13-14	
Lube Oil Range Organics	ND	54	NWTPH-Dx	8-13-14	8-13-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	82	50-150				

Date of Report: August 15, 2014
 Samples Submitted: August 13, 2014
 Laboratory Reference: 1408-091
 Project: 6672-1

**NWTPH-Dx
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0813S2					
Diesel Range Organics	ND	25	NWTPH-Dx	8-13-14	8-13-14	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-13-14	8-13-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	91	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	08-090-02									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						68	80	50-150		

Date of Report: August 15, 2014
 Samples Submitted: August 13, 2014
 Laboratory Reference: 1408-091
 Project: 6672-1

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-13-6					
Laboratory ID:	08-091-06					
Diesel Range Organics	ND	38	NWTPH-Dx	8-14-14	8-14-14	U1
Lube Oil	370	56	NWTPH-Dx	8-14-14	8-14-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>80</i>	<i>50-150</i>				
Client ID:	8-13-12					
Laboratory ID:	08-091-12					
Diesel Range Organics	ND	150	NWTPH-Dx	8-14-14	8-14-14	U1
Lube Oil	870	60	NWTPH-Dx	8-14-14	8-14-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>73</i>	<i>50-150</i>				

Date of Report: August 15, 2014
 Samples Submitted: August 13, 2014
 Laboratory Reference: 1408-091
 Project: 6672-1

**NWTPH-Dx
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0814S1					
Diesel Range Organics	ND	25	NWTPH-Dx	8-14-14	8-14-14	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-14-14	8-14-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	94	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-101-01							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				79	81	50-150		

Date of Report: August 15, 2014
Samples Submitted: August 13, 2014
Laboratory Reference: 1408-091
Project: 6672-1

% MOISTURE

Date Analyzed: 8-13-14

Client ID	Lab ID	% Moisture
8-13-1	08-091-01	18
8-13-2	08-091-02	20
8-13-3	08-091-03	14
8-13-4	08-091-04	15
8-13-5	08-091-05	12
8-13-6	08-091-06	11
8-13-7	08-091-07	16
8-13-8	08-091-08	17
8-13-9	08-091-09	8
8-13-10	08-091-10	10
8-13-11	08-091-11	7
8-13-12	08-091-12	17



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



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Chain of Custody

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08-091

CIVIL ENGINEERING INC. Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3981 • www.criste-env.com										08-09.1									
Company: Tarea Associates Inc.										Turnaround Request (in working days) (Check One) <input type="checkbox"/> Same Day <input checked="" type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> Standard (7 Days) (TPH analysis 5 Days) <input type="checkbox"/> (other)									
Project Number: 6672-1										Laboratory Number:									
Project Name: _____																			
Project Manager: Chuck Lia																			
Sampled by: Nicolas R. Hoffman																			
Lab ID										Date Sampled Time Sampled Matrix									
Sample Identification										Number of Containers									
1 8-13-1										5									
2 8-13-2										X									
3 8-13-3										X									
4 8-13-4										X									
5 8-13-5										X									
6 8-13-6										X									
7 8-13-7										X									
8 8-13-8										X									
9 8-13-9										X									
10 8-13-10										X									
Signature										Company									
Relinquished										THI									
Received										8/13/14 12:20									
Relinquished										8/13/14 2:20									
Received																			
Relinquished																			
Received																			
Reviewed/Date										Reviewed/Date									
Chromatograms with final report <input type="checkbox"/>																			



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Page 2 of 2

CIVIL-ENVIRONMENTAL INC. Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com					
Company: Terra Associates Inc.					
Project Number: 6672-1					
Project Name: _____					
Project Manager: Chuck Lie					
Sampled by: Nicolas R. Hoffman					
<div>(Check One) <input type="checkbox"/> Same Day <input checked="" type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> Standard (7 Days) (TPH analysis 5 Days)</div>					
<div>Date Sampled Time Sampled Matrix 8/13/14 10:55 Soil 8/13/14 11:05 Soil</div>					
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					
% Moisture					



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August 27, 2014

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6672-1
Laboratory Reference No. 1408-214

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on August 25, 2014.

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,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister
Project Manager

Enclosures

Date of Report: August 27, 2014
Samples Submitted: August 25, 2014
Laboratory Reference: 1408-214
Project: 6672-1

Case Narrative

Samples were collected on August 25, 2014 and received by the laboratory on August 25, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

NWTPH Gx/BTEX Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

The sample chromatograms are similar to mineral spirits with diesel.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: August 27, 2014
 Samples Submitted: August 25, 2014
 Laboratory Reference: 1408-214
 Project: 6672-1

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-25-1					
Laboratory ID:	08-214-01					
Benzene	ND	0.020	EPA 8021B	8-25-14	8-26-14	
Toluene	ND	0.098	EPA 8021B	8-25-14	8-26-14	
Ethyl Benzene	0.20	0.098	EPA 8021B	8-25-14	8-26-14	
m,p-Xylene	0.45	0.098	EPA 8021B	8-25-14	8-26-14	
o-Xylene	ND	0.49	EPA 8021B	8-25-14	8-26-14	U1
Gasoline	430	49	NWTPH-Gx	8-25-14	8-26-14	Z
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	86	71-121				
Client ID:	8-25-2					
Laboratory ID:	08-214-02					
Benzene	ND	0.021	EPA 8021B	8-25-14	8-26-14	
Toluene	ND	0.10	EPA 8021B	8-25-14	8-26-14	
Ethyl Benzene	0.57	0.10	EPA 8021B	8-25-14	8-26-14	
m,p-Xylene	1.7	0.10	EPA 8021B	8-25-14	8-26-14	
o-Xylene	ND	0.50	EPA 8021B	8-25-14	8-26-14	U1
Gasoline	1400	100	NWTPH-Gx	8-25-14	8-26-14	Z
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	84	71-121				

Date of Report: August 27, 2014
 Samples Submitted: August 25, 2014
 Laboratory Reference: 1408-214
 Project: 6672-1

