OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
UNDERGROUND STORAGE TANK PROGRAM

Initial (Twenty Day) Report Form for UST Cleanup Projects

This report is due twenty (20) days from the date of the release.

DEQ USTC File No. _____

DEQ Facility ID No. 26-23-0131

Site Name: Former Twelfth Avenue Motor Service

Site Address: 2436 SE 12th Avenue

INITIAL CLEANUP INFORMATION

(1) Type of contamination (check √ all that apply):

☑ Gasoline ☑ Diesel ☐ Waste Oil ☐ Heating Oil

☐ Other (specify) _____

(2) Estimate quantity of release (based on information known to date – ● select only one):

● <100 gal. ○ 100-499 gal. ○ 500-999 gal. ○ 1,000-5,000 gal. ○ >5,000 gal.

SITE INFORMATION (check √ yes or √ no)

(3) ☐ Y ☑ N Did any water enter the excavation? If yes, please describe and identify the depth to groundwater in feet below ground surface: _____

(4) ☐ Y ☑ N Was a sheen or odor observed on any water in the excavation?

Note: If groundwater is encountered, soil samples from the soil/water interface must be collected and analyzed for BTEX and by the appropriate TPH method.

At sites where diesel or other non-gasoline products have been released, the water may also have to be screened or tested for polynuclear aromatic hydrocarbons (PAHs). *Please refer to OAR 340-122-0218.*

(5) ☐ Y ☑ N Was water pumped from the excavation?

☐ Y ☑ N If yes, did groundwater recharge within 24 hours after pumping?

Please describe the pumping procedure and disposal option selected for the purged excavation water:

(6) ☐ Y ☑ N Were any water samples collected from the excavation? If yes, please describe:

(7) ☑ Y ☐ N Have any soil and/or water sample results been received at this time?

If so, please attach any lab reports.

IF GROUNDWATER HAS BEEN ENCOUNTERED, PLEASE ANSWER QUESTIONS #8-13, BELOW.
IF NO WATER HAS BEEN ENCOUNTERED, PLEASE SKIP TO QUESTION #14

(8) What are the known uses of groundwater within a 500-foot radius of the release site (check √ all that apply)?

☑ non-use ☐ industrial ☐ agricultural ☐ drinking supply

(9) If groundwater in this area is being used as a drinking water supply, please check √ the type and size of population served by the supply:

☐ Community (community well used for drinking water year round – ● select only one)

size: ○ <1,000 people ○ 1,000 - 5,000 people ○ >5,000 people

☐ Intermittent use (public water used for drinking water only on a part-time basis – ● select only one)

size: ○ <50 people ○ 50 - 300 people ○ > 300 people

☐ Private wells (individual private water well or wells used for drinking water – ● select only one)

size: ○ <10 people ○ 10 - 25 people ○ >25 people

(10) ☐ **Y** ☑ **N** Is there any evidence this water supply has been or is likely to be impacted from the petroleum product release? If yes, estimate how difficult it would be to replace the existing supply:

☐ bottled water is the only alternative

☐ on-site water treatment; bulk water delivery; new wells are available

☐ able to connect to existing water supply

☐ do not know what alternatives would be available

(11) ☐ **Y** ☑ **N** Are/were vapors present in on-site or nearby buildings? If yes:

A. Are you monitoring and/or mitigating any potential fire and safety hazards posed by vapors and free product? Explain: _____

B. Estimate the number of people potentially affected by vapors – ● select only one:

○ 1-2 people ○ 3-10 people ○ >10 people

(12) ☐ **Y** ☑ **N** Are vapors or is petroleum contamination present in the utility corridors?

If yes, please explain: _____

(13) ☐ **Y** ☑ **N** Are natural areas located within 1/4 mile of the site? If so, please describe types (parks, rivers, wetlands, sensitive habitats, *etc.*) and proximity: _____

(14) ☐ **Y** ☑ **N** If groundwater was not encountered in the excavation, do you believe that this cleanup project can be conducted under the requirements for an UST Cleanup Matrix site? If yes, then refer to OAR 340-122-0305 through 0360.

