



PERSONAL AND CONFIDENTIAL

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Offices in Portland and Bend, Oregon

February 6, 2025



Attn: Heather Brown
2838 SE 9th Ave
Portland, Oregon 97202

RE: Summary of CMMP Oversight – North Wall Stabilization Project
Irwing Hodson Building, 2808-2838 SE 9th Avenue, Portland, Oregon 97202

Heather Brown:

On behalf of Irwin Hodson, EVREN Northwest, Inc. (ENW) prepared this letter to document oversight of soil management activities during a structural stabilization project at the above-referenced building in Portland, Oregon. This scope of work was conducted along the north wall in the northwest quadrant of the on-site building and included removal of a portion of floor slab, targeted excavation of sub-slab soils to facilitate the installation of piles and underpinning to support the foundation. Following completion of this work the slab floor was restored.

ENW provided oversight of the property owner's contractor, Ram Jack West (RJW), to ensure compliance with the Contaminated Media Management Plan (CMMP) for the site.¹ The work described in this letter report was conducted in November and December 2024.

Prior to the start of sub-slab activities, RJW erected a temporary partition wall with plastic sheeting to separate the work area from normal site operations. Windows along the north wall were opened and several large fans were set up in the work area to provide ventilation.

A portion of the concrete floor slab along the north wall was demolished and removed. ENW utilized a photoionization detector (PID) during this stage of the project to screen both underlying soil and indoor air for potential presence of volatile organic constituents (VOCs). No measurable VOC readings above 0.0 parts per million by volume (ppmv) were suggested by the PID in either indoor air or underlying soil. Once the portion of concrete slab flooring was removed, RJW proceeded with target soil excavation to facilitate the installation of piles and underpins. Excavation spoils were mostly set aside for reuse as backfill, but roughly 20 yards of material was placed in two 10-yard drop boxes equipped with covers. ENW continued to provide periodic indoor air and soil screening during excavation and no PID readings above 0.0 ppmv were observed in either ambient air or soil spoils.

Upon the completion of excavation activities, ENW collected composite samples of the containerized soils to characterize the material for appropriate offsite disposal. Samples were

¹ ENW, April 2022. *Contaminated Media Management Plan*, Irwin Hodson Property, 2808 and 2838 SE 9th Avenue, Portland, Oregon 97202. Prepared April 26, 2022.

Environmental and Natural Resource Consulting

delivered by courier to Friedman & Bruya, Inc. (F&BI) in Seattle, Washington under chain-of-custody protocol and underwent the following analytical procedures:

- U.S. Environmental Protection Agency (EPA) Method 8260 for VOCs;
- EPA Method 8270 for polycyclic aromatic hydrocarbons (PAHs);
- Northwest Total Petroleum Hydrocarbon Identification (NWTPH-HCID) with subsequent analysis for NWTPH diesel-range organics (DRO); and
- EPA Method 6020B for Resource Conservation and Recovery Act (RCRA) 8 total metals plus total copper.

Once RJW completed the installation of piles and underpins, the work area was backfilled with imported commercially-sourced crushed rock. A vapor barrier was installed over the exposed soil with care to ensure adequate adhesion to the surrounding concrete and properly overlapped and sealed seams. Finally, the concrete slab was restored.

Field activities are documented in the photographic log included as Attachment A following this letter. Lab reports for soil characterization samples are included as Attachment B. A waste profile (144234OR) was issued by Waste Management for disposal at their Hillsboro Landfill facility. Waste disposal receipts are included in Attachment C.

No additional actions related to soil management for this project are warranted at this time; however, ENW recommends that any future construction projects continue to include proper identification, management, and disposal of contaminated media according to the CMMP.

Kind regards,



Evan Bruggeman, R.G.
EVREN Northwest, Inc.

Attachments: A Photographic Log
 B Laboratory Report
 C Soil Disposal Receipts

ATTACHMENT A: PHOTOGRAPHIC LOG



Prior to the start of work, a temporary partition was set up to isolate the work area from normal site operations. Red tape was placed to designate the portion of the floor slab to be removed.



View looking west after removal of the northern section of floor slab. The area remained ventilated with open windows and large fans.



The work area was ventilated by opening windows and operating several fans. A PID was used to monitor ambient air concentrations.



Ambient air monitoring with a PID did not suggest any readings above 0.0 ppmv.



Irwin Hodson
2808-2838 SE 9th Ave
Portland, Oregon

Site Photographs

Project No.
186-19002-09

Attachment
A



Soil was removed to allow for the installation of piles to stabilize the north wall. Excavation spoils either remained accessible for re-use or were deposited into two 10-yard drop boxes pending characterization for appropriate offsite disposal.



View of several excavations for pile installation.



Work area following completion of pile installation and backfill.



View of vapor barrier installation prior to slab restoration. Care was taken to ensure the vapor barrier was well sealed to the surrounding concrete and to adequately overlap and seal seams.



Irwin Hodson
2808-2838 SE 9th Ave
Portland, Oregon

Site Photographs

Project No.
186-19002-09

Attachment
A



View of the restored slab following completion of the north wall stabilization project.



View of new brackets on north wall exterior. One covered drop box of soil is visible on the left. Samples were collected to characterize soil for appropriate disposal.