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0825S2					
Benzene	ND	0.020	EPA 8021B	8-25-14	8-26-14	
Toluene	ND	0.050	EPA 8021B	8-25-14	8-26-14	
Ethyl Benzene	ND	0.050	EPA 8021B	8-25-14	8-26-14	
m,p-Xylene	ND	0.050	EPA 8021B	8-25-14	8-26-14	
o-Xylene	ND	0.050	EPA 8021B	8-25-14	8-26-14	
Gasoline	ND	5.0	NWTPH-Gx	8-25-14	8-26-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	83	71-121				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-217-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				93	88	71-121		

SPIKE BLANKS

Laboratory ID:	SB0825S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.909	0.991	1.00	1.00	91	99	73-121	9	10
Toluene	0.894	0.966	1.00	1.00	89	97	75-124	8	10
Ethyl Benzene	0.922	0.989	1.00	1.00	92	99	75-125	7	9
m,p-Xylene	0.923	0.992	1.00	1.00	92	99	75-126	7	9
o-Xylene	0.914	0.985	1.00	1.00	91	99	74-123	7	8
Surrogate:									
Fluorobenzene				88	89	71-121			

Date of Report: August 27, 2014
 Samples Submitted: August 25, 2014
 Laboratory Reference: 1408-214
 Project: 6672-1

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-25-1					
Laboratory ID:	08-214-01					
Diesel Range Organics	270	27	NWTPH-Dx	8-25-14	8-25-14	M,N
Lube Oil	1300	54	NWTPH-Dx	8-25-14	8-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	93	50-150				
Client ID:	8-25-2					
Laboratory ID:	08-214-02					
Diesel Range Organics	ND	28	NWTPH-Dx	8-25-14	8-25-14	
Lube Oil	80	55	NWTPH-Dx	8-25-14	8-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				

Date of Report: August 27, 2014
 Samples Submitted: August 25, 2014
 Laboratory Reference: 1408-214
 Project: 6672-1

**NWTPH-Dx
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0825S1					
Diesel Range Organics	ND	25	NWTPH-Dx	8-25-14	8-25-14	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-25-14	8-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	94	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	08-214-02									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil	72.7	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						90	86	50-150		

Date of Report: August 27, 2014
Samples Submitted: August 25, 2014
Laboratory Reference: 1408-214
Project: 6672-1

% MOISTURE

Date Analyzed: 8-25-14

Client ID	Lab ID	% Moisture
8-25-1	08-214-01	8
8-25-2	08-214-02	9



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 - The sample chromatogram is similar to mineral spirits with diesel.

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

Chain of Custody

[illegible]



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August 27, 2014

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6672-1
Laboratory Reference No. 1408-217

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on August 25, 2014.

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,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal flourish.

David Baumeister
Project Manager

Enclosures

Date of Report: August 27, 2014
Samples Submitted: August 25, 2014
Laboratory Reference: 1408-217
Project: 6672-1

Case Narrative

Samples were collected on August 25, 2014 and received by the laboratory on August 25, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

NWTPH Gx/BTEX Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

The chromatogram for sample 8-25-5 is similar to mineral spirits with diesel.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: August 27, 2014
 Samples Submitted: August 25, 2014
 Laboratory Reference: 1408-217
 Project: 6672-1

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-25-3					
Laboratory ID:	08-217-01					
Benzene	ND	0.020	EPA 8021B	8-25-14	8-26-14	
Toluene	ND	0.055	EPA 8021B	8-25-14	8-26-14	
Ethyl Benzene	ND	0.055	EPA 8021B	8-25-14	8-26-14	
m,p-Xylene	ND	0.055	EPA 8021B	8-25-14	8-26-14	
o-Xylene	ND	0.055	EPA 8021B	8-25-14	8-26-14	
Gasoline	ND	5.5	NWTPH-Gx	8-25-14	8-26-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	91	71-121				
Client ID:	8-25-4					
Laboratory ID:	08-217-02					
Benzene	ND	0.020	EPA 8021B	8-25-14	8-26-14	
Toluene	ND	0.062	EPA 8021B	8-25-14	8-26-14	
Ethyl Benzene	ND	0.062	EPA 8021B	8-25-14	8-26-14	
m,p-Xylene	ND	0.062	EPA 8021B	8-25-14	8-26-14	
o-Xylene	ND	0.062	EPA 8021B	8-25-14	8-26-14	
Gasoline	ND	6.2	NWTPH-Gx	8-25-14	8-26-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	93	71-121				
Client ID:	8-25-5					
Laboratory ID:	08-217-03					
Benzene	ND	0.021	EPA 8021B	8-25-14	8-26-14	
Toluene	ND	0.11	EPA 8021B	8-25-14	8-26-14	
Ethyl Benzene	0.43	0.11	EPA 8021B	8-25-14	8-26-14	
m,p-Xylene	0.42	0.11	EPA 8021B	8-25-14	8-26-14	
o-Xylene	ND	0.55	EPA 8021B	8-25-14	8-26-14	U1
Gasoline	670	54	NWTPH-Gx	8-25-14	8-26-14	Z
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	84	71-121				

Date of Report: August 27, 2014
 Samples Submitted: August 25, 2014
 Laboratory Reference: 1408-217
 Project: 6672-1

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0825S2					
Benzene	ND	0.020	EPA 8021B	8-25-14	8-26-14	
Toluene	ND	0.050	EPA 8021B	8-25-14	8-26-14	
Ethyl Benzene	ND	0.050	EPA 8021B	8-25-14	8-26-14	
m,p-Xylene	ND	0.050	EPA 8021B	8-25-14	8-26-14	
o-Xylene	ND	0.050	EPA 8021B	8-25-14	8-26-14	
Gasoline	ND	5.0	NWTPH-Gx	8-25-14	8-26-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	83	71-121				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-217-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				93	88	71-121		

SPIKE BLANKS

Laboratory ID:	SB0825S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.909	0.991	1.00	1.00	91	99	73-121	9	10
Toluene	0.894	0.966	1.00	1.00	89	97	75-124	8	10
Ethyl Benzene	0.922	0.989	1.00	1.00	92	99	75-125	7	9
m,p-Xylene	0.923	0.992	1.00	1.00	92	99	75-126	7	9
o-Xylene	0.914	0.985	1.00	1.00	91	99	74-123	7	8
Surrogate:									
Fluorobenzene					88	89	71-121		

Date of Report: August 27, 2014
 Samples Submitted: August 25, 2014
 Laboratory Reference: 1408-217
 Project: 6672-1

