associated
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incorporated

Soil Characterization Sampling Report

SKYLINE ELEMENTARY SCHOOL

Tacoma, Washington

Prepared For:

TURNER CONSTRUCTION COMPANY

Project No. 20200183V001
August 19, 2020

Associated Earth Sciences, Inc.
911 5th Avenue
Kirkland, WA 98033
P (425) 827 7701

associated earth sciences incorporated

August 19, 2020
Project No. 20200183V001

Turner Construction Company
830 4th Avenue South, Suite 300
Seattle, Washington 98134

Attention: Ms. Amanda Packer

Subject: Soil Characterization Sampling Report
Skyline Elementary School
2301 North Mildred Street
Tacoma, Washington

Dear Ms. Packer:

Associated Earth Sciences, Inc. (AESI) is pleased to present the enclosed copy of the above-referenced report. This report summarizes the results of the soil characterization sampling at the Skyline Elementary School property located at 2301 North Mildred Street in Tacoma, Washington. The scope of services was completed in general accordance with the proposal provided by AESI, dated May 15, 2020, and authorized by you on June 24, 2020.

We have enjoyed working with you on this study and are confident that our findings will aid in the construction of the new building at the Skyline Elementary School property. If you should have any questions regarding this report, or if we can be of additional help to you, please do not hesitate to call.

Sincerely,
ASSOCIATED EARTH SCIENCES, INC.
Kirkland, Washington

Timothy S. Brown, L.Hg.
Associate Hydrogeologist

TSB/ld
20200183V001-2

SOIL CHARACTERIZATION SAMPLING REPORT

SKYLINE ELEMENTARY SCHOOL

Tacoma, Washington

Prepared for:
Turner Construction Company
830 4th Avenue South, Suite 300
Seattle, Washington 98134

Prepared by:
Associated Earth Sciences, Inc.
911 5th Avenue
Kirkland, Washington 98033
425-827-7701

August 19, 2020
Project No. 20200183V001

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1.0 INTRODUCTION

Associated Earth Sciences, Inc. (AESI) has prepared this Soil Characterization Sampling Report on behalf of Turner Construction Company in connection with the Skyline Elementary School project located in Tacoma, Washington (Figure 1). Skyline Elementary School and associated development centers are located on two contiguous Pierce County parcels (Nos. 0221352000 and 0221352014). Each parcel is 10 acres in size, totaling 20 acres. The soil characterization sampling performed for this project focuses on Parcel 0221352014 comprising a portion of the development center building, track and field, and additional playing fields (Site) as shown on Figure 2. AESI understands Turner Construction Company is in the design stage for construction of a new building on Parcel 0221352014.

The Site is currently mapped by the Washington State Department of Ecology, *Tacoma Smelter Plume Model Remedies Guidance* dated July 2019 (Guidance), as having soils with arsenic concentrations ranging over 100 parts per million (ppm).

1.1 Project Background

AESI understands that the Site consists of an existing track and field, baseball diamond, and additional playfields located at Skyline Elementary School and Tacoma Professional Development Center in Tacoma, Washington (Figure 2). The Site is Pierce County Parcel 0221352014, which is owned by the Tacoma School District #10 according to the Pierce County assessor records. The Site is approximately 10 acres in size and lies within an open area that is visually delineated by school/development center buildings to the west, North Vassault Street to the east, and by residential properties to the north and south. Presently, the northern half of the Site is developed with a natural grass soccer field surrounded by a gravel track and the southern half of the Site is covered with a natural grass surface with a gravel road cutting from southeast to the northwest.

1.2 Purpose

The purpose of soil characterization sampling was to assess the Site for arsenic and lead contamination based on the Guidance. AESI understands the building design is not final, and Turner Construction Company requested this soil characterization sampling to evaluate if special handling or encapsulation of soils would be necessary during the construction phase of the project.

The objective of the soil characterization sampling report is to document the soil characterization sampling activities, associated results, and conclusions. This report includes a summary of sample planning according to the Guidance, a figure showing sampling locations, a summary of sampling methodology, tabulated results with a comparison of the results to Model Toxics Control Act (MTCA) *Washington Administrative Code* (WAC) 173-340 Method A

cleanup levels, the laboratory report and chain of custody, and recommendations based on the Guidance.

2.0 SOIL CHARACTERIZATION SAMPLING

The assessment and cleanup of contaminated sites in Washington State is regulated by MTCA. Concentrations of contaminants detected in the soil samples were evaluated with respect to MTCA Method A cleanup levels for unrestricted land use.

2.1 Planning for Sampling

The number of samples required is defined in the Guidance and based on the location within the Tacoma Smelter Plume, Site acreage, current and future land use, and the number of Decision Units identified. A Decision Unit is an area of the property expected to have a distinctive pattern of soil contamination from other areas based on current and past land uses. The Site is not expected to have more than one distinctive pattern of contamination and is therefore identified as one Decision Unit (DU1).

The Guidance prescribes a linear interpolation method for calculating the required number of samples. Forty-eight sample locations are required at the Site based on the linear interpolation method. Per the Guidance, samples are to be collected from 0 to 6 inches below ground surface (bgs) at every location. At every fourth location, an additional sample is required to be collected from 6 to 12 inches bgs. And, if forest duff is present (leaves and debris from trees in undisturbed areas), an additional composite sample is required. At the Site, there is no duff. The total number of discrete samples is 60 as a result:

- Forty-eight (48) samples from the locations extended to depths of approximately 0 to 6 inches bgs.
- Twelve (12) samples from every fourth location extended to depths from approximately 6 to 12 inches bgs.

The calculations for the number of samples are included as Appendix A.

AESI prepared a site-specific health and safety plan and completed a geo-referenced site plan mapping out all sample locations in an approximately evenly-spaced grid in accordance with the Guidance prior to sampling.