Irwin Hodson
2808-2838 SE 9th Ave
Portland, Oregon

Site Photographs

Project No.
186-19002-09

Attachment

A

ATTACHMENT B: ANALYTICAL REPORT

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 Ave South
Seattle, WA 98108-2419
(206) 285-8282
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www.friedmanandbruya.com

December 17, 2024

Lynn Green, Project Manager
Evren Northwest, Inc.
PO Box 14488
Portland, OR 97293

Dear Mr Green:

Included are the results from the testing of material submitted on November 22, 2024 from the 186-19002-09, F&BI 411379 project. There are 16 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Neil Woller, Paul Trone, Evan Bruggeman
ENW1217R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on November 22, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 186-19002-09, F&BI 411379 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID

411379 -01

Evren Northwest

Dropbox-COMP01-241121

The 8260D calibration standard did not meet the acceptance criteria for several analytes. The data were flagged accordingly.

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

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/17/24
Date Received: 11/22/24
Project: 186-19002-09, F&BI 411379
Date Extracted: 12/06/24
Date Analyzed: 12/06/24

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID**

Results Reported on a Dry Weight Basis
Results Reported as Not Detected (ND) or Detected (D)

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

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 50-150)
Dropbox-COMP01-241121 411379-01	ND	ND	D	83
Method Blank 04-2995 MB	ND	ND	ND	80

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/17/24
Date Received: 11/22/24
Project: 186-19002-09, F&BI 411379
Date Extracted: 12/09/24
Date Analyzed: 12/09/24

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND RESIDUAL RANGE
USING METHOD NWTPH-D_x**

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>Residual Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
Dropbox-COMP01-241121 411379-01	90 x	340	106
Method Blank 04-3000 MB	<50	<250	104

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Dropbox-COMP01-241121	Client:	Evren Northwest
Date Received:	11/22/24	Project:	186-19002-09, F&BI 411379
Date Extracted:	12/05/24	Lab ID:	411379-01
Date Analyzed:	12/05/24	Data File:	120508.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	86	114
Toluene-d8	97	86	115
4-Bromofluorobenzene	110	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05 k
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05 k	Dibromochloromethane	<0.05
Bromomethane	<0.5 k	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5 k	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 ca	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 k
2,2-Dichloropropane	<0.05 k	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 k
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05 k
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05 k
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 k
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 k
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	<1 k		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	186-19002-09, F&BI 411379
Date Extracted:	12/05/24	Lab ID:	04-2939 mb
Date Analyzed:	12/05/24	Data File:	120506.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	86	114
Toluene-d8	97	86	115
4-Bromofluorobenzene	115	83	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05 k
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05 k	Dibromochloromethane	<0.05
Bromomethane	<0.5 k	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5 k	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 ca	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 k
2,2-Dichloropropane	<0.05 k	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 k
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05 k
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05 k
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 k
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 k
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	<1 k		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	Dropbox-COMP01-241121	Client:	Evren Northwest
Date Received:	11/22/24	Project:	186-19002-09, F&BI 411379
Date Extracted:	12/03/24	Lab ID:	411379-01
Date Analyzed:	12/03/24	Data File:	120315.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	106	50	150
Benz(a)anthracene-d12	114	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.048
2-Methylnaphthalene	0.0055
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.023
Anthracene	<0.005
Fluoranthene	0.056
Pyrene	0.045
Benz(a)anthracene	0.029
Chrysene	0.032
Benzo(b)fluoranthene	0.041
Benzo(k)fluoranthene	0.011
Benzo(a)pyrene	0.031
Indeno(1,2,3-cd)pyrene	0.029
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	0.036

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	186-19002-09, F&BI 411379
Date Extracted:	12/03/24	Lab ID:	04-2980 mb
Date Analyzed:	12/03/24	Data File:	120309.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	91	50	150
Benz(a)anthracene-d12	97	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Dropbox-COMP01-241121	Client:	Evren Northwest
Date Received:	11/22/24	Project:	186-19002-09, F&BI 411379
Date Extracted:	11/22/24	Lab ID:	411379-01 and 411379-01 x5
Date Analyzed:	11/22/24 and 11/25/24	Data File:	411379-01.238 and 411379-01 x5.135
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	6.3
Barium	140
Cadmium	<1
Copper	21
Chromium	13
Lead	31
Mercury	<1
Selenium	<1
Silver	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Evren Northwest
Date Received:	NA	Project:	186-19002-09, F&BI 411379
Date Extracted:	11/22/24	Lab ID:	I4-1018 mb
Date Analyzed:	11/22/24	Data File:	I4-1018 mb.142
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/17/24

Date Received: 11/22/24

Project: 186-19002-09, F&BI 411379

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

Laboratory Code: 412103-01 (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	97	102	106	64-136	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	110	78-121