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-25-3					
Laboratory ID:	08-217-01					
Diesel Range Organics	ND	28	NWTPH-Dx	8-25-14	8-25-14	
Lube Oil Range Organics	ND	55	NWTPH-Dx	8-25-14	8-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	87	50-150				
Client ID:	8-25-4					
Laboratory ID:	08-217-02					
Diesel Range Organics	ND	29	NWTPH-Dx	8-25-14	8-25-14	
Lube Oil Range Organics	ND	58	NWTPH-Dx	8-25-14	8-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				
Client ID:	8-25-5					
Laboratory ID:	08-217-03					
Diesel Range Organics	510	28	NWTPH-Dx	8-25-14	8-25-14	M,N
Lube Oil	1300	56	NWTPH-Dx	8-25-14	8-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	78	50-150				

Date of Report: August 27, 2014
 Samples Submitted: August 25, 2014
 Laboratory Reference: 1408-217
 Project: 6672-1

**NWTPH-Dx
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0825S1					
Diesel Range Organics	ND	25	NWTPH-Dx	8-25-14	8-25-14	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-25-14	8-25-14	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	94	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	08-214-02									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil	72.7	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						90	86	50-150		

Date of Report: August 27, 2014
 Samples Submitted: August 25, 2014
 Laboratory Reference: 1408-217
 Project: 6672-1

**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Product
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Lab ID:	08-217-04					
Client ID:	8-25-L					
<hr/>						
Arsenic	ND	10	6010C	8-26-14	8-26-14	
Barium	64	2.5	6010C	8-26-14	8-26-14	
Cadmium	0.80	0.50	6010C	8-26-14	8-26-14	
Chromium	0.56	0.50	6010C	8-26-14	8-26-14	
Lead	190	5.0	6010C	8-26-14	8-26-14	
Mercury	ND	0.25	7471B	8-26-14	8-26-14	
Selenium	ND	10	6010C	8-26-14	8-26-14	
Silver	ND	1.0	6010C	8-26-14	8-26-14	
<hr/>						

Date of Report: August 27, 2014
Samples Submitted: August 25, 2014
Laboratory Reference: 1408-217
Project: 6672-1

**TOTAL METALS
EPA 6010C/7471B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 8-26-14
Date Analyzed: 8-26-14

Matrix: Product
Units: mg/kg (ppm)

Lab ID: MB0826PH1

Analyte	Method	Result	PQL
Arsenic	6010C	ND	10
Barium	6010C	ND	2.5
Cadmium	6010C	ND	0.50
Chromium	6010C	ND	0.50
Lead	6010C	ND	5.0
Mercury	7471B	ND	0.25
Selenium	6010C	ND	10
Silver	6010C	ND	1.0

Date of Report: August 27, 2014
 Samples Submitted: August 25, 2014
 Laboratory Reference: 1408-217
 Project: 6672-1

**TOTAL METALS
 EPA 6010C/7471B
 SB/SBD QUALITY CONTROL**

Date Extracted: 8-26-14

Date Analyzed: 8-26-14

Matrix: Product

Units: mg/kg (ppm)

Lab ID: SB0826PH1

Analyte	Spike Level	SB	Percent Recovery	SBD	Percent Recovery	RPD	Flags
Arsenic	100	97.1	97	101	101	4	
Barium	100	97.3	97	99.3	99	2	
Cadmium	50.0	50.3	101	51.5	103	3	
Chromium	100	102	102	106	106	4	
Lead	250	269	108	276	110	2	
Mercury	0.500	0.512	102	0.497	99	3	
Selenium	100	97.8	98	101	101	4	
Silver	25.0	26.6	106	27.7	111	4	

Date of Report: August 27, 2014
Samples Submitted: August 25, 2014
Laboratory Reference: 1408-217
Project: 6672-1

% MOISTURE

Date Analyzed: 8-25-14

Client ID	Lab ID	% Moisture
8-25-3	08-217-01	9
8-25-4	08-217-02	13
8-25-5	08-217-03	11



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 - The sample chromatogram is similar to mineral spirits with diesel.

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

08/27/2014

OnSite Environmental Inc
14648 NE 95th Street
Redmond, WA 98052
Attn: David Baumeister

Project: 6672-1
Client ID: 8-25-L
Sample Matrix: Liquid
Date Sampled: 08/25/2014
Date Received: 08/27/2014
Spectra Project: 2014080640
Spectra Number: 1
Rush

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Total Halogens	45	ppm	SW846 9076

SPECTRA LABORATORIES



Steve Hibbs, Laboratory Manager
a5/bw



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

August 27, 2014

OnSite Environmental Inc.
14648 NE 95th Street
Redmond, Wa 98052
Attn: David Baumeister

Method: SW846 9076
Sample Matrix: Liquid
Units: ppm
Spectra Project: 2014080640
Spectra #'s: 1

TOTAL HALOGENS QUALITY CONTROL RESULTS

METHOD BLANK

Date Analyzed: 08/27/14
Units: ppm

Total Halogens < 1.0

INITIAL CHECK STANDARD RESULT

Date Analyzed: 08/27/14
Units: ppm

	<u>Known Value</u>	<u>Measured Value</u>	<u>% Recovered</u>
Total Halogens	100	110.3	110.3

SPECTRA LABORATORIES


Steve Hibbs, Laboratory Manager



Date/Time: _____

Project Name:

Page of

2014080640

08-217

Laboratory Reference #:

Standard Name Day

Date/Time:

[illegible]



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August 27, 2014

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6672-1
Laboratory Reference No. 1408-231

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on August 26, 2014.