2.2 Field Methods

Soil sampling was conducted on July 20 and 21, 2020, using hand-operated soil excavation and sampling equipment. Sample locations were pre-determined and located in the field using a

geo-referenced Avenza map. Forty-eight soil samples were collected at depths of approximately 0 to 6 inches and twelve additional samples were collected at depths of approximately 6 to 12 inches. The approximate locations of the soil samples completed by AESI are shown on Figure 2. Soils encountered in DU1 ranged from silty sand with gravel to fine to medium sand with variable amounts of gravel.

Sampling equipment was cleaned using an Alconox® wash and potable water rinse prior to the beginning of the project and before collecting each soil sample. All soil samples collected for laboratory analysis were placed in appropriate sample containers supplied by the laboratory. Each container was labeled with the Site name, date, time, and unique sample ID. Sample containers were placed in a chilled cooler immediately after sampling, and subsequently transported to the analytical laboratory by AESI under standard chain of custody procedures.

3.0 RESULTS

Soil samples were analyzed by Friedman & Bruya, Inc., located in Seattle, Washington. Soil samples were analyzed for arsenic and lead using U.S. Environmental Protection Agency (EPA) Method 6020B. The resulting analytical data were evaluated with respect to the MTCA Method A soil cleanup levels, and the criteria included in the Guidance. MTCA Method A cleanup levels for arsenic and lead are 20 milligrams per kilogram (mg/kg), and 250 mg/kg, respectively.

The soil sample analytical results are summarized in Table 1. Arsenic concentrations exceeded the MTCA Method A cleanup level of 20 mg/kg in 27 of the 60 soil samples analyzed. Arsenic concentrations ranged from 1.7 mg/kg to 166.0 mg/kg. The average DU1 concentration of arsenic from soil samples collected from 0 to 6 inches bgs was 22.4 mg/kg. The average DU1 concentration of arsenic from soil samples collected from 6 to 12 inches bgs was 27.0 mg/kg.

None of the lead concentrations detected in the soil samples exceeded the MTCA Method A cleanup level of 250 mg/kg. Lead concentrations ranged from 1.3 mg/kg to 137.0 mg/kg. The average DU1 concentration of lead was 28.35 mg/kg. Analytical laboratory reports and chain of custody forms are attached in Appendix B.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The soil characterization sampling results for DU1 indicate that the shallow soils have concentrations of arsenic above MTCA Method A cleanup level and concentrations of lead below MTCA Method A cleanup level. Special handling and/or remediation therefore appears to be needed in the DU1 area for arsenic prior to construction activities. Based on the average concentrations across DU1 (23.3 mg/kg combined 0 to 6 and 6 to 12 inches bgs), and a standard deviation of 27.9 mg/kg combined 0 to 6 and 6 to 12 inches bgs), several model remedy options

apply to the Site including excavate and remove, mix, cap in place, and consolidate and cap. These model remedies are discussed in more detail in the Guidance.

AESI recommends the following as next steps:

- A copy of this report should be submitted to Ecology as required in the Guidance to document compliance for DU1.
- Additional soil sampling should be conducted to refine understanding of the depth of contamination across the Site.
- A soil management plan should be prepared to specify the model remedy or remedies appropriate for the Site. The additional soil sampling will inform the soil management plan.
- It is also recommended that healthy actions take place to reduce exposure to contaminated soils as defined in the Guidance.

5.0 LIMITATIONS

This report has been prepared for the exclusive use of Turner Construction Company and their agents, for specific application to this project. The results contained in this report are based upon the information acquired during this subsurface assessment. Within the limitations of scope, schedule, and budget, our services have been performed in accordance with generally accepted environmental industry practices in effect in this area at the time our report was prepared. No other warranty, express or implied, is made.

6.0 CLOSURE

We are pleased to have had this opportunity to work with you and are confident that this report will aid in the evaluation of the Site. Should you have any questions, please do not hesitate to call.

