Focused Arsenic & Lead Soil Assessment

King County Parcel: 042104-9012 & 042104-9221
January 11, 2020

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1.0 INTRODUCTION

EcoCon, Inc (ECI), on behalf of Eastwood Terrace Estate, LLC, completed the arsenic and lead investigation for the property known as: King County Parcels: 042104-9012 & 042104-9221 which is located at the intersection of Pacific Highway/WA-99 & South 304th Street in Federal Way, Washington (Property/ Subject Property) (Figure 1, Appendix A).

The purpose of this investigation was to identify and delineate potential arsenic and lead contamination the guidance of the Department of Ecology (Ecology) concerning arsenic (As) and lead (Lead) resulting from the former Asarco Tacoma Smelter Site (Ecology Publication number 12-09-086).

1.1 Subject Property Location / Description

The Subject Property is located at the intersection of Pacific Highway/WA-99 & South 304th Street in Federal Way, Washington (King County parcel numbers 042104-9012 & 042104-9221) and is bounded by:

- SmartCare Daycare and Residential housing to the north;
- Pacific Highway/WA-99 to the west;
- South 304th St to the south; and
- Residential neighborhoods to the east.

The greater vicinity is occupied by primarily residential developments. According to research conducted by ECI, the Subject Property falls into the Moderate Zone (20-100 ppm arsenic / lead respectively) of contamination produced by the Asarco Tacoma Smelter.

1.2 Previous Environmental Investigations and Remedial Actions

1.2.1 Arsenic & Lead Soil Screening – EcoCon, Inc – April 2019

In April 2019 ECI environmental professionals completed a limited environmental screening focused on potential Arsenic and Lead impacted soils. This investigation was conducted as a screening only and was not in accordance with Ecology Remedies Guidance "Sampling & Cleanup of Arsenic & Lead Contaminated Soils, Publication 12-09-086.

Ten sample locations were selected, and a total of 14 samples were collected which included 10 surface soil samples collected between 0 to 6" below ground surface (bgs), and 4 samples of forest duff (the leaves and decomposing matter which rests on the forest floor). Samples were analyzed by Friedman & Bruya of Seattle, Washington. Of the samples analyzed, none were above MTCA method A Cleanup Levels (CULs) for Arsenic (CUL = 20 ppm) or Lead (CUL = 250 ppm). However, the analytical results revealed that each of the samples contained concentrations below the cleanup level of both Arsenic and Lead.

1.2.2 Arsenic & Lead Soil Assessment – EcoCon, Inc – July 17, 2019

On June 11th and June 12th, 2019 ECI environmental professionals collected a total of 69 soil samples and one forest duff sample from the Subject Property. The purpose of this sampling event was to fulfill testing

requirements set forth in Ecology Publication 12-09-086A which concerns areas affected by the Tacoma Smelter Plume.
The results of the analysis indicate that the average concentrations for lead and arsenic for the Subject Property are below the concentration indicated by 12-09-086A, specifically and average of arsenic exceeding 20 parts per million (ppm) and lead exceeding 250 ppm. However, one sample (F8-0-6") was reported exceeding the 40-ppm maximum allowed concentration for a discreet soil sample for arsenic, which will require further action in that area of the subject property.

1.4 Regulatory Compliance and Cleanup Standards

Regulatory compliance for this project is based on the Washington Administrative Code (WAC) 173-340 – Model Toxic Control Act (MTCA) - RCW Chapter 70.105D, implemented by the Washington State Department of Ecology. Pursuant to Chapter 70.105D RCW, Ecology has established cleanup standards and requirements for cleanup actions. The rules establishing these standards and requirements were developed by Ecology in consultation with the Science Advisory Board (established under the Act) and with representatives from local government, citizen, environmental, and business groups. The rules were first published in February 1991, with amendments in January 1996, February 2001, and October 2007.

Sampling procedures and sampling requirements are detailed in the Ecology 19-09-101 (Tacoma Smelter Plume Model Remedies Guidance - Sampling and cleanup of arsenic and lead contaminated soils). Should arsenic or lead levels be reported elevated, remediation is necessary. Elevated means: 1) Average arsenic greater than 20 mg/kg (ppm) or maximum (any one sample) arsenic greater than 40 mg/kg and 2) average lead greater than 250 mg/kg; or maximum lead is greater than 500 ppm.

The COCs and the respective CULs are shown in the table below:

Table 1: Contaminants of Concern, Methods, and Cleanup Levels

Table 830-1 Constituent Method-A Soil Cleanup Levels for Unrestricted Land Use (MTCA Cleanup Regulation 173-340-900: Table 740-1)			
Contaminant of Concern (COCs)	**Laboratory Method[1]**	**Soil Cleanup Levels (mg/kg)**	
Arsenic (As)	6010, 6020, 6200, or 7060	Average Concentration (all samples combined)	20
		Maximum Concentration (per sample)	40
Lead (Lead)	6010, 6020, 6200, or 7421	Average Concentration (all samples combined)	250
		Maximum Concentration (per sample)	500

2.0 SAMPLE COLLECTION

This report has been prepared to present the finding of two supplemental sampling events competed in December 2020 and January 2021. The December sampling events was conducted to delineate the extent of arsenic impacted soil in grid F8, (Figure 3 & 4, Appendix A). The January sampling event was competed to meet the updated sampling requirements as outlined Tacoma Smelter Plume Model Remedies Guidance - Sampling and cleanup of arsenic and lead contaminated soils – Publication 19-09-101. The new standard required an additional five (5) soil samples from forest duff.

2.1 Pre-Sample Collection Activities

Sampling activities were completed as outlined in Ecology guidance referenced in section 1.4 above. This guidance document recommends the following steps to determine the number and location of samples needed:

- Sub-divide the previous sampling grid F8 into nine distinct sampling locations to delineate the extent of arsenic impacted soil exceeding 40 ppm.

2.1.1 Site Characterization

The Subject Property is currently forested, but the **intended** use of the Property is development into multifamily residential. The intended use of the Property means that the number of sample locations will be based on "Residential, Parks, Commercial".

2.1.2 Decision Units

A decision unit is an area of a property expected to have a different pattern of soil contamination than other areas. It may also be defined as an area of the property with a different use (such as open land and playgrounds). At this time, ECI has not been made aware of any special areas set aside for playgrounds, gardens, unforested land, or graded areas of the Property which may have triggered the need for additional decision units. For this Property, only one decision unit is required.

2.1.3 Number of Samples & Locations

Based on the previous sampling events with the collection of sixty-nine (69) discrete soil and six (6) forest duff, nine additional sample locations within grid F8 were chosen, with two samples collected at 0-6" bgs and 6-12" bgs each of the nine grides and one sample collected at 12-18" bgs within the previously reported sample location exceeding 40 ppm (Figure 4, Appendix A).

2.2 Soil Sampling

2.1 December 2020 Sampling Event

On December 14, 2020, ECI environmental professionals mobilized to the site and collected a total of nineteen (19) soil samples. Each sample location was measured using handheld global positioning system (GPS) equipment and marked with sample flags.

Samples were collected using properly decontaminated stainless steel sampling equipment and transferred into new resealable sample bags. New nitrile gloves were used during the collection of each discrete sample. Sampling equipment was decontaminated using a mixture of deionized water and tri-sodium phosphate (TSOP) to reduce the possibility of cross-contamination. Samples were transferred under industry standard chain of custody protocol to Washington State Accredited Environmental Laboratory Friedman & Bruya of Seattle, Washington on December 15, 2020.

2.2 January 2021 Sampling Event

On January 7, 2021, ECI environmental professionals mobilized to the site and collected five surface duff soil samples. Each sample was comprised of 6 (six) subsamples. Each sample location was measured using handheld global positioning system (GPS) equipment and marked with sample flags.

Samples were collected using properly decontaminated stainless steel sampling equipment and transferred into new resealable sample bags. New nitrile gloves were used during the collection of each discrete sample. Sampling equipment was decontaminated using a mixture of deionized water and tri-sodium phosphate (TSOP) to reduce the possibility of cross-contamination. Samples were transferred under industry standard chain of custody protocol to Washington State Accredited Environmental Laboratory Friedman & Bruya of Seattle, Washington on January 7, 2021.

3.0 LABORATORY ANALYSIS

Soil samples were analyzed for total arsenic and total lead by EPA Method 6020B. Presented below is Table 2: Site Charectorization-2019 and 2020 Arsenic & Lead Analytical Results and Table 3: Grid F8 Delineation-Arsenic & Lead Analytical Results. Table 2 is provided to present all sample characterization analytical data along with analytical concentration average. Table two provides grid F8 arsenic delineation data.

Table 2: Site Characterization-2019 and 2021 Arsenic & Lead Analytical Results

Sample ID	Sample Depth (in)	Date Sampled	Soil Sample Results (EPA 200.8 / 6020B)	
			Arsenic	Lead
			Sample Reported in Parts Per Million (ppm)	
S1-Duff	Surface	4/22/2019	12.3	32.1
S3-Duff	Surface	4/22/2019	9.36	25.8
S5-Duff	Surface	4/22/2019	7.42	74.9
S7-Duff	Surface	4/22/2019	8.72	56.4
F6-Duff	Surface	01/07/2021	1.75	10.0
E5-Duff	Surface	01/07/2021	<4	10.4
I4-Duff	Surface	01/07/2021	2.59	14.7
J6-Duff	Surface	01/07/2021	1.60	7.94
H8-Duff	Surface	01/07/2021	4.43	23.8
S2-0-6”	0-6	4/22/2019	3.61	6.39
S3-0-6”	0-6	4/22/2019	16.2	40.3
S4-0-6”	0-6	4/22/2019	3.32	4.48
S5-0-6”	0-6	4/22/2019	3.59	6.99
S6-0.6”	0-6	4/22/2019	12.7	29.3
S7-0-6”	0-6	4/22/2019	8.49	17
S8-0-6”	0-6	4/22/2019	6.79	16.2
S9-0-6”	0-6	4/22/2019	10	24.1
S10-0-6”	0-6	4/22/2019	3.1	11.5
A1-0-6”	0-6	6/13/2019	9.04	35.4
A2-0-6”	0-6	6/13/2019	14.9	20.4
A3-0-6”	0-6	6/13/2019	6.21	9.69
A4-0-6”	0-6	6/13/2019	14.2	31.9
B1-0-6”	0-6	6/13/2019	4.01	17.5
B1-6-12 “	6-12	6/13/2019	4.14	18.3