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,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister
Project Manager

Enclosures

Date of Report: August 27, 2014
Samples Submitted: August 26, 2014
Laboratory Reference: 1408-231
Project: 6672-1

Case Narrative

Samples were collected on August 26, 2014 and received by the laboratory on August 26, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

NWTPH Gx/BTEX Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: August 27, 2014
 Samples Submitted: August 26, 2014
 Laboratory Reference: 1408-231
 Project: 6672-1

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-26-1					
Laboratory ID:	08-231-01					
Benzene	ND	0.020	EPA 8021B	8-26-14	8-26-14	
Toluene	ND	0.055	EPA 8021B	8-26-14	8-26-14	
Ethyl Benzene	ND	0.055	EPA 8021B	8-26-14	8-26-14	
m,p-Xylene	ND	0.055	EPA 8021B	8-26-14	8-26-14	
o-Xylene	ND	0.055	EPA 8021B	8-26-14	8-26-14	
Gasoline	ND	5.5	NWTPH-Gx	8-26-14	8-26-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>86</i>	<i>71-121</i>				

Date of Report: August 27, 2014
 Samples Submitted: August 26, 2014
 Laboratory Reference: 1408-231
 Project: 6672-1

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0826S2					
Benzene	ND	0.020	EPA 8021B	8-26-14	8-26-14	
Toluene	ND	0.050	EPA 8021B	8-26-14	8-26-14	
Ethyl Benzene	ND	0.050	EPA 8021B	8-26-14	8-26-14	
m,p-Xylene	ND	0.050	EPA 8021B	8-26-14	8-26-14	
o-Xylene	ND	0.050	EPA 8021B	8-26-14	8-26-14	
Gasoline	ND	5.0	NWTPH-Gx	8-26-14	8-26-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	83	71-121				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-224-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				92	98	71-121		

SPIKE BLANKS

Laboratory ID:	SB0826S1									
	SB	SBD	SB	SBD	SB	SBD				
Benzene	0.939	1.01	1.00	1.00	94	101	73-121	7	10	
Toluene	0.939	1.02	1.00	1.00	94	102	75-124	8	10	
Ethyl Benzene	0.958	1.02	1.00	1.00	96	102	75-125	6	9	
m,p-Xylene	0.961	1.02	1.00	1.00	96	102	75-126	6	9	
o-Xylene	0.939	1.00	1.00	1.00	94	100	74-123	6	8	
Surrogate:										
Fluorobenzene					83	86	71-121			

Date of Report: August 27, 2014
 Samples Submitted: August 26, 2014
 Laboratory Reference: 1408-231
 Project: 6672-1

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	8-26-1					
Laboratory ID:	08-231-01					
Diesel Range Organics	ND	29	NWTPH-Dx	8-26-14	8-26-14	
Lube Oil Range Organics	ND	57	NWTPH-Dx	8-26-14	8-26-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>86</i>	<i>50-150</i>				

Date of Report: August 27, 2014
 Samples Submitted: August 26, 2014
 Laboratory Reference: 1408-231
 Project: 6672-1

**NWTPH-Dx
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0826S3					
Diesel Range Organics	ND	25	NWTPH-Dx	8-26-14	8-26-14	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-26-14	8-26-14	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	92	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	08-231-01									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						86	77	50-150		

Date of Report: August 27, 2014
Samples Submitted: August 26, 2014
Laboratory Reference: 1408-231
Project: 6672-1

% MOISTURE

Date Analyzed: 8-26-14

Client ID	Lab ID	% Moisture
8-26-1	08-231-01	13



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



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September 18, 2014

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6672-1
Laboratory Reference No. 1409-160

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on September 17, 2014.

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,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister
Project Manager

Enclosures

Date of Report: September 18, 2014
Samples Submitted: September 17, 2014
Laboratory Reference: 1409-160
Project: 6672-1

Case Narrative

Samples were collected on September 16, 2014 and received by the laboratory on September 17, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

NWTPH Gx/BTEX Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: September 18, 2014
 Samples Submitted: September 17, 2014
 Laboratory Reference: 1409-160
 Project: 6672-1

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	9-16-1					
Laboratory ID:	09-160-01					
Benzene	0.029	0.024	EPA 8021B	9-17-14	9-17-14	
Toluene	ND	0.12	EPA 8021B	9-17-14	9-17-14	
Ethyl Benzene	1.2	0.12	EPA 8021B	9-17-14	9-17-14	
m,p-Xylene	0.71	0.12	EPA 8021B	9-17-14	9-17-14	
o-Xylene	0.52	0.12	EPA 8021B	9-17-14	9-17-14	
Gasoline	400	12	NWTPH-Gx	9-17-14	9-17-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	98	71-121				

Date of Report: September 18, 2014
 Samples Submitted: September 17, 2014
 Laboratory Reference: 1409-160
 Project: 6672-1

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0917S1					
Benzene	ND	0.020	EPA 8021B	9-17-14	9-17-14	
Toluene	ND	0.050	EPA 8021B	9-17-14	9-17-14	
Ethyl Benzene	ND	0.050	EPA 8021B	9-17-14	9-17-14	
m,p-Xylene	ND	0.050	EPA 8021B	9-17-14	9-17-14	
o-Xylene	ND	0.050	EPA 8021B	9-17-14	9-17-14	
Gasoline	ND	5.0	NWTPH-Gx	9-17-14	9-17-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	91	71-121				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	09-160-01							
	ORIG	DUP						
Benzene	0.0270	0.0254	NA	NA	NA	NA	6	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	1.08	1.12	NA	NA	NA	NA	4	30
m,p-Xylene	0.649	0.658	NA	NA	NA	NA	1	30
o-Xylene	0.475	0.473	NA	NA	NA	NA	0	30
Gasoline	369	347	NA	NA	NA	NA	6	30
Surrogate:								
Fluorobenzene				98	95	71-121		

SPIKE BLANKS

Laboratory ID:	SB0917S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	1.01	1.04	1.00	1.00	101	104	73-121	3	10
Toluene	1.01	1.03	1.00	1.00	101	103	75-124	2	10
Ethyl Benzene	0.999	1.01	1.00	1.00	100	101	75-125	1	9
m,p-Xylene	1.00	1.02	1.00	1.00	100	102	75-126	2	9
o-Xylene	1.01	1.02	1.00	1.00	101	102	74-123	1	8
Surrogate:									
Fluorobenzene				91	93	71-121			

Date of Report: September 18, 2014
Samples Submitted: September 17, 2014
Laboratory Reference: 1409-160
Project: 6672-1

% MOISTURE

Date Analyzed: 9-17-14

Client ID	Lab ID	% Moisture
9-16-1	09-160-01	9



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



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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:

09-160

Company: Terra Associates Inc.
Project Number: 6672-1
Project Name: _____
Project Manager: Chuck Lia
Sampled by: Nicholas R. Hoffman

Lab ID: _____
Sample Identification: _____
Date Sampled: 9/16/14 Time Sampled: 14:25 Matrix: Soil