AREA/SITE CONDITIONS:

(15) Mean annual rainfall: ○ <20 inches ◉ 20-45 inches ○ >45 inches

(16) Soil type(s) of the naturally occurring soils, not the backfill around the tank – ● select only one:

○ clays, compact tills, shales, and unfractured metamorphic and igneous rocks

◉ sandy loams, loamy sands, silty clays, clay loams, moderately permeable limestone, dolomite, sandstones, moderately fractured igneous and metamorphic rock

○ fine and silty sands, sands and gravels, highly fractured igneous and metamorphic rock, permeable basalts and lavas, karst limestones and dolomites

SOIL MANAGEMENT

(17) If soil sample results have been received:

☑ **Y** ☐ **N** Will the level of contamination detected require removal of contaminated soil for treatment or disposal?

(18) All contaminated soil temporarily stockpiled on-site prior to treatment or disposal must be contained within a bermed area, kept covered, and the entire area secured to prevent unauthorized access by the public. If you haven't done this, please explain why:

Note: It is a violation to stockpile petroleum contaminated soil (PCS) on-site for greater than 30 days without a DEQ Solid Waste Letter Authorization (SWLA) Permit.

(19) If contaminated soil is currently stockpiled on-site, please indicate when disposal will occur or when treatment will begin: _____

(20) Estimated volume of contaminated soil (specify tons or cubic yards): _____

(21) Intended disposition of soils (please ● select only one):

○ On-site/off-site treatment, Solid Waste Letter Authorization Permit Application attached.

○ Thermal treatment off-site at an authorized facility.
Facility name: _____

◉ Landfill disposal.
Name of Landfill: Hillsboro Landfill

Note: Please attach additional information as necessary to explain any unusual circumstances associated with this project.

This initial report is intended to provide the Department with the basic initial information about activities associated with the release. Future reports should provide a more detailed and complete picture of the cleanup project.

Please be aware that a DEQ permit/authorization is required for the following activities:

1) Soil aeration, bioremediation (on-site or off-site), or on-site thermal treatment.

2) Water discharges to a stream/storm drain from the excavation or treatment tank.

If these activities will be included in your cleanup project, contact the regional DEQ office for the appropriate application forms, information on permit fees and guidance documents.

THIS REPORT WAS PREPARED BY:

Individual: Kyle Fisher Date: 3/15/23

Company: Point Source Solutions Phone: 5038608811

Address: 5317 NE St Johns Rd

Suite D

City: Vancouver State WA Zip 98661

1. Please return this form to the regional office in which the site is located. If you have questions, call the contact person in your regional office.

2. For all tanks, except heating oil tanks, you must submit an *UST Decommissioning Checklist and Site Assessment Report* to the appropriate regional office within 30 days of the UST decommissioning. Failure to do so can result in delays to your project and may result in continued billing for the annual tank permit fees.

3. Addresses and phone numbers for the regional offices can be found in the *UST Cleanup Manual* or viewed and downloaded from this DEQ Webpage: http://www.deq.state.or.us/about/locations.htm

4. Copies of the *UST Cleanup Manual* and other UST program forms and checklists can be viewed and downloaded from DEQ's Website: http://www.deq.state.or.us/lq/tanks/ust/index.htm

or in the Portland area by calling Steve Paiko at 503-229-6652

or outside the Portland area leaving a message on the UST Help Line (toll-free in Oregon) at 1-800-742-7878

KEEP A COPY OF THIS REPORT FOR YOUR FACILITY RECORDS

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

March 3, 2023

Gil Cobb, Project Manager
Point Source Solutions
5317 NE St Johns Rd, Suite D
Vancouver, WA 98661

Dear Mr Cobb:

Included are the results from the testing of material submitted on February 27, 2023 from the 2436 SE 12th Ave, F&BI 302353 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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: Johnny Ramus, Jeff Jackman, Kyle Fisher
PSS0303R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 27, 2023 by Friedman & Bruya, Inc. from the Point Source Solutions 2436 SE 12th Ave, F&BI 302353 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Point Source Solutions
302353 -01	B1-S1-10
302353 -02	B2-S1-11
302353 -03	B2-S2-16
302353 -04	B3-S1-4
302353 -05	B3-S2-10
302353 -06	B4-S1-4
302353 -07	B4-S2-11

All quality control requirements were acceptable.