Sample ID	Sample Depth (in)	Date Sampled	Soil Sample Results (EPA 200.8 / 6020B)	
			Arsenic	Lead
			Sample Reported in Parts Per Million (ppm)	
B2-0-6”	0-6	6/13/2019	4.45	8.93
B2-6-12”	6-12	6/13/2019	3.95	7.28
B4-0-6”	0-6	6/13/2019	22.9	71.1
B4-6-12”	6-12	6/13/2019	7.88	16.5
B5-0-6”	0-6	6/13/2019	16	36.6
B6-0-6”	0-6	6/13/2019	29.4	194
C2-0-6”	0-6	6/13/2019	39.6	89.2
C3-0-6”	0-6	6/13/2019	8.62	20.5
C4-0-6”	0-6	6/13/2019	12.1	33.4
C4-0-6-12”	6-12	6/13/2019	3.36	5.61
C5-0-6”	0-6	6/13/2019	6.85	13.4
C5-6-12 “	6-12	6/13/2019	5.06	10.3
C6-0-6”	0-6	6/13/2019	27	77.9
D1-0-6”	0-6	6/13/2019	5.16	11.7
D3-0-6”	0-6	6/13/2019	19.5	45.2
D4-0-6”	0-6	6/13/2019	6.38	7.3
D4-0-6”	0-6	6/13/2019	14	34.6
D4-6-12”	6-12	6/13/2019	8.76	28.1
D6-0-6”	0-6	6/13/2019	25.9	73.2
D7-0-6”	0-6	6/13/2019	32.6	95.7
D8-0-6”	0-6	6/13/2019	12.5	24.9
D8-6-12 “	6-12	6/13/2019	10.2	26.9
E1-Duff	Surface	6/13/2019	23.6	101
E1-0-6”	0-6	6/13/2019	15.2	61.5
E2-0-6”	0-6	6/13/2019	10.3	20.8
E2-6-12 “	6-12	6/13/2019	11.3	26.3
E3-0-6”	0-6	6/13/2019	9.37	37.3
E4-0-6”	0-6	6/13/2019	11.9	31.5
E5-0-6”	0-6	6/13/2019	27.1	76
E6-0-6”	0-6	6/13/2019	23	42.3
E7-0-6”	0-6	6/13/2019	34	64.5
E7-6-12 “	6-12	6/13/2019	9.76	16.8
E8-0-6”	0-6	6/13/2019	18.5	42.8
F4-0-6”	0-6	6/13/2019	13.2	17.1
F4-6-12 “	6-12	6/13/2019	16.2	25.5
F5-0-6”	0-6	6/13/2019	16.5	34.6
F6-0-6”	0-6	6/13/2019	8.84	8.94
F7-0-6”	0-6	6/13/2019	26.2	42.1
F8-0-6”	0-6	6/13/2019	**43**	93.7

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Sample ID	Sample Depth (in)	Date Sampled	Soil Sample Results (EPA 200.8 / 6020B)	
			Arsenic	Lead
			Sample Reported in Parts Per Million (ppm)	
G5-0-6”	0-6	6/13/2019	10.2	21.7
G7-0-6”	0-6	6/13/2019	17.1	43.3
G8-0-6”	0-6	6/13/2019	3.57	11.6
G8-0-6”	0-6	6/13/2019	11.2	17
G8-6-12 “	6-12	6/13/2019	4.79	21.3
H4-0-6”	0-6	6/13/2019	12.4	53.2
H5-0-6”	0-6	6/13/2019	5.32	14.2
H6-0-6”	0-6	6/13/2019	17.6	56.8
H8-0-6”	0-6	6/13/2019	13	33.4
I4-0-6”	0-6	6/13/2019	12.9	53.6
I5-0-6”	0-6	6/13/2019	10	28.8
I56-12 “	6-12	6/13/2019	8.71	29.6
I6-0-6”	0-6	6/13/2019	32.8	73.1
I7-0-6”	0-6	6/13/2019	14.3	45.8
I7-6-12 “	6-12	6/13/2019	7.72	22.7
I8-0-6”	0-6	6/13/2019	9.07	43
J4-0-6”	0-6	6/13/2019	10.8	127
J5-0-6”	0-6	6/13/2019	9.32	41.7
J7-0-6”	0-6	6/13/2019	25	77.3
J7-6-12 “	6-12	6/13/2019	26.5	78.2
J8-0-6”	0-6	6/13/2019	3.84	14.3
K4-0-6”	0-6	6/13/2019	4.03	69
K5-0-6”	0-6	6/13/2019	4.02	49.1
K7-0-6”	0-6	6/13/2019	3.58	21.6
Average Concentration			**12.48**	**37.56**
Laboratory Reporting Limit			1	1
Average Concentration CUL as per 12-09-086A			20	250
Maximum Concentration CUL as per 12-09-086A			40	500
Ecology MTCA Method A Cleanup Levels			20	250

Notes:
Bold indicates a detected concentration that is below Ecology MTCA Method A Cleanup Levels
Bold and Shaded with an orange background indicates the detected concentration exceeds the maximum concentration allowed by publication 12-09-086A.

Table 3: Grid F8 Delineation-Arsenic & Lead Analytical Results-December 2020 Sampling Event

Sample ID	Sample Depth (in)	Date Sampled	Soil Sample Results (EPA 200.8 / 6020B)	
			Arsenic	Lead
			Sample Reported in Parts Per Million (ppm)	
December 14, 2020 Sampling Event				
F8-1-0-6”	0-6”	12/14/2020	2.58	3.88

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Sample ID	Sample Depth (in)	Date Sampled	Soil Sample Results (EPA 200.8 / 6020B)	
			Arsenic	Lead
			Sample Reported in Parts Per Million (ppm)	
F8-1-6-12”	6-12”	12/14/2020	2.12	3.95
F8-1-12-18”	6-12”	12/14/2020	2.37	3.08
F8-2-0-6”	0-6”	12/14/2020	10.5	16.7
F8-2-6-12”	6-12”	12/14/2020	2.73	3.75
F8-3-0-6”	0-6”	12/14/2020	9.72	149
F8-3-6-12”	6-12”	12/14/2020	11.2	73.3
F8-4-0-6”	0-6”	12/14/2020	21.5	72.1
F8-4-6-12”	6-12”	12/14/2020	14.2	37.7
F8-5-0-6”	0-6”	12/14/2020	9.87	16.6
F8-5-6-12”	6-12”	12/14/2020	6.35	15.6
F8-6-0-6”	0-6”	12/14/2020	8.03	13.3
F8-6-6-12”	6-12”	12/14/2020	4.92	10.2
F8-7-0-6”	0-6”	12/14/2020	22.9	54.1
F8-7-6-12”	6-12”	12/14/2020	3.9	5.86
F8-8-0-6”	0-6”	12/14/2020	11.5	21.8
F8-8-6-12”	6-12”	12/14/2020	7.24	12.3
F8-9-0-6”	0-6”	12/14/2020	10.9	31.1
F8-9-6-12”	6-12”	12/14/2020	5.09	13.1
Laboratory Reporting Limit			1	1
Average Concentration CUL as per 12-09-086A			20	250
Maximum Concentration CUL as per 12-09-086A			40	500
Ecology MTCA Method A Cleanup Levels			20	250

Notes:
Bold indicates a detected concentration that is below Ecology MTCA Method A Cleanup Levels
Bold and Red with an orange background indicates the detected concentration exceeds the maximum concentration allowed by publication 19-09-101

4.0 SUMMARY AND RECCOMENDATIONS

4.1 Summary

On December 14, 2020 ECI environmental professionals collected a nineteen (19) soil samples from nine (9) distinct sampling locations at two depths, 0-6” bgs and 6-12” bgs. One sample location (grid F8-1) also had a sample collected from 6-18” bgs. The purpose of the sampling event was to delineate the extent of previously identified (July 2019) arsenic impacted soil reported containing 43 ppm arsenic exceeding the maximum 40 ppm maximum concentration.

Each of the nineteen (19) samples collection from grid F8 were reported below the maximum average concertation for both arsenic and lead and below the maximum individual concentration for both arsenic and lead.

On January 7, 2020 ECI environmental professionals five (5) forest Duff soil samples from 5 grids. Each sample was comprised of six (6) subsamples. These five samples were reported below the maximum individual concretion for both arsenic and lead.

Combined with the April and June 2019 sampling events, there is only one small approximate 10 foot by 15 foot (~150 square feet) located on the south half of grid F8-1 where arsenic contaminated soil remains (Sample F8-0-6", reported at 43 ppm Arsenic).

4.1 Recommendations

Corrective action may be required should a no further action determination be necessary. The corrective action alternatives include 1) Excavation and Removal and/or 2) Soil Mixing. Based on the localized area of impacted soil, soil mixing is recommended. Details regarding how this remedy should be implemented are provided in excerpts from the Ecology Guidance Publication in the tables below:

Table 4: Model Remedy Options

	Model Remedy	Action	Considerations
Permanent	**Excavate & Remove (Ch. 3)**	Excavate contaminated soils and properly dispose of them.	⇒ The top 6" of soil must have <20 ppm average arsenic and <250 ppm average lead after excavation. Take samples at depth to make sure you remove all contamination. ⇒ Performance monitoring required.
	Mix (Ch. 4)	Mix the top 6-12" of contaminated soils with imported soils or deeper, clean soil.	⇒ Not for soils >40 ppm average arsenic, average lead >500 ppm. ⇒ Performance monitoring required.

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Table 5: Things to Consider

Arsenic and lead levels: Use excavation at any level of contamination	
Pros: • Permanent • Only permanent remedy for average arsenic > 40 ppm, lead > 500 ppm • Works for all levels of arsenic or lead soil contamination • No need for institutional controls	**Cons:** • May require a waste disposal authorization for landfill • Can be expensive to and dispose of soils and new soils • Requires sampling for and for importing new soils
Costs: There are certain costs with removal, proper landfill disposal, and bringing in clean fill. However, there are no long-term maintenance costs for maintenance and monitoring because the remedy is permanent. Estimate costs using the worksheet at the end of the chapter.	

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ECI recommends the Subject Property be entered into the Expedited Voluntary Cleanup Program (VCP) process. This process will provide Ecology with the necessary information to provide an opinion as to the work competed and if necessary, a pathway to closure and a no further action determination.

ECI appreciates the opportunity to provide environmental consulting services on this project. Should you have any questions, please contact our office at (253) 238-9270.

