
SUBSURFACE INVESTIGATION REPORT

EAST WATERFRONT PROPERTY



Property:

East Waterfront Property
2750 West Commodore Way
Seattle, Washington

Prepared for:

TOC Holdings Co.
2737 West Commodore Way
Seattle, Washington

Report Date:

December 2, 2015

Subsurface Investigation Report

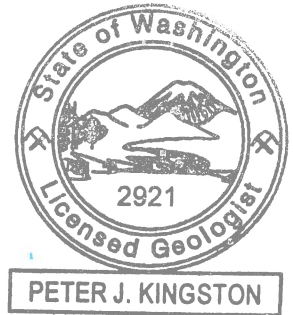
Prepared for:


TOC Holdings Co.
2737 West Commodore Way
Seattle, Washington 98199

East Waterfront Property
2750 West Commodore Way
Seattle, Washington 98199

Project No.: 0440-004-39

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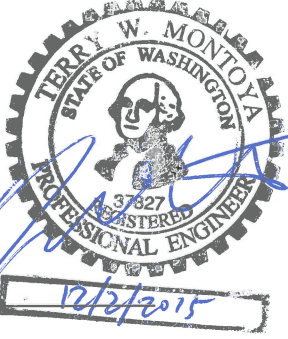
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December 2, 2015



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Friedman & Bruya, Inc. #503416 amended
Friedman & Bruya, Inc. #504487

ACRONYMS AND ABBREVIATIONS

ASKO Hydraulic Property	part of the Seattle Terminal Properties, and encompasses King County Tax Parcel No. 432790-0405
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
Bulk Terminal Property	part of the Seattle Terminal Properties, and encompasses King County Tax Parcel No. 112503-9050
COPC	chemical of potential concern
DNR	Washington State Department of Natural Resources
DRPH	diesel-range petroleum hydrocarbons
East Waterfront Property	part of the Seattle Terminal Properties, located at 2750 West Commodore Way, Seattle, Washington, and encompasses King county Tax Parcel No. 112503-9102
EPA	U.S. Environmental Protection Agency
GRPH	gasoline-range petroleum hydrocarbons
MTCA	Washington State Model Toxics Control Act
NWTPH	Northwest Total Petroleum Hydrocarbon
ORPH	oil-range petroleum hydrocarbons
PID	photoionization detector
Seattle Terminal Properties	Bulk Terminal Property, East Waterfront Property, ASKO Hydraulic Property, West Waterfront Property, and the DNR Aquatic Lease Land Property
SoundEarth	SoundEarth Strategies, Inc.
UST	underground storage tank
WAC	Washington Administrative Code
West Waterfront Property	part of the Seattle Terminal Properties, and encompasses King County Tax Parcel No. 112503-9081

1.0 INTRODUCTION

SoundEarth Strategies, Inc. (SoundEarth) has prepared this report on behalf of TOC Holdings Co. to provide the results of the subsurface investigation performed along the eastern property line of the East Waterfront Property. The East Waterfront Property is located at 2750 West Commodore Way in Seattle, Washington (Figure 1).

The East Waterfront Property is part of the Seattle Terminal Properties. The Seattle Terminal Properties include four real properties (King County Tax Parcel Numbers 112503-9050 [Bulk Terminal Property], 112503-9120 [East Waterfront Property], 423790-0405 [ASKO Hydraulic Property], and 112503-9081 [West Waterfront Property]) and one parcel leased from the Washington State Department of Natural Resources (DNR; King County Tax Parcel Number 112503-9113). The Seattle Terminal Properties are identified as the Bulk Terminal Property, East Waterfront Property, ASKO Hydraulic Property, West Waterfront Property, and the DNR Aquatic Lease Land Property.

TOC Holdings Co. operated a petroleum bulk storage facility at the Seattle Terminal Properties between 1941 and 2001. Operations included distribution of petroleum products, including gasoline and diesel, between transport ships, railroad tank cars, and trucks. Former features used at the East Waterfront Property as part of the petroleum bulk storage facility included two barrel inclines, a garage, a shed, a warehouse building, a waste oil underground storage tank (UST), and a pipeline utilidor. Historical records indicate that the east-adjointing parcel is currently owned by the Port of Seattle. Historical tax records also indicate that a 10,000-gallon UST is situated on the southwest corner of the east-adjointing parcel, which is located adjacent to the East Waterfront Property (Figure 2). Historical tax records did not indicate the substance stored in the UST.

Previous subsurface investigations and groundwater monitoring conducted at the East Waterfront Property indicated that total petroleum hydrocarbons were detected in soil and groundwater exceeding the Washington State Model Toxics Control Act (MTCA) cleanup levels as established in Chapter 340 of Title 173 of the Washington Administrative Code (WAC 173-340). A detailed summary of the remedial investigation performed at the East Waterfront Property is provided in the Remedial Investigation Report prepared by SoundEarth, dated June 10, 2014.

The subsurface investigation was performed in general accordance with SoundEarth's proposal dated January 20, 2015. This report describes the field activities performed during the subsurface investigation, summarizes the observed soil profile and analytical results reported by the laboratory, and provides conclusions.

1.1 PURPOSE

The purpose of the subsurface investigation was to further assess soil and groundwater quality at the East Waterfront Property and identify potential sources of chemicals of potential concern (COPCs) in areas with limited groundwater data near the eastern property line between wells 02MW06 and 02MW10 that had been identified by others as a potential data gap.

2.0 SUBSURFACE INVESTIGATION

Field activities for the subsurface investigation were conducted on March 23, April 23, and April 27, 2015. Cascade Drilling, L.P. of Woodinville, Washington, advanced two borings using a limited-access, direct push-probe rig. Geologic Drill Exploration, Inc. of Spokane, Washington, installed two monitoring wells using a limited-access, hollow-stem auger drill rig. Drilling and well installation activities were observed by a SoundEarth geologist. The scope of work associated with the subsurface investigation included the following:

- Preparing a health and safety plan in accordance with MTCA and Part 1910.120 of Title 29 of the Code of Federal Regulations before initiating field activities.
- Preparing a work plan summary (checklist) outlining specific field activities to be completed.
- Performing a utility locate at the proposed boring locations using Bravo Environmental of Tukwila, Washington, and contacting the Northwest Utility Notification Center.
- Advancing two direct push-probe borings (B355 and B356).
- Submitting select soil samples collected from each probe boring for laboratory analysis.
- Advancing two hollow-stem auger borings (B371 and B372) and installing monitoring wells 02MW15 and 02MW16 in the borings, respectively.
- Developing the new monitoring wells.
- Completing a professional survey of the location and elevation of the borings and top-of-casings of the monitoring wells using Axis Survey & Mapping of Redmond, Washington.
- Collecting groundwater samples from monitoring wells 02MW15 and 02MW16 using low-flow sampling methods and submitting the groundwater samples for laboratory analysis.
- Preparing this subsurface investigation report.

A detailed description of the subsurface investigation field activities is provided in the following sections.

2.1 SOIL SAMPLE COLLECTION

On March 23, 2015, borings B355 and B356 were advanced inside of the garage and shed structures, adjacent to the eastern property line of the East Waterfront Property (Figure 2). The borings were sampled continuously until probe refusal was encountered to the maximum depths explored ranging from approximately 8 to 9 feet below ground surface (bgs). The borings were sampled using a 5-foot-long probe rod driven with a 140-pound-per-square-inch hydraulic hammer. The sampler was lined with disposable acetate sleeves that were removed and opened to reveal the soil for each driven sampling interval. Sample recovery percentages were logged for each sample interval.

The soil samples were described in accordance with SoundEarth's *Standard Operating Procedure 005 – Soil Sampling*. Soil samples were screened in the field for potential evidence of contamination using visual observations, notations of odor, and by conducting headspace analysis using a photoionization detector (PID) to detect the presence of volatile organic vapors. Headspace analysis was conducted by placing soil from each sample interval into a resealable plastic bag and allowing the sample to warm for a minimum of 30 seconds. The probe of the PID was then inserted into the bag, and the highest reading obtained over an approximately 30-second interval was recorded. The Unified Soil Classification System

symbol, visual and olfactory notations for the samples, and PID readings were recorded on boring log forms, which are provided in Appendix A.

Soil samples collected from the two borings were transferred directly into laboratory-prepared sample containers. Soil samples to be analyzed for low-level volatile organic compounds were collected in accordance with U.S. Environmental Protection Agency (EPA) Method 5035A. Additional soil samples were collected using 4-ounce jars. Sample containers were labeled with unique sample identification and placed into an iced cooler. The soil samples were submitted to Friedman & Bruya, Inc. of Seattle, Washington under standard chain-of-custody protocols for laboratory analysis. One soil sample per boring was analyzed for diesel-range petroleum hydrocarbons (DRPH) and oil-range petroleum hydrocarbons (ORPH) by Northwest Total Petroleum Hydrocarbon (NWTPH) Method NWTPH-Dx; gasoline-range petroleum hydrocarbons (GRPH) by Method NWTPH-Gx; and benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021B.

2.2 MONITORING WELL INSTALLATION AND DEVELOPMENT

On April 23, 2015, borings B371 and B372 were advanced to approximately 15 feet bgs with a limited-access, hollow-stem auger drill rig. The borings were located in the vicinity of borings B355 and B356. The borings were completed as monitoring wells 02MW15 and 02MW16 (Figure 2). The monitoring wells were screened from 5 to 15 feet below the top of the casing. The monitoring wells were constructed of 2-inch-diameter blank PVC casing, flush-threaded to 0.010-inch slotted well screen. The bottom of each well was fitted with a threaded PVC bottom cap, and a locking compression-fit well cap was placed in the top of the well casing. The annulus of each monitoring well was filled with #2/12 silica sand to approximately 1 foot above the top of the screened interval. A bentonite seal having a minimum thickness of 2 feet was installed above the sand pack. The wells were completed at the surface with a flush-mounted, traffic-rated well box set in concrete.