Date of Report: 03/03/23
Date Received: 02/27/23
Project: 2436 SE 12th Ave, F&BI 302353
Date Extracted: 02/28/23
Date Analyzed: 03/01/23

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 58-139)
B1-S1-10 302353-01	230	ip
B2-S1-11 302353-02 1/20	2,200	ip
B2-S2-16 302353-03	7.8	105
B3-S1-4 302353-04	<5	94
B3-S2-10 302353-05	<5	102
B4-S1-4 302353-06	<5	100
B4-S2-11 302353-07	<5	100
Method Blank 03-467 MB	<5	109

Date of Report: 03/03/23
Date Received: 02/27/23
Project: 2436 SE 12th Ave, F&BI 302353
Date Extracted: 02/27/23
Date Analyzed: 02/27/23

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)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
B1-S1-10 302353-01	<50	<250	107
B2-S1-11 302353-02	2,000 x	<250	112
B2-S2-16 302353-03	<50	<250	107
B3-S1-4 302353-04	<50	<250	110
B3-S2-10 302353-05	<50	<250	108
B4-S1-4 302353-06	<50	<250	107
B4-S2-11 302353-07	<50	<250	104
Method Blank 03-492 MB	<50	<250	107

Date of Report: 03/03/23
Date Received: 02/27/23
Project: 2436 SE 12th Ave, F&BI 302353

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 302344-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	100	70-130

Date of Report: 03/03/23
Date Received: 02/27/23
Project: 2436 SE 12th Ave, F&BI 302353

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

Laboratory Code: 302229-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	3,400	124	110	70-130	12

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	102	70-130

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, biased high; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the standard reporting limit. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

302353

SAMPLE CHAIN OF CUSTODY 02/27/23 N3

Page # 1 of 1

Report To Gil Cobb

Company Point Source Solutions

Address 5317 NE St Johns Rd, Ste D

City, State, ZIP Vancouver, WA

Phone _____ Email _____

SAMPLERS (*signature*) John Ren

PROJECT NAME: 2436 SE 12th Ave — PO #:

REMARKS: Project Specific RLs - Yes / No — INVOICE TO:

TURNAROUND TIME
X Standard Turnaround
RUSH _____
Rush charges authorized by: _____

SAMPLE DISPOSAL
Dispose after 30 days
Archive Samples
Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082						Notes
B1-S1-10	01A-C	2/22/23	10:37	Soil	3	X	X										
B2-S1-11	02	" "	11:58	Soil	3	X	X										
B2-S2-16	03	" "	12:16	Soil	3	X	X										
B3-S1-4	04	" "	13:43	Soil	3	X	X										
B3-S2-10	05	" "	13:58	Soil	3	X	X										
B4-S1-4	06	" "	14:44	Soil	3	X	X										
B4-S2-11	07	" "	14:52	Soil	3	X	X										
									Samples received at 8 °C								

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: John Ren	John Ramos	Point Source	2/27/23	11:33
Received by:	ANH PHAN	F&B	02/27/23	11:23
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

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March 10, 2023

Gil Cobb, Project Manager
Point Source Solutions
5317 NE St Johns Rd, Suite D
Vancouver, WA 98661

Dear Mr Cobb:

Included are the additional results from the testing of material submitted on February 27, 2023 from the 2436 SE 12th Ave, F&BI 302353 project. There are 13 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Johnny Ramus, Jeff Jackman, Kyle Fisher
PSS0310R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 27, 2023 by Friedman & Bruya, Inc. from the Point Source Solutions 2436 SE 12th Ave, F&BI 302353 project. Samples were logged in under the laboratory ID's listed below.

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302353 -02	B2-S1-11
302353 -03	B2-S2-16
302353 -04	B3-S1-4
302353 -05	B3-S2-10
302353 -06	B4-S1-4
302353 -07	B4-S2-11

The 8260D matrix spike and matrix spike duplicate failed the relative percent difference for several compounds. The analytes were not detected therefore the data were acceptable.

The 8260D laboratory control sample exceeded the acceptance criteria for bromomethane. The compound was not detected, therefore the data were acceptable.

All other quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 6020B

Client ID:	B2-S1-11	Client:	Point Source Solutions
Date Received:	02/27/23	Project:	2436 SE 12th Ave, F&BI 302353
Date Extracted:	03/07/23	Lab ID:	302353-02
Date Analyzed:	03/07/23	Data File:	302353-02.105
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Lead	8.07