5.0 QUALIFICATIONS OF THIS REPORT

Some clients, design professionals and contractors may not recognize that the geoscience practices (geotechnical engineering, geology, and environmental science) are far less exact than other engineering and natural science disciplines. This lack of understanding can create unrealistic expectations that could lead to disappointments, claims and disputes. ECI includes these explanatory "limitations" provisions in our reports to help reduce such risks. Please confer with ECI if you are unclear how these "Report Limitations and Guidelines for Use" apply to your project or Site.

5.1 Use of this Report by Others

Our report was prepared for the exclusive use of American Classic Homes and designated agent/ensigns. This report may be provided to regulatory agencies for review if requested or required. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with and generally accepted environmental practices in this area at the time this report was prepared.

This report has been prepared for subsurface investigation activities at the Subject Property. EcoCon considered a number of unique, project-specific factors when establishing the scope of services for this project and report. No one except designated agent/ensigns should rely on this environmental report without first conferring with ECI. This report should not be applied for any purpose or project except the one originally contemplated.

Unless ECI specifically indicates otherwise, do not rely on this report if it was:

- Not prepared for you,
- Not prepared for your project,
- Not prepared for the specific site explored, or
- Completed before important site changes were made.

If important changes are made after the date of this report, ECI should be given the opportunity to review our interpretations and recommendations and provide written modifications or confirmation, as appropriate.

5.2 Uncertainty May Remain after Completion of Site Investigation and Remedial Activities

The investigation and remediation activities completed in a portion of a site cannot wholly eliminate uncertainty regarding the potential for contamination in connection with the entire property. Our

interpretation of subsurface conditions in this study is based on field observations and chemical analytical data from the locations sampled. It is always possible that contamination exists in areas that were not explored, sampled, or analyzed.

5.3 Subsurface Conditions Can Change

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the Site, by new releases of hazardous substances, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Always contact ECI before applying this report to determine if it is still applicable.

5.4 Soil and Groundwater End Use

The cleanup levels referenced in this report are Site- and situation-specific and could change with time due to regulatory or Site changes. The cleanup levels may not be applicable for other sites or for other on-site uses of the affected media (soil and/or groundwater).

Note that hazardous substances may be present in some of the Site soil and/or groundwater at detectable concentrations that are less than the referenced cleanup levels. Because these cleanup levels can change, EcoCon should be contacted to evaluate the potential for associated environmental liabilities prior to the export of soil or groundwater from the Subject Site or reuse of the affected media on the Site. We cannot be responsible for potential environmental liability arising out of the transfer of soil and/or groundwater from the Subject Site to another location or its reuse on the Site in instances that we were not aware of or could not control.

5.5 Most Environmental Findings Are Professional Opinions

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

6.0 REFERENCES

Department of Ecology Publication Number 19-090-101:
https://apps.ecology.wa.gov/publications/SummaryPages/1909101.html

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Figure 4: Grid F8 Soil Sample Location Map

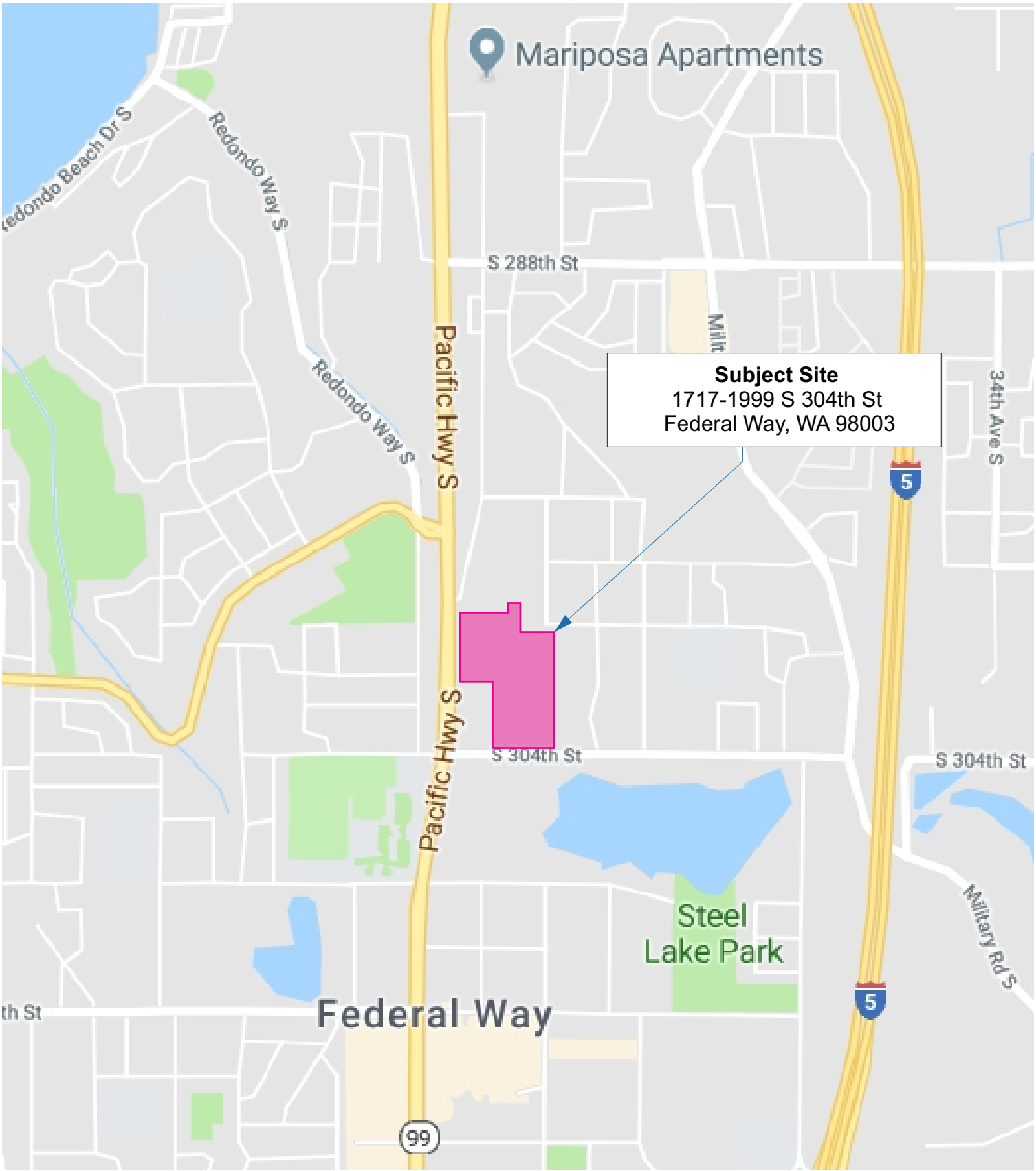
Appendix B: Laboratory Analytical Results

Analytical Data Sheets
Sample Chain of Custody

Appendix A

Project Figures

Figure 1 – Site Location Map
Figure 2 – Site Topographic Map
Figure 3: Soil Sample Location Map
Figure 4: Grid F8 Soil Sample Location Map



Not To Scale

Site Location Map
Arsenic & Lead Sampling Report
1717-1999 S 304th St
Federal Way, WA 98003

Date:	July 10, 2019
Completed By:	K. Spencer
Reviewed By.:	S. Spencer
Version:	R1-051019
Project No.:	0717-01-01

Figure No.: 01

Sheet 01 of 03

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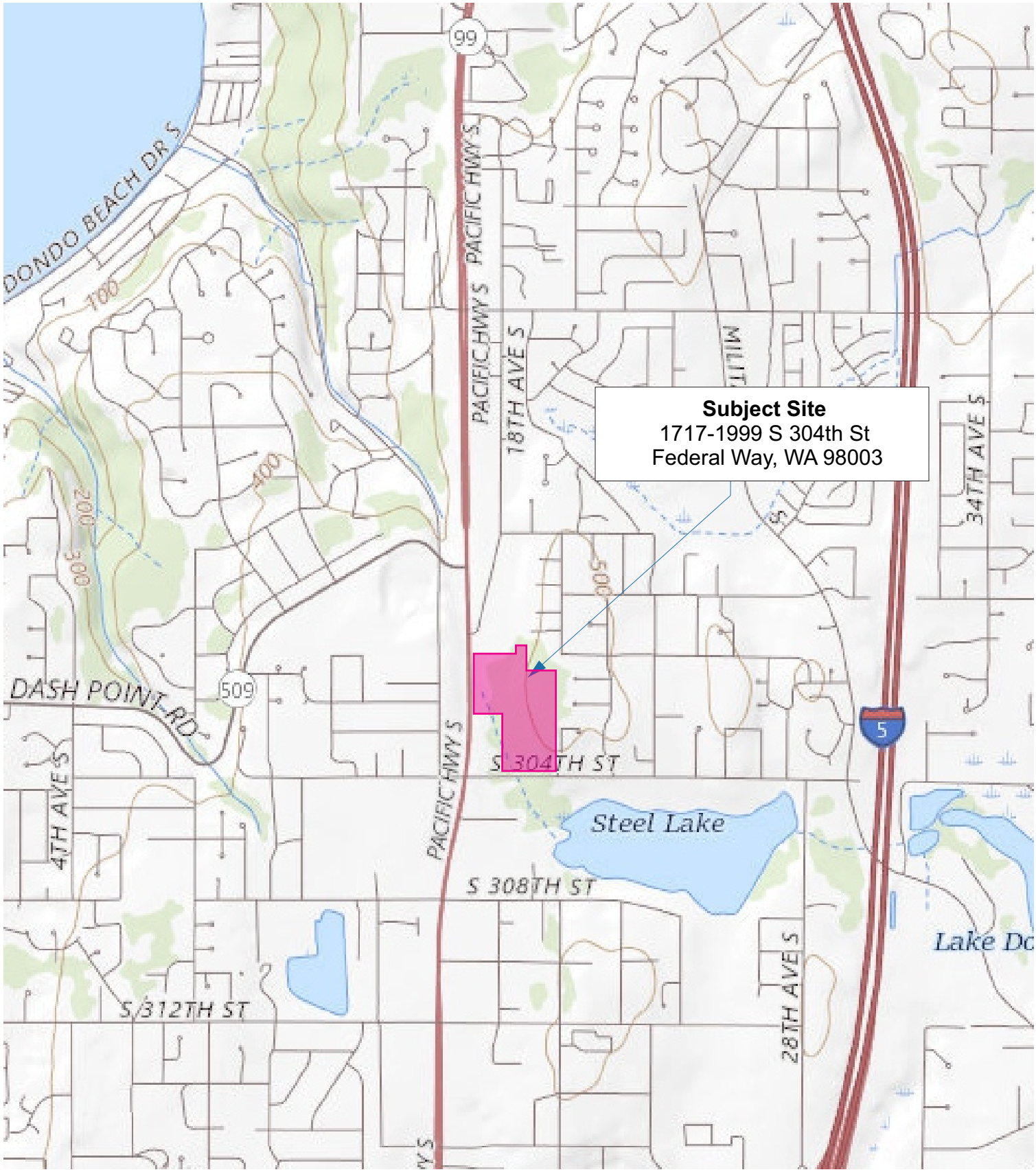