The monitoring wells were developed with disposable bailers and a submersible pump in accordance with SoundEarth's *Standard Operating Procedure 010 – Monitoring Well Development*. Monitoring well development consisted of surging the monitoring wells and purging groundwater until a minimum of seven submerged well volumes was removed. Following well installation, the boring and monitoring well locations and elevations were surveyed by Axis Survey and Mapping Consulting Engineers of Kirkland, Washington. The monitoring well top of casings and top of monuments were surveyed to an accuracy of 0.01 to 0.02 foot, using a North American Vertical Datum of 1988 benchmark.

2.3 GROUNDWATER SAMPLING

On April 27, 2015, monitoring wells 02MW15 and 02MW16 were sampled by SoundEarth personnel. The wells were sampled using low-flow techniques in accordance with SoundEarth's *Standard Operating Procedure 007 – Groundwater Sampling*. Purging and sampling of each monitoring well were performed using a peristaltic pump and dedicated polyethylene tubing at flow rates ranging from 100 to 130 milliliters per minute. The tubing intake was placed approximately 2 to 3 feet below the surface of the groundwater or in the middle of the submerged screen in each monitoring well. During purging, water quality was monitored using a water quality meter equipped with a flow-through cell. The water quality parameters that were monitored and recorded included temperature, pH, specific conductivity, dissolved oxygen, turbidity, and oxidation-reduction potential. Each well was purged until the minimum subset of pH, specific conductance, and turbidity or dissolved oxygen stabilized.

Following purging, groundwater samples were collected from the pump outlet tubing located upstream of the flow-through cell and placed directly into clean, laboratory-prepared sample containers. Each container was labeled with unique sample identification, placed on ice in a cooler, and transported to Friedman & Bruya, Inc. of Seattle, Washington, under standard chain-of-custody protocols for laboratory analysis. The groundwater samples were submitted for analysis of GPRH by Method NWTPH-Gx, DRPH and ORPH by Method NWTPH-Dx, and BTEX by EPA Method 8021B.

2.4 WASTE MANAGEMENT

Soil cuttings generated during the subsurface investigation were stored in labeled 55-gallon drums and placed in a temporary accumulation area on the East Waterfront Property in accordance with WAC 173-303. A waste profile is currently being created for the generated soil based on the analytical results. If the generated soil is classified as hazardous waste, it will be transported and disposed of at a permitted treatment, storage, and disposal facility. Purge water generated during the groundwater monitoring and well development activities was placed into the groundwater pretreatment system located on the Bulk Terminal Property. Water will be treated and discharged to the sanitary sewer system in accordance with the King County Industrial Waste Discharge Permit No. 7689-07.

3.0 RESULTS

This section summarizes the soil profile observed during soil sampling activities and the results of soil and groundwater samples analyzed for this subsurface investigation. Soil analytical results are presented on Figure 3 and in Table 1. Groundwater analytical results are presented on Figure 4 and in Table 2. Laboratory reports for the samples analyzed as part of the subsurface investigation are included as Appendix B.

3.1 SOIL

Soil observed in the four borings had similar soil profile consisting of an upper silty sand layer, ranging from ground surface to 3 to 5 feet bgs, underlain by a silt layer extending to approximately 7 to 10 feet bgs. The silt layer was underlain by silty sand to the maximum depth explored of 15 feet bgs. Silt and clay in the upper 3 feet bgs were observed in boring B355.

One soil sample from each boring advanced on March 23, 2015, was selected for laboratory analysis for DRPH, ORPH, GRPH, and BTEX. Concentrations of DRPH, ORPH, GRPH, and BTEX were not detected in the two soil samples (B355-09 and B356-08). The analytical results for the two soil samples were also less than the laboratory reporting limit and the MTCA Method A cleanup level for the analyzed compounds.

3.2 GROUNDWATER

Groundwater was observed between 8 and 10 feet bgs in the borings advanced during drilling activities, with the exception of boring B356, which had no observed measurable groundwater. Prior to sampling, groundwater levels in the monitoring wells were observed ranging from 3.13 (02MW15) to 8.27 (02MW16) feet below the top-of-casing. No indications of contamination were observed in the soil or groundwater encountered during the subsurface investigation. Concentrations of DRPH, ORPH, GRPH, and BTEX in the two groundwater samples were below the applicable MTCA Method A cleanup levels and/or the laboratory reporting limits.

4.0 CONCLUSIONS

The results from the subsurface investigation and historical subsurface investigations indicate the following:

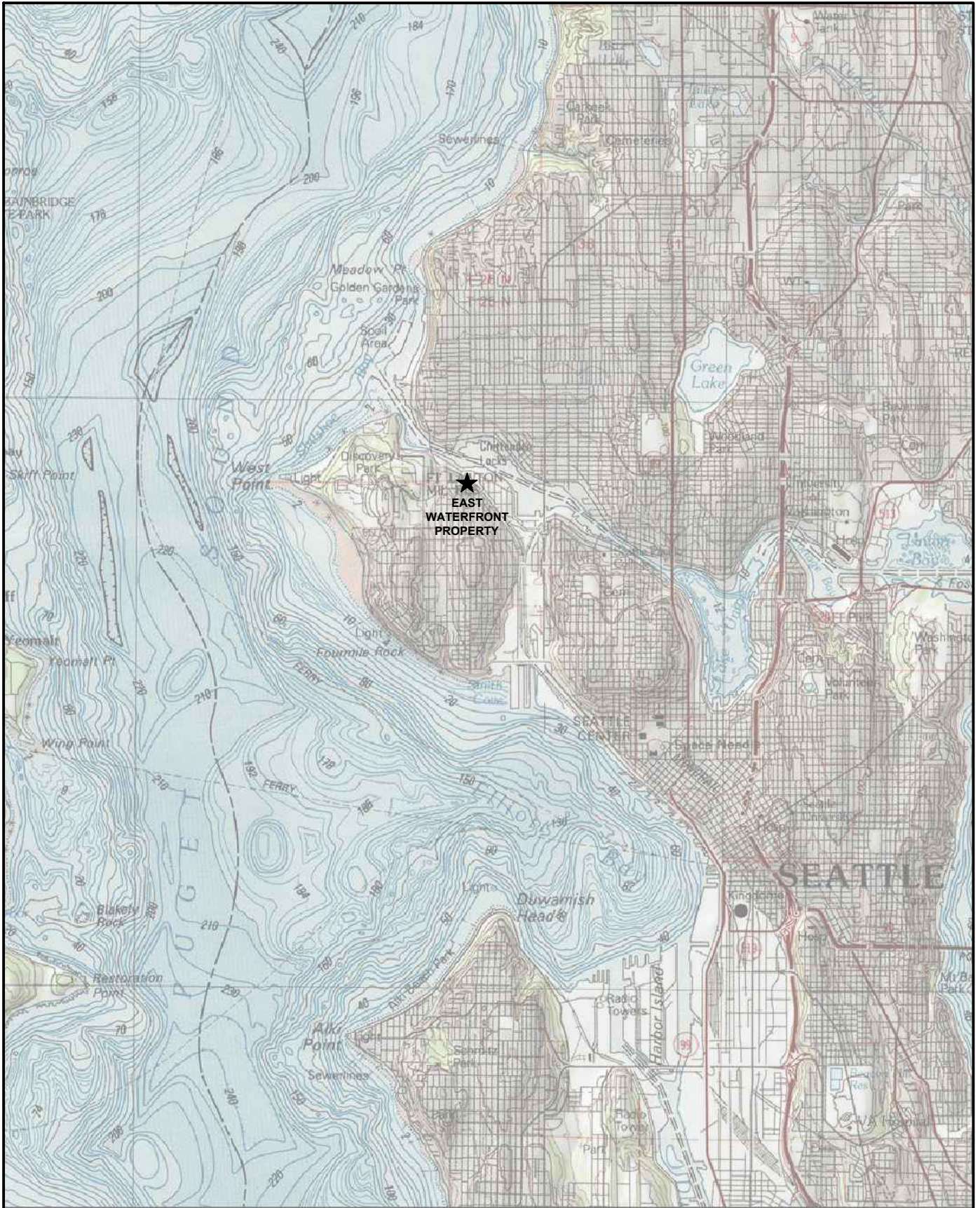
- The soil conditions observed at borings B355 and B356 were below the applicable MTCA cleanup levels for DRPH, ORPH, GRPH, and BTEX, indicating that soil in the vicinity of the borings does not require cleanup. In addition, the soil conditions located near the eastern property line between wells 02MW06 and 02MW10 do not appear to have been impacted significantly by historical operations at the East Waterfront Property.
- The groundwater conditions observed at monitoring wells 02MW15 and 02MW16 were below the applicable MTCA cleanup levels for COPCs, indicating that groundwater near the eastern property line does not exceed the applicable MTCA cleanup levels between wells 02MW06 and 02MW10.
- The results also indicate that the residual concentrations of COPCs in soil and groundwater exceeding the applicable MTCA cleanup levels at the East Waterfront Property remain within the property boundary, west of the property line, and do not extend to the east-adjacent property.