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/17/24

Date Received: 11/22/24

Project: 186-19002-09, F&BI 411379

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

Laboratory Code: 411379-01 (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	49	66	10-142	30 vo
Chloromethane	mg/kg (ppm)	2	<0.5	81	104	10-126	25 vo
Vinyl chloride	mg/kg (ppm)	2	<0.05	91	117	10-138	25 vo
Bromomethane	mg/kg (ppm)	2	<0.5	101	127	10-163	23 vo
Chloroethane	mg/kg (ppm)	2	<0.5	91	116	10-176	24 vo
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	109	132	10-176	19
Acetone	mg/kg (ppm)	10	<5	111	114	10-163	3
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	86	85	10-160	1
Hexane	mg/kg (ppm)	2	<0.25	91	92	10-137	1
Methylene chloride	mg/kg (ppm)	2	<0.5	78	80	10-156	3
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	95	97	21-145	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	89	86	14-137	3
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	95	98	19-140	3
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	115	116	10-158	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	94	94	25-135	0
Chloroform	mg/kg (ppm)	2	<0.05	93	97	21-145	4
2-Butanone (MEK)	mg/kg (ppm)	10	<1	112	122	19-147	9
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	106	120	12-160	12
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	94	97	10-156	3
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	100	103	17-140	3
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	99	104	9-164	5
Benzene	mg/kg (ppm)	2	<0.03	95	99	29-129	4
Trichloroethene	mg/kg (ppm)	2	<0.02	89	113	21-139	24 vo
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	104	127	30-135	20
Bromodichloromethane	mg/kg (ppm)	2	<0.05	95	119	23-155	22 vo
Dibromomethane	mg/kg (ppm)	2	<0.05	99	125	23-145	23 vo
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	108	132	24-155	20
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	98	125	28-144	24 vo
Toluene	mg/kg (ppm)	2	<0.05	100	104	35-130	4
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	102	114	26-149	11
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	103	109	10-205	6
2-Hexanone	mg/kg (ppm)	10	<1	115	121	15-166	5
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	111	118	31-137	6
Tetrachloroethene	mg/kg (ppm)	2	<0.025	90	100	20-133	11
Dibromochloromethane	mg/kg (ppm)	2	<0.05	93	101	28-150	8
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	97	106	28-142	9
Chlorobenzene	mg/kg (ppm)	2	<0.05	96	105	32-129	9
Ethylbenzene	mg/kg (ppm)	2	<0.05	104	113	32-137	8
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	103	108	31-143	5
m,p-Xylene	mg/kg (ppm)	4	<0.1	101	110	34-136	9
o-Xylene	mg/kg (ppm)	2	<0.05	98	109	33-134	11
Styrene	mg/kg (ppm)	2	<0.05	99	108	35-137	9
Isopropylbenzene	mg/kg (ppm)	2	<0.05	101	109	31-142	8
Bromoform	mg/kg (ppm)	2	<0.05	87	100	21-156	14
n-Propylbenzene	mg/kg (ppm)	2	<0.05	120	122	23-146	2
Bromobenzene	mg/kg (ppm)	2	<0.05	109	114	34-130	4
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	118	118	18-149	0
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	127	128	28-140	1
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	130	138	25-144	6
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	117	121	31-134	3
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	117	123	31-136	5
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	115	118	30-137	3
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	116	119	10-182	3
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	117	122	23-145	4
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	115	119	21-149	3
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	104	110	30-131	6
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	104	108	29-129	4
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	101	107	31-132	6
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	118	118	11-161	0
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	100	106	22-142	6
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	115	110	10-142	4
Naphthalene	mg/kg (ppm)	2	<0.05	109	113	14-157	4
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	108	109	20-144	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/17/24

Date Received: 11/22/24

Project: 186-19002-09, F&BI 411379

**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	69	10-146
Chloromethane	mg/kg (ppm)	2	80	27-133
Vinyl chloride	mg/kg (ppm)	2	89	22-139
Bromomethane	mg/kg (ppm)	2	107	10-201
Chloroethane	mg/kg (ppm)	2	90	10-163
Trichlorofluoromethane	mg/kg (ppm)	2	109	10-196
Acetone	mg/kg (ppm)	10	101	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	92	47-128
Hexane	mg/kg (ppm)	2	94	43-142
Methylene chloride	mg/kg (ppm)	2	75	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	90	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	84	64-132
1,1-Dichloroethane	mg/kg (ppm)	2	94	64-135
2,2-Dichloropropane	mg/kg (ppm)	2	108	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	89	64-135
Chloroform	mg/kg (ppm)	2	89	61-139
2-Butanone (MEK)	mg/kg (ppm)	10	105	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	103	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	93	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	97	64-136
Carbon tetrachloride	mg/kg (ppm)	2	99	60-139
Benzene	mg/kg (ppm)	2	91	65-136
Trichloroethene	mg/kg (ppm)	2	85	63-139
1,2-Dichloropropane	mg/kg (ppm)	2	96	61-145
Bromodichloromethane	mg/kg (ppm)	2	91	57-126
Dibromomethane	mg/kg (ppm)	2	92	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	101	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	92	65-143
Toluene	mg/kg (ppm)	2	94	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	103	65-131
1,1,2-Trichloroethane	mg/kg (ppm)	2	102	62-131
2-Hexanone	mg/kg (ppm)	10	107	33-152
1,3-Dichloropropane	mg/kg (ppm)	2	108	67-128
Tetrachloroethene	mg/kg (ppm)	2	87	68-128
Dibromochloromethane	mg/kg (ppm)	2	89	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	98	66-129
Chlorobenzene	mg/kg (ppm)	2	92	67-128
Ethylbenzene	mg/kg (ppm)	2	101	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	95	64-121
m,p-Xylene	mg/kg (ppm)	4	97	68-128
o-Xylene	mg/kg (ppm)	2	96	67-129
Styrene	mg/kg (ppm)	2	96	67-129
Isopropylbenzene	mg/kg (ppm)	2	99	68-128
Bromoform	mg/kg (ppm)	2	87	56-132
n-Propylbenzene	mg/kg (ppm)	2	112	68-129
Bromobenzene	mg/kg (ppm)	2	100	69-128
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	108	69-129
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	113	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	128	61-137
2-Chlorotoluene	mg/kg (ppm)	2	108	69-128
4-Chlorotoluene	mg/kg (ppm)	2	109	67-127
tert-Butylbenzene	mg/kg (ppm)	2	107	69-129
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	107	69-128
sec-Butylbenzene	mg/kg (ppm)	2	109	69-130
p-Isopropyltoluene	mg/kg (ppm)	2	109	69-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	100	69-127
1,4-Dichlorobenzene	mg/kg (ppm)	2	100	68-126
1,2-Dichlorobenzene	mg/kg (ppm)	2	97	69-127
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	118	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	91	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	96	50-153
Naphthalene	mg/kg (ppm)	2	104	62-128
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	99	61-126

