



SoundEarth Strategies, Inc.
2811 Fairview Avenue East, Suite 2000
Seattle, Washington 98102

October 18, 2021

Mr. John Guenther, LHG
Washington State Department of Ecology
Bellingham Field Office
913 Squalicum Way, Unit 101
Bellingham, Washington 98225

**SUBJECT: WESMAR COMPANY INC. SITE—YEAR 2 SECOND SEMIANNUAL GROUNDWATER
MONITORING EVENT: JULY 2021
Former Wesmar Company, Inc.
(Ballard Blocks II Property)
1401 and 1451 Northwest 46th Street, Seattle, Washington
Project No. 1249-001-06**

Dear Mr. Guenther:

On behalf of Block at Ballard II, LLC, SoundEarth Strategies, Inc. (SoundEarth) has prepared this subgrade drainage groundwater monitoring report to provide a summary of the results for the Year 2 second semiannual groundwater monitoring event performed in July 2021 at the Former Wesmar Company, Inc. Site (the Site). The Site is located at 1401 and 1451 Northwest 46th Street in Seattle, Washington, and is also identified as Ballard Blocks II.

Operation and monitoring of the permanent subgrade drainage water treatment system associated with the completed redevelopment of the Property began in October 2019. The work for this monitoring event was performed pursuant to the requirements of the October 20, 2017, First Amended Consent Decree (No. DE 10-2-21304-0 SEA; Consent Decree) between Block at Ballard II, LLC and the Washington State Department of Ecology (Ecology).

SUBGRADE DRAINAGE GOUNDWATER MONITORING

The approximate location of the subgrade groundwater collection sump and the arsenic water treatment system located in the underground parking garage on the Site is shown on Figure 1. Water monitoring analytical results pertaining to the subgrade drainage water and the permanent arsenic treatment system are summarized in Tables 1 and 2.

SAMPLING METHODOLOGY

The following section describes the sampling methodology employed during the subgrade drainage water quality monitoring activities and the permanent arsenic treatment system performance monitoring activities performed at the Site during Second and Third Quarter 2021.

April 2021 through August 2021 Permanent Arsenic Treatment System Monthly Performance Monitoring Events

Subgrade drainage pipes under the building on the Site drain water to a sump by gravity feed in the underground parking garage in the southeastern portion of the Site (Figure 1).

Monthly permanent arsenic treatment system performance monitoring activities were performed on April 26, May 27, June 28, July 28, and August 26, 2021. To improve the efficacy of the treatment system, a third arsenic-targeting media treatment vessel was previously added to the treatment system train in February 2021.

During these monitoring events, water samples were collected from a pre-treatment influent water port (INF), located immediately ahead of the three arsenic-targeting media treatment vessels; a mid-treatment system monitoring port (MID), located between the first and second arsenic-targeting media treatment vessels; and a post-treatment effluent water monitoring port (EFF), located immediately downstream of the permanent arsenic-treatment system vessels prior to discharge to the municipal stormwater system. The approximate locations of these three water monitoring ports (INF, MID, and EFF) are shown on the general design schematic of the treatment system in Attachment A. This schematic does not show the third treatment vessel added to the downstream end of the treatment system train (between the second treatment vessel and the effluent monitoring port).

Water samples were collected directly into clean, laboratory-prepared sample containers. Each container was labeled with a unique sample identification number, the date and time sampled, and project number; placed on ice in a cooler; and transported to Friedman & Bruya, Inc. (F&B) of Seattle, Washington, under standard chain-of-custody protocols for laboratory analysis. The collected water samples submitted for laboratory analysis were analyzed by US Environmental Protection Agency Method 200.8 for total arsenic.

Year 2 Second Semiannual (July 2021) Subgrade Drainage Groundwater Monitoring Event

A subgrade drainage groundwater sample was collected from the subgrade groundwater collection sump inlet pipes on July 28, 2021. A description of the sampling methodology is provided below. A flow-weighted sample from the subgrade groundwater drainage system was collected directly from the sub-slab drainage outlet pipes located within the sump (Figure 1).