Number of Containers

NWTPH-HCID	
NWTPH-Gx/BTEX	<u>X</u>
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/ MTCA Metals (circle one)	
TCLP Metals	
HEM (oil and grease) 1664A	

X % Moisture

Signature	Company	Date	Time	Comments/Special Instructions
<u>[Signature]</u>	<u>TAI</u>	<u>9/17/14</u>	<u>0600</u>	
<u>Dugan McCloskey</u>	<u>TAI</u>	<u>9/17/14</u>	<u>0600</u>	
<u>Dugan McCloskey</u>	<u>TAI</u>	<u>9/17/14</u>	<u>0715</u>	
<u>[Signature]</u>	<u>TAI</u>	<u>9/17/14</u>	<u>0715</u>	
<u>[Signature]</u>	<u>TAI</u>	<u>9/17/14</u>	<u>0715</u>	
<u>[Signature]</u>	<u>OSR</u>	<u>9.17.14</u>	<u>7:15A</u>	

Received _____
Relinquished _____
Relinquished _____
Received _____
Relinquished _____
Received _____
Reviewed/Date _____



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September 23, 2014

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6672-1
Laboratory Reference No. 1409-186

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on September 18, 2014.

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,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal flourish.

David Baumeister
Project Manager

Enclosures

Date of Report: September 23, 2014
Samples Submitted: September 18, 2014
Laboratory Reference: 1409-186
Project: 6672-1

Case Narrative

Samples were collected on September 18, 2014 and received by the laboratory on September 18, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

NWTPH Gx/BTEX Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: September 23, 2014
 Samples Submitted: September 18, 2014
 Laboratory Reference: 1409-186
 Project: 6672-1

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: 9-18-1						
Laboratory ID:	09-186-01					
Benzene	ND	0.023	EPA 8021B	9-19-14	9-19-14	
Toluene	ND	0.11	EPA 8021B	9-19-14	9-19-14	
Ethyl Benzene	0.14	0.11	EPA 8021B	9-19-14	9-19-14	
m,p-Xylene	ND	0.11	EPA 8021B	9-19-14	9-19-14	
o-Xylene	ND	0.11	EPA 8021B	9-19-14	9-19-14	
Gasoline	ND	11	NWTPH-Gx	9-19-14	9-19-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	99	71-121				
Client ID: 9-18-2						
Laboratory ID:	09-186-02					
Benzene	1.0	0.026	EPA 8021B	9-19-14	9-19-14	
Toluene	ND	0.13	EPA 8021B	9-19-14	9-19-14	
Ethyl Benzene	12	0.13	EPA 8021B	9-19-14	9-19-14	
m,p-Xylene	45	1.3	EPA 8021B	9-19-14	9-19-14	
o-Xylene	11	0.13	EPA 8021B	9-19-14	9-19-14	
Gasoline	930	13	NWTPH-Gx	9-19-14	9-19-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	101	71-121				
Client ID: 9-18-3						
Laboratory ID:	09-186-03					
Benzene	ND	0.020	EPA 8021B	9-19-14	9-19-14	
Toluene	ND	0.070	EPA 8021B	9-19-14	9-19-14	
Ethyl Benzene	ND	0.070	EPA 8021B	9-19-14	9-19-14	
m,p-Xylene	ND	0.070	EPA 8021B	9-19-14	9-19-14	
o-Xylene	ND	0.070	EPA 8021B	9-19-14	9-19-14	
Gasoline	ND	7.0	NWTPH-Gx	9-19-14	9-19-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	98	71-121				

Date of Report: September 23, 2014
 Samples Submitted: September 18, 2014
 Laboratory Reference: 1409-186
 Project: 6672-1

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	9-18-4					
Laboratory ID:	09-186-04					
Benzene	0.18	0.057	EPA 8021B	9-19-14	9-19-14	
Toluene	ND	0.29	EPA 8021B	9-19-14	9-19-14	
Ethyl Benzene	4.4	0.29	EPA 8021B	9-19-14	9-19-14	
m,p-Xylene	17	0.29	EPA 8021B	9-19-14	9-19-14	
o-Xylene	1.0	0.29	EPA 8021B	9-19-14	9-19-14	
Gasoline	230	29	NWTPH-Gx	9-19-14	9-19-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>84</i>	<i>71-121</i>				

Date of Report: September 23, 2014
 Samples Submitted: September 18, 2014
 Laboratory Reference: 1409-186
 Project: 6672-1

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0919S1					
Benzene	ND	0.020	EPA 8021B	9-19-14	9-19-14	
Toluene	ND	0.050	EPA 8021B	9-19-14	9-19-14	
Ethyl Benzene	ND	0.050	EPA 8021B	9-19-14	9-19-14	
m,p-Xylene	ND	0.050	EPA 8021B	9-19-14	9-19-14	
o-Xylene	ND	0.050	EPA 8021B	9-19-14	9-19-14	
Gasoline	ND	5.0	NWTPH-Gx	9-19-14	9-19-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	93	71-121				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	09-186-03							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				98	95	71-121		

SPIKE BLANKS

Laboratory ID:	SB0919S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	1.02	1.06	1.00	1.00	102	106	73-121	4	10
Toluene	1.02	1.05	1.00	1.00	102	105	75-124	3	10
Ethyl Benzene	1.01	1.04	1.00	1.00	101	104	75-125	3	9
m,p-Xylene	1.01	1.04	1.00	1.00	101	104	75-126	3	9
o-Xylene	1.02	1.04	1.00	1.00	102	104	74-123	2	8
Surrogate:									
Fluorobenzene				94	97	71-121			

Date of Report: September 23, 2014
Samples Submitted: September 18, 2014
Laboratory Reference: 1409-186
Project: 6672-1

% MOISTURE

Date Analyzed: 9-19-14

Client ID	Lab ID	% Moisture
9-18-1	09-186-01	11
9-18-2	09-186-02	14
9-18-3	09-186-03	18
9-18-4	09-186-04	10



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



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Page 1 of 1[illegible]



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September 26, 2014

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6672-1
Laboratory Reference No. 1409-186B

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on September 18, 2014.

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,

A handwritten signature in black ink, appearing to read 'DB', followed by a long horizontal flourish.