Not To Scale

Site Topographic Map
Arsenic & Lead Sampling Report
1717-1999 S 304th St
Federal Way, WA 98003

Date:	July 10, 2019
Completed By:	K. Spencer
Reviewed By.:	S. Spencer
Version:	R1-051019
Project No.:	0717-01-01

Figure No.: 02
Sheet 02 of 03

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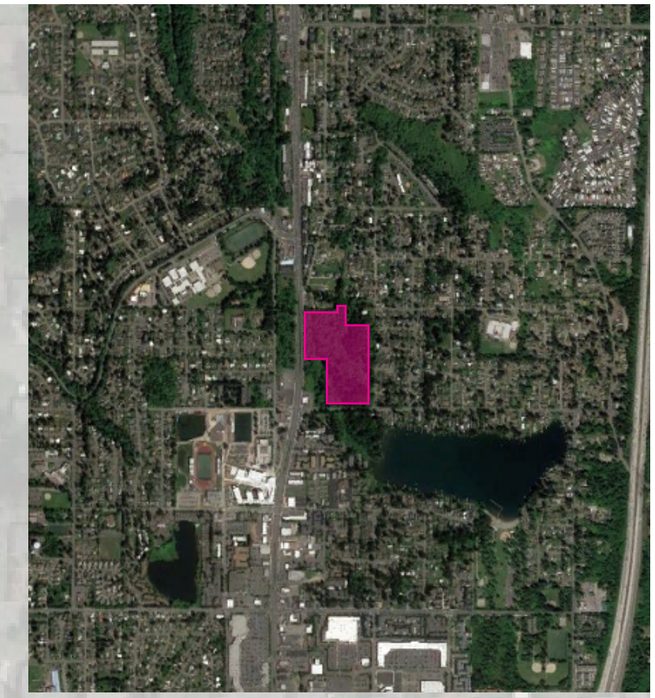
Pacific Highway South

A1 A1-0-6″ As:9.04 Pb:35.4	A2 A2-0-6″ As:14.9 Pb:20.4	A3 A3-0-6″ As:6.21 Pb:9.69	A4 A4-0-6″ As:14.2 Pb:31.9	A5 S6-0-6″ As:12.7 Pb:29.3			
B1 B1-0-6″ As:4.01 Pb:17.5 B1-6-12″ As:4.14 Pb:18.3	B2 B2-0-6″ As:4.45 Pb:8.93 B2-6-12″ As:3.95 Pb:7.28	B3 S7-Duff As:8.72 Pb:56.4 S7-0-6″ As:8.49 Pb:17.0	B4 B4-0-6″ **As:22.9** Pb:71.1 B4-6-12″ As:7.88 Pb:16.5	B5 B5-0-6″ As:16.0 Pb:36.6	B6 B6-0-6″ **As:29.4** Pb:194		
C1 S4-0-6″ As:3.32 Pb:4.48	C2 C2-0-6″ **As:39.6** Pb:89.2	C3 C3-0-6″ As:8.62 Pb:20.5	C4 C4-0-6″ As:12.1 Pb:33.4 C4-6-12″ As:3.36 Pb:5.61	C5 C5-0-6″ As:6.85 Pb:13.4 C5-6-12″ As:5.06 Pb:10.3	C6 C6-0-6″ **As:27.0** Pb:77.9	C7 S5-Duff As:7.42 Pb:74.9 S5-0-6″ As:3.59 Pb:6.99	C8 C8-0-6″ As:11.2 Pb:17.0
D1 D1-0-6″ As:5.16 Pb:11.7	D2 S3-Duff As:9.36 Pb:25.8 S3-0-6″ As:16.2 Pb:40.3	D3 D3-0-6″ As:19.5 Pb:45.2	D4 D4-0-6″ As:6.38 Pb:7.30 D4-6-12″ As:8.76 Pb:28.1	D5 S8-0-6″ As:6.79 Pb:16.2	D6 D6-0-6″ **As:25.9** Pb:73.2	D7 D7-0-6″ **As:32.6** Pb:95.7	D8 D8-0-6″ As:12.5 Pb:24.9
E1 E1-Duff As:23.6 Pb:101 E1-0-6″ As:15.2 Pb:61.5	E2 E2-0-6″ As:10.3 Pb:20.8 E2-6-12″ As:11.3 Pb:26.3	E3 E3-0-6″ As:9.37 Pb:37.3	E4 E4-0-6″ As:11.9 Pb:31.5	E5 E5-Duff As:<4 Pb:10.4 E5-0-6″ **As:27.1** Pb:76.0	E6 E6-0-6″ **As:23.0** Pb:42.3	E7 E7-0-6″ **As:34.0** Pb:64.5 E7-6-12″ As:9.76 Pb:16.8	E8 E8-0-6″ As:18.5 Pb:42.8
		F3 F3-0-6″ As:14.0 Pb:34.6	F4 F4-0-6″ As:13.2 Pb:17.1	F5 F5-0-6″ As:16.5 Pb:34.6	F6 F6-Duff As:1.75 Pb:10 F6-0-6″ As:8.84 Pb:8.94	F7 F7-0-6″ As:26.2 Pb:42.1	F8 F8-0-6″ As:43.0 Pb:93.7
			G4 S2-0-6″ As:3.61 Pb:6.39	G5 G5-0-6″ As:10.2 Pb:21.7	G6 S9-0-6″ As:10.0 Pb:24.1	G7 G7-0-6″ As:17.1 Pb:43.3	G8 G8-0-6″ As:3.57 Pb:11.6 G8-6-12″ As:4.79 Pb:21.3
			H4 H4-0-6″ As:12.4 Pb:53.2	H5 H5-0-6″ As:5.32 Pb:14.2	H6 H6-0-6″ As:17.6 Pb:56.8	H7 S1-Duff As:12.3 Pb:32.1 S1-0-6″ As:11.2 Pb:24.1	H8 H8-Duff As:4.43 Pb:23.8 H8-0-6″ As:13.0 Pb:33.4
			I4 I4-Duff As:2.59 Pb:14.7 I4-0-6″ As:12.9 Pb:53.6	I5 I5-0-6″ As:10.0 Pb:28.8 I5-6-12″ As:8.71 Pb:29.6	I6 I6-0-6″ **As:32.8** Pb:73.1	I7 I7-0-6″ As:14.3 Pb:45.8 I7-6-12″ As:7.72 Pb:22.7	I8 I8-0-6″ As:9.07 Pb:43.0
			J4 J4-0-6″ As:10.8 Pb:127	J5 J5-0-6″ As:9.32 Pb:41.7	J6 J6-Duff As:1.6 Pb:7.94 S10-0-6″ As:3.10 Pb:11.5	J7 J7-0-6″ **As:25.0** Pb:77.3 J7-6-12″ As:26.5 Pb:78.2	J8 J8-0-6″ As:3.84 Pb:14.3
K4 K4-0-6″ As:4.03 Pb:69.0		K5 K5-0-6″ As:4.02 Pb:49.1				K7 K7-0-6″ As:3.58 Pb:27.6	



Subject Property

S. 304th Street

N

0 25 50 100

Approximate Scale in Feet

△ Soil Sample Report <20 mg/kg Arsenic / <250 mg/kg Lead

△ Soil Sample Report <40 mg/kg Arsenic / <500 mg/kg Lead

△ Soil Sample Report >40 mg/kg Arsenic

As Arsenic

Pb Lead

mg/kg milligram / Killogram

Soil Sample Location Map
Arsenic & Lead Sampling Report
1717-1999 S 304th St
Federal Way, WA 98003

Date:	January 7, 2021
Completed By:	K. Spencer
Reviewed By.:	S. Spencer
Version:	R1-051019
Project No.:	0766-01

Figure No.: 03
Sheet 03 of 04

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F7

F8-7-0”-6”
As:22.9
Pb:54.1
F8-7-6”-12”
As:3.90
Pb:5.86

F8-7

F8-8-0”-6”
As:11.5
Pb:21.8
F8-8-6”-12”
As:7.24
Pb:12.3

F8-8

F8-9-0”-6”
As:10.9
Pb:31.1
F8-9-6”-12”
As:5.09
Pb:13.1

F8-9

F8-4-0”-6”
As:21.5
Pb:72.1
F8-4-6”-12”
As:14.2
Pb:37.7

F8-4

F8-5-0”-6”
As:9.87
Pb:16.6
F8-5-6”-12”
As:6.35
Pb:15.6

F8-5

F8-6-0”-6”
As:8.03
Pb:13.3
F8-6-6”-12”
As:4.92
Pb:10.2

F8-6

F8-1-0”-6”
As:2.58
Pb:3.88
F8-1-6”-12”
As:2.12
Pb:3.95
F8-1-12”-18”
As:2.37
Pb:3.08