5.0 LIMITATIONS

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

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

FIGURES



0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 miles
 0 1 2 3 4 5 km
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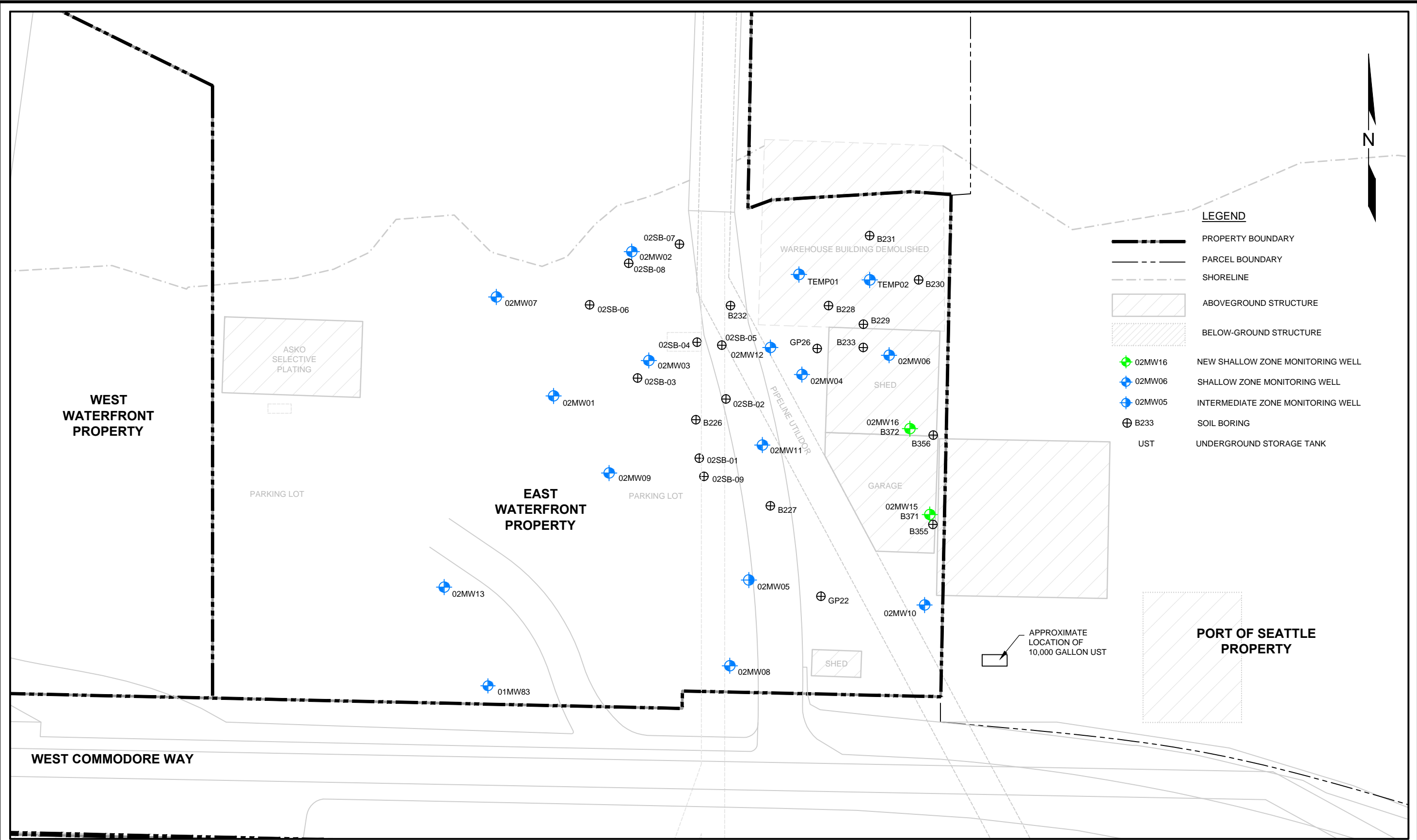


DATE: _____05/13/14
 DRAWN BY: _____NAC
 CHECKED BY: _____PJK/TSB
 CAD FILE: _____0600_FIG1_VICINITY_EWA

PROJECT NAME: _____EAST WATERFRONT PROPERTY
 PROJECT NUMBER: _____0440-004
 STREET ADDRESS: _____2750 WEST COMMODORE WAY
 CITY, STATE: _____SEATTLE, WASHINGTON

FIGURE 1
 PROPERTY LOCATION MAP

10/28/2015
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LEGEND

	PROPERTY BOUNDARY
	PARCEL BOUNDARY
	SHORELINE
	ABOVEGROUND STRUCTURE
	BELOW-GROUND STRUCTURE
	NEW SHALLOW ZONE MONITORING WELL
	SHALLOW ZONE MONITORING WELL
	INTERMEDIATE ZONE MONITORING WELL
	SOIL BORING
	UST



DATE: 07/27/15
 DRAWN BY: NAC/JQC
 CHECKED BY: PJK/TSB
 CAD FILE: 01-600_2015_EL

PROJECT NAME: EAST WATERFRONT PROPERTY
 SES PROJECT NUMBER: 0440-004
 STREET ADDRESS: 2750 WEST COMMODORE WAY
 CITY, STATE: SEATTLE, WASHINGTON

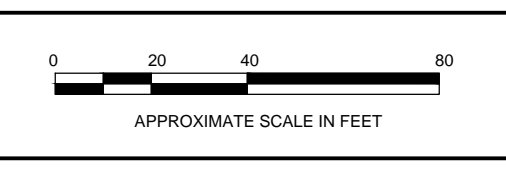
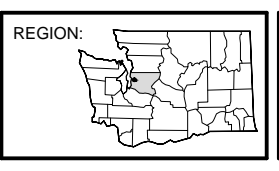


FIGURE 2
EXPLORATION LOCATION PLAN

SOUND EARTH INC.

10/28/2015
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Boring	Date Sampled	Depth (feet below ground surface)	Analytical Results (milligrams per kilogram)						
			Benzene	Toluene	Ethylbenzene	Total Xylenes	GRPH	DRPH	ORPH
B355	03/23/15	9	<0.02	<0.02	<0.02	<0.06	<2	<50	<250
B356	03/23/15	8	<0.02	<0.02	<0.02	<0.06	<2	<50	<250
MTCAL Cleanup Level for Soil			0.03	7	6	9	30	2,000	2,000



DATE: 05/01/15
 DRAWN BY: NAC/JQC
 CHECKED BY: PJK/TSB
 CAD FILE: 01-600_2015_SD

PROJECT NAME: EAST WATERFRONT PROPERTY
 SES PROJECT NUMBER: 0440-004
 STREET ADDRESS: 2750 WEST COMMODORE WAY
 CITY, STATE: SEATTLE, WASHINGTON

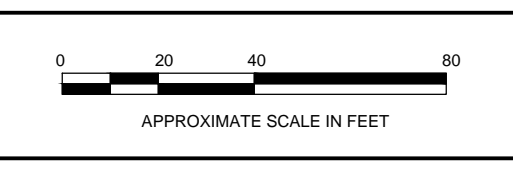
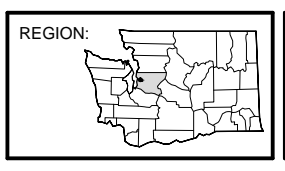


FIGURE 3
SOIL ANALYTICAL RESULTS

SOUND EARTH INC.

10/28/2015
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Well Identification	Date Sampled	Analytical Results (micrograms per liter)						
		Benzene	Toluene	Ethylbenzene	Total Xylenes	GRPH	DRPH	ORPH
East Waterfront Property								
Shallow Water-Bearing Zone								
02MW15	04/27/15	<1	<1	<1	<3	<100	180	<250
02MW16	04/27/15	<1	<1	<1	<3	<100	230	<250
MTC Cleanup Level for Groundwater		5	1,000	700	1,000	800	500	500



DATE: 05/01/15
 DRAWN BY: NAC/JQC
 CHECKED BY: PJK/TSB
 CAD FILE: 01-600_2015_GD

PROJECT NAME: EAST WATERFRONT PROPERTY
 SES PROJECT NUMBER: 0440-004
 STREET ADDRESS: 2750 WEST COMMODORE WAY
 CITY, STATE: SEATTLE, WASHINGTON

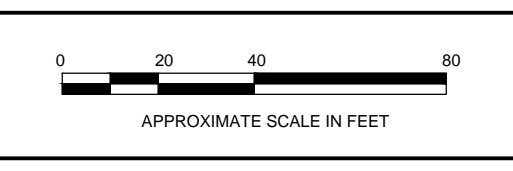
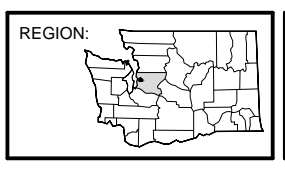


FIGURE 4
GROUNDWATER ANALYTICAL RESULTS

SOUND EARTH INC.

TABLES



Table 1
Summary of Soil Analytical Results
TOC Holdings Co.
East Waterfront Property
2750 West Commodore Way
Seattle, Washington

Boring Identification	Soil Sample Identification	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)						
					DRPH ⁽³⁾	ORPH ⁽³⁾	GRPH ⁽²⁾	Benzene ⁽¹⁾	Toluene ⁽¹⁾	Ethylbenzene ⁽¹⁾	Total Xylenes ⁽¹⁾
Borings											
B355	B355-09	SoundEarth	03/23/15	9	<50	<250	<2	<0.02	<0.02	<0.02	<0.06
B356	B356-08			8	<50	<250	<2	<0.02	<0.02	<0.02	<0.06
MTCA Cleanup Level for Soil⁽⁴⁾					2,000	2,000	30	0.03	7	6	9

NOTES:

Sample analyses conducted by Friedman & Bruya, Inc. of Seattle, Washington.

⁽¹⁾Analyzed by EPA Method 8021B.

⁽²⁾Analyzed by Method NWTPH-Gx.

⁽³⁾Analyzed by Method NWTPH-Dx.

⁽⁴⁾MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Uses.

< = not detected at a concentration exceeding the laboratory reporting limit

bgs = below ground surface

DRPH = diesel-range petroleum hydrocarbons

EPA = United States Environmental Protection Agency

GRPH = gasoline-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbons

SoundEarth = SoundEarth Strategies, Inc.

WAC = Washington Administrative Code



Table 2
Summary of Groundwater Analytical Results
TOC Holdings Co.
East Waterfront Property
2750 West Commodore Way
Seattle, Washington

Well Identification	Sample Identification	Sampled By	Date Sampled	Analytical Results (micrograms per liter)						
				DRPH ⁽¹⁾	ORPH ⁽¹⁾	GRPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethylbenzene ⁽³⁾	Total Xylenes ⁽³⁾
East Waterfront Property										
Shallow Water-Bearing Zone										
02MW15	02MW15-20150427	SoundEarth	04/27/15	180 ^x	<250	<100	<1	<1	<1	<3
02MW16	02MW16-20150427	SoundEarth	04/27/15	230 ^x	<250	<100	<1	<1	<1	<3
MTCA Cleanup Level for Groundwater⁽⁴⁾				500	500	800	5	1,000	700	1,000

NOTES:

Sample analyses conducted by Friedman & Bruya, Inc. of Seattle, Washington.

⁽¹⁾Analyzed by Method NWTPH-Dx.

⁽²⁾Analyzed by Method NWTPH-Gx.

⁽³⁾Analyzed by EPA Method 8021B.