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Point Source Solutions
Date Received:	Not Applicable	Project:	2436 SE 12th Ave, F&BI 302353
Date Extracted:	03/07/23	Lab ID:	I3-165 mb
Date Analyzed:	03/07/23	Data File:	I3-165 mb.078
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	B2-S1-11	Client:	Point Source Solutions
Date Received:	02/27/23	Project:	2436 SE 12th Ave, F&BI 302353
Date Extracted:	03/07/23	Lab ID:	302353-02
Date Analyzed:	03/07/23	Data File:	030712.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	90	109
Toluene-d8	103	89	112
4-Bromofluorobenzene	102	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.085
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	0.23
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	0.58
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	0.48
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	1.8
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	0.12
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	1.6
Benzene	<0.03	sec-Butylbenzene	2.0
Trichloroethene	<0.02	p-Isopropyltoluene	3.6
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	Point Source Solutions
Date Received:	Not Applicable	Project:	2436 SE 12th Ave, F&BI 302353
Date Extracted:	03/06/23	Lab ID:	03-0372 mb
Date Analyzed:	03/06/23	Data File:	030605.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	109
Toluene-d8	103	89	112
4-Bromofluorobenzene	96	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	B2-S1-11	Client:	Point Source Solutions
Date Received:	02/27/23	Project:	2436 SE 12th Ave, F&BI 302353
Date Extracted:	03/06/23	Lab ID:	302353-02 1/5
Date Analyzed:	03/06/23	Data File:	030616.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	130	10	198
2-Fluorobiphenyl	85	45	117
2,4,6-Tribromophenol	81	11	158
Terphenyl-d14	100	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	0.15
1-Methylnaphthalene	0.17
Acenaphthylene	<0.01
Acenaphthene	<0.01
Fluorene	0.074
Phenanthrene	0.061
Anthracene	<0.01
Fluoranthene	0.011
Pyrene	0.013
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01
Benzo(g,h,i)perylene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Point Source Solutions
Date Received:	Not Applicable	Project:	2436 SE 12th Ave, F&BI 302353
Date Extracted:	03/06/23	Lab ID:	03-527 mb 1/5
Date Analyzed:	03/06/23	Data File:	030615.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	102	16	137
2-Fluorobiphenyl	95	46	122
2,4,6-Tribromophenol	105	17	154
Terphenyl-d14	98	31	167

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Acenaphthylene	<0.01
Acenaphthene	<0.01
Fluorene	<0.01
Phenanthrene	<0.01
Anthracene	<0.01
Fluoranthene	<0.01
Pyrene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01
Benzo(g,h,i)perylene	<0.01

Date of Report: 03/10/23
Date Received: 02/27/23
Project: 2436 SE 12th Ave, F&BI 302353

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

Laboratory Code: 303073-01 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/kg (ppm)	50	<5	90	96	75-125	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	96	80-120

Date of Report: 03/10/23
Date Received: 02/27/23
Project: 2436 SE 12th Ave, F&BI 302353