Sincerely,
ASSOCIATED EARTH SCIENCES, INC.
Kirkland, Washington

Ken Jennings, L.G.
Senior Geologist

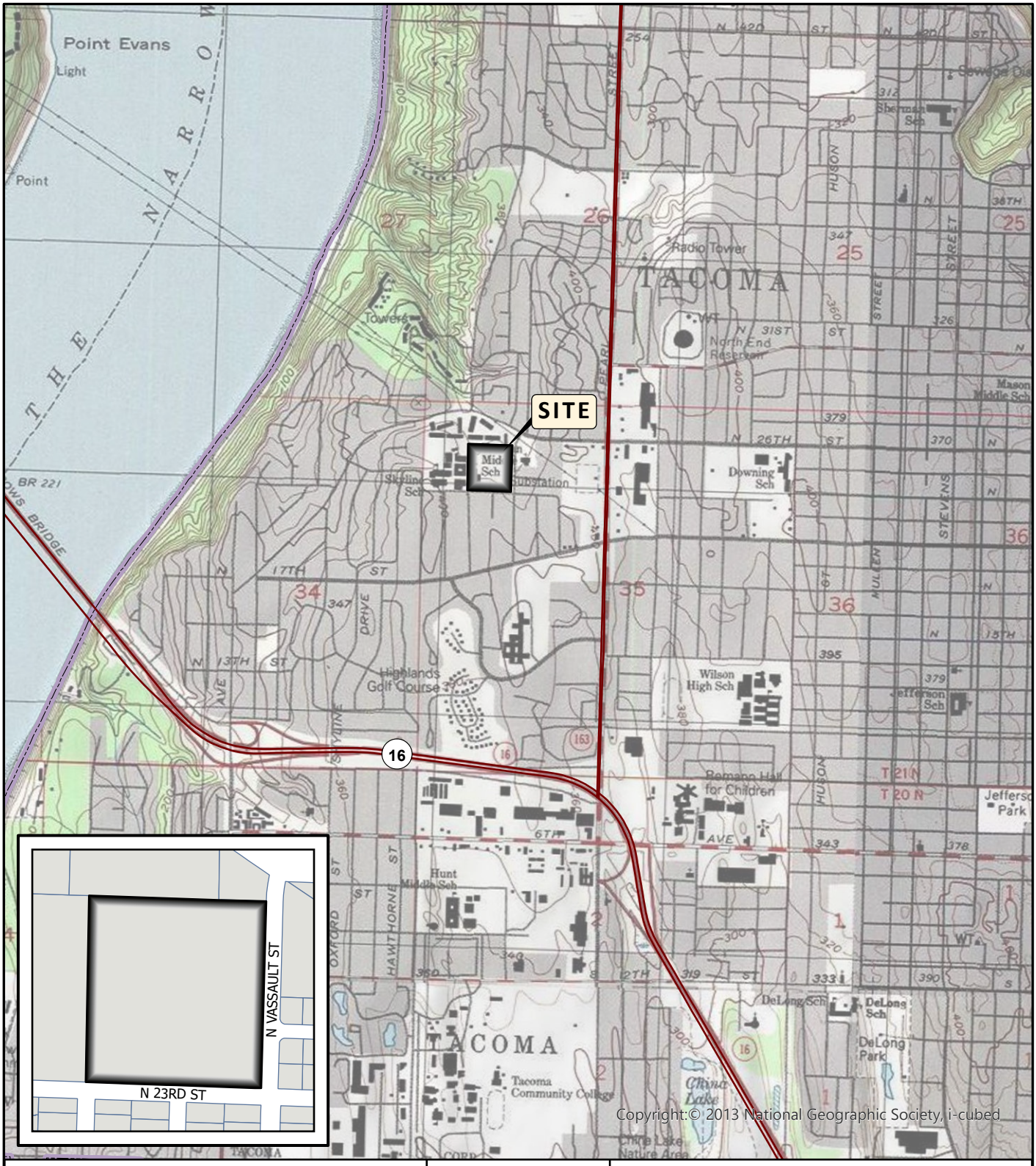
Timothy S. Brown, L.Hg.
Associate Hydrogeologist

7.0 REFERENCES

Washington Administrative Code (WAC): 173 340 - Model Toxics Control Act regulations.

Washington State Department of Ecology, 2019, Tacoma smelter plume model remedies guidance: July 2019.

FIGURES



DATA SOURCES / REFERENCES:
USGS: 7.5' SERIES TOPOGRAPHIC MAPS, ESRI/I-CUBED/NGS 2013
PIERCE CO. STREETS, PARCELS, CITY 2/20
LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE

N

0 2000
Feet

NOTE: BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION

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VICINITY MAP

SKYLINE ELEMENTARY SCHOOL
TACOMA, WASHINGTON

PROJ NO.	DATE:	FIGURE:
20200183V001	8/20	1

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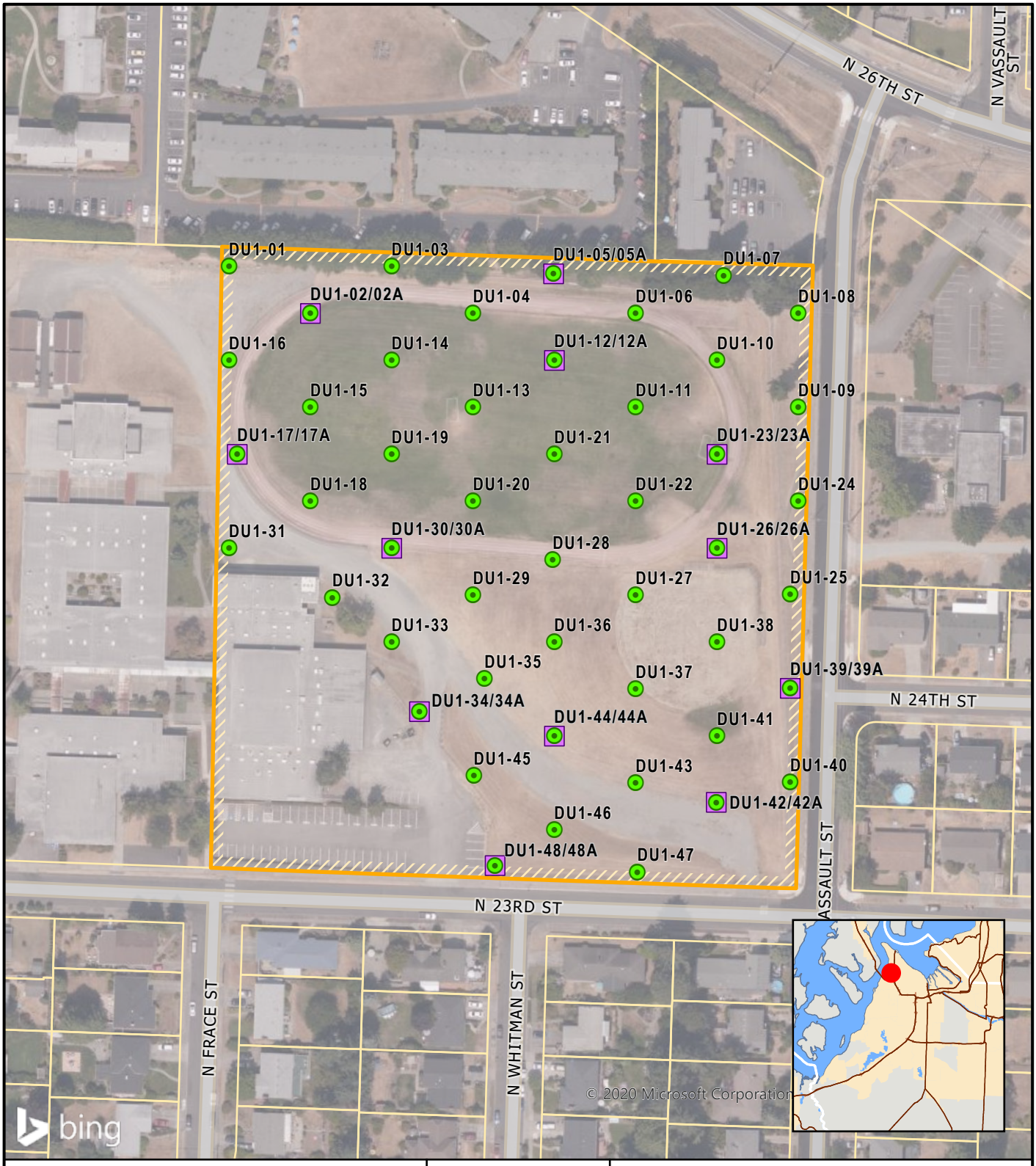