David Baumeister
Project Manager

Enclosures

Date of Report: September 26, 2014
Samples Submitted: September 18, 2014
Laboratory Reference: 1409-186B
Project: 6672-1

Case Narrative

Samples were collected on September 18, 2014 and received by the laboratory on September 18, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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: September 26, 2014
 Samples Submitted: September 18, 2014
 Laboratory Reference: 1409-186B
 Project: 6672-1

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	9-18-1					
Laboratory ID:	09-186-01					
Diesel Range Organics	ND	28	NWTPH-Dx	9-25-14	9-25-14	
Lube Oil Range Organics	ND	56	NWTPH-Dx	9-25-14	9-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	87	50-150				
Client ID:	9-18-3					
Laboratory ID:	09-186-03					
Diesel Range Organics	ND	30	NWTPH-Dx	9-25-14	9-25-14	
Lube Oil Range Organics	ND	61	NWTPH-Dx	9-25-14	9-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				

Date of Report: September 26, 2014
 Samples Submitted: September 18, 2014
 Laboratory Reference: 1409-186B
 Project: 6672-1

**NWTPH-Dx
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0925S2					
Diesel Range Organics	ND	25	NWTPH-Dx	9-25-14	9-25-14	
Lube Oil Range Organics	ND	50	NWTPH-Dx	9-25-14	9-25-14	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	95	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	09-186-03									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						90	96	50-150		



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



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September 22, 2014

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6672-1
Laboratory Reference No. 1409-193

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on September 19, 2014.

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,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal flourish.

David Baumeister
Project Manager

Enclosures

Date of Report: September 22, 2014
Samples Submitted: September 19, 2014
Laboratory Reference: 1409-193
Project: 6672-1

Case Narrative

Samples were collected on September 19, 2014 and received by the laboratory on September 19, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

NWTPH Gx/BTEX Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: September 22, 2014
 Samples Submitted: September 19, 2014
 Laboratory Reference: 1409-193
 Project: 6672-1

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	9-19-1					
Laboratory ID:	09-193-01					
Benzene	ND	0.020	EPA 8021B	9-21-14	9-21-14	
Toluene	ND	0.079	EPA 8021B	9-21-14	9-21-14	
Ethyl Benzene	ND	0.079	EPA 8021B	9-21-14	9-21-14	
m,p-Xylene	ND	0.079	EPA 8021B	9-21-14	9-21-14	
o-Xylene	ND	0.079	EPA 8021B	9-21-14	9-21-14	
Gasoline	ND	7.9	NWTPH-Gx	9-21-14	9-21-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>100</i>	<i>71-121</i>				

Date of Report: September 22, 2014
 Samples Submitted: September 19, 2014
 Laboratory Reference: 1409-193
 Project: 6672-1

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0921S1					
Benzene	ND	0.020	EPA 8021B	9-21-14	9-21-14	
Toluene	ND	0.050	EPA 8021B	9-21-14	9-21-14	
Ethyl Benzene	ND	0.050	EPA 8021B	9-21-14	9-21-14	
m,p-Xylene	ND	0.050	EPA 8021B	9-21-14	9-21-14	
o-Xylene	ND	0.050	EPA 8021B	9-21-14	9-21-14	
Gasoline	ND	5.0	NWTPH-Gx	9-21-14	9-21-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	93	71-121				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	09-191-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				100	98	71-121		

SPIKE BLANKS

Laboratory ID:	SB0921S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	1.06	1.12	1.00	1.00	106	112	73-121	6	10
Toluene	1.05	1.10	1.00	1.00	105	110	75-124	5	10
Ethyl Benzene	1.01	1.07	1.00	1.00	101	107	75-125	6	9
m,p-Xylene	1.01	1.06	1.00	1.00	101	106	75-126	5	9
o-Xylene	1.00	1.04	1.00	1.00	100	104	74-123	4	8
Surrogate:									
Fluorobenzene					97	100	71-121		

Date of Report: September 22, 2014
Samples Submitted: September 19, 2014
Laboratory Reference: 1409-193
Project: 6672-1

% MOISTURE

Date Analyzed: 9-21-14

Client ID	Lab ID	% Moisture
9-19-1	09-193-01	23



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.
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- 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 _____.
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- 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.
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- 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



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September 26, 2014

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6672-1
Laboratory Reference No. 1409-193B

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on September 19, 2014.

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,

A handwritten signature in black ink, appearing to read 'DB', with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures

Date of Report: September 26, 2014
Samples Submitted: September 19, 2014
Laboratory Reference: 1409-193B
Project: 6672-1

Case Narrative

Samples were collected on September 19, 2014 and received by the laboratory on September 19, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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: September 26, 2014
 Samples Submitted: September 19, 2014
 Laboratory Reference: 1409-193B
 Project: 6672-1

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	9-19-1					
Laboratory ID:	09-193-01					
Diesel Range Organics	ND	32	NWTPH-Dx	9-25-14	9-25-14	
Lube Oil Range Organics	ND	65	NWTPH-Dx	9-25-14	9-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				

Date of Report: September 26, 2014
 Samples Submitted: September 19, 2014
 Laboratory Reference: 1409-193B
 Project: 6672-1

**NWTPH-Dx
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0925S2					
Diesel Range Organics	ND	25	NWTPH-Dx	9-25-14	9-25-14	
Lube Oil Range Organics	ND	50	NWTPH-Dx	9-25-14	9-25-14	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	95	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	09-186-03									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						90	96	50-150		



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

[illegible]



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

September 29, 2014

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6672-1
Laboratory Reference No. 1409-264

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on September 25, 2014.

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,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal flourish.