⁽⁴⁾MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels for Groundwater, revised November 2007.

Laboratory Note:

^xThe pattern of peaks present is not indicative of diesel or motor oil or the sample chromatographic pattern does not resemble the fuel standard used for quantitation.

< = not detected at a concentration exceeding the laboratory reporting limit

DRPH = diesel-range petroleum hydrocarbons

EPA = United States Environmental Protection Agency

GRPH = gasoline-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbons

SoundEarth = SoundEarth Strategies, Inc.

WAC = Washington Administrative Code

APPENDIX A
BORING LOGS



Project: TOC Holdings Co. Facility No. 01-600
Project Number: 0440-004-39
Logged by: AFH
Date Started: 03/23/2015
Surface Conditions: Concrete
Well Location N/S: 70 feet South of 02MW06
Well Location E/W: 3 feet West of East wall of shed
Reviewed by: PJK
Date Completed: 03/23/2015

BORING LOG | B355

Site Address: 2750 West Commodore Way
 Seattle, Washington

Water Depth At Time of Drilling 8 feet bgs
 Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
0								Concrete	
			100			ML		Boring hand dug to 2 feet below ground surface. Moist, sandy SILT, with trace gravel., brown, no hydrocarbon odor (60-30-10).	
						CL		Wet, silty CLAY, blue-brown, no hydrocarbon odor (85,15,0).	
			90			SM		Wet, fine SAND, medium gray, no hydrocarbon odor (10,85,5).	
5				0.1	B355-05				
						ML		Wet, SILT, dark gray, no hydrocarbon odor (80,20,0).	
				0.2	B355-07				
			50						
				0.4	B355-09				
10								Boring terminated at 9.0 feet below ground surface.	
15									

Drilling Co./Driller: Cascade/Casey
Drilling Equipment: Geoprobe
Sampler Type: continuous
Hammer Type/Weight: -- lbs
Total Boring Depth: 9 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 2 inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: ---
Annular Seal: Sand
Monument Type: --

Notes/Comments:



Project: TOC Holdings Co. Facility No. 01-600
Project Number: 0440-004-39
Logged by: AFH
Date Started: 03/23/2015
Surface Conditions: Concrete
Well Location N/S: 30 feet South of 02MW06
Well Location E/W: 3.5 feet West of East wall of shed
Reviewed by: PJK
Date Completed: 03/23/2015

BORING LOG | B356

Site Address: 2750 West Commodore Way
Seattle, Washington

Water Depth At Time of Drilling -- feet bgs
 Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
0			100	0.0	B356-03	Concrete SM		Concrete Boring hand dug to 2 feet below ground surface. Wet, fine SAND, brown, no hydrocarbon odor (15,85,0).	
5			100	0.1	B356-07	ML		Moist, SILT, dark gray, no hydrocarbon odor (85,15,0).	
			50	0.0	B356-08				
10								Boring terminated at 8.0 feet below ground surface.	
15									

Drilling Co./Driller: Cascade/Casey
Drilling Equipment: Geoprobe
Sampler Type: continuous
Hammer Type/Weight: -- lbs
Total Boring Depth: 8 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 2 inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: ---
Annular Seal: Sand
Monument Type: --

Notes/Comments:



Project: TOC - EWF Property
Project Number: 0440-004-39
Logged by: GCF
Date Started: 4/23/15
Surface Conditions: Concrete
Well Location N/S: 18' north of SE corner of garage.
Well Location E/W: 3' west of SE corner of garage.
Reviewed by: PJK
Date Completed: 4/23/15

BORING LOG | **B371**
 02MW15

Site Address: 2737 West Commodore Way
 Seattle, Washington

Water Depth At Time of Drilling 8 feet bgs
 Water Depth After Completion 5 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
0								5" of concrete	
5				0.4				Spoils observed to be moist, sandy SILTS, brown-gray. No hydrocarbon odor. Driller reports hard silts at 5' to 6' bgs. Wet sands encountered at ~7' bgs.	
10								Spoils observed to be saturated, silty SAND, gray.	
15								Boring terminated at 15' bgs and completed as 02MW15. Well screened from 15' to 5' bgs.	

Drilling Co./Driller: Geologic Drill / Aren
Drilling Equipment: Hollow stem auger
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 15 feet bgs
Total Well Depth: 15 feet bgs
State Well ID No.: BAH915

Well/Auger Diameter: 2" / 6" inches
Well Screened Interval: 15 - 5 feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: 10 x 20 Silica Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flushmount

Notes/Comments:
 No hydrocarbon odor observed in boring spoils.

 Drill straight to 15' bgs.



Project: TOC - EWF Property
Project Number: 0440-004-39
Logged by: GCF
Date Started: 4/23/15
Surface Conditions: Concrete
Well Location N/S: 51' north of SE corner of garage.
Well Location E/W: 4' west of SE corner of garage.
Reviewed by: PJK
Date Completed: 4/23/15

BORING LOG | **B372**
 | 02MW16

Site Address: 2737 West Commodore Way
 Seattle, Washington

Water Depth At Time of Drilling 10 feet bgs
 Water Depth After Completion 7.9 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
0								5" of concrete	
5								Driller reports hard silts at 4' bgs. Spoils observed to be brown SILT.	
10								Spoils observed to be wet, SAND with silt.	
15								Boring terminated at 15' bgs and completed as 02MW16. Well screened from 15' to 5' bgs.	

Drilling Co./Driller: Geologic Drill / Aren
Drilling Equipment: Hollow stem auger
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 15 feet bgs
Total Well Depth: 15 feet bgs
State Well ID No.: BAH916

Well/Auger Diameter: 2" / 6" inches
Well Screened Interval: 15 - 5 feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: 10 x 20 Silica Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flushmount

Notes/Comments:
 No hydrocarbon odor observed in boring spoils.

 Drill straight to 15' bgs.

APPENDIX B
LABORATORY ANALYTICAL REPORTS

Friedman & Bruya, Inc. #503416 amended

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

March 27, 2015

Tim Brown, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Brown:

Included are the results from the testing of material submitted on March 23, 2015 from the TOC_01-600_20150323 WORFDB8, F&BI 503416 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Pete Kingston, Jessica Brown, Courtney Porter, Jennifer Cyr
SOU0327R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 23, 2015 by Friedman & Bruya, Inc. from the SoundEarth Strategies TOC_01-600_20150323 WORFDB8, F&BI 503416 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
503416 -01	B325-05
503416 -02	B325-07
503416 -03	B325-09
503416 -04	B326-03
503416 -05	B326-07
503416 -06	B326-08

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/27/15

Date Received: 03/23/15

Project: TOC_01-600_20150323 WORFDB8, F&BI 503416

Date Extracted: 03/25/15

Date Analyzed: 03/25/15

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
B325-09 503416-03	<0.02	<0.02	<0.02	<0.06	<2	78
B326-08 503416-06	<0.02	<0.02	<0.02	<0.06	<2	89
Method Blank 05-617 MB	<0.02	<0.02	<0.02	<0.06	<2	86

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/27/15

Date Received: 03/23/15

Project: TOC_01-600_20150323 WORFDB8, F&BI 503416

Date Extracted: 03/25/15

Date Analyzed: 03/25/15

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
B325-09 503416-03	<50	<250	102
B326-08 503416-06	<50	<250	103
Method Blank 05-614 MB	<50	<250	99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/27/15

Date Received: 03/23/15

Project: TOC_01-600_20150323 WORFDB8, F&BI 503416

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

Laboratory Code: 503452-03 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	90	69-120
Toluene	mg/kg (ppm)	0.5	92	70-117
Ethylbenzene	mg/kg (ppm)	0.5	90	65-123
Xylenes	mg/kg (ppm)	1.5	89	66-120
Gasoline	mg/kg (ppm)	20	105	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/27/15

Date Received: 03/23/15

Project: TOC_01-600_20150323 WORFDB8, F&BI 503416

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

Laboratory Code: 503457-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	98	99	63-146	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	90	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

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

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

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

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

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

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

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

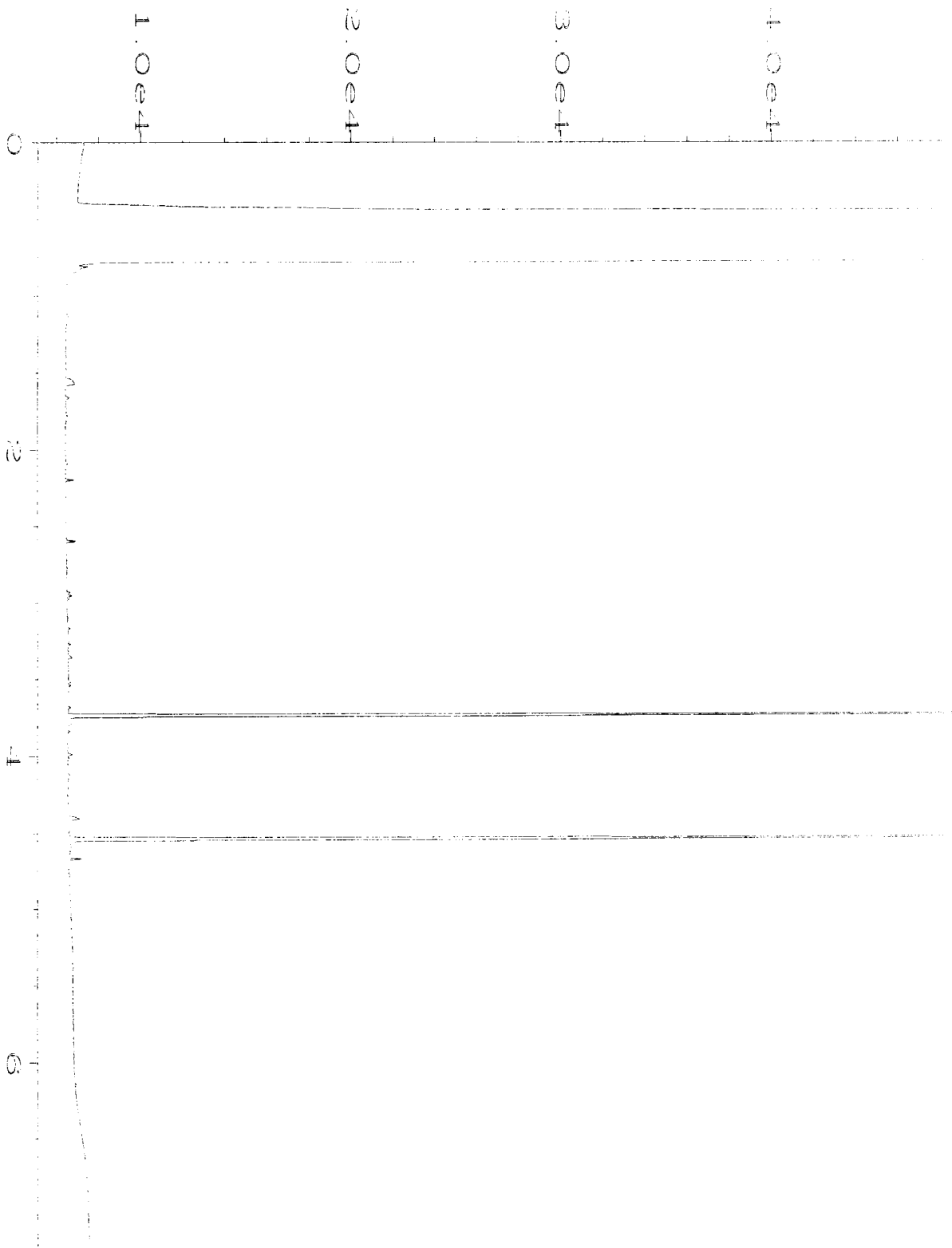
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