LEGEND

- DECISION UNIT 1
- DU1-#: SOIL SAMPLE TAKEN FROM 0-6" BGS
- DU1-#/#A - SOIL SAMPLE TAKEN FROM 6-12" BGS
- PARCEL

DATA SOURCES / REFERENCES:
PIERCE CO: STREETS, PARCELS 2/20
AERIAL: BING IMAGERY, 7/18
LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE

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NOTE: BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION

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SOIL SAMPLING

SKYLINE ELEMENTARY SCHOOL
TACOMA, WASHINGTON

PROJ NO.	DATE:	FIGURE:
202000183V001	8/20	2

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TABLES

Table 1
Summary of Soil Analytical Results
Arsenic and Lead
Skyline Elementary School
Tacoma, Washington

Sample ID	Sample Date	Sample Depth (inches)	Analytical Results [1]	
			Arsenic (mg/kg)	Lead (mg/kg)
Decision Unit DU1				
DU1-01	7/20/2020	0 - 6	**41.7**	52.7
DU1-02	7/20/2020	0 - 6	2.83	3.46
DU1-02A	7/20/2020	6 - 12	1.89	1.34
DU1-03	7/20/2020	0 - 6	**34.0**	40.0
DU1-04	7/20/2020	0 - 6	2.55	3.14
DU1-05	7/20/2020	0 - 6	**34.1**	42.4
DU1-05A	7/20/2020	6 - 12	**37.9**	43.0
DU1-06	7/20/2020	0 - 6	2.29	2.36
DU1-07	7/20/2020	0 - 6	**30.8**	35.4
DU1-08	7/20/2020	0 - 6	**57.7**	58.3
DU1-09	7/20/2020	0 - 6	**26.3**	31.5
DU1-10	7/20/2020	0 - 6	3.73	3.05
DU1-11	7/20/2020	0 - 6	2.24	2.62
DU1-12	7/20/2020	0 - 6	2.24	2.56
DU1-12A	7/20/2020	6 - 12	1.89	1.31
DU1-13	7/20/2020	0 - 6	2.29	3.19
DU1-14	7/20/2020	0 - 6	2.00	2.22
DU1-15	7/20/2020	0 - 6	1.78	2.16
DU1-16	7/20/2020	0 - 6	**32.7**	43.0
DU1-17	7/20/2020	0 - 6	**25.3**	28.2
DU1-17A	7/20/2020	6 - 12	**33.9**	39.8
DU1-18	7/20/2020	0 - 6	3.22	3.34
DU1-19	7/20/2020	0 - 6	1.94	2.32
DU1-20	7/20/2020	0 - 6	2.08	2.34
DU1-21	7/20/2020	0 - 6	1.66	2.44
DU1-22	7/20/2020	0 - 6	2.26	4.13
DU1-23	7/20/2020	0 - 6	2.52	2.92
DU1-23A	7/20/2020	6 - 12	1.77	1.35
DU1-24	7/20/2020	0 - 6	**26.5**	34.9
DU1-25	7/21/2020	0 - 6	**39.9**	61.8
DU1-26	7/21/2020	0 - 6	**49.3**	53.0
DU1-26A	7/21/2020	6 - 12	**24.0**	31.9
DU1-27	7/21/2020	0 - 6	3.54	2.94
DU1-28	7/21/2020	0 - 6	5.34	8.77
DU1-29	7/21/2020	0 - 6	12.6	8.76
DU1-30	7/21/2020	0 - 6	**23.8**	11.1
DU1-30A	7/21/2020	6 - 12	**88.4**	137
DU1-31	7/21/2020	0 - 6	12.2	12.3
DU1-32	7/21/2020	0 - 6	9.94	11.5
DU1-33	7/21/2020	0 - 6	5.72	6.35
DU1-34	7/21/2020	0 - 6	**22.4**	29.5
DU1-34A	7/21/2020	6 - 12	13.4	18.3
DU1-35	7/21/2020	0 - 6	18.1	18.6
DU1-36	7/21/2020	0 - 6	10.0	9.94
DU1-37	7/21/2020	0 - 6	16.9	15.6
DU1-38	7/21/2020	0 - 6	5.20	4.67
DU1-39	7/21/2020	0 - 6	**70.7**	67.9
DU1-39A	7/21/2020	6 - 12	**60.7**	51.1
DU1-40	7/21/2020	0 - 6	**52.9**	70.8

Table 1
Summary of Soil Analytical Results
Arsenic and Lead
Skyline Elementary School
Tacoma, Washington

Sample ID	Sample Date	Sample Depth (inches)	Analytical Results [1]	
			Arsenic (mg/kg)	Lead (mg/kg)
Decision Unit DU1				
DU1-41	7/21/2020	0 - 6	**50.9**	23.8
DU1-42	7/21/2020	0 - 6	6.88	13.5
DU1-42A	7/21/2020	6 - 12	**50.5**	66.4
DU1-43	7/21/2020	0 - 6	4.72	6.29
DU1-44	7/21/2020	0 - 6	**28.0**	34.1
DU1-44A	7/21/2020	6 - 12	4.64	5.32
DU1-45	7/21/2020	0 - 6	**39.1**	43.8
DU1-46	7/21/2020	0 - 6	**40.5**	48.5
DU1-47	7/21/2020	0 - 6	**35.5**	50.0
DU1-48	7/21/2020	0 - 6	**166**	90.7
DU1-48A	7/21/2020	6 - 12	5.05	5.61
DU1 Average Concentration 0-6 inches			**22.4**	23.2
DU1 Average Concentration 6-12 inches			**27.0**	33.5
MTCA Cleanup Level [2]			20.0	250.0

NOTES:

(1) = Samples were analyzed by Friedman & Bruya, Inc. of Seattle, Washington using EPA Method 6020B.