David Baumeister
Project Manager

Enclosures

Date of Report: September 29, 2014
Samples Submitted: September 25, 2014
Laboratory Reference: 1409-264
Project: 6672-1

Case Narrative

Samples were collected on September 25, 2014 and received by the laboratory on September 25, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

NWTPH Gx/BTEX Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: September 29, 2014
 Samples Submitted: September 25, 2014
 Laboratory Reference: 1409-264
 Project: 6672-1

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	9-25-1					
Laboratory ID:	09-264-01					
Benzene	0.023	0.020	EPA 8021B	9-26-14	9-26-14	
Toluene	ND	0.079	EPA 8021B	9-26-14	9-26-14	
Ethyl Benzene	ND	0.079	EPA 8021B	9-26-14	9-26-14	
m,p-Xylene	0.084	0.079	EPA 8021B	9-26-14	9-26-14	
o-Xylene	ND	0.079	EPA 8021B	9-26-14	9-26-14	
Gasoline	ND	7.9	NWTPH-Gx	9-26-14	9-26-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	99	71-121				
Client ID:	9-25-2					
Laboratory ID:	09-264-02					
Benzene	1.3	0.022	EPA 8021B	9-26-14	9-26-14	
Toluene	ND	0.11	EPA 8021B	9-26-14	9-26-14	
Ethyl Benzene	50	2.7	EPA 8021B	9-26-14	9-26-14	
m,p-Xylene	150	2.7	EPA 8021B	9-26-14	9-26-14	
o-Xylene	5.5	0.11	EPA 8021B	9-26-14	9-26-14	
Gasoline	1900	270	NWTPH-Gx	9-26-14	9-26-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	105	71-121				
Client ID:	9-25-3					
Laboratory ID:	09-264-03					
Benzene	ND	0.020	EPA 8021B	9-26-14	9-26-14	
Toluene	ND	0.078	EPA 8021B	9-26-14	9-26-14	
Ethyl Benzene	ND	0.078	EPA 8021B	9-26-14	9-26-14	
m,p-Xylene	ND	0.078	EPA 8021B	9-26-14	9-26-14	
o-Xylene	ND	0.078	EPA 8021B	9-26-14	9-26-14	
Gasoline	ND	7.8	NWTPH-Gx	9-26-14	9-26-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	101	71-121				

Date of Report: September 29, 2014
 Samples Submitted: September 25, 2014
 Laboratory Reference: 1409-264
 Project: 6672-1

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	9-25-4					
Laboratory ID:	09-264-04					
Benzene	2.2	0.027	EPA 8021B	9-26-14	9-26-14	
Toluene	ND	0.14	EPA 8021B	9-26-14	9-26-14	
Ethyl Benzene	19	1.4	EPA 8021B	9-26-14	9-26-14	
m,p-Xylene	33	1.4	EPA 8021B	9-26-14	9-26-14	
o-Xylene	0.53	0.14	EPA 8021B	9-26-14	9-26-14	
Gasoline	2500	140	NWTPH-Gx	9-26-14	9-26-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>103</i>	<i>71-121</i>				
Client ID:	9-25-5					
Laboratory ID:	09-264-05					
Benzene	ND	0.020	EPA 8021B	9-26-14	9-26-14	
Toluene	ND	0.069	EPA 8021B	9-26-14	9-26-14	
Ethyl Benzene	ND	0.069	EPA 8021B	9-26-14	9-26-14	
m,p-Xylene	ND	0.069	EPA 8021B	9-26-14	9-26-14	
o-Xylene	ND	0.069	EPA 8021B	9-26-14	9-26-14	
Gasoline	ND	6.9	NWTPH-Gx	9-26-14	9-26-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>96</i>	<i>71-121</i>				

Date of Report: September 29, 2014
 Samples Submitted: September 25, 2014
 Laboratory Reference: 1409-264
 Project: 6672-1

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0926S1					
Benzene	ND	0.020	EPA 8021B	9-26-14	9-26-14	
Toluene	ND	0.050	EPA 8021B	9-26-14	9-26-14	
Ethyl Benzene	ND	0.050	EPA 8021B	9-26-14	9-26-14	
m,p-Xylene	ND	0.050	EPA 8021B	9-26-14	9-26-14	
o-Xylene	ND	0.050	EPA 8021B	9-26-14	9-26-14	
Gasoline	ND	5.0	NWTPH-Gx	9-26-14	9-26-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	92	71-121				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	09-260-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	0.0562	0.0545	NA	NA	NA	3	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
Surrogate:								
Fluorobenzene				95	89	71-121		

SPIKE BLANKS

Laboratory ID:	SB0926S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	1.04	1.03	1.00	1.00	104	103	73-121	1	10
Toluene	1.06	1.04	1.00	1.00	106	104	75-124	2	10
Ethyl Benzene	1.07	1.05	1.00	1.00	107	105	75-125	2	9
m,p-Xylene	1.08	1.06	1.00	1.00	108	106	75-126	2	9
o-Xylene	1.02	1.01	1.00	1.00	102	101	74-123	1	8
Surrogate:									
Fluorobenzene					95	95	71-121		

Date of Report: September 29, 2014
 Samples Submitted: September 25, 2014
 Laboratory Reference: 1409-264
 Project: 6672-1

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	9-25-1					
Laboratory ID:	09-264-01					
Diesel Range Organics	ND	33	NWTPH-Dx	9-25-14	9-25-14	
Lube Oil Range Organics	ND	65	NWTPH-Dx	9-25-14	9-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				
Client ID:	9-25-5					
Laboratory ID:	09-264-05					
Diesel Range Organics	ND	29	NWTPH-Dx	9-25-14	9-25-14	
Lube Oil Range Organics	ND	59	NWTPH-Dx	9-25-14	9-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				

Date of Report: September 29, 2014
 Samples Submitted: September 25, 2014
 Laboratory Reference: 1409-264
 Project: 6672-1

**NWTPH-Dx
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0925S2					
Diesel Range Organics	ND	25	NWTPH-Dx	9-25-14	9-25-14	
Lube Oil Range Organics	ND	50	NWTPH-Dx	9-25-14	9-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	09-186-03									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						90	96	50-150		

Date of Report: September 29, 2014
Samples Submitted: September 25, 2014
Laboratory Reference: 1409-264
Project: 6672-1

% MOISTURE

Date Analyzed: 9-25-14

Client ID	Lab ID	% Moisture
9-25-1	09-264-01	23
9-25-2	09-264-02	9
9-25-3	09-264-03	21
9-25-4	09-264-04	13
9-25-5	09-264-05	15