Outlet pipes draining into the subgrade groundwater collection sump from the subgrade drainage system include one pipe on the northern side, a lower pipe on the eastern side, an upper pipe on the eastern side, and one pipe on the southern side of the sump. During the monitoring event on July 28, 2021, water was observed flowing from the pipe on the northern side and the lower pipe on the eastern side of the subgrade groundwater collection sump. SoundEarth did not observe water flowing from the pipes on the southern side or the upper pipe on the eastern side of the subgrade groundwater collection sump during this monitoring event.

A flow rate was measured for the outlet pipe producing water from the sub-slab drainage system on July 28, 2021. The water volume collected for analysis was collected from the pipes that were producing water flow. The total water flow rate into the subgrade sump during the monitoring event on July 28, 2021, was approximately 0.5 gallons per minute.

Water quality analytical results for the permanent arsenic treatment system performance monitoring activities are summarized below and on Table 1. Analytical results for total arsenic for groundwater samples collected from the subgrade drainage system are summarized in the results section below and on Table 2. Laboratory analytical reports are included in Attachment B.

April through August 2021 Permanent Arsenic Treatment System Performance Monitoring Events

Effluent water samples collected following treatment through the permanent arsenic treatment system include sample IDs 1249_GW_EFF_20210426, 1249_GW_EFF_20210527, 1249_GW_EFF_20210628, 1249_GW_EFF_20210728, and 1249_GW_EFF_20210826. Total arsenic was not detected at concentrations exceeding the Washington State Model Toxics Control Act (MTCA) Method A cleanup level for groundwater of 5 micrograms per liter ($\mu\text{g/L}$) in the water samples collected during treatment system performance monitoring events on April 26, May 27, June 28, July 28, and August 26, 2021.

Year 2 Second Semiannual (July 2021) Subgrade Drainage Groundwater Monitoring Event Results

The Year 2 Second Semiannual (July 2021) flow-weighted water sample (sample ID: 1249_SSGW_20210728) was collected from the subgrade groundwater drainage system on July 28, 2021, prior to treatment through the permanent arsenic treatment system. Arsenic was detected at a concentration of 28.7 $\mu\text{g/L}$ in the flow-weighted subgrade groundwater sample, which is above the MTCA Method A cleanup level of 5 $\mu\text{g/L}$.

The post-treatment effluent water sample (sample ID 1249_GW_EFF_20210728) was collected on July 28, 2021, following treatment of the collected subgrade drainage water through the permanent arsenic treatment system. Arsenic was detected at a concentration of less than 1 $\mu\text{g/L}$ in the water sample, which is below the MTCA Method A cleanup level for arsenic in groundwater of 5 $\mu\text{g/L}$ for post-treatment effluent discharge water.

SUMMARY OF FINDINGS AND CONCLUSIONS

Relying on the results of analytical testing, the permanent arsenic treatment system is performing as designed and effectively treating concentrations of total arsenic in subgrade drainage water in compliance with the Consent Decree. Concentrations of total arsenic in post-treatment subgrade drainage water were below the MTCA Method A cleanup level of 5 $\mu\text{g/L}$ for groundwater.

Long-term groundwater monitoring is planned to continue as outlined in the Revised Cleanup Action Plan of the Consent Decree, with the next event planned for First Quarter 2022 (the Year 3 First Semiannual monitoring event).

LIMITATIONS

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

Opinions and recommendations contained in this report are derived, in part, from data gathered by others, and from conditions evaluated when services were performed, and are intended only for the client, purposes, locations, time frames, and project parameters indicated. SoundEarth does not warrant

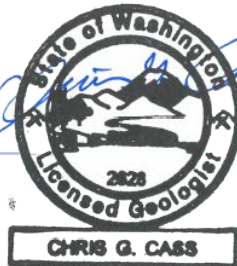
and is not responsible for the accuracy or validity of work performed by others, nor from the impacts of changes in environmental standards, practices, or regulations subsequent to performance of services. SoundEarth does not warrant the use of segregated portions of this report.