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

Red = concentration exceeds MTCA cleanup level.

DU = Decision Unit

MTCA = Washington State Model Toxics Control Act

mg/kg = milligram per kilogram

WAC = Washington Administrative Code

APPENDIX A

Linear Interpolation Calculations

Appendix A
Calculation of Sample Number
by Linear Interpolation
Skyline Elementary School
Tacoma, Washington

Minimum Samples per Decision Unit

Sampling Area	Residential, Parks, Commercial		Forest and Open Land	
	As >100	As 20-100	As >100	As 20-100
0.25	10	8	8	8
1	20	16	16	12
5	40	32	30	24
10	60	48	40	32
20	80	64	50	40
100	120	90	70	60
>100	120 + 1 per 5 acres	90 + 1 per 5 acres	70 + 1 per 5 acres	60 + 1 per 5 acres

Soil Samples — Minimum number of samples - 0-6 inches plus 25% from 6-12 inches

Forest Duff — 1 composite per Decision Unit w 6 evenly spaced samples
Decision Units w duff — 0

Interpolative calculation	Size	Ya	Yb	X	Xa	Xb
Size	7	40	60	7	5	10

Sample Locations — 48
Sample number — 60

APPENDIX B

Laboratory Reports and Chain of Custody Forms

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 27, 2020

Ken Jennings, Project Manager
Associated Earth Sciences, Inc.
911 5th Avenue, Suite 100
Kirkland, WA 98033

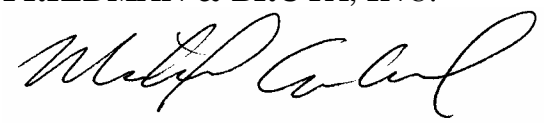
Dear Mr Jennings:

Included are the results from the testing of material submitted on July 21, 2020 from the Skyline E.S. PO 200183V001, F&BI 007340 project. There are 37 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: Kellie Andrews
AE10727R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 21, 2020 by Friedman & Bruya, Inc. from the Associated Earth Sciences Skyline E.S. PO 200183V001, F&BI 007340 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Associated Earth Sciences
007340 -01	DU1-25
007340 -02	DU1-26
007340 -03	DU1-26A
007340 -04	DU1-27
007340 -05	DU1-28
007340 -06	DU1-29
007340 -07	DU1-30
007340 -08	DU1-30A
007340 -09	DU1-31
007340 -10	DU1-32
007340 -11	DU1-33
007340 -12	DU1-34
007340 -13	DU1-34A
007340 -14	DU1-35
007340 -15	DU1-36
007340 -16	DU1-37
007340 -17	DU1-38
007340 -18	DU1-39
007340 -19	DU1-39A
007340 -20	DU1-40
007340 -21	DU1-41
007340 -22	DU1-42
007340 -23	DU1-42A
007340 -24	DU1-43
007340 -25	DU1-44
007340 -26	DU1-44A
007340 -27	DU1-45
007340 -28	DU1-46
007340 -29	DU1-47
007340 -30	DU1-48
007340 -31	DU1-48A

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-25	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-01
Date Analyzed:	07/22/20	Data File:	007340-01.074
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	39.9
Lead	61.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-26	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-02
Date Analyzed:	07/22/20	Data File:	007340-02.080
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	49.3
Lead	53.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-26A	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-03
Date Analyzed:	07/22/20	Data File:	007340-03.081
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	24.0
Lead	31.9

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-27	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-04
Date Analyzed:	07/22/20	Data File:	007340-04.082
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.54
Lead	2.94

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-28	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-05
Date Analyzed:	07/22/20	Data File:	007340-05.083
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.34
Lead	8.77

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-29	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-06
Date Analyzed:	07/22/20	Data File:	007340-06.084
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	12.6
Lead	8.76

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-30	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-07
Date Analyzed:	07/22/20	Data File:	007340-07.085
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	23.8
Lead	11.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-30A	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-08
Date Analyzed:	07/22/20	Data File:	007340-08.086
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	88.4
Lead	137

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-31	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-09
Date Analyzed:	07/22/20	Data File:	007340-09.087
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	12.2
Lead	12.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-32	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-10
Date Analyzed:	07/22/20	Data File:	007340-10.088
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.94
Lead	11.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-33	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-11
Date Analyzed:	07/22/20	Data File:	007340-11.089
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.72
Lead	6.35

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-34	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-12
Date Analyzed:	07/22/20	Data File:	007340-12.092
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	22.4
Lead	29.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-34A	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-13
Date Analyzed:	07/22/20	Data File:	007340-13.093
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	13.4
Lead	18.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-35	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-14
Date Analyzed:	07/22/20	Data File:	007340-14.094
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	18.1
Lead	18.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-36	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-15
Date Analyzed:	07/22/20	Data File:	007340-15.095
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.98
Lead	9.94

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-37	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-16
Date Analyzed:	07/22/20	Data File:	007340-16.096
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	16.9
Lead	15.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-38	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-17
Date Analyzed:	07/22/20	Data File:	007340-17.097
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.20
Lead	4.67