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 303040-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2	<0.5	27	19	10-142	35 vo
Chloromethane	mg/kg (ppm)	2	<0.5	56	43	10-126	26 vo
Vinyl chloride	mg/kg (ppm)	2	<0.05	52	43	10-138	19
Bromomethane	mg/kg (ppm)	2	<0.5	74	99	10-163	29 vo
Chloroethane	mg/kg (ppm)	2	<0.5	70	62	10-176	12
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	69	60	10-176	14
Acetone	mg/kg (ppm)	10	<5	65	51	10-163	24 vo
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	78	68	10-160	14
Hexane	mg/kg (ppm)	2	<0.25	63	54	10-137	15
Methylene chloride	mg/kg (ppm)	2	<0.5	80	67	10-156	18
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	90	81	21-145	11
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	82	73	14-137	12
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	81	71	19-140	13
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	88	81	10-158	8
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	84	77	25-135	9
Chloroform	mg/kg (ppm)	2	<0.05	89	80	21-145	11
2-Butanone (MEK)	mg/kg (ppm)	10	<1	88	76	19-147	15
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	88	79	12-160	11
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	94	83	10-156	12
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	82	74	17-140	10
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	90	81	9-164	11
Benzene	mg/kg (ppm)	2	<0.03	87	77	29-129	12
Trichloroethene	mg/kg (ppm)	2	<0.02	86	77	21-139	11
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	80	70	30-135	13
Bromodichloromethane	mg/kg (ppm)	2	<0.05	92	82	23-155	11
Dibromomethane	mg/kg (ppm)	2	<0.05	90	79	23-145	13
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	96	84	24-155	13
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	88	77	28-144	13
Toluene	mg/kg (ppm)	2	<0.05	84	74	35-130	13
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	86	76	26-149	12
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	82	72	10-205	13
2-Hexanone	mg/kg (ppm)	10	<0.5	95	84	15-166	12
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	86	76	31-137	12
Tetrachloroethene	mg/kg (ppm)	2	<0.025	96	85	20-133	12
Dibromochloromethane	mg/kg (ppm)	2	<0.05	86	78	28-150	10
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	84	74	28-142	13
Chlorobenzene	mg/kg (ppm)	2	<0.05	89	79	32-129	12
Ethylbenzene	mg/kg (ppm)	2	<0.05	89	79	32-137	12
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	89	80	31-143	11
m,p-Xylene	mg/kg (ppm)	4	<0.1	89	78	34-136	13
o-Xylene	mg/kg (ppm)	2	<0.05	86	78	33-134	10
Styrene	mg/kg (ppm)	2	<0.05	88	79	35-137	11
Isopropylbenzene	mg/kg (ppm)	2	<0.05	93	83	31-142	11
Bromoform	mg/kg (ppm)	2	<0.05	89	82	21-156	8
n-Propylbenzene	mg/kg (ppm)	2	<0.05	87	81	23-146	7
Bromobenzene	mg/kg (ppm)	2	<0.05	91	84	34-130	8
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	89	82	18-149	8
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	92	87	28-140	6
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	83	77	25-144	7
2-Chlorotoluene	mg/kg (ppm)	2	0.65	73 b	60 b	31-134	20 b
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	85	79	31-136	7
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	92	85	30-137	8
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	87	81	10-182	7
sec-Butylbenzene	mg/kg (ppm)	2	0.087	90	82	23-145	9
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	91	84	21-149	8
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	89	83	30-131	7
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	91	84	29-129	8
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	90	84	31-132	7
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	80	75	11-161	6
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	93	83	22-142	11
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	120	105	10-142	13
Naphthalene	mg/kg (ppm)	2	<0.05	88	80	14-157	10
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	94	83	20-144	12

Date of Report: 03/10/23
Date Received: 02/27/23
Project: 2436 SE 12th Ave, F&BI 302353

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2	53	10-146
Chloromethane	mg/kg (ppm)	2	69	27-133
Vinyl chloride	mg/kg (ppm)	2	72	22-139
Bromomethane	mg/kg (ppm)	2	143 vo	38-114
Chloroethane	mg/kg (ppm)	2	91	9-163
Trichlorofluoromethane	mg/kg (ppm)	2	92	10-196
Acetone	mg/kg (ppm)	10	72	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	92	47-128
Hexane	mg/kg (ppm)	2	86	43-142
Methylene chloride	mg/kg (ppm)	2	92	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	99	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	92	67-129
1,1-Dichloroethane	mg/kg (ppm)	2	91	68-115
2,2-Dichloropropane	mg/kg (ppm)	2	98	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	95	72-127
Chloroform	mg/kg (ppm)	2	98	66-120
2-Butanone (MEK)	mg/kg (ppm)	10	95	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	95	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	106	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	92	69-128
Carbon tetrachloride	mg/kg (ppm)	2	103	60-139
Benzene	mg/kg (ppm)	2	94	71-118
Trichloroethene	mg/kg (ppm)	2	99	63-121
1,2-Dichloropropane	mg/kg (ppm)	2	86	72-127
Bromodichloromethane	mg/kg (ppm)	2	100	57-126
Dibromomethane	mg/kg (ppm)	2	99	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	99	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	93	67-122
Toluene	mg/kg (ppm)	2	89	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	88	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2	84	64-115
2-Hexanone	mg/kg (ppm)	10	99	33-152
1,3-Dichloropropane	mg/kg (ppm)	2	89	72-130
Tetrachloroethene	mg/kg (ppm)	2	102	72-114
Dibromochloromethane	mg/kg (ppm)	2	93	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	88	74-132
Chlorobenzene	mg/kg (ppm)	2	92	76-111
Ethylbenzene	mg/kg (ppm)	2	92	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	94	64-121
m,p-Xylene	mg/kg (ppm)	4	92	78-122
o-Xylene	mg/kg (ppm)	2	93	77-124
Styrene	mg/kg (ppm)	2	92	74-126
Isopropylbenzene	mg/kg (ppm)	2	98	76-127
Bromoform	mg/kg (ppm)	2	97	56-132
n-Propylbenzene	mg/kg (ppm)	2	93	74-124
Bromobenzene	mg/kg (ppm)	2	99	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	98	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	88	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	88	61-137
2-Chlorotoluene	mg/kg (ppm)	2	94	74-121
4-Chlorotoluene	mg/kg (ppm)	2	92	75-122
tert-Butylbenzene	mg/kg (ppm)	2	99	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	96	76-125
sec-Butylbenzene	mg/kg (ppm)	2	97	71-130
p-Isopropyltoluene	mg/kg (ppm)	2	97	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2	98	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2	99	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2	100	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	89	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	96	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	107	50-153
Naphthalene	mg/kg (ppm)	2	92	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	95	63-138