CLOSING

SoundEarth appreciates the opportunity to provide environmental services on this project. Please contact the undersigned at 206-306-1900 with any questions.

Respectfully,
SoundEarth Strategies, Inc.

Chris G. Cass, LG
Senior Geologist



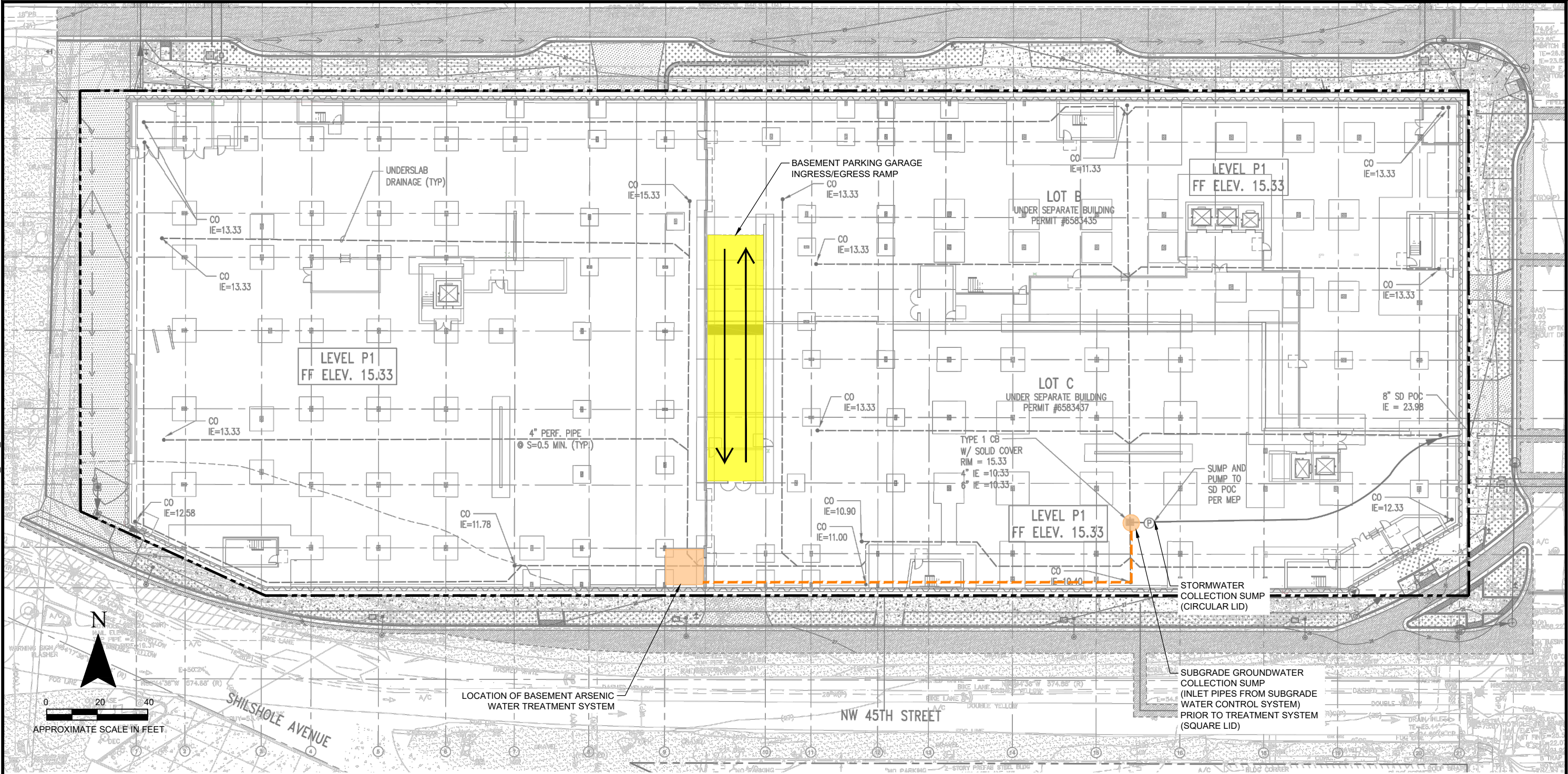
Chris M. Carter
Managing Principal

Attachments: Figure 1, Arsenic Treatment System Basement Location Map
Table 1, Summary of Influent, Mid-Treatment, and Effluent Water Analytical Results for Total Arsenic
Table 2, Summary of Groundwater Analytical Results for Raw Pre-Treatment Subgrade Water Control System Water
A, Arsenic Treatment System Schematic Diagram For Treatment of Pumped Subgrade Water
B, Laboratory Analytical Reports
 Friedman & Bruya, Inc. #104536
 Friedman & Bruya, Inc. #105526
 Friedman & Bruya, Inc. #106558
 Friedman & Bruya, Inc. #107501
 Friedman & Bruya, Inc. #107503
 Friedman & Bruya, Inc. #108476

cc: Eric Silvers, Regency Centers Corporation

JSL/CGC:kar

FIGURE



LEGEND

- PROPERTY BOUNDARY
- BASEMENT PARKING GARAGE INGRESS/EGRESS RAMP

NOTE:
BASEMAP PROVIDED BY
WEBER THOMPSON/KPFF, 2018.

SoundEarth
Strategies
WWW.SOUNDEARTHINC.COM

WESMAR COMPANY INC. SITE
(BALLARD BLOCKS II)
1401 AND 1451
NORTHWEST 46TH STREET
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #1249-001

FIGURE 1
ARSENIC TREATMENT SYSTEM