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

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

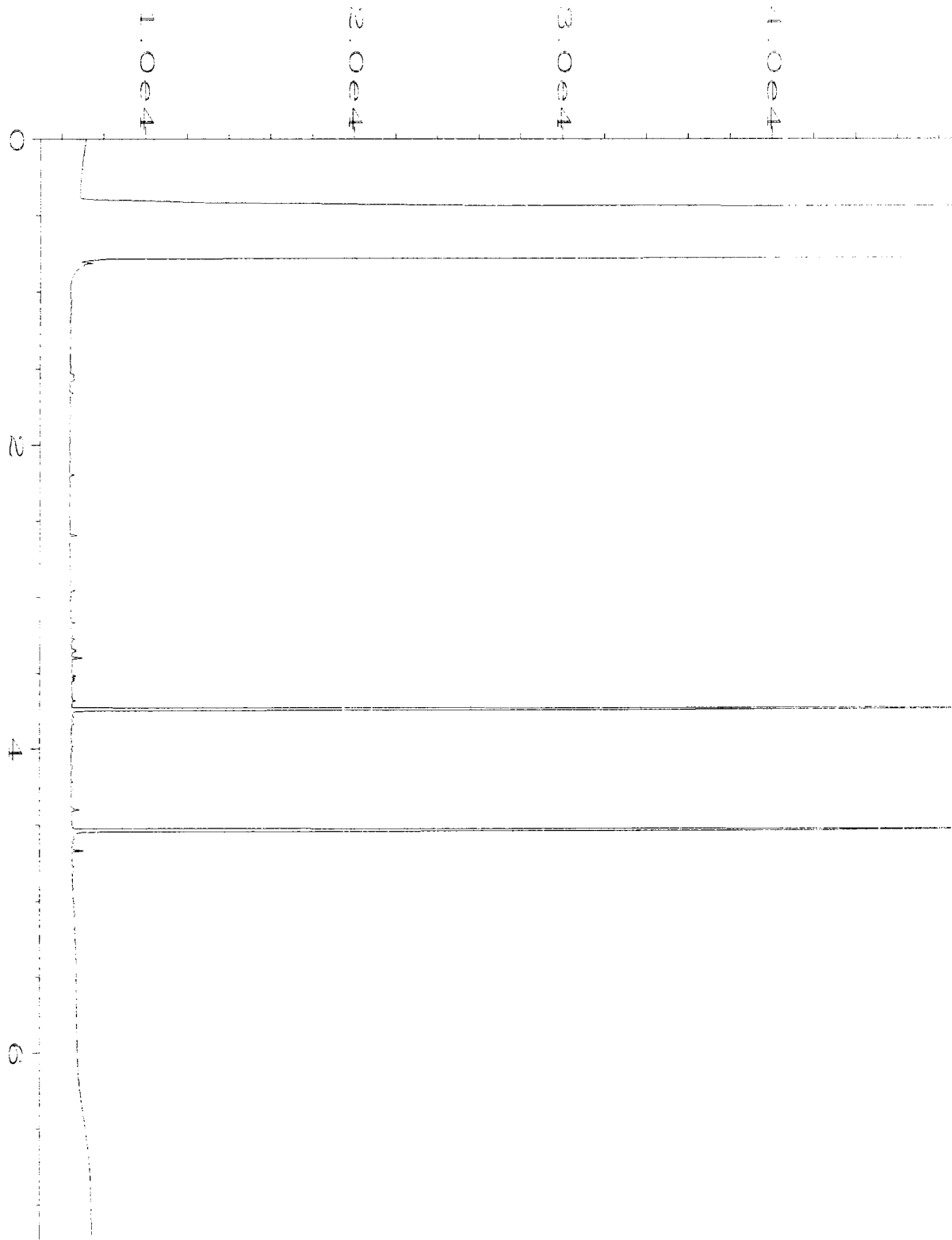
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

1000
900
800
700
600
500
400
300
200
100
0

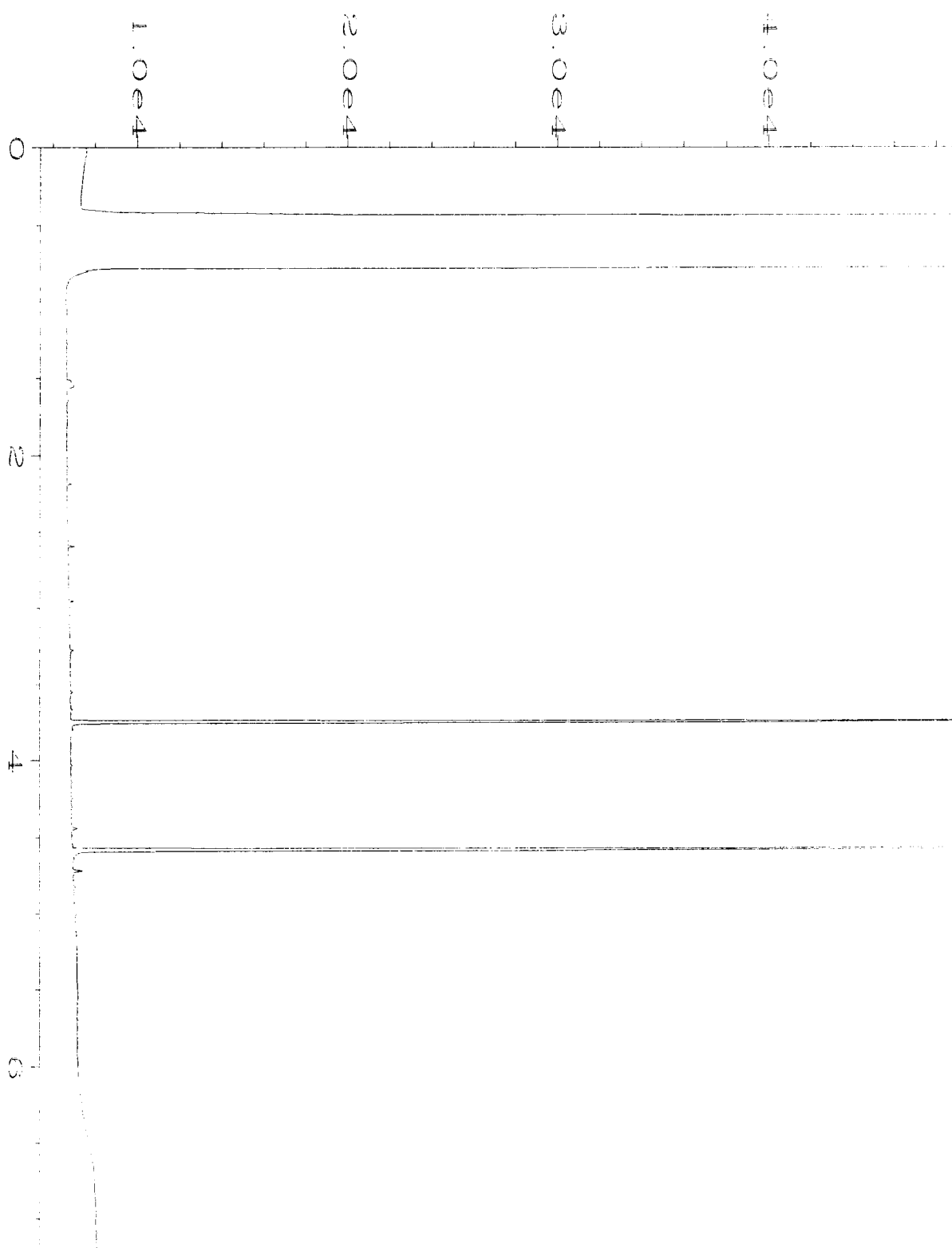


Data File Name : C:\HPCHEM\1\DATA\03-25-15\021F0401.D
Operator : sp Page Number : 1
Instrument : GC1 Vial Number : 21
Sample Name : 503416-03 Injection Number : 1
Run Time Bar Code: Sequence Line : 4
Acquired on : 25 Mar 15 12:55 PM Instrument Method: DX.MTH
Report Created on: 25 Mar 15 04:03 PM Analysis Method : DX.MTH