F8-1

F8-2-0”-6”
As:10.5
Pb:16.7
F8-2-6”-12”
As:2.73
Pb:3.75

F8-0-6”
As:43.0
Pb:93.7

F8-2

F8-3-0”-6”
As:9.72
Pb:149
F8-3-6”-12”
As:11.2
Pb:73.3

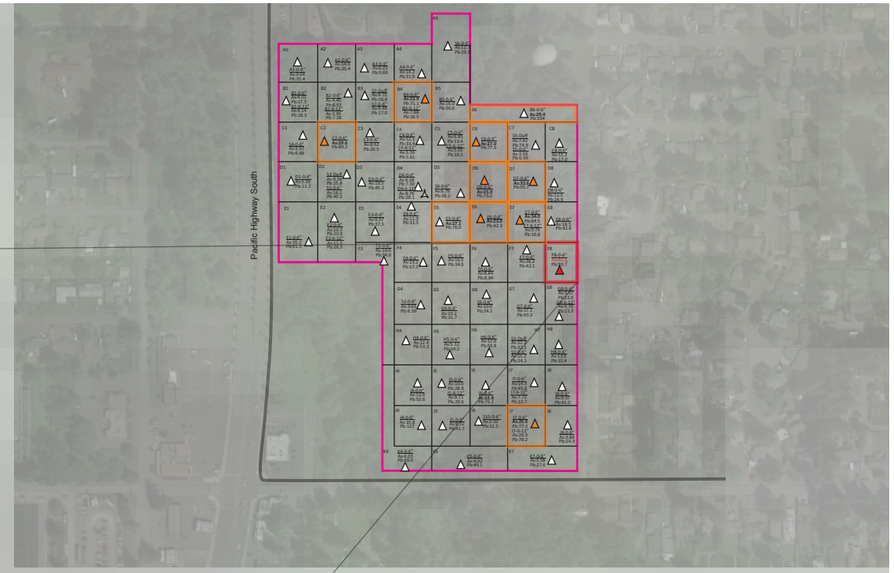
F8-3

F8

G7

G8

Approximate Area to be Mixed



N

0 5 10 20

Approximate Scale in Feet

△ Soil Sample Report <20 mg/kg Arsenic / <250 mg/kg Lead
△ Soil Sample Report <40 mg/kg Arsenic / <500 mg/kg Lead
△ Soil Sample Report >40 mg/kg Arsenic
As Arsenic
Pb Lead
mg/kg milligram / Killogram

Grid F8 - Soil Sample Location Map
Arsenic & Lead Sampling Report
1717-1999 S 304th St
Federal Way, WA 98003

Date:	January 7, 2021
Completed By:	K. Spencer
Reviewed By.:	S. Spencer
Version:	R1-051019
Project No.:	0766-01

Figure No.: 04
Sheet 03 of 04

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Appendix B

Laboratory Analytical Results

Analytical Data Sheets

Sample Chain of Custody

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 24, 2019

Steve Spencer, Project Manager
EcoCon, Inc.
P.O. Box 153
Fox Island, WA 98333

Dear Mr Spencer:

Included are the results from the testing of material submitted on June 13, 2019 from the 0717-02-01 American Classic Homes, F&BI 906258 project. There are 80 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
EMS0624R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 13, 2019 by Friedman & Bruya, Inc. from the EcoCon 0717-02-01 American Classic Homes, F&BI 906258 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	EcoCon
906258 -01	B4-6-12"
906258 -02	A1-0-6"
906258 -03	B2-6-12"
906258 -04	D1-0-6"
906258 -05	B1-0-6"
906258 -06	F4-0-6"
906258 -07	D4-6-12"
906258 -08	C3-0-6"
906258 -09	C4-0-6"
906258 -10	B4-0-6"
906258 -11	A4-0-6"
906258 -12	K5-0-6"
906258 -13	F5-0-6"
906258 -14	A3-0-6"
906258 -15	B2-0-6"
906258 -16	D4-0-6"
906258 -17	D8-0-6"
906258 -18	E3-0-6"
906258 -19	C2-0-6"
906258 -20	C4-0-6-12"
906258 -21	I6-0-6"
906258 -22	I5-0-6"
906258 -23	F6-0-6"
906258 -24	I8-0-6"
906258 -25	K4-0-6"
906258 -26	E4-0-6"
906258 -27	J8-0-6"
906258 -28	H6-0-6"
906258 -29	G7-0-6"
906258 -30	B5-0-6"
906258 -31	G8-6-12 "
906258 -32	G8-0-6"
906258 -33	D4-0-6"
906258 -34	D3-0-6"
906258 -35	K7-0-6"
906258 -36	D8-6-12 "

CASE NARRATIVE (continued)

Laboratory ID	EcoCon
906258 -37	E7-0-6"
906258 -38	H8-0-6"
906258 -39	H5-0-6"
906258 -40	G8-0-6"
906258 -41	I7-0-6"
906258 -42	D6-0-6"
906258 -43	D7-0-6"
906258 -44	F8-0-6"
906258 -45	E8-0-6"
906258 -46	A2-0-6"
906258 -47	I4-0-6"
906258 -48	E5-0-6"
906258 -49	B6-0-6"
906258 -50	C5-6-12 “
906258 -51	I56-12 "
906258 -52	C6-0-6"
906258 -53	J5-0-6"
906258 -54	E1-0-6"
906258 -55	B1-6-12 "
906258 -56	F7-0-6"
906258 -57	E2-6-12 “
906258 -58	J4-0-6"
906258 -59	J7-6-12 "
906258 -60	J7-0-6"
906258 -61	E7-6-12 “
906258 -62	I7-6-12 “
906258 -63	G5-0-6"
906258 -64	F4-6-12 “
906258 -65	H4-0-6"
906258 -66	E6-0-6"
906258 -67	C5-0-6"
906258 -68	E2-0-6"
906258 -69	E1-Duff

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 6020B

Client ID:	B4-6-12”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-01
Date Analyzed:	06/18/19	Data File:	906258-01.103
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	7.88
Lead	16.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	A1-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-02
Date Analyzed:	06/18/19	Data File:	906258-02.104
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.04
Lead	35.4

Analysis For Total Metals By EPA Method 6020B

Client ID:	B2-6-12”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-03
Date Analyzed:	06/18/19	Data File:	906258-03.105
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.95
Lead	7.28

Analysis For Total Metals By EPA Method 6020B

Client ID:	D1-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-04
Date Analyzed:	06/18/19	Data File:	906258-04.106
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.16
Lead	11.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	B1-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-05
Date Analyzed:	06/18/19	Data File:	906258-05.107
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.01
Lead	17.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	F4-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-06
Date Analyzed:	06/18/19	Data File:	906258-06.108
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	13.2
Lead	17.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	D4-6-12”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-07
Date Analyzed:	06/18/19	Data File:	906258-07.118
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.76
Lead	28.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	C3-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-08
Date Analyzed:	06/18/19	Data File:	906258-08.119
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.62
Lead	20.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	C4-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-09
Date Analyzed:	06/18/19	Data File:	906258-09.120
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	12.1
Lead	33.4

Analysis For Total Metals By EPA Method 6020B

Client ID:	B4-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-10
Date Analyzed:	06/18/19	Data File:	906258-10.131
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	22.9
Lead	71.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	A4-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-11
Date Analyzed:	06/18/19	Data File:	906258-11.132
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	14.2
Lead	31.9

Analysis For Total Metals By EPA Method 6020B

Client ID:	K5-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-12
Date Analyzed:	06/18/19	Data File:	906258-12.137
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.02
Lead	49.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	F5-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-13
Date Analyzed:	06/18/19	Data File:	906258-13.138
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	16.5
Lead	34.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	A3-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-14
Date Analyzed:	06/18/19	Data File:	906258-14.139
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	6.21
Lead	9.69

Analysis For Total Metals By EPA Method 6020B

Client ID:	B2-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-15
Date Analyzed:	06/18/19	Data File:	906258-15.140
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.45
Lead	8.93

Analysis For Total Metals By EPA Method 6020B

Client ID:	D4-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-16
Date Analyzed:	06/18/19	Data File:	906258-16.141
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	6.38
Lead	7.30

Analysis For Total Metals By EPA Method 6020B

Client ID:	D8-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-17
Date Analyzed:	06/18/19	Data File:	906258-17.142
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	12.5
Lead	24.9

Analysis For Total Metals By EPA Method 6020B

Client ID:	E3-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-18
Date Analyzed:	06/18/19	Data File:	906258-18.143
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.37
Lead	37.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	C2-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-19
Date Analyzed:	06/18/19	Data File:	906258-19.144
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	39.6
Lead	89.2

Analysis For Total Metals By EPA Method 6020B

Client ID:	C4-0-6-12"	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-20
Date Analyzed:	06/18/19	Data File:	906258-20.147
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.36
Lead	5.61

Analysis For Total Metals By EPA Method 6020B

Client ID:	I6-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-21
Date Analyzed:	06/18/19	Data File:	906258-21.152
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	32.8
Lead	73.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	I5-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-22
Date Analyzed:	06/18/19	Data File:	906258-22.155
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	10.0
Lead	28.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	F6-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-23
Date Analyzed:	06/18/19	Data File:	906258-23.156
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.84
Lead	8.94

Analysis For Total Metals By EPA Method 6020B

Client ID:	I8-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-24
Date Analyzed:	06/18/19	Data File:	906258-24.159
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.07
Lead	43.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	K4-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-25
Date Analyzed:	06/18/19	Data File:	906258-25.160
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.03
Lead	69.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	E4-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-26
Date Analyzed:	06/18/19	Data File:	906258-26.161
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	11.9
Lead	31.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	J8-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-27
Date Analyzed:	06/18/19	Data File:	906258-27.162
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.84
Lead	14.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	H6-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-28
Date Analyzed:	06/18/19	Data File:	906258-28.163
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	17.6
Lead	56.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	G7-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-29
Date Analyzed:	06/18/19	Data File:	906258-29.164
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	17.1
Lead	43.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	B5-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-30
Date Analyzed:	06/18/19	Data File:	906258-30.165
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	16.0
Lead	36.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	G8-6-12 “	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-31
Date Analyzed:	06/18/19	Data File:	906258-31.166
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.79
Lead	21.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	G8-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-32
Date Analyzed:	06/18/19	Data File:	906258-32.167
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.57
Lead	11.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	D4-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-33
Date Analyzed:	06/18/19	Data File:	906258-33.168
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	14.0
Lead	34.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	D3-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-34
Date Analyzed:	06/18/19	Data File:	906258-34.171
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	19.5
Lead	45.2

Analysis For Total Metals By EPA Method 6020B

Client ID:	K7-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-35
Date Analyzed:	06/18/19	Data File:	906258-35.172
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.58
Lead	21.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	D8-6-12 “	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-36
Date Analyzed:	06/18/19	Data File:	906258-36.173
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	10.2
Lead	26.9

Analysis For Total Metals By EPA Method 6020B

Client ID:	E7-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-37
Date Analyzed:	06/18/19	Data File:	906258-37.174
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	34.0
Lead	64.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	H8-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-38
Date Analyzed:	06/18/19	Data File:	906258-38.175
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	13.0
Lead	33.4

Analysis For Total Metals By EPA Method 6020B

Client ID:	H5-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-39
Date Analyzed:	06/18/19	Data File:	906258-39.176
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.32
Lead	14.2

Analysis For Total Metals By EPA Method 6020B

Client ID:	G8-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-40
Date Analyzed:	06/18/19	Data File:	906258-40.177
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	11.2
Lead	17.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	I7-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-41
Date Analyzed:	06/19/19	Data File:	906258-41.036
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	14.3
Lead	45.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	D6-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-42
Date Analyzed:	06/19/19	Data File:	906258-42.052
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	25.9
Lead	73.2