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-39	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-18
Date Analyzed:	07/22/20	Data File:	007340-18.098
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	70.7
Lead	67.9

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-39A	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-19
Date Analyzed:	07/22/20	Data File:	007340-19.099
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	60.7
Lead	51.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-40	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-20
Date Analyzed:	07/22/20	Data File:	007340-20.100
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	52.9
Lead	70.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-41	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-21
Date Analyzed:	07/22/20	Data File:	007340-21.103
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	50.9
Lead	23.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-42	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-22
Date Analyzed:	07/22/20	Data File:	007340-22.106
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	6.88
Lead	13.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-42A	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-23
Date Analyzed:	07/22/20	Data File:	007340-23.107
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	50.5
Lead	66.4

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-43	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-24
Date Analyzed:	07/22/20	Data File:	007340-24.108
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.72
Lead	6.29

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-44	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-25
Date Analyzed:	07/22/20	Data File:	007340-25.109
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	28.0
Lead	34.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-44A	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-26
Date Analyzed:	07/22/20	Data File:	007340-26.110
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.64
Lead	5.32

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-45	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-27
Date Analyzed:	07/22/20	Data File:	007340-27.111
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	39.1
Lead	43.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-46	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-28
Date Analyzed:	07/22/20	Data File:	007340-28.112
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	40.5
Lead	48.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-47	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-29
Date Analyzed:	07/22/20	Data File:	007340-29.115
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	35.5
Lead	50.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-48	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-30
Date Analyzed:	07/22/20	Data File:	007340-30.116
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	166
Lead	90.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-48A	Client:	Associated Earth Sciences
Date Received:	07/21/20	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	007340-31
Date Analyzed:	07/22/20	Data File:	007340-31.117
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.05
Lead	5.61

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Associated Earth Sciences
Date Received:	Not Applicable	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	I0-427 mb
Date Analyzed:	07/22/20	Data File:	I0-427 mb.055
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:	Associated Earth Sciences
Date Received:	Not Applicable	Project:	Skyline E.S. PO 200183V001
Date Extracted:	07/22/20	Lab ID:	I0-428 mb
Date Analyzed:	07/22/20	Data File:	I0-428 mb.072
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Date of Report: 07/27/20
Date Received: 07/21/20
Project: Skyline E.S. PO 200183V001, F&BI 007340

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

Laboratory Code: 007340-01 (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	37.9	101	145 b	75-125	36 b
Lead	mg/kg (ppm)	50	58.7	96	88	75-125	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	81	80-120
Lead	mg/kg (ppm)	50	95	80-120

Date of Report: 07/27/20
Date Received: 07/21/20
Project: Skyline E.S. PO 200183V001, F&BI 007340

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

Laboratory Code: 007340-21 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	49.9	0 b	0 b	75-125	0 b
Lead	mg/kg (ppm)	50	24.1	88	99	75-125	12

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	97	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.

007340

SAMPLE CHAIN OF CUSTODY ME 07/21/20 BDY

Page # 1 of 4

Report To Ken Jennings; Kellie Andrews

Company AESI

Address 911 5th Ave

City, State, ZIP Kirkland WA

Phone _____ Email _____

SAMPLERS (*signature*)	Kellie A
PROJECT NAME: Skyline E.S.	PO #: 200183
REMARKS: Project specific RLs? - Yes / No	INVOICE TO

TURNAROUND TIME
- ☒ Standard turnaround
- ☐ RUSH _____
- Rush charges authorized by: _____

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	As, Pb				Notes
DU1-25	01	7/21/20	0835	Soil	2								X				
DU1-26	02		0837										X				
DU1-26A	03		1025										X				
DU1-27	04		0840										X				
DU1-28	05		0844										X				
DU1-29	06		0849										X				
DU1-30	07		0851										X				
DU1-30A	08		1033										X				
DU1-31	09		0854										X				
DU1-32	10	↓	0859	↓	↓								✓				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Kellie Andrews	Kellie Andrews	AESI	7/21/20	1249
Received by: Nhan Phan	Nhan Phan	FEBI	7/21/20	1245
Relinquished by:				
Received by:		Samples received at 5 °C		

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

007340

SAMPLE CHAIN OF CUSTODY ME 07/21/20

BDY

Page # 2 of 4

Report To Ken Jennings; Kellie Andrews

Company AESI

Address 911 5th Ave

City, State, ZIP Kirkland WA

Phone _____ Email _____

SAMPLERS (*signature*) Kellie An

PROJECT NAME: SKYline E.S

PO #: 200183V001

REMARKS: Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- [x] Standard turnaround
- [ ] RUSH _____
- Rush charges authorized by: _____

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	As, Pb				Notes
DU1-33	11	7/21/20	0910	Soil	1								X				
DU1-34	12		0913										Y				
DU1-34A	13		1042										Y				
DU1-35	14		0915										Y				
DU1-36	15		0919										X				
DU1-37	16		0922										Y				
DU1-38	17		0925										Y				
DU1-39	18		0930										Y				
DU1-39A	19		1054										X				
DU1-40	20	↓	0933	↓	↓								Y				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Kellie An	Kellie Andrews	AESI	7/21/20	1245
Received by: [illegible]	Nhan Phan	FEBI	7/21/20	1245
Relinquished by:				
Received by:		Samples received at 5 °C		

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Seattle, WA 98119-2029
Ph. (206) 285-8282

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SAMPLE CHAIN OF CUSTODY ME 07/21/20

BIY

Page # 3 of 4

Report To Ken Jennings, Kellie Andrews

Company AESI

Address 911 5th Ave

City, State, ZIP Kirkland WA 98033

Phone _____ Email _____

SAMPLERS (*signature*) Kellie Andrews

PROJECT NAME: Skyline E.S.