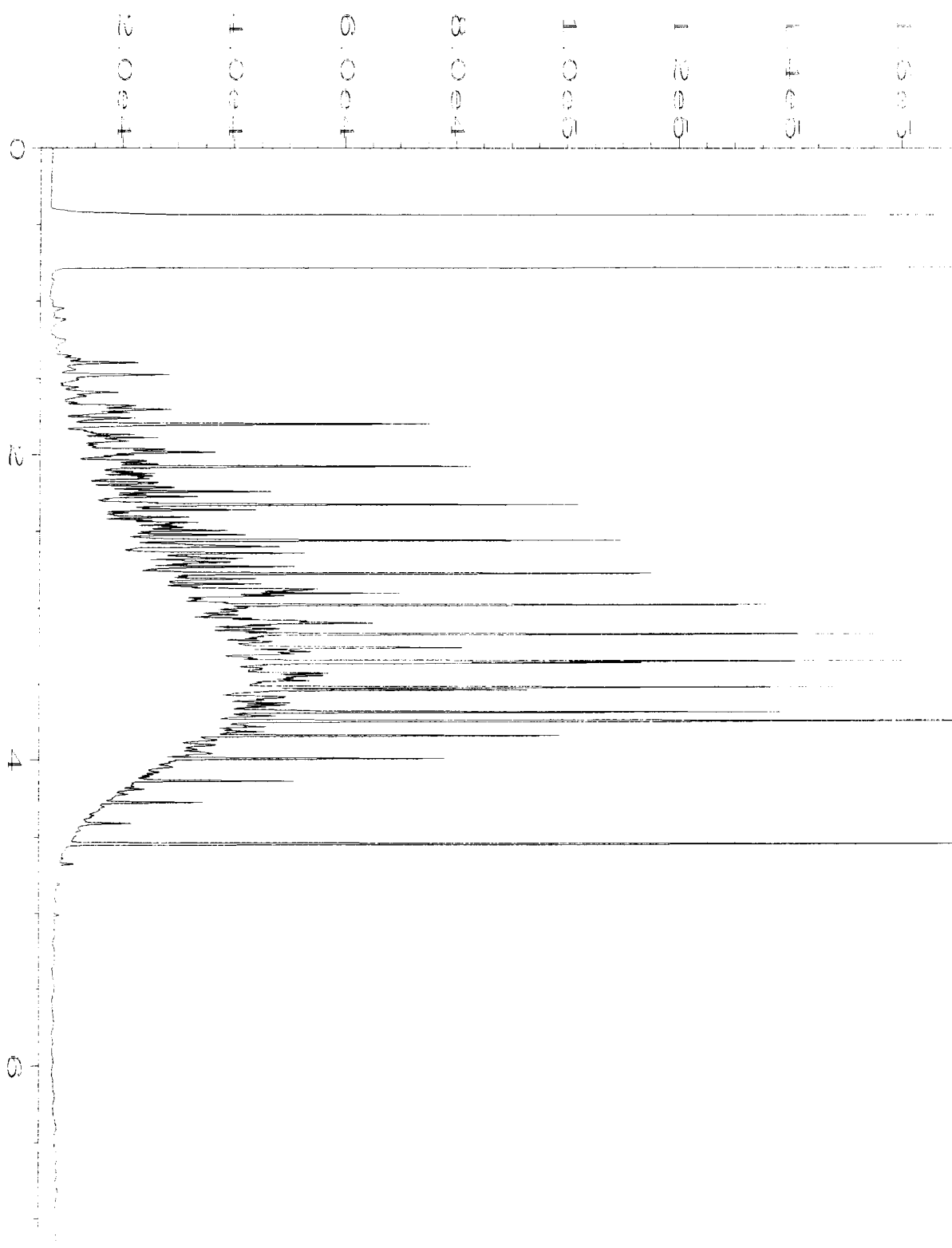
11:04:00 AM 03/25/2015



Data File Name	: C:\HPCHEM\1\DATA\03-25-15\022F0401.D	Page Number	: 1
Operator	: sp	Vial Number	: 22
Instrument	: GC1	Injection Number	: 1
Sample Name	: 503416-06	Sequence Line	: 4
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 25 Mar 15 01:06 PM	Analysis Method	: DX.MTH
Report Created on:	25 Mar 15 04:03 PM		



Data File Name	: C:\HPCHEM\1\DATA\03-25-15\007F0401.D	Page Number	: 1
Operator	: sp	Vial Number	: 7
Instrument	: GC1	Injection Number	: 1
Sample Name	: 05-614 mb	Sequence Line	: 4
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 25 Mar 15 10:23 AM	Analysis Method	: DX.MTH
Report Created on:	25 Mar 15 04:03 PM		



Data File Name	: C:\HPCHEM\1\DATA\03-25-15\003F0201.D	Page Number	: 1
Operator	: sp	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 Dx 44-94C	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 25 Mar 15 08:49 AM	Analysis Method	: DX.MTH
Report Created on:	25 Mar 15 04:03 PM		

503446

SAMPLE CHAIN OF CUSTODY ME 03-23-15

B02 / VS2

Send Report To Tim Brown, cc: Jessica Brown, Pete Kingston, Jennifer Cyr, Courtney Porter

SAMPLERS (signature)

Dr. [Signature]

Page # 1 of 1

TURNAROUND TIME

Standard (2 Weeks)

RUSH _____

Rush charges authorized by: _____

Company Sound Environmental Strategies

PROJECT NAME/NO.

PO #

TOC Holdings Co. Facility No. 01-600
Seattle Terminal - East Waterfront Property

0440-004-39

Address 2811 Fairview Ave E, Suite 2000

REMARKS

EIM Y / N

City, State, ZIP Seattle, WA 98102

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	GRPH by NWTPH-Gx	BTEX by EPA 8021B	DRPH/ORPH by NWTPH-Dx	PCP by EPA 8270D (low-level detection limits)	cVOCs by EPA 8260B	Nitrate and Sulfate by EPA 300.0	Methane, Ethane, and Ethene by RSK 175	Notes
B325-05.0	B325	05.0	01A-E	03-23-15	0910	soil	5								X-per AH 3/24/15
B325-07.0	B325	07.0	02		0912										HOLD
B325-09.0	B325	09.0	03		0945			X	X	X					
B326-03.0	B326	03.0	04		1020										
B326-07.0	B326	07.0	05		1025										
B326-08.0	B326	08.0	06		1035			X	X	X					
AFH 03-23-15															

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>[Signature]</i>	Ada Hamilton	Sound Earth	03-23-15	1130
Received by: <i>[Signature]</i>	HONG NGUYEN	FBI	✓	✓
Relinquished by:				
Received by:		Samples received at	4	°C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 14, 2015

Tim Brown, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Brown:

Included is the amended report from the testing of material submitted on March 23, 2015 from the TOC_01-600_20150323 WORFDB8, F&BI 503416 project. Per your request, the sample IDs have been updated.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Pete Kingston, Jessica Brown, Courtney Porter, Jennifer Cyr, Clare Tochilin
SOU0327R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

March 27, 2015

Tim Brown, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Brown:

Included are the results from the testing of material submitted on March 23, 2015 from the TOC_01-600_20150323 WORFDB8, F&BI 503416 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Pete Kingston, Jessica Brown, Courtney Porter, Jennifer Cyr
SOU0327R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 23, 2015 by Friedman & Bruya, Inc. from the SoundEarth Strategies TOC_01-600_20150323 WORFDB8, F&BI 503416 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
503416 -01	B355-05
503416 -02	B355-07
503416 -03	B355-09
503416 -04	B356-03
503416 -05	B356-07
503416 -06	B356-08

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/27/15

Date Received: 03/23/15

Project: TOC_01-600_20150323 WORFDB8, F&BI 503416

Date Extracted: 03/25/15

Date Analyzed: 03/25/15

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
B355-09 503416-03	<0.02	<0.02	<0.02	<0.06	<2	78
B356-08 503416-06	<0.02	<0.02	<0.02	<0.06	<2	89
Method Blank 05-617 MB	<0.02	<0.02	<0.02	<0.06	<2	86

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/27/15

Date Received: 03/23/15

Project: TOC_01-600_20150323 WORFDB8, F&BI 503416

Date Extracted: 03/25/15

Date Analyzed: 03/25/15

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
B355-09 503416-03	<50	<250	102
B356-08 503416-06	<50	<250	103
Method Blank 05-614 MB	<50	<250	99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/27/15

Date Received: 03/23/15

Project: TOC_01-600_20150323 WORFDB8, F&BI 503416

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

Laboratory Code: 503452-03 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	90	69-120
Toluene	mg/kg (ppm)	0.5	92	70-117
Ethylbenzene	mg/kg (ppm)	0.5	90	65-123
Xylenes	mg/kg (ppm)	1.5	89	66-120
Gasoline	mg/kg (ppm)	20	105	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/27/15

Date Received: 03/23/15

Project: TOC_01-600_20150323 WORFDB8, F&BI 503416

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

Laboratory Code: 503457-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	98	99	63-146	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	90	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

503446

SAMPLE CHAIN OF CUSTODY ME 03-23-15

B02/V02

Send Report To Tim Brown, cc: Jessica Brown, Pete Kingston, Jennifer Cyr, Courtney Porter

Company Sound Environmental Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS (signature) <i>Dee Bus</i>	
PROJECT NAME/NO. TOC Holdings Co. Facility No. 01-600 Seattle Terminal - East Waterfront Property	PO # 0440-001-39
REMARKS	EIM Y / N

Page # 1 of 1

TURNAROUND TIME
Standard (2 Weeks)
RUSH _____
Rush charges authorized by: _____

SAMPLE DISPOSAL
 Dispose after 30 days
Return samples
Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	GRPH by NWTPH-Gx	BTEX by EPA 8021B	DRPHORPH by NWTPH-Dx	PCP by EPA 82700 (low-level detection limits)	cVOCs by EPA 8260B	Nitrate and Sulfate by EPA 300.0	Methane, Ethane, and Ethene by RSK 175	Notes
B355	B355	05.0	01A-E	03-23-15	0910	soil	5								X-per AM SET/151
B325-05.0	B325	05.0	02		0912										HOLD
B325-07.0	B325	07.0	03		0945			X	X	X					
B325-09.0	B325	09.0	04		1020										
B326-03.0	B326	03.0	05		1025										
B326-07.0	B326	07.0	06		1035			X	X	X					
B356	B356														

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Dee Hamilton</i>	Dee Hamilton	Sound Earth	03-23-15	1130
Received by: <i>HONG NGUYEN</i>	HONG NGUYEN	FBI	✓	✓
Relinquished by:				
Received by:				