Analysis For Total Metals By EPA Method 6020B

Client ID:	D7-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-43
Date Analyzed:	06/19/19	Data File:	906258-43.053
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	32.6
Lead	95.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-44
Date Analyzed:	06/19/19	Data File:	906258-44.054
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	43.0
Lead	93.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	E8-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-45
Date Analyzed:	06/19/19	Data File:	906258-45.055
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	18.5
Lead	42.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	A2-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-46
Date Analyzed:	06/19/19	Data File:	906258-46.082
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	14.9
Lead	20.4

Analysis For Total Metals By EPA Method 6020B

Client ID:	I4-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-47
Date Analyzed:	06/19/19	Data File:	906258-47.083
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	12.9
Lead	53.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	E5-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-48
Date Analyzed:	06/19/19	Data File:	906258-48.084
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	27.1
Lead	76.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	B6-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-49
Date Analyzed:	06/19/19	Data File:	906258-49.085
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	29.4
Lead	194

Analysis For Total Metals By EPA Method 6020B

Client ID:	C5-6-12 “	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-50
Date Analyzed:	06/19/19	Data File:	906258-50.088
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.06
Lead	10.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	I56-12 “	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-51
Date Analyzed:	06/19/19	Data File:	906258-51.089
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.71
Lead	29.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	C6-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-52
Date Analyzed:	06/19/19	Data File:	906258-52.090
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	27.0
Lead	77.9

Analysis For Total Metals By EPA Method 6020B

Client ID:	J5-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-53
Date Analyzed:	06/19/19	Data File:	906258-53.091
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.32
Lead	41.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	E1-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-54
Date Analyzed:	06/19/19	Data File:	906258-54.092
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	15.2
Lead	61.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	B1-6-12 “	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-55
Date Analyzed:	06/19/19	Data File:	906258-55.093
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.14
Lead	18.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	F7-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-56
Date Analyzed:	06/19/19	Data File:	906258-56.094
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	26.2
Lead	42.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	E2-6-12 “	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-57
Date Analyzed:	06/19/19	Data File:	906258-57.095
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	11.3
Lead	26.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	J4-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-58
Date Analyzed:	06/19/19	Data File:	906258-58.096
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	10.8
Lead	127

Analysis For Total Metals By EPA Method 6020B

Client ID:	J7-6-12 “	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-59
Date Analyzed:	06/19/19	Data File:	906258-59.097
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	26.5
Lead	78.2

Analysis For Total Metals By EPA Method 6020B

Client ID:	J7-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	906258-60
Date Analyzed:	06/20/19	Data File:	906258-60.083
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	25.0
Lead	77.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	E7-6-12 “	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/19/19	Lab ID:	906258-61
Date Analyzed:	06/20/19	Data File:	906258-61.084
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.76
Lead	16.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	I7-6-12 “	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/19/19	Lab ID:	906258-62
Date Analyzed:	06/20/19	Data File:	906258-62.120
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	7.72
Lead	22.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	G5-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/19/19	Lab ID:	906258-63
Date Analyzed:	06/20/19	Data File:	906258-63.121
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	10.2
Lead	21.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	F4-6-12 “	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/19/19	Lab ID:	906258-64
Date Analyzed:	06/20/19	Data File:	906258-64.122
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	16.2
Lead	25.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	H4-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/19/19	Lab ID:	906258-65
Date Analyzed:	06/20/19	Data File:	906258-65.123
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	12.4
Lead	53.2

Analysis For Total Metals By EPA Method 6020B

Client ID:	E6-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/19/19	Lab ID:	906258-66
Date Analyzed:	06/20/19	Data File:	906258-66.124
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	23.0
Lead	42.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	C5-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/19/19	Lab ID:	906258-67
Date Analyzed:	06/20/19	Data File:	906258-67.125
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	6.85
Lead	13.4

Analysis For Total Metals By EPA Method 6020B

Client ID:	E2-0-6”	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/19/19	Lab ID:	906258-68
Date Analyzed:	06/20/19	Data File:	906258-68.133
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	10.3
Lead	20.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	E1-Duff	Client:	EcoCon
Date Received:	06/13/19	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/19/19	Lab ID:	906258-69
Date Analyzed:	06/20/19	Data File:	906258-69.134
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	23.6
Lead	101

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	EcoCon
Date Received:	Not Applicable	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	I9-368 mb
Date Analyzed:	06/18/19	Data File:	I9-368 mb.093
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	EcoCon
Date Received:	Not Applicable	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	I9-370 mb
Date Analyzed:	06/18/19	Data File:	I9-370 mb.150
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	EcoCon
Date Received:	Not Applicable	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/18/19	Lab ID:	I9-371 mb
Date Analyzed:	06/19/19	Data File:	I9-371 mb.032
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	EcoCon
Date Received:	Not Applicable	Project:	0717-02-01 American Classic Homes
Date Extracted:	06/19/19	Lab ID:	I9-372 mb
Date Analyzed:	06/21/19	Data File:	I9-372 mb.038
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Date of Report: 06/24/19
Date Received: 06/13/19
Project: 0717-02-01 American Classic Homes, F&BI 906258

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

Laboratory Code: 906258-20 (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	2.99	84	81	75-125	4
Lead	mg/kg (ppm)	50	4.99	93	91	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	99	80-120
Lead	mg/kg (ppm)	50	115	80-120

Date of Report: 06/24/19
Date Received: 06/13/19
Project: 0717-02-01 American Classic Homes, F&BI 906258

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

Laboratory Code: 906258-21 (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	25.6	99	115	75-125	15
Lead	mg/kg (ppm)	50	57.0	91	102	75-125	11

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	94	80-120
Lead	mg/kg (ppm)	50	106	80-120

Date of Report: 06/24/19
Date Received: 06/13/19
Project: 0717-02-01 American Classic Homes, F&BI 906258

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

Laboratory Code: 906258-41 (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	12.3	100	102	75-125	2
Lead	mg/kg (ppm)	50	39.4	101	98	75-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	91	80-120
Lead	mg/kg (ppm)	50	106	80-120

Date of Report: 06/24/19
Date Received: 06/13/19
Project: 0717-02-01 American Classic Homes, F&BI 906258

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

Laboratory Code: 906258-61 x5 (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	8.69	78	83	75-125	6
Lead	mg/kg (ppm)	50	16.4	91	87	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
Lead	mg/kg (ppm)	50	107	80-120

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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 lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

906258

SAMPLE CHAIN OF CUSTODY

ME 06-13-19

BI4

Page # 1 of 7

Send Report To: Stephen Spencer

Company: ECI

Address: PO Box 153

City, State, ZIP: Fox Island WA 98333

Phone #: 2539217059 Fax #:

Email Address: Stephen@alleci.com

SAMPLERS (signature):

PROJECT NAME/NO.: 0717-02-01 American Classic Homes

PO #:

PROJECT ADDRESS: 30231 S 304th St Federal Wa7

• ELECTRONIC DATA REQUESTED

TURNAROUND TIME
• Standard Turnaround
• RUSH
Rush charges authorized by:

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

Samples Received at 25 °C

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Pb/As					Notes
						ANALYSES REQUESTED											X-per SS 6/14/19 ME
B4-6-12"	01	06/13/2019		Soil	1							X					Tacoma Smelter Plume
A1-0-6"	02	06/13/2019		Soil	1												
B2-6-12"	03	06/13/2019		Soil	1												
D1-0-6"	04	06/13/2019		Soil	1												
B1-0-6"	05	06/13/2019		Soil	1												
F4-0-6"	06	06/13/2019		Soil	1												
D4-6-12"	07	06/13/2019		Soil	1												
C3-0-6"	08	06/13/2019		Soil	1												
C4-0-6"	09	06/13/2019		Soil	1												
B4-0-6"	10	06/13/2019		Soil	1												

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Stephanie Holt	ECI	6-13-19	1418
Received by:		Melissa Matlock	FedEx S.D.	6/13/19	1420
Relinquished by:					
Received by:		HONG NGUYEN	FBI	6-13-19	17:05

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

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Samples received at 25 °C

906258

SAMPLE CHAIN OF CUSTODY ME 06-13-19 BIY

Page # 2 of 7

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Company

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Email Address

SAMPLERS *(signature)*

PROJECT NAME/NO. | PO #

PROJECT ADDRESS

• ELECTRONIC DATA REQUESTED

TURNAROUND TIME
- Standard Turnaround
- RUSH

Rush charges authorized by:

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

Samples Received at 25 °C

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Pb, As					Notes
A4-0-6"	11	06/13/2019		Soil	1							X					
K5-0-6"	12	06/13/2019		Soil	1												
F5-0-6"	13	06/13/2019		Soil	1												
A3-0-6"	14	06/13/2019		Soil	1												
B2-0-6"	15	06/13/2019		Soil	1												
D4-0-6"	16	06/13/2019		Soil	1												
D8-0-6"	17	06/13/2019		Soil	1												
E3-0-6"	18	06/13/2019		Soil	1												
C2-0-6"	19	06/13/2019		Soil	1												
C4-6-12"	20	06/13/2019		Soil	1												

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:					
Received by:	[signature]	HONG NGUYEN	FBI	6/13/19	17:05
Relinquished by:					
Received by:					

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Samples received at 25 °C

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SAMPLE CHAIN OF CUSTODY ME 06-13-19 BIY

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PROJECT NAME/NO. | PO #

PROJECT ADDRESS

· ELECTRONIC DATA REQUESTED

TURNAROUND TIME
- Standard Turnaround
- RUSH

Rush charges authorized by:

SAMPLE DISPOSAL
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Samples Received at 25 °C

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Pb + As					Notes
I6-0-6"	21	06/13/2019		Soil	1												
I5-0-6"	22	06/13/2019		Soil	1												
F6-0-6"	23	06/13/2019		Soil	1												
I8-0-6"	24	06/13/2019		Soil	1												
K4-0-6"	25	06/13/2019		Soil	1												
E4-0-6"	26	06/13/2019		Soil	1												
J8-0-6"	27	06/13/2019		Soil	1												
H6-0-6"	~~28~~	06/13/2019		Soil	1												
G7-0-6"	29	06/13/2019		Soil	1												
B5-0-6"	30	06/13/2019		Soil	1												

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~~Samples received at~~ 25 °C

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SAMPLE CHAIN OF CUSTODY ME 06-13-19