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/17/24

Date Received: 11/22/24

Project: 186-19002-09, F&BI 411379

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL
SAMPLES FOR PAHS BY EPA METHOD 8270E SIM**

Laboratory Code: 411290-01 (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)	0.5	<0.005	106	106	50-150	0
2-Methylnaphthalene	mg/kg (ppm)	0.5	<0.005	103	101	50-150	2
1-Methylnaphthalene	mg/kg (ppm)	0.5	<0.005	104	103	50-150	1
Acenaphthylene	mg/kg (ppm)	0.5	<0.005	95	94	50-150	1
Acenaphthene	mg/kg (ppm)	0.5	<0.005	92	92	50-150	0
Fluorene	mg/kg (ppm)	0.5	<0.005	96	94	50-150	2
Phenanthrene	mg/kg (ppm)	0.5	<0.005	98	96	50-150	2
Anthracene	mg/kg (ppm)	0.5	<0.005	100	100	50-150	0
Fluoranthene	mg/kg (ppm)	0.5	<0.005	100	97	50-150	3
Pyrene	mg/kg (ppm)	0.5	<0.005	98	95	50-150	3
Benz(a)anthracene	mg/kg (ppm)	0.5	<0.005	95	93	50-150	2
Chrysene	mg/kg (ppm)	0.5	<0.005	103	101	50-150	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	<0.005	96	95	50-150	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	<0.005	98	97	50-150	1
Benzo(a)pyrene	mg/kg (ppm)	0.5	<0.005	95	94	50-150	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	<0.005	110	102	50-150	8
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	<0.005	111	106	50-150	5
Benzo(g,h,i)perylene	mg/kg (ppm)	0.5	<0.005	109	104	50-150	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/17/24

Date Received: 11/22/24

Project: 186-19002-09, F&BI 411379

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL
SAMPLES FOR PAHS BY EPA METHOD 8270E SIM**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.5	106	70-130
2-Methylnaphthalene	mg/kg (ppm)	0.5	102	70-130
1-Methylnaphthalene	mg/kg (ppm)	0.5	104	70-130
Acenaphthylene	mg/kg (ppm)	0.5	96	70-130
Acenaphthene	mg/kg (ppm)	0.5	92	70-130
Fluorene	mg/kg (ppm)	0.5	97	70-130
Phenanthrene	mg/kg (ppm)	0.5	98	70-130
Anthracene	mg/kg (ppm)	0.5	95	70-130
Fluoranthene	mg/kg (ppm)	0.5	95	70-130
Pyrene	mg/kg (ppm)	0.5	104	70-130
Benz(a)anthracene	mg/kg (ppm)	0.5	94	70-130
Chrysene	mg/kg (ppm)	0.5	101	70-130
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	96	70-130
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	95	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.5	93	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	111	70-130
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	110	70-130
Benzo(g,h,i)perylene	mg/kg (ppm)	0.5	108	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/17/24

Date Received: 11/22/24

Project: 186-19002-09, F&BI 411379

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

Laboratory Code: 411367-15 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.95	88	80	75-125	10
Barium	mg/kg (ppm)	10	14.4	71 b	63 b	75-125	12 b
Cadmium	mg/kg (ppm)	10	<1	83	79	75-125	5
Chromium	mg/kg (ppm)	10	6.81	76 b	68 b	75-125	11 b
Copper	mg/kg (ppm)	10	8.26	82 b	76 b	75-125	8 b
Lead	mg/kg (ppm)	10	1.19	84	81	75-125	4
Mercury	mg/kg (ppm)	10	<1	86	82	75-125	5
Selenium	mg/kg (ppm)	10	<1	81	76	75-125	6
Silver	mg/kg (ppm)	10	<1	82	79	75-125	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	90	80-120
Barium	mg/kg (ppm)	10	90	80-120
Cadmium	mg/kg (ppm)	10	88	80-120
Chromium	mg/kg (ppm)	10	92	80-120
Copper	mg/kg (ppm)	10	84	80-120
Lead	mg/kg (ppm)	10	90	80-120
Mercury	mg/kg (ppm)	10	85	80-120
Selenium	mg/kg (ppm)	10	88	80-120
Silver	mg/kg (ppm)	10	85	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria, biased low; 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 between the method detection limit and the lowest calibration point. 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.