Samples received at 4 °C

Friedman & Bruya, Inc. #504487

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

April 30, 2015

Tim Brown, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Brown:

Included are the results from the testing of material submitted on April 27, 2015 from the TOC_01-600_20150427 WORFDB8, F&BI 504487 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Jessica Brown, Courtney Porter, Jennifer Cyr, Pete Kingston
SOU0430R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 27, 2015 by Friedman & Bruya, Inc. from the SoundEarth Strategies TOC_01-600_20150427 WORFDB8, F&BI 504487 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
504487 -01	02MW15-20150427
504487 -02	02MW16-20150427

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/30/15

Date Received: 04/27/15

Project: TOC_01-600_20150427 WORFDB8, F&BI 504487

Date Extracted: 04/28/15

Date Analyzed: 04/28/15

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

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 52-124)
02MW15-20150427 504487-01	<1	<1	<1	<3	<100	100
02MW16-20150427 504487-02	<1	<1	<1	<3	<100	108
Method Blank 05-822 MB	<1	<1	<1	<3	<100	100

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/30/15

Date Received: 04/27/15

Project: TOC_01-600_20150427 WORFDB8, F&BI 504487

Date Extracted: 04/28/15

Date Analyzed: 04/28/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 41-152)
02MW15-20150427 504487-01	180 x	<250	102
02MW16-20150427 504487-02	230 x	<250	92
Method Blank 05-855 MB	<50	<250	91

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/30/15

Date Received: 04/27/15

Project: TOC_01-600_20150427 WORFDB8, F&BI 504487

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

Laboratory Code: 504487-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	89	65-118
Toluene	ug/L (ppb)	50	89	72-122
Ethylbenzene	ug/L (ppb)	50	89	73-126
Xylenes	ug/L (ppb)	150	88	74-118
Gasoline	ug/L (ppb)	1,000	98	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/30/15

Date Received: 04/27/15

Project: TOC_01-600_20150427 WORFDB8, F&BI 504487

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

Laboratory Code: Laboratory Control Sample

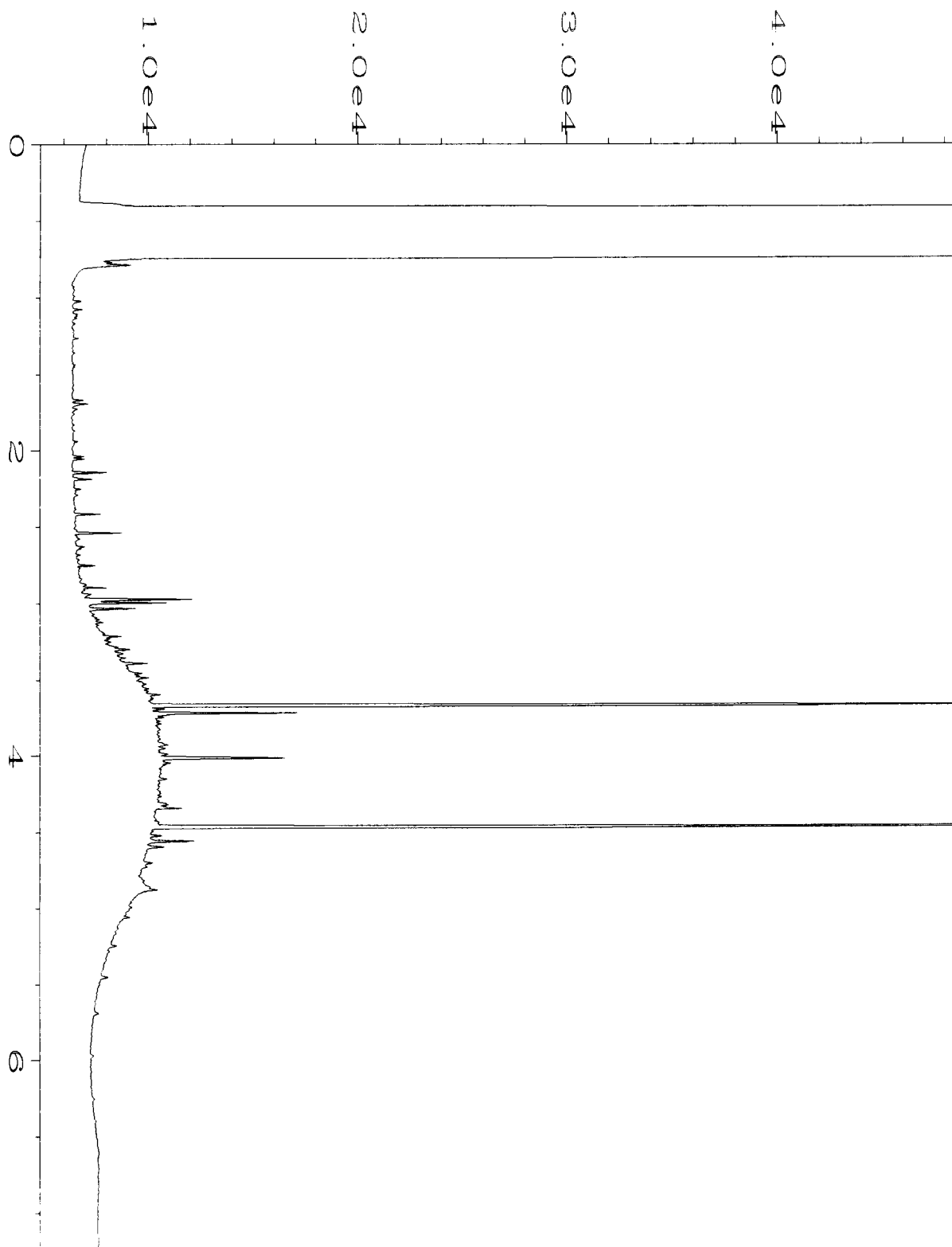
Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	102	104	63-142	2

FRIEDMAN & BRUYA, INC.

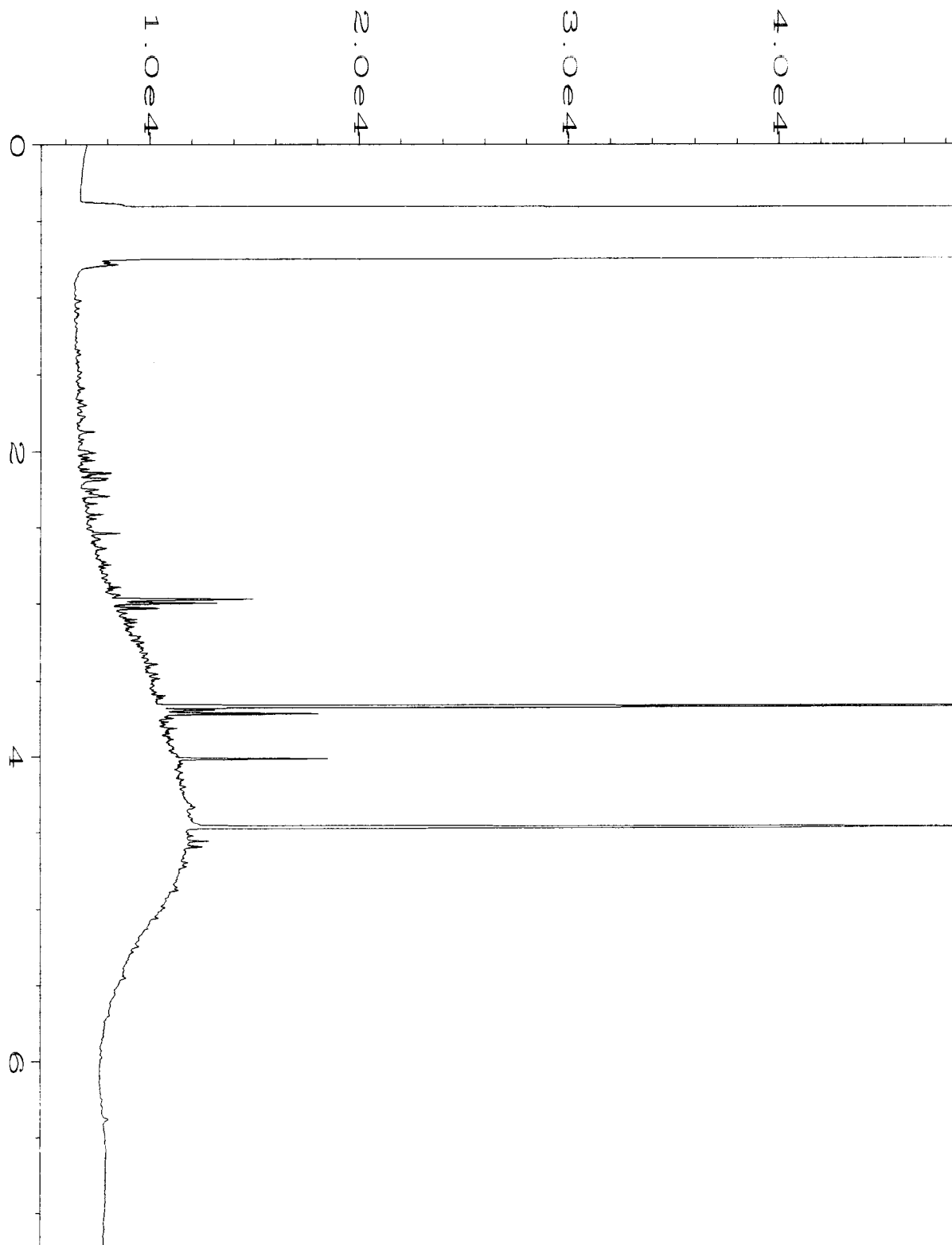
ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