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• ELECTRONIC DATA REQUESTED

TURNAROUND TIME
- Standard Turnaround
- RUSH

Rush charges authorized by:

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

Samples Received at 25 °C

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Pb+As					Notes
G8-6-12"	31	06/13/2019		Soil	1							X					
G8-0-6"	32	06/13/2019		Soil	1							↓					
D4-0-6"	33	06/13/2019		Soil	1												
D3-0-6"	34	06/13/2019		Soil	1												
K7-0-6"	35	06/13/2019		Soil	1												
D8-6-12"	36	06/13/2019		Soil	1												
E7-0-6"	37	06/13/2019		Soil	1												
H8-0-6"	38	06/13/2019		Soil	1												
H5-0-6"	39	06/13/2019		Soil	1												
C8-0-6"	40	06/13/2019		Soil	1							↓					

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:					
Received by:	Hong	HONG NGUYEN	FBI	6/13/19	17:05
Relinquished by:					
Received by:					

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Samples received at 25 °C

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SAMPLE CHAIN OF CUSTODY ME 06-13-19

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TURNAROUND TIME
- Standard Turnaround
- RUSH

Rush charges authorized by:

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

Samples Received at 25 °C

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Pb + As					Notes
I7-0-6"	41	06/13/2019		Soil	1							X					
D6-0-6"	42	06/13/2019		Soil	1												
D7-0-6"	43	06/13/2019		Soil	1												
F8-0-6"	44	06/13/2019		Soil	1												
E8-0-6"	45	06/13/2019		Soil	1												
A2-0-6"	46	06/13/2019		Soil	1												
I4-0-6"	47	06/13/2019		Soil	1												
E5-0-6"	48	06/13/2019		Soil	1												
B6-0-6"	49	06/13/2019		Soil	1												
C5-6-12"	50	06/13/2019		Soil	1							↓					

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:				
Received by: [signature]	HONG NGUYEN	FBI	6/13/19	17:05
Relinquished by:				
Received by:				

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Samples received at 25 °C

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SAMPLE CHAIN OF CUSTODY ME 06-13-19

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PROJECT ADDRESS

• ELECTRONIC DATA REQUESTED

TURNAROUND TIME
- Standard Turnaround
- RUSH

Rush charges authorized by:

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

Samples Received at 25 °C

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Pb + As					Notes
I5-6-12"	51	06/13/2019		Soil	1							X					
C6-0-6"	52	06/13/2019		Soil	1												
J5-0-6"	53	06/13/2019		Soil	1												
E1-0-6"	54	06/13/2019		Soil	1												
B1-6-12"	55	06/13/2019		Soil	1												
F7-0-6"	56	06/13/2019		Soil	1												
E2-6-12"	57	06/13/2019		Soil	1												
J4-0-6"	58	06/13/2019		Soil	1												
J7-6-12"	59	06/13/2019		Soil	1												
J7-0-6"	60	06/13/2019		Soil	1												

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:					
Received by:	[signature]	HONG NGUYEN	FBI	6/13/19	17:05
Relinquished by:					
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SAMPLE CHAIN OF CUSTODY ME 06-13-19

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PROJECT NAME/NO. | PO #

PROJECT ADDRESS

• ELECTRONIC DATA REQUESTED

TURNAROUND TIME
• Standard Turnaround
• RUSH
Rush charges authorized by:

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

Samples Received at 25 °C

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	PAHs					Notes
						ANALYSES REQUESTED											
E7-6-12"	61	06/13/2019		Soil	1							X					
I7-6-12"	62	06/13/2019		Soil	1												
G5-0-6"	63	06/13/2019		Soil	1												
F4-6-12"	64	06/13/2019		Soil	1												
H4-0-6"	65	06/13/2019		Soil	1												
E6-0-6"	66	06/13/2019		Soil	1												
C5-0-6"	67	06/13/2019		Soil	1												
E2-0-6"	68	06/13/2019		Soil	1												
Duff	69	06/13/2019		Soil	1												

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Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:					
Received by:	7/0	HONG NGUYEN	FBI	6/13/19	17:05
Relinquished by:					
Received by:					

Samples received at 25 °C

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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

May 1, 2019

Kyle Spencer, Project Manager
EcoCon, Inc.
P.O. Box 153
Fox Island, WA 98333

Dear Mr Spencer:

Included are the results from the testing of material submitted on April 23, 2019 from the 0717-01-Soil Sampling, F&BI 904445 project. There are 18 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: Steve Spencer
EMS0501R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 23, 2019 by Friedman & Bruya, Inc. from the EcoCon 0717-01-Soil Sampling, F&BI 904445 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	EcoCon
904445 -01	S1-0-6"
904445 -02	S1-Duff
904445 -03	S2-0-6"
904445 -04	S3-Duff
904445 -05	S3-0-6"
904445 -06	S4-0-6"
904445 -07	S5-Duff
904445 -08	S5-0-6"
904445 -09	S6-0-6"
904445 -10	S7-Duff
904445 -11	S7-0-6"
904445 -12	S8-0-6"
904445 -13	S9-0-6"
904445 -14	S10-0-6"

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 6020B

Client ID:	S1-0-6”	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-01
Date Analyzed:	04/25/19	Data File:	904445-01.102
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	11.2
Lead	24.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	S1-Duff	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-02
Date Analyzed:	04/25/19	Data File:	904445-02.103
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	12.3
Lead	32.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	S2-0-6”	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-03
Date Analyzed:	04/25/19	Data File:	904445-03.104
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.61
Lead	6.39

Analysis For Total Metals By EPA Method 6020B

Client ID:	S3-Duff	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-04
Date Analyzed:	04/25/19	Data File:	904445-04.107
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.36
Lead	25.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	S3-0-6”	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-05
Date Analyzed:	04/25/19	Data File:	904445-05.108
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	16.2
Lead	40.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	S4-0-6”	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-06
Date Analyzed:	04/25/19	Data File:	904445-06.109
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.32
Lead	4.48

Analysis For Total Metals By EPA Method 6020B

Client ID:	S5-Duff	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-07
Date Analyzed:	04/25/19	Data File:	904445-07.110
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	7.42
Lead	74.9

Analysis For Total Metals By EPA Method 6020B

Client ID:	S5-0-6”	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-08
Date Analyzed:	04/25/19	Data File:	904445-08.113
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.59
Lead	6.99

Analysis For Total Metals By EPA Method 6020B

Client ID:	S6-0-6”	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-09
Date Analyzed:	04/25/19	Data File:	904445-09.114
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	12.7
Lead	29.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	S7-Duff	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-10
Date Analyzed:	04/25/19	Data File:	904445-10.115
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.72
Lead	56.4

Analysis For Total Metals By EPA Method 6020B

Client ID:	S7-0-6”	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-11
Date Analyzed:	04/25/19	Data File:	904445-11.116
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.49
Lead	17.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	S8-0-6”	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-12
Date Analyzed:	04/25/19	Data File:	904445-12.117
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	6.79
Lead	16.2

Analysis For Total Metals By EPA Method 6020B

Client ID:	S9-0-6”	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-13
Date Analyzed:	04/25/19	Data File:	904445-13.118
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	10.0
Lead	24.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	S10-0-6”	Client:	EcoCon
Date Received:	04/23/19	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	904445-14
Date Analyzed:	04/25/19	Data File:	904445-14.119
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.10
Lead	11.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	EcoCon
Date Received:	Not Applicable	Project:	0717-01-Soil Sampling
Date Extracted:	04/25/19	Lab ID:	I9-271 mb
Date Analyzed:	04/25/19	Data File:	I9-271 mb.097
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Date of Report: 05/01/19
Date Received: 04/23/19
Project: 0717-01-Soil Sampling, F&BI 904445

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

Laboratory Code: 904445-03 (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	3.07	75	88	75-125	16
Lead	mg/kg (ppm)	50	5.43	94	104	75-125	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	85	80-120
Lead	mg/kg (ppm)	50	107	80-120

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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 lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

904445

SAMPLE CHAIN OF CUSTODY

ME 04-23-19

Page # 1 of 2 BI3

Report To Kyle Spencer

Company ECI

Address PO Box 153

City, State, ZIP Fox Island, WA, 98333

Phone 253-279-2803 Email kyle@alleci.com

SAMPLERS (*signature*)

PROJECT NAME: 0717-01-Soil Sampling

PO #:

REMARKS

INVOICE TO

TURNAROUND TIME
- ☒ 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	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Lead and Arsenic				Notes
S1-0-6"	01	4-22-19		Soil	1								X				
S1-Duff	02	↓		↓	↓								↓				
S2-0-6"	03																
S3-Duff	04																
S3-0-6"	05																
S4-0-6"	06																
S5-Duff	07																
S5-0-6"	08																
S6-0-6"	09																
S7-Duff	10	X		X	X								X				Samples received at 7 °C

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Kyle Spencer	ECI	4-22-19	3:09
Received by:	Melissa Matlock	Fed ex	4/23/19	10:47
Relinquished by:				
Received by:	Nhan Phan	FEBI	4/23/19	1155

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

SAMPLE CHAIN OF CUSTODY

904445

ME 04-23-19

Page # 2 of 2 BI3

Send Report To

Company BEI

Address

City, State, ZIP

Phone # Fax #

Email Address

SAMPLERS *(signature)*

PROJECT NAME/NO. 0717-01

PO #

PROJECT ADDRESS

· ELECTRONIC DATA REQUESTED

TURNAROUND TIME
- Standard Turnaround
- RUSH

Rush charges authorized by:

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

Samples Received at ____ °C

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Lead and Arsenic					Notes
S7-0-6"	11	4-22-19		Soil	1							X					
S8-0-6"	12	↓		↓	↓							↓					
S9-0-6"	13	↓		↓	↓							↓					
S10-0-6"	14	X		X	X							↓					
												Parks 4/23				B	

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

FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:					
Received by:		Nikki Phan	FBT	4/23/19	1155
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

December 21, 2020

Kyle Spencer, Project Manager
EcoCon, Inc.
P.O. Box 153
Fox Island, WA 98333

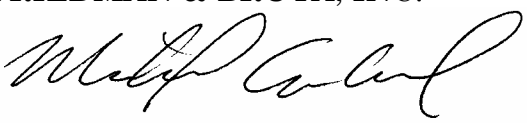
Dear Mr Spencer:

Included are the results from the testing of material submitted on December 15, 2020 from the 0766-00-Edgewood Terrace estates, LLC, F&BI 012239 project. There are 23 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: Kaden Reed, Dave Polivka
EMS1221R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 15, 2020 by Friedman & Bruya, Inc. from the EcoCon 0766-00-Edgewood Terrace estates, LLC, F&BI 012239 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	EcoCon
012239 -01	F8-1-0"-6"
012239 -02	F8-1-6"-12"
012239 -03	F8-1-12"-18"
012239 -04	F8-2-0"-6"
012239 -05	F8-2-6"-12"
012239 -06	F8-3-0"-6"
012239 -07	F8-3-6"-12"
012239 -08	F8-4-0"-6"
012239 -09	F8-4-6"-12"
012239 -10	F8-5-0"-6"
012239 -11	F8-5-6"-12"
012239 -12	F8-6-0"-6"
012239 -13	F8-6-6"-12"
012239 -14	F8-7-0"-6"
012239 -15	F8-7-6"-12"
012239 -16	F8-8-0"-6"
012239 -17	F8-8-6"-12"
012239 -18	F8-9-0"-6"
012239 -19	F8-9-6"-12"

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-1-0”-6”	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-01
Date Analyzed:	12/16/20	Data File:	012239-01.106
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.58
Lead	3.88

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-1-6”-12”	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-02
Date Analyzed:	12/16/20	Data File:	012239-02.107
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.12
Lead	3.95

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-1-12”-18”	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-03
Date Analyzed:	12/16/20	Data File:	012239-03.108
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.37
Lead	3.08

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-2-0”-6”	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-04
Date Analyzed:	12/16/20	Data File:	012239-04.109
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	10.5
Lead	16.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-2-6"-12"	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-05
Date Analyzed:	12/16/20	Data File:	012239-05.117
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.73
Lead	3.75

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-3-0"-6"	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-06 x5
Date Analyzed:	12/17/20	Data File:	012239-06 x5.050
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.72
Lead	149

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-3-6”-12”	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-07
Date Analyzed:	12/16/20	Data File:	012239-07.119
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	11.2
Lead	73.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-4-0"-6"	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-08
Date Analyzed:	12/16/20	Data File:	012239-08.120
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	21.5
Lead	72.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-4-6”-12”	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-09
Date Analyzed:	12/16/20	Data File:	012239-09.121
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	14.2
Lead	37.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-5-0”-6”	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-10
Date Analyzed:	12/16/20	Data File:	012239-10.126
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.87
Lead	16.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-5-6"-12"	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-11
Date Analyzed:	12/16/20	Data File:	012239-11.127
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	6.35
Lead	15.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-6-0"-6"	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-12
Date Analyzed:	12/16/20	Data File:	012239-12.128
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.03
Lead	13.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-6-6”-12”	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-13
Date Analyzed:	12/16/20	Data File:	012239-13.129
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.92
Lead	10.2

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-7-0”-6”	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-14
Date Analyzed:	12/16/20	Data File:	012239-14.130
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	22.9
Lead	54.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-7-6"-12"	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-15
Date Analyzed:	12/16/20	Data File:	012239-15.131
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.90
Lead	5.86

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-8-0"-6"	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-16
Date Analyzed:	12/16/20	Data File:	012239-16.132
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	11.5
Lead	21.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-8-6"-12"	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-17
Date Analyzed:	12/16/20	Data File:	012239-17.133
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	7.24
Lead	12.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-9-0"-6"	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-18
Date Analyzed:	12/17/20	Data File:	012239-18.051
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	10.9
Lead	31.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	F8-9-6”-12”	Client:	EcoCon
Date Received:	12/15/20	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	012239-19
Date Analyzed:	12/17/20	Data File:	012239-19.052
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.09
Lead	13.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	EcoCon
Date Received:	Not Applicable	Project:	0766-00-Edgewood Terrace
Date Extracted:	12/16/20	Lab ID:	I0-777 mb
Date Analyzed:	12/16/20	Data File:	I0-777 mb.056
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Date of Report: 12/21/20
Date Received: 12/15/20
Project: 0766-00-Edgewood Terrace estates, LLC, F&BI 012239

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

Laboratory Code: 012239-01 x5 (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	<5	98	98	75-125	0
Lead	mg/kg (ppm)	50	<5	97	95	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	109	80-120
Lead	mg/kg (ppm)	50	94	80-120

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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 lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

012239

SAMPLE CHAIN OF CUSTODY

ME 12/15/20 BI4

Report To Kyle Spencer

Company ECI

Address Po Box 153

City, State, ZIP Fox Island 98333

Phone 2532792803 Email kyle@alleci.com

SAMPLERS (*signature*)

PROJECT NAME: 0766-00-Edgewood Terrace estates, LLC

PO #

REMARKS: Project Specific RLs - Yes / No

INVOICE TO

TURNAROUND TIME
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	Pb/As					Notes
F8-1-0"-6"	01	12/14/2020		Soil								x					
F8-1-6"-12"	02	12/14/2020		Soil								x					
F8-1-12"-18"	03	12/14/2020		Soil								x					
F8-2-0"-6"	04	12/14/2020		Soil								x					
F8-2-6"-12"	05	12/14/2020		Soil								x					
F8-3-0"-6"	06	12/14/2020		Soil								x					
F8-3-6"-12"	07	12/14/2020		Soil								x					
F8-4-0"-6"	08	12/14/2020		Soil								x					
F8-4-6"-12"	09	12/14/2020		Soil								x					
F8-5-0"-6"	10	12/14/2020		Soil								x					

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	kyle Spencer	ECI	12/15/2020	10;38AM
Received by:	Nham Phan	FEBI	12/15/20	1230
Relinquished by:				
Received by:		Samples received at 19 °C		

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

012239

SAMPLE CHAIN OF CUSTODY

ME 12/15/20 BIY

Report To Kyle Spencer

Company ECI

Address Po Box 153

City, State, ZIP Fox Island 98333

Phone 2532792803 Email kyle@alleci.com

SAMPLERS (signature)

PROJECT NAME: 0766-00-Edgewood Terrace estates, LLC

PO #

REMARKS

Project Specific RLs - Yes / No

INVOICE TO

TURNAROUND TIME
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	Pb/As					Notes
F8-1-0"-6"																	
F8-5-6"-12"	11	12/14/2020		Soil								x					
F8-6-0"-6"	12	12/14/2020		Soil								x					
F8-6-6"-12"	13	12/14/2020		Soil								x					
F8-7-0"-6"	14	12/14/2020		Soil								x					
F8-7-6"-12"	15	12/14/2020		Soil								x					
F8-8-0"-6"	16	12/14/2020		Soil								x					
F8-8-6"-12"	17	12/14/2020		Soil								x					
F8-9-0"-6"	18	12/14/2020		Soil								x					
F8-9-6"-12"	19	12/14/2020		Soil								x					

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

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		kyle Spencer	ECI	12/15/2020	10:38AM
Received by:		Nhan Phan	FEBT	12/15/20	1230
Relinquished by:					
Received by:			Samples received at 19 °C		

DRAFT

Analysis For Total Metals By EPA Method 6020B

Client ID:	F6-DUFF	Client:	EcoCon
Date Received:	01/08/21	Project:	0766-01, F&BI 101089
Date Extracted:	01/11/21	Lab ID:	101089-01
Date Analyzed:	01/11/21	Data File:	101089-01.053
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.75
Lead	10.0

Reporting limits may be raised due to high moisture content.

DRAFT

Analysis For Total Metals By EPA Method 6020B

Client ID:	E5-DUFF	Client:	EcoCon
Date Received:	01/08/21	Project:	0766-01, F&BI 101089
Date Extracted:	01/11/21	Lab ID:	101089-02
Date Analyzed:	01/11/21	Data File:	101089-02.054
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<4
Lead	10.4

Reporting limits may be raised due to high moisture content.

DRAFT

Analysis For Total Metals By EPA Method 6020B

Client ID:	I4-DUFF	Client:	EcoCon
Date Received:	01/08/21	Project:	0766-01, F&BI 101089
Date Extracted:	01/11/21	Lab ID:	101089-03
Date Analyzed:	01/11/21	Data File:	101089-03.055
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.59
Lead	14.7

Reporting limits may be raised due to high moisture content.

DRAFT

Analysis For Total Metals By EPA Method 6020B

Client ID:	J6-DUFF	Client:	EcoCon
Date Received:	01/08/21	Project:	0766-01, F&BI 101089
Date Extracted:	01/11/21	Lab ID:	101089-04
Date Analyzed:	01/11/21	Data File:	101089-04.056
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.60
Lead	7.94

Reporting limits may be raised due to high moisture content.

DRAFT

Analysis For Total Metals By EPA Method 6020B

Client ID:	H8-DUFF	Client:	EcoCon
Date Received:	01/08/21	Project:	0766-01, F&BI 101089
Date Extracted:	01/11/21	Lab ID:	101089-05
Date Analyzed:	01/11/21	Data File:	101089-05.057
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.43
Lead	23.8

Reporting limits may be raised due to high moisture content.

DRAFT

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	EcoCon
Date Received:	Not Applicable	Project:	0766-01, F&BI 101089
Date Extracted:	01/11/21	Lab ID:	I1-14 mb
Date Analyzed:	01/11/21	Data File:	I1-14 mb.037
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

101089

SAMPLE CHAIN OF CUSTODY

ME 01/08/21

AI

Page # 1 of 1

Send Report To STEPHEN SPENCER

Company EC1

Address PO BOX 153

City, State, ZIP FOX ISLAND, WA 98333

Phone # 253 238 9270 Fax #

Email Address STEPHEN@ALLEC1.COM

SAMPLERS (signature)

PROJECT NAME/NO. 0766-01 - EDGEWOOD TERRACE

PO #

PROJECT ADDRESS 1999 S. 304TH ST, FEDERAL WAY, WA

• ELECTRONIC DATA REQUESTED

TURNAROUND TIME
- Standard Turnaround
- (X) RUSH 24 hr px SS / ME 1/8/21

Rush charges authorized by:

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

Samples Received at ____ °C

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	As	Pb				Notes
F6-DUFF	01	1/8/21	3:32	DUFF	1							X	X				
E5-DUFF	02		3:47									X	X				
I4-DUFF	03		3:58									X	X				
J6-DUFF	04		4:09									X	X				
H8-DUFF	05		4:17									X	X				

Samples received at 6 °C

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		BRAD REECY	EC1	1/8/21	10:24
Received by:		GURJEET	FEDEX	01/09/21	10:24
Relinquished by:					
Received by:		Nhan Phan	FEBI	01/08/21	1325

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
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