PO #: 200183 VOA1

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- ☑ Standard turnaround
- ☐ RUSH _____
- Rush charges authorized by: _____

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	As, Pb				Notes
DU1-41	21	7/21/20	0935	Soil	1								X				
DU1-42	22		0940										X				
DU1-42A	23		1058										X				
DU1-43	24		0950										X				
DU1-44	25		0953										X				
DU1-44A	26		1035										X				
DU1-45	27		1010										X				
DU1-46	28		0959										X				
DU1-47	29		1003										X				
DU1-48	30	↓	1005	↓	↓								X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Kellie Andrews	Kellie Andrews	AESI	7/21/20	1245
Received by:	Nhan Pham	Fe BI	7/21/20	1245
Relinquished by:				
Received by:		Samples received at 5 °C		

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Seattle, WA 98119-2029
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007340

SAMPLE CHAIN OF CUSTODY ME 07/21/20 BIY

Page # 4 of 4

Report To Ken Jennings, Kellie Andrews

Company AESI

Address 911 5th Ave

City, State, ZIP Kirkland WA

Phone _____ Email _____

SAMPLERS (*signature*)	Kellie Andrews
PROJECT NAME: Skyline E.S.	PO #: 200193V001
REMARKS: Project specific RLs? - Yes / No	INVOICE TO

TURNAROUND TIME
- [x] Standard turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Archive samples
- [ ] Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	As, Pb				Notes
DUI-48A	31	7/21/20	1105	SOIL	1								X				

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Kellie Andrews	Kellie Andrews	AESI	7/21/20	1245
Received by:		Nhan Phan	FEBI	7/21/20	✓
Relinquished by:					
Received by:			Samples received at 5 °C		

Friedman & Bruya, Inc.
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Seattle, WA 98119-2029
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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fbi@isomedia.com
www.friedmanandbruya.com

July 24, 2020

Ken Jennings, Project Manager
Associated Earth Sciences, Inc.
911 5th Avenue, Suite 100
Kirkland, WA 98033

Dear Mr Jennings:

Included are the results from the testing of material submitted on July 20, 2020 from the Skyline E.S. PO 20200183V001, F&BI 007320 project. There are 35 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: Kellie Andrews
AE10724R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 20, 2020 by Friedman & Bruya, Inc. from the Associated Earth Sciences Skyline E.S. PO 20200183V001, F&BI 007320 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Associated Earth Sciences
007320 -01	DU1-01
007320 -02	DU1-02
007320 -03	DU1-02A
007320 -04	DU1-03
007320 -05	DU1-04
007320 -06	DU1-05
007320 -07	DU1-05A
007320 -08	DU1-06
007320 -09	DU1-07
007320 -10	DU1-08
007320 -11	DU1-09
007320 -12	DU1-10
007320 -13	DU1-11
007320 -14	DU1-12
007320 -15	DU1-12A
007320 -16	DU1-13
007320 -17	DU1-14
007320 -18	DU1-15
007320 -19	DU1-16
007320 -20	DU1-17
007320 -21	DU1-17A
007320 -22	DU1-18
007320 -23	DU1-19
007320 -24	DU1-20
007320 -25	DU1-21
007320 -26	DU1-22
007320 -27	DU1-23
007320 -28	DU1-23A
007320 -29	DU1-24

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-01	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-01
Date Analyzed:	07/21/20	Data File:	007320-01.059
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	41.7
Lead	52.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-02	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-02
Date Analyzed:	07/21/20	Data File:	007320-02.060
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.83
Lead	3.46

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-02A	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-03
Date Analyzed:	07/21/20	Data File:	007320-03.065
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.89
Lead	1.34

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-03	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-04
Date Analyzed:	07/21/20	Data File:	007320-04.066
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	34.0
Lead	40.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-04	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-05
Date Analyzed:	07/21/20	Data File:	007320-05.067
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.55
Lead	3.14

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-05	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-06
Date Analyzed:	07/21/20	Data File:	007320-06.068
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	34.1
Lead	42.4

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-05A	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-07
Date Analyzed:	07/21/20	Data File:	007320-07.069
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.9
Lead	43.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-06	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-08
Date Analyzed:	07/21/20	Data File:	007320-08.070
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.29
Lead	2.36

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-07	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-09
Date Analyzed:	07/21/20	Data File:	007320-09.071
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	30.8
Lead	35.4

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-08	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-10
Date Analyzed:	07/21/20	Data File:	007320-10.072
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	57.7
Lead	58.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-09	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-11
Date Analyzed:	07/21/20	Data File:	007320-11.073
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	26.3
Lead	31.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-10	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-12
Date Analyzed:	07/21/20	Data File:	007320-12.074
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.73
Lead	3.05

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-11	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-13
Date Analyzed:	07/21/20	Data File:	007320-13.077
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.24
Lead	2.62

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-12	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-14
Date Analyzed:	07/21/20	Data File:	007320-14.078
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.24
Lead	2.56

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-12A	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-15
Date Analyzed:	07/21/20	Data File:	007320-15.079
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.89
Lead	1.31

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-13	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-16
Date Analyzed:	07/21/20	Data File:	007320-16.080
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.29
Lead	3.19

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-14	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-17
Date Analyzed:	07/21/20	Data File:	007320-17.081
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.00
Lead	2.22

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-15	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-18
Date Analyzed:	07/21/20	Data File:	007320-18.082
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.78
Lead	2.16

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-16	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-19
Date Analyzed:	07/21/20	Data File:	007320-19.083
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	32.7
Lead	43.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-17	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-20
Date Analyzed:	07/21/20	Data File:	007320-20.084
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	25.3
Lead	28.2

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-17A	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-21
Date Analyzed:	07/21/20	Data File:	007320-21.092
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.9
Lead	39.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-18	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-22
Date Analyzed:	07/21/20	Data File:	007320-22.093
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.22
Lead	3.34