4113 79

Report to Lynn Green

Company Euren Northwest

Address P.O. Box 14488

City, State, ZIP Portland OR 97223

Phone (503) 451-5561 Email lynn@euren-nw.com

SAMPLE CHAIN OF CUSTODY

11/22/24

4 M 1

SAMPLERS (signature) Jordan Morris Page # 1 of 7

PROJECT NAME 186-19002-09 PO # _____

REMARKS _____ INVOICE TO _____

Project specific RIs? - Yes / No _____

TURNAROUND TIME
 Standard turnaround
 RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Archive samples
 Other _____
 Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	PCRA & Metals	Copper		
<u>Dropbox-Comp01-241121</u>	<u>OIA-E</u>	<u>11-21-24</u>	<u>11:35</u>	<u>5011</u>	<u>5</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>(X) per ER</u>						
																<u>11/21/24 ME</u>
																<u>per ER</u>
																<u>12/6/24 ME</u>

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Jordan Morris</u>	<u>Jordan Morris</u>	<u>Euren Northwest</u>	<u>11-21-24</u>	<u>16:08</u>
<u>AW</u>	<u>Ash Phan</u>	<u>FBI</u>	<u>11/22/24</u>	<u>11:05</u>
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
 5500 4th Ave S.
 Seattle WA 98108
 (206) 285-8282
 office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 411379 CLIENT Evren INITIALS/ DATE: AP 11/22/24

If custody seals are present on cooler, are they intact? NA YES NO

Cooler/Sample temperature 4 °C Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? YES NO

How did samples arrive? Over the Counter Picked up by F&BI FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? YES NO Initials/ Date: AP 11/22/24
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 1 days

Are the samples clearly identified? (explain "no" answer below) YES NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) YES NO

Were appropriate sample containers used? YES NO Unknown

If custody seals are present on samples, are they intact? NA YES NO

Are samples requiring no headspace, headspace free? NA YES NO

Is the following information provided on the COC, and does it match the sample label? (explain "no" answer below).

- Sample ID's Yes No _____ Not on COC/label
- Date Sampled Yes No _____ Not on COC/label
- Time Sampled Yes No _____ Not on COC/label
- # of Containers Yes No _____
- Relinquished Yes No _____
- Requested analysis Yes On Hold _____

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? NA YES NO

Number of unused TO15 canisters _____ Number of unused TO17 tubes _____

GLS.

800-322-5555
www.gls-us.com

Ship From:

EVREN
DAN SAJKKO
40 SE 24TH AVE SUITE A
PORTLAND, OR 97214

Ship To:

FRIEDMAN & BRUYA, INC.
SAMPLE RECEIVING
5500 4TH AVENUE SOUTH
SEATTLE, WA, 98108

COD: \$0.00

Weight: 0 lb(s)

Dimensions:

Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED

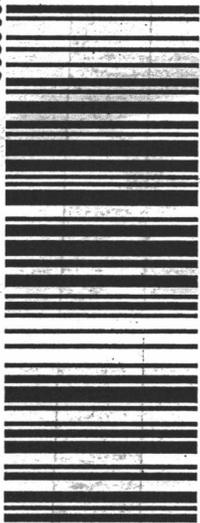
Tracking #: 562171559



PDS

SEATTLE

S06437C



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KNT WA980-7C0

Print Date : 10/24/24 15:40 PM

1 of 25

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 Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

December 30, 2024

Lynn Green, Project Manager
Evren Northwest, Inc.
PO Box 14488
Portland, OR 97293

Dear Mr Green:

Included are the results from the testing of material submitted on December 4, 2024 from the 186-19002-09, F&BI 412060 project. There are 20 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Neil Woller, Paul Trone, Evan Bruggeman
ENW1230R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on December 4, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 186-19002-09, F&BI 412060 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID

412060 -01

Evren Northwest

Dropbox-Comp02-241203

The 8260D calibration standard did not meet the acceptance criteria for several analytes. The data were flagged accordingly.

A 6020B copper internal standard did not meet the acceptance criteria. The sample was diluted and reanalyzed with acceptable results. Both data sets were reported.

The 8260D chloromethane matrix spike and matrix spike duplicate did not meet the acceptance criteria for several metals. The laboratory control sample passed the acceptance criteria, therefore the results were due to matrix effect.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/30/24
Date Received: 12/04/24
Project: 186-19002-09, F&BI 412060
Date Extracted: 12/12/24
Date Analyzed: 12/12/24

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID**

Results Reported on a Dry Weight Basis
Results Reported as Not Detected (ND) or Detected (D)

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

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
Dropbox-Comp02-241203 412060-01	ND	ND	D	82
Method Blank 04-3104 MB	ND	ND	ND	83

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/30/24
Date Received: 12/04/24
Project: 186-19002-09, F&BI 412060
Date Extracted: 12/17/24
Date Analyzed: 12/17/24

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND RESIDUAL RANGE
USING METHOD NWTPH-D_x**

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>Residual Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
Dropbox-Comp02-241203 412060-01	280 x	470	98
Method Blank 04-3126 MB	<25	<125	102

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Dropbox-Comp02-241203	Client:	Evren Northwest
Date Received:	12/04/24	Project:	186-19002-09, F&BI 412060
Date Extracted:	12/10/24	Lab ID:	412060-01
Date Analyzed:	12/11/24	Data File:	121114.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	113	79	128
Toluene-d8	99	84	121
4-Bromofluorobenzene	98	84	116