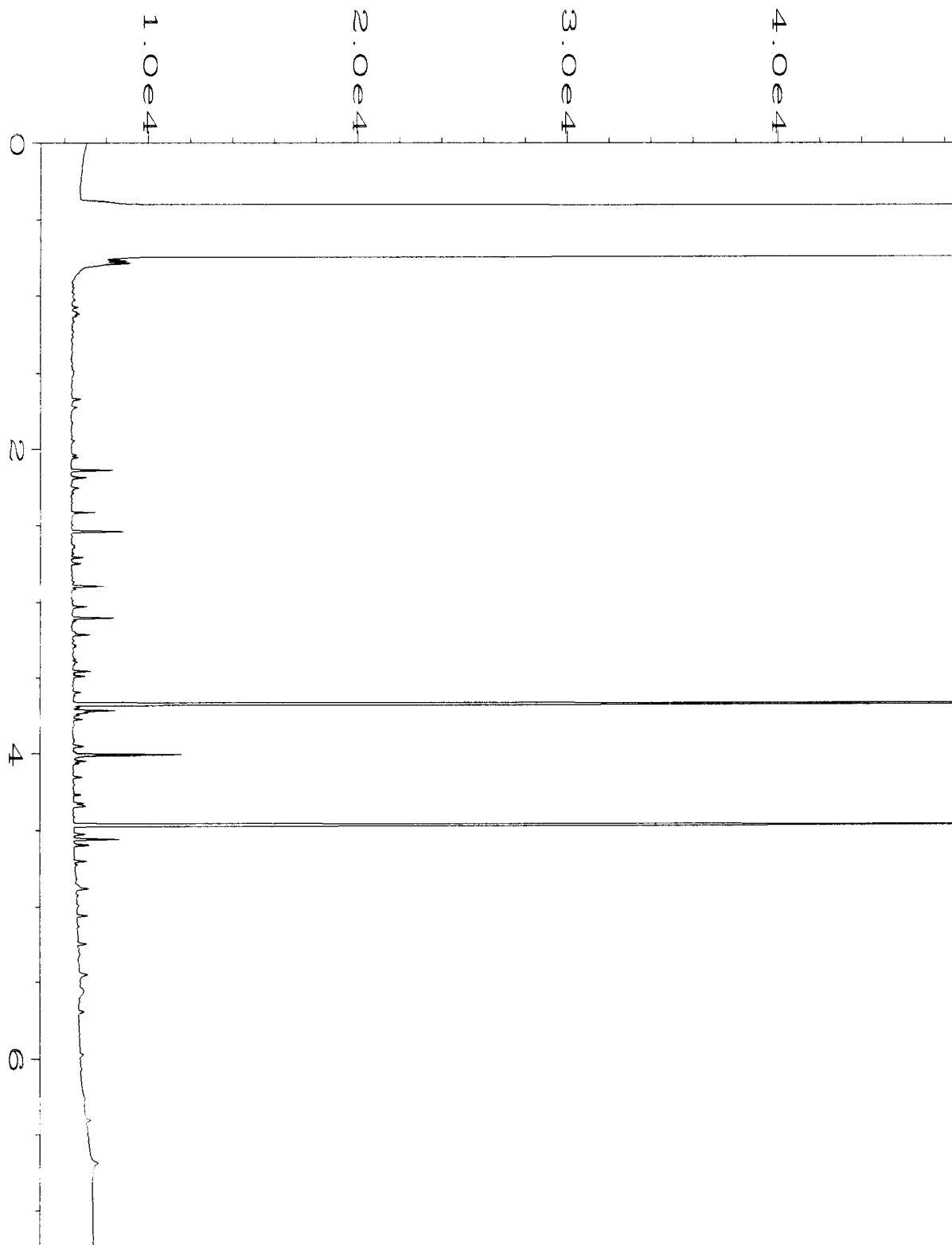
- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



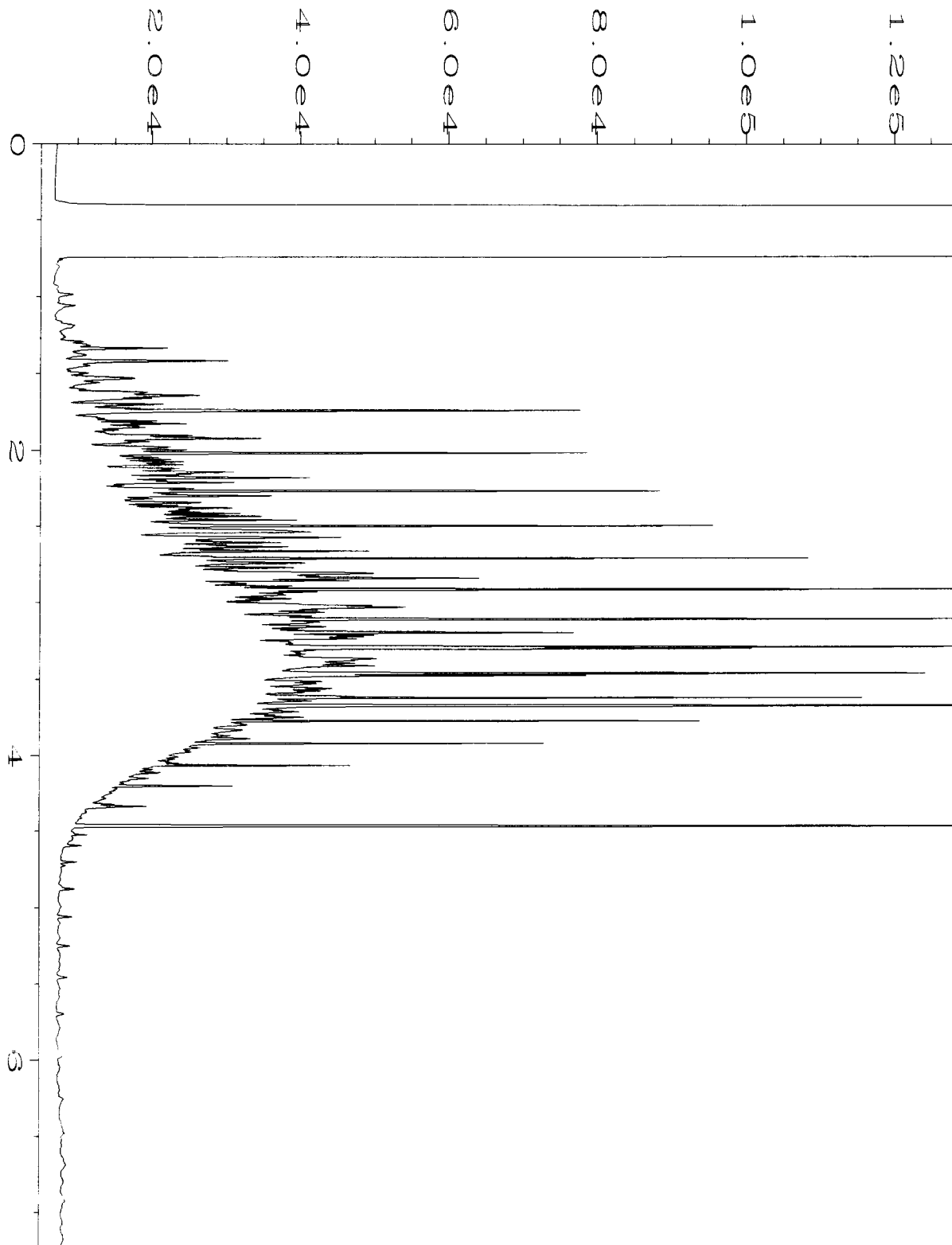
Data File Name	: C:\HPCHEM\1\DATA\04-28-15\020F0701.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 20
Instrument	: GC1	Injection Number	: 1
Sample Name	: 504487-01	Sequence Line	: 7
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 28 Apr 15 03:02 PM	Analysis Method	: DX.MTH
Report Created on:	29 Apr 15 09:13 AM		



Data File Name	: C:\HPCHEM\1\DATA\04-28-15\021F0701.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 21
Instrument	: GC1	Injection Number	: 1
Sample Name	: 504487-02	Sequence Line	: 7
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 28 Apr 15 03:13 PM	Analysis Method	: DX.MTH
Report Created on:	29 Apr 15 09:14 AM		



Data File Name	: C:\HPCHEM\1\DATA\04-28-15\017F0501.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 17
Instrument	: GC1	Injection Number	: 1
Sample Name	: 05-855 mb	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 28 Apr 15 02:17 PM	Analysis Method	: DX.MTH
Report Created on:	29 Apr 15 09:18 AM		



Data File Name	: C:\HPCHEM\1\DATA\04-28-15\003F0201.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 Dx 44-94C	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 28 Apr 15 09:43 AM	Analysis Method	: DX.MTH
Report Created on:	29 Apr 15 09:18 AM		

504487

SAMPLE CHAIN OF CUSTODY

ME 04-27-15

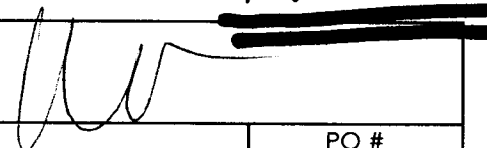
VI VSI / DOU

Send Report To Tim Brown, cc: Jessica Brown, Pete Kingston, Jennifer Cyr, Courtney Porter

Company Sound Environmental Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS (signature) 

Page # 1 of 1

PROJECT NAME/NO.

PO #

TOC Holdings Co. Facility No. 01-600
Seattle Terminal - East Waterfront Property

REMARKS

EIM Y / N

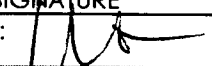
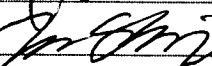
TURNAROUND TIME

Standard (2 Weeks)
 RUSH 48-hr TAT
Rush charges authorized by:
P. K. Kingston

SAMPLE DISPOSAL
Dispose after 30 days
Return samples
Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	GRPH by NWTPH-Gx	BTEX by EPA 8021B	DRPH/ORPH by NWTPH-Dx	PCP by EPA 8270D (low-level detection limits)	cVOCs by EPA 8260B	Nitrate and Sulfate by EPA 300.0	Methane, Ethane, and Ethene by RSK 175	Notes
02MW15-20150427	02MW15	7	01A-E	4/27/15	1125	water	5	X	X	X					
02MW16-20150427	02MW16	11	02A-E	4/27/15	1220	water	5	X	X	X					
CP 4/27/15															

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Courtney Porter	SoundEarth	4/27/15	1445
Received by: 	Jon Shimada	FBI	T	T
Relinquished by:				
Received by:				