Date of Report: 03/10/23
Date Received: 02/27/23
Project: 2436 SE 12th Ave, F&BI 302353

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: 303077-11 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.83	<0.01	84	81	50-150	4
2-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	92	87	50-150	6
1-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	94	89	50-150	5
Acenaphthylene	mg/kg (ppm)	0.83	<0.01	98	94	50-150	4
Acenaphthene	mg/kg (ppm)	0.83	<0.01	89	85	50-150	5
Fluorene	mg/kg (ppm)	0.83	<0.01	97	93	50-150	4
Phenanthrene	mg/kg (ppm)	0.83	<0.01	90	89	10-170	1
Anthracene	mg/kg (ppm)	0.83	<0.01	90	89	50-150	1
Fluoranthene	mg/kg (ppm)	0.83	<0.01	96	94	10-203	2
Pyrene	mg/kg (ppm)	0.83	<0.01	89	86	10-208	3
Benz(a)anthracene	mg/kg (ppm)	0.83	<0.01	95	93	37-146	2
Chrysene	mg/kg (ppm)	0.83	<0.01	93	90	36-144	3
Benzo(a)pyrene	mg/kg (ppm)	0.83	<0.01	91	90	40-150	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	<0.01	94	91	45-157	3
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.01	89	88	50-150	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	<0.01	82	81	24-145	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.01	79	76	31-137	4
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	<0.01	75	71	14-141	5

Date of Report: 03/10/23
Date Received: 02/27/23
Project: 2436 SE 12th Ave, F&BI 302353

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.83	89	58-108
2-Methylnaphthalene	mg/kg (ppm)	0.83	96	67-109
1-Methylnaphthalene	mg/kg (ppm)	0.83	98	66-107
Acenaphthylene	mg/kg (ppm)	0.83	105	70-130
Acenaphthene	mg/kg (ppm)	0.83	97	66-112
Fluorene	mg/kg (ppm)	0.83	103	67-117
Phenanthrene	mg/kg (ppm)	0.83	98	70-130
Anthracene	mg/kg (ppm)	0.83	98	70-130
Fluoranthene	mg/kg (ppm)	0.83	103	70-130
Pyrene	mg/kg (ppm)	0.83	97	70-130
Benz(a)anthracene	mg/kg (ppm)	0.83	101	70-130
Chrysene	mg/kg (ppm)	0.83	100	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.83	95	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	95	69-125
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	92	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	92	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	87	67-128
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	85	67-127

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, biased high; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the standard reporting limit. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

302353

SAMPLE CHAIN OF CUSTODY

02/27/23 N3

Report To Gil Cobb

Company Point Source Solutions

Address 5317 NE St Johns Rd, Ste D

City, State, ZIP Vancouver, WA

Phone _____ Email _____

SAMPLERS (*signature*) JohnRam

PROJECT NAME 2436 SE 12th Ave

PO #

REMARKS

Project Specific RLs - Yes / No

INVOICE TO

TURNAROUND TIME
- X Standard Turnaround
- RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- Dispose after 30 days
- Archive Samples
- Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Lead					Notes
						ANALYSES REQUESTED											
B1-S1-10	01A-C	2/22/23	10:37	Soil	3	X	X										● per KF
B2-S1-11	02	" "	11:58	Soil	3	X	X		●	●		●					3/3/23 M
B2-S2-16	03	" "	12:16	Soil	3	X	X										
B3-S1-4	04	" "	13:43	Soil	3	X	X										
B3-S2-10	05	" "	13:58	Soil	3	X	X										
B4-S1-4	06	" "	14:44	Soil	3	X	X										
B4-S2-11	07	" "	14:52	Soil	3	X	X										

Samples received at 8 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	T
Relinquished by: JohnRam	John Ramos	Point Source	2/27/23	16
Received by:	ANH PHAN	FSB	02/27/23	11
Relinquished by:				
Received by:				

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