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 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25 k	o-Xylene	<0.05
Methylene chloride	<0.5 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05 k
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05 k	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	0.10	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	<1		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	186-19002-09, F&BI 412060
Date Extracted:	12/10/24	Lab ID:	04-2951 mb
Date Analyzed:	12/11/24	Data File:	121113.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	79	128
Toluene-d8	95	84	121
4-Bromofluorobenzene	108	84	116

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 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25 k	o-Xylene	<0.05
Methylene chloride	<0.5 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05 k
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05 k	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	<1		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	Dropbox-Comp02-241203	Client:	Evren Northwest
Date Received:	12/04/24	Project:	186-19002-09, F&BI 412060
Date Extracted:	12/09/24	Lab ID:	412060-01
Date Analyzed:	12/09/24	Data File:	120925.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	100	50	150
Benz(a)anthracene-d12	117	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.021
2-Methylnaphthalene	0.012
1-Methylnaphthalene	0.0077
Acenaphthylene	0.011
Acenaphthene	<0.005
Fluorene	0.0052
Phenanthrene	0.098
Anthracene	0.011
Fluoranthene	0.12
Pyrene	0.11
Benz(a)anthracene	0.036
Chrysene	0.084
Benzo(b)fluoranthene	0.052
Benzo(k)fluoranthene	0.015
Benzo(a)pyrene	0.049
Indeno(1,2,3-cd)pyrene	0.046
Dibenz(a,h)anthracene	0.011
Benzo(g,h,i)perylene	0.071

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	186-19002-09, F&BI 412060
Date Extracted:	12/09/24	Lab ID:	04-3002 mb
Date Analyzed:	12/09/24	Data File:	120908.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	50	150
Benz(a)anthracene-d12	96	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Dropbox-Comp02-241203	Client:	Evren Northwest
Date Received:	12/04/24	Project:	186-19002-09, F&BI 412060
Date Extracted:	12/06/24	Lab ID:	412060-01
Date Analyzed:	12/06/24	Data File:	412060-01.083
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.2
Barium	140
Cadmium	<1
Copper	14 J
Mercury	<1
Selenium	<1
Silver	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Dropbox-Comp02-241203	Client:	Evren Northwest
Date Received:	12/04/24	Project:	186-19002-09, F&BI 412060
Date Extracted:	12/06/24	Lab ID:	412060-01 x5
Date Analyzed:	12/09/24	Data File:	412060-01 x5.181
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Chromium	13
Copper	<25
Lead	39

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Evren Northwest
Date Received:	NA	Project:	186-19002-09, F&BI 412060
Date Extracted:	12/06/24	Lab ID:	I4-1054 mb2
Date Analyzed:	12/06/24	Data File:	I4-1054 mb2.081
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Dropbox-Comp02-241203	Client:	Evren Northwest
Date Received:	12/04/24	Project:	186-19002-09, F&BI 412060
Date Extracted:	12/26/24	Lab ID:	412060-01 1/30
Date Analyzed:	12/26/24	Data File:	122615.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	69	41	139
Decachlorobiphenyl	71	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	0.033
Aroclor 1262	<0.02
Aroclor 1268	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	186-19002-09, F&BI 412060
Date Extracted:	12/26/24	Lab ID:	04-3189 mb 1/30
Date Analyzed:	12/26/24	Data File:	122607.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	82	41	139
Decachlorobiphenyl	99	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/30/24

Date Received: 12/04/24

Project: 186-19002-09, F&BI 412060

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

Laboratory Code: 412060-01 (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	1,100	88	92	64-136	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	110	78-121

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/30/24

Date Received: 12/04/24

Project: 186-19002-09, F&BI 412060

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

Laboratory Code: 412060-01 (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	51	56	10-142	9
Chloromethane	mg/kg (ppm)	2	<0.5	67	84	10-126	23 vo
Vinyl chloride	mg/kg (ppm)	2	<0.05	77	82	10-138	6
Bromomethane	mg/kg (ppm)	2	<0.5	87	98	10-163	12
Chloroethane	mg/kg (ppm)	2	<0.5	84	96	10-176	13
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	85	97	10-176	13
Acetone	mg/kg (ppm)	10	<5	102	103	10-163	1
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	83	99	10-160	18
Hexane	mg/kg (ppm)	2	<0.25	89	97	10-137	9
Methylene chloride	mg/kg (ppm)	2	<0.5	93	104	10-156	11
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	91	101	21-145	10
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	88	95	14-137	8
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	87	98	19-140	12
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	92	103	10-158	11
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	91	99	25-135	8
Chloroform	mg/kg (ppm)	2	<0.05	87	99	21-145	13
2-Butanone (MEK)	mg/kg (ppm)	10	<1	90	98	19-147	9
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	86	100	12-160	15
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	91	98	10-156	7
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	90	98	17-140	9
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	89	99	9-164	11
Benzene	mg/kg (ppm)	2	<0.03	81	94	29-129	15
Trichloroethene	mg/kg (ppm)	2	0.086	81	91	21-139	12
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	91	99	30-135	8
Bromodichloromethane	mg/kg (ppm)	2	<0.05	89	98	23-155	10
Dibromomethane	mg/kg (ppm)	2	<0.05	84	98	23-145	15
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	87	98	24-155	12
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	89	102	28-144	14
Toluene	mg/kg (ppm)	2	<0.05	86	97	35-130	12
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	88	99	26-149	12
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	89	98	10-205	10
2-Hexanone	mg/kg (ppm)	10	<1	87	97	15-166	11
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	90	101	31-137	12
Tetrachloroethene	mg/kg (ppm)	2	<0.025	93	107	20-133	14
Dibromochloromethane	mg/kg (ppm)	2	<0.05	88	96	28-150	9
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	87	98	28-142	12
Chlorobenzene	mg/kg (ppm)	2	<0.05	87	98	32-129	12
Ethylbenzene	mg/kg (ppm)	2	<0.05	85	97	32-137	13
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	93	105	31-143	12
m,p-Xylene	mg/kg (ppm)	4	<0.1	88	100	34-136	13
o-Xylene	mg/kg (ppm)	2	<0.05	88	98	33-134	11
Styrene	mg/kg (ppm)	2	<0.05	85	99	35-137	15
Isopropylbenzene	mg/kg (ppm)	2	<0.05	90	99	31-142	10
Bromoform	mg/kg (ppm)	2	<0.05	100	113	21-156	12
n-Propylbenzene	mg/kg (ppm)	2	<0.05	91	105	23-146	14
Bromobenzene	mg/kg (ppm)	2	<0.05	91	101	34-130	10
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	90	105	18-149	15
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	91	101	28-140	10
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	85	99	25-144	15
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	90	104	31-134	14
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	91	102	31-136	11
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	92	105	30-137	13
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	94	105	10-182	11
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	91	102	23-145	11
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	92	105	21-149	13
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	87	100	30-131	14
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	88	100	29-129	13
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	93	105	31-132	12
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	91	96	11-161	5
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	91	103	22-142	12
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	93	107	10-142	14
Naphthalene	mg/kg (ppm)	2	<0.05	94	108	14-157	14
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	92	103	20-144	11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/30/24