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



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Chain of Custody

Page 1 of 1

09-264

Company: <u>Terra Associates Inc.</u>		Turnaround Request (in working days)		Laboratory Number: 09-264																		
Project Number: <u>6672-2</u>		<input checked="" type="checkbox"/> Same Day <input checked="" type="checkbox"/> 2 Day																				
Project Name: _____		<input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days																				
Project Manager: <u>Chuck Lie</u>		<input type="checkbox"/> Standard (7 Days) (TPH analysis 5 Days)																				
Sampled by: <u>Nicholas R. Hoffman</u>		<input type="checkbox"/> _____ (other)																				
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers																	
1	9-25-1	9/25/14	7:50	Soil	2																	
2	9-25-2		9:20			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	% Moisture
3	9-25-3		10:35			X	X															X
4	9-25-4		11:45			X	X															X
5	9-25-5		14:05			X			X													X
Signature		Company		Date	Time	Comments/Special Instructions																
Relinquished	<u>[Signature]</u>	TAE		9/25/14	15:50																	
Received	<u>[Signature]</u>	CCE		9/25/14	1550																	
Relinquished																						
Received																						
Relinquished																						
Received																						
Reviewed/Date		Reviewed/Date		Chromatograms with final report <input type="checkbox"/>																		



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October 2, 2014

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6672-1
Laboratory Reference No. 1409-264B

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on September 25, 2014.

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,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal flourish line.

David Baumeister
Project Manager

Enclosures

Date of Report: October 2, 2014
Samples Submitted: September 25, 2014
Laboratory Reference: 1409-264B
Project: 6672-1

Case Narrative

Samples were collected on September 25, 2014 and received by the laboratory on September 25, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

Volatiles EPA 8260C Analysis

Method 5035A VOA vials containing stir bars were not provided for samples 9-25-2 and 9-25-5. The samples were therefore extracted from 4-ounce jars and analyzed.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: October 2, 2014
 Samples Submitted: September 25, 2014
 Laboratory Reference: 1409-264B
 Project: 6672-1

VOLATILES EPA 8260C

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	9-25-2					
Laboratory ID:	09-264-02					
Methyl t-Butyl Ether	ND	0.059	EPA 8260C	10-2-14	10-2-14	
1,2-Dichloroethane	ND	0.059	EPA 8260C	10-2-14	10-2-14	
1,2-Dibromoethane	ND	0.059	EPA 8260C	10-2-14	10-2-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>65-129</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>77-122</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>73-124</i>				

Date of Report: October 2, 2014
 Samples Submitted: September 25, 2014
 Laboratory Reference: 1409-264B
 Project: 6672-1

VOLATILES EPA 8260C

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	9-25-5					
Laboratory ID:	09-264-05					
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	10-2-14	10-2-14	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	10-2-14	10-2-14	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	10-2-14	10-2-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>65-129</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>77-122</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>73-124</i>				

Date of Report: October 2, 2014
 Samples Submitted: September 25, 2014
 Laboratory Reference: 1409-264B
 Project: 6672-1

**VOLATILES EPA 8260C
 METHOD BLANK QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB1002S1					
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	10-2-14	10-2-14	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	10-2-14	10-2-14	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	10-2-14	10-2-14	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>65-129</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>77-122</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>73-124</i>				

Date of Report: October 2, 2014
 Samples Submitted: September 25, 2014
 Laboratory Reference: 1409-264B
 Project: 6672-1

**VOLATILES EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	Limits		Limit	
SPIKE BLANKS										
Laboratory ID:	SB1002S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0435	0.0431	0.0500	0.0500	87	86	56-141	1	15	
Benzene	0.0453	0.0458	0.0500	0.0500	91	92	70-121	1	15	
Trichloroethene	0.0496	0.0499	0.0500	0.0500	99	100	74-118	1	15	
Toluene	0.0461	0.0472	0.0500	0.0500	92	94	75-120	2	15	
Chlorobenzene	0.0446	0.0449	0.0500	0.0500	89	90	75-120	1	15	
Surrogate:										
Dibromofluoromethane					98	100	65-129			
Toluene-d8					97	99	77-122			
4-Bromofluorobenzene					98	99	73-124			

Date of Report: October 2, 2014
Samples Submitted: September 25, 2014
Laboratory Reference: 1409-264B
Project: 6672-1

**TOTAL LEAD
EPA 6010C**

Matrix: Soil
Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	EPA Method	Prepared	Analyzed	Flags
<hr/>						
Lab ID:	09-264-02					
Client ID:	9-25-2					
<hr/>						
Lead	ND	5.5	6010C	10-1-14	10-1-14	
<hr/>						
<hr/>						
Lab ID:	09-264-05					
Client ID:	9-25-5					
<hr/>						
Lead	ND	5.9	6010C	10-1-14	10-1-14	
<hr/>						

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**TOTAL LEAD
EPA 6010C
METHOD BLANK QUALITY CONTROL**

Date Extracted: 10-1-14
Date Analyzed: 10-1-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB1001SM1

Analyte	Method	Result	PQL
Lead	6010C	ND	5.0

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**TOTAL LEAD
EPA 6010C
DUPLICATE QUALITY CONTROL**

Date Extracted: 10-1-14
Date Analyzed: 10-1-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-271-03

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

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**TOTAL LEAD
EPA 6010C
MS/MSD QUALITY CONTROL**

Date Extracted: 10-1-14

Date Analyzed: 10-1-14

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 09-271-03

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	250	228	91	223	89	2	



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

Company: Terra Associates Inc.			Turnaround Request (in working days)			Laboratory Number: 09-264																			
Project Number: 6672-1			<input checked="" type="checkbox"/> Same Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> Standard (7 Days) (TPH analysis 5 Days)																						
Project Manager: Chuck Lie			<input type="checkbox"/> (other)																						
Sampled by: Nicholas R. Hoffman																									
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers																				
1	9-25-1	9/25/14	7:50	Soil	2	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	MTBE, EDB, EDC	TOTAL LEAD	% Moisture	
2	9-25-2		9:20			X	X		X														X		X
3	9-25-3		10:35			X	X																X		X
4	9-25-4		11:45			X	X																X		X
5	9-25-5		14:05			X			X														X		X
Signature		Company		Date	Time	Comments/Special Instructions																			
[Signature]		TERRA		9/25/14	15:50	X Added 10/1/14. DR (2 day TA)																			
Relinquished																									
Received																									
Relinquished																									
Received																									
Relinquished																									
Received																									
Relinquished																									
Reviewed/Date		Reviewed/Date		Reviewed/Date		Chromatograms with final report <input type="checkbox"/>																			