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-19	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-23
Date Analyzed:	07/21/20	Data File:	007320-23.096
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.94
Lead	2.32

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-20	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-24
Date Analyzed:	07/21/20	Data File:	007320-24.097
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.08
Lead	2.34

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-21	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-25
Date Analyzed:	07/21/20	Data File:	007320-25.098
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.66
Lead	2.44

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-22	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-26
Date Analyzed:	07/21/20	Data File:	007320-26.099
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.26
Lead	4.13

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-23	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-27
Date Analyzed:	07/21/20	Data File:	007320-27.100
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.52
Lead	2.92

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-23A	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-28
Date Analyzed:	07/21/20	Data File:	007320-28.101
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.77
Lead	1.35

Analysis For Total Metals By EPA Method 6020B

Client ID:	DU1-24	Client:	Associated Earth Sciences
Date Received:	07/20/20	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	007320-29
Date Analyzed:	07/21/20	Data File:	007320-29.104
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	26.5
Lead	34.9

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Associated Earth Sciences
Date Received:	Not Applicable	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	I0-424 mb
Date Analyzed:	07/21/20	Data File:	I0-424 mb.044
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:	Associated Earth Sciences
Date Received:	Not Applicable	Project:	Skyline E.S. PO 20200183V001
Date Extracted:	07/21/20	Lab ID:	I0-425 mb
Date Analyzed:	07/21/20	Data File:	I0-425 mb.057
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Date of Report: 07/24/20
Date Received: 07/20/20
Project: Skyline E.S. PO 20200183V001, F&BI 007320

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

Laboratory Code: 007320-02 (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	2.60	90	88	75-125	2
Lead	mg/kg (ppm)	50	3.18	95	92	75-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	92	80-120
Lead	mg/kg (ppm)	50	103	80-120

Date of Report: 07/24/20
Date Received: 07/20/20
Project: Skyline E.S. PO 20200183V001, F&BI 007320

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

Laboratory Code: 007320-22 (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	3.19	83	84	75-125	1
Lead	mg/kg (ppm)	50	3.31	91	92	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	93	80-120
Lead	mg/kg (ppm)	50	102	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.

007320

SAMPLE CHAIN OF CUSTODY ME 07/20/20

AE3

Page # 1 of 3

Report To Ken Jennings; Kellie Andrews

Company AESI

Address 911 5th Ave

City, State, ZIP Kirkland WA

Phone _____ Email _____

SAMPLERS (*signature*) Kuway

PROJECT NAME: Skyline E.S.

PO #: 20200183V001

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- ☒ Standard turnaround
- ☐ RUSH _____
- Rush charges authorized by: _____

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	As, Pb				Notes
DU1-01	01	7/20/20	1025	Soil	1								X				
DU1-02	02		1027										X				
DU1-02A	03		1116										X				
DU1-03	04		1030										X				
DU1-04	05		1034										X				
DU1-05	06		~~1038~~										X				
DU1-05A	07		1114										X				
DU1-06	08		1048										X				
DU1-07	09		1051										X				
DU1-08	~~09~~ 10	↓	1057	↓	↓								X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Kuway	Kellie Andrews	AESI	7/20/20	1410
Received by:	Nhan Pham	FEBI	7/20/20	1410
Relinquished by:				
Received by:		Samples received at 5 °C		

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

007320

SAMPLE CHAIN OF CUSTODY ME 07/20/20

BI3

Page # 2 of 3

Report To Ken Jennings; Kellie Andrews

Company AESI

Address 911 5th Ave

City, State, ZIP Kirkland WA 98033

Phone _____ Email _____

SAMPLERS (*signature*) Kellie Phan

PROJECT NAME: Skyline E.S.

PO #: 200183V001

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- ☒ Standard turnaround
- ☐ RUSH _____
- Rush charges authorized by: _____

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

Sample ID	Lab ID (NP)	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	As, Pb				Notes
DU1-09	21-11	7/20/20	1059	Soil	1								X				
DU1-10	22-12		1102										X				
DU1-11	23-13		1106										X				
DU1-12	24-14		1110										X				
DU1-12A	25-15		1220										X				
DU1-13	26-16		1130										X				
DU1-14	27-17		1135										X				
DU1-15	28-18		1138										X				
DU1-16	29-19		1142										X				
DU1-17	30-20		1151										X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Kellie Phan	Kellie Andrews	AESI	7/20/20	1410
Received by: Nhan Phan	Nhan Phan	FCBI	7/20/20	1410
Relinquished by:				
Received by:				

Samples received at 5 °C

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SAMPLE CHAIN OF CUSTODY ME 07/20/20

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Page # 3 of 3

Report To Ken Jennings, Kellie Andrews

Company AESI

Address 911 5th Ave

City, State, ZIP Kirkland WA

Phone _____ Email _____

SAMPLERS (*signature*) Kellie Andrews

PROJECT NAME: Skyline E.S. | PO #: 20200183V001

REMARKS: Project specific RLs? - Yes / No | INVOICE TO

TURNAROUND TIME
- [x] Standard turnaround
- [ ] RUSH _____
- Rush charges authorized by: _____

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

Sample ID	Lab ID (NP 7/20)	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	As, Pb				Notes
DU1-17A	21-21	7/20/20	1240	Soil	1								X				
DU1-18	22-22		1153										X				
DU1-19	23-23		1214										X				
DU1-20	24-24		1210										X				
DU1-21	25-25		1223										X				
DU1-22	26-26		1220										X				
DU1-23	27-27		1230										X				
DU1-23A	28-28		1245										X				
DU1-24	29-29		1232										X				
																	Kellie Andrews

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Kellie Andrews	Kellie Andrews	AESI	7/20/20	1410
Received by: [illegible]	Nhan Phan	FEBI	7/20/20	1410
Relinquished by:				
Received by:		Samples received at 5 °C		

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