Date Received: 12/04/24

Project: 186-19002-09, F&BI 412060

**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	63	10-146
Chloromethane	mg/kg (ppm)	2	78	27-133
Vinyl chloride	mg/kg (ppm)	2	86	22-139
Bromomethane	mg/kg (ppm)	2	100	10-201
Chloroethane	mg/kg (ppm)	2	98	10-163
Trichlorofluoromethane	mg/kg (ppm)	2	103	10-196
Acetone	mg/kg (ppm)	10	99	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	95	47-128
Hexane	mg/kg (ppm)	2	97	43-142
Methylene chloride	mg/kg (ppm)	2	96	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	93	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	92	64-132
1,1-Dichloroethane	mg/kg (ppm)	2	90	64-135
2,2-Dichloropropane	mg/kg (ppm)	2	97	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	93	64-135
Chloroform	mg/kg (ppm)	2	91	61-139
2-Butanone (MEK)	mg/kg (ppm)	10	88	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	92	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	92	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	92	64-136
Carbon tetrachloride	mg/kg (ppm)	2	92	60-139
Benzene	mg/kg (ppm)	2	85	65-136
Trichloroethene	mg/kg (ppm)	2	87	63-139
1,2-Dichloropropane	mg/kg (ppm)	2	92	61-145
Bromodichloromethane	mg/kg (ppm)	2	91	57-126
Dibromomethane	mg/kg (ppm)	2	86	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	84	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	89	65-143
Toluene	mg/kg (ppm)	2	89	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	90	65-131
1,1,2-Trichloroethane	mg/kg (ppm)	2	91	62-131
2-Hexanone	mg/kg (ppm)	10	84	33-152
1,3-Dichloropropane	mg/kg (ppm)	2	90	67-128
Tetrachloroethene	mg/kg (ppm)	2	93	68-128
Dibromochloromethane	mg/kg (ppm)	2	89	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	90	66-129
Chlorobenzene	mg/kg (ppm)	2	89	67-128
Ethylbenzene	mg/kg (ppm)	2	91	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	96	64-121
m,p-Xylene	mg/kg (ppm)	4	93	68-128
o-Xylene	mg/kg (ppm)	2	91	67-129
Styrene	mg/kg (ppm)	2	90	67-129
Isopropylbenzene	mg/kg (ppm)	2	94	68-128
Bromoform	mg/kg (ppm)	2	103	56-132
n-Propylbenzene	mg/kg (ppm)	2	94	68-129
Bromobenzene	mg/kg (ppm)	2	92	69-128
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	93	69-129
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	90	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	89	61-137
2-Chlorotoluene	mg/kg (ppm)	2	92	69-128
4-Chlorotoluene	mg/kg (ppm)	2	92	67-127
tert-Butylbenzene	mg/kg (ppm)	2	95	69-129
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	94	69-128
sec-Butylbenzene	mg/kg (ppm)	2	94	69-130
p-Isopropyltoluene	mg/kg (ppm)	2	95	69-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	92	69-127
1,4-Dichlorobenzene	mg/kg (ppm)	2	88	68-126
1,2-Dichlorobenzene	mg/kg (ppm)	2	95	69-127
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	91	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	94	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	95	50-153
Naphthalene	mg/kg (ppm)	2	94	62-128
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	90	61-126

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/30/24

Date Received: 12/04/24

Project: 186-19002-09, F&BI 412060

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL
SAMPLES FOR PAHS BY EPA METHOD 8270E SIM**

Laboratory Code: 412109-01 (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)	0.5	<0.005	109	109	50-150	0
2-Methylnaphthalene	mg/kg (ppm)	0.5	<0.005	106	106	50-150	0
1-Methylnaphthalene	mg/kg (ppm)	0.5	<0.005	108	108	50-150	0
Acenaphthylene	mg/kg (ppm)	0.5	<0.005	98	106	50-150	8
Acenaphthene	mg/kg (ppm)	0.5	<0.005	94	102	50-150	8
Fluorene	mg/kg (ppm)	0.5	<0.005	101	109	50-150	8
Phenanthrene	mg/kg (ppm)	0.5	<0.005	96	95	50-150	1
Anthracene	mg/kg (ppm)	0.5	<0.005	104	103	50-150	1
Fluoranthene	mg/kg (ppm)	0.5	<0.005	105	101	50-150	4
Pyrene	mg/kg (ppm)	0.5	<0.005	86	90	50-150	5
Benz(a)anthracene	mg/kg (ppm)	0.5	<0.005	95	100	50-150	5
Chrysene	mg/kg (ppm)	0.5	<0.005	106	101	50-150	5
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	<0.005	98	97	50-150	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	<0.005	91	93	50-150	2
Benzo(a)pyrene	mg/kg (ppm)	0.5	<0.005	94	95	50-150	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	<0.005	113	110	50-150	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	<0.005	116	113	50-150	3
Benzo(g,h,i)perylene	mg/kg (ppm)	0.5	<0.005	116	113	50-150	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/30/24

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Project: 186-19002-09, F&BI 412060

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL
SAMPLES FOR PAHS BY EPA METHOD 8270E SIM**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.5	108	70-130
2-Methylnaphthalene	mg/kg (ppm)	0.5	106	70-130
1-Methylnaphthalene	mg/kg (ppm)	0.5	108	70-130
Acenaphthylene	mg/kg (ppm)	0.5	97	70-130
Acenaphthene	mg/kg (ppm)	0.5	94	70-130
Fluorene	mg/kg (ppm)	0.5	102	70-130
Phenanthrene	mg/kg (ppm)	0.5	95	70-130
Anthracene	mg/kg (ppm)	0.5	102	70-130
Fluoranthene	mg/kg (ppm)	0.5	103	70-130
Pyrene	mg/kg (ppm)	0.5	92	70-130
Benz(a)anthracene	mg/kg (ppm)	0.5	94	70-130
Chrysene	mg/kg (ppm)	0.5	106	70-130
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	99	70-130
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	93	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.5	94	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	107	70-130
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	108	70-130
Benzo(g,h,i)perylene	mg/kg (ppm)	0.5	109	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/30/24

Date Received: 12/04/24

Project: 186-19002-09, F&BI 412060

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	104	103	80-120	1
Barium	mg/kg (ppm)	10	105	103	80-120	2
Cadmium	mg/kg (ppm)	10	103	102	80-120	1
Chromium	mg/kg (ppm)	10	107	106	80-120	1
Copper	mg/kg (ppm)	10	100	97	80-120	3
Lead	mg/kg (ppm)	10	105	102	80-120	3
Mercury	mg/kg (ppm)	10	96	98	80-120	2
Selenium	mg/kg (ppm)	10	103	101	80-120	2
Silver	mg/kg (ppm)	10	106	105	80-120	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/30/24

Date Received: 12/04/24

Project: 186-19002-09, F&BI 412060

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
POLYCHLORINATED BIPHENYLS AS
AROCLOR 1016/1260 BY EPA METHOD 8082A**

Laboratory Code: 412430-01 1/30 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	<0.02	70	70	50-150	0
Aroclor 1260	mg/kg (ppm)	0.25	<0.02	79	80	50-150	1

Laboratory Code: Laboratory Control Sample 1/30

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.25	94	50-138
Aroclor 1260	mg/kg (ppm)	0.25	101	54-146

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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, biased low; 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 between the method detection limit and the lowest calibration point. 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.

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 412060 CLIENT Evren INITIALS/ AT
DATE: 12/4/24

If custody seals are present on cooler, are they intact? NA YES NO

Cooler/Sample temperature 4 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? YES NO

How did samples arrive?
 Over the Counter Picked up by F&BI FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? YES NO Initials/ AP
*or other representative documents, letters, and/or shipping memos Date: 12/04/24

Number of days samples have been sitting prior to receipt at laboratory 1 days

Are the samples clearly identified? (explain "no" answer below) YES NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) YES NO

Were appropriate sample containers used? YES NO Unknown

If custody seals are present on samples, are they intact? NA YES NO

Are samples requiring no headspace, headspace free? NA YES NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Not on COC/label
Date Sampled	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Not on COC/label
Time Sampled	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Not on COC/label
# of Containers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	
Relinquished	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	
Requested analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> On Hold	_____	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? NA YES NO

Number of unused TO15 canisters _____ Number of unused TO17 tubes _____

GLS.

Ship From:
EVREN
DAN SAIKKO
40 SE 24TH AVE SUITE A
PORTLAND, OR 97214

Ship To:
FRIEDMAN & BRUYA, INC.
SAMPLE RECEIVING
5500 4TH AVENUE SOUTH
SEATTLE, WA, 98108

COD: \$0.00
Weight: 0 lb(s)
Dimensions:
Reference:
Delivery Instructions:
Signature Type: NOT REQUIRED

800-322-5555
www.gls-us.com

Tracking #: 562171564

PDS

SEATTLE

S06437C



18396903

KNT WA980-7C0

Print Date : 10/24/24 15:40 PM

ATTACHMENT C: SOIL DISPOSAL RECEIPTS