BASEMENT LOCATION MAP

TABLES



Table 1
Summary of Influent, Mid-Treatment, and Effluent Water Analytical Results for Total Arsenic
Ballard Blocks II
1401 and 1451 Northwest 46th Street
Seattle, Washington

Sample IDs	Date Sampled	Pre-Treatment Influent Water Total Arsenic Analytical Results ⁽¹⁾ (micrograms per liter)	Mid-Treatment System Total Arsenic Analytical Results ⁽¹⁾ (micrograms per liter)	Treated Effluent Water Total Arsenic Analytical Results ⁽¹⁾ (micrograms per liter)
Permanent Arsenic Treatment System Maintenance Water Quality Monitoring Results				
1249_GW_INF/MID/EFF_20191121	11/21/19	9.58	2.43	<1
1249_GW_INF/MID/EFF_20191226	12/26/19	9.25	3.31	<1
1249_GW_INF/MID/EFF_20200123	01/23/20	12.5	7.21	<1
1249_GW_INF/MID/EFF_20200220	02/20/20	9.88	5.78	<1
1249_GW_INF/MID/EFF_20200319	03/19/20	8.83	4.04	<1
1249_GW_INF/MID/EFF_20200426	04/26/20	12.1	6.11	<1
1249_GW_INF/MID/EFF_20200523	05/23/20	15.4	8.01	<1
1249_GW_INF/MID/EFF_20200623	06/23/20	22.3	11.6	1.67
1249_GW_INF/MID/EFF_20200721	07/21/20	23.8	13.6	2.38
1249_GW_INF/MID/EFF_20200828	08/28/20	24.8	12.8	3.26
1249_GW_INF/MID/EFF_20200922	09/22/20	26.3	13.3	3.36
1249_GW_INF/MID/EFF_20201028	10/28/20	25.0	24.2	<1
1249_GW_INF/MID/EFF_20201119	11/19/20	18.4	15.8	<1
1249_GW_INF/MID/EFF_20201221	12/21/20	5.16	4.80	<1
1249_GW_INF/MID/EFF_20210125	01/25/21	8.61	8.11	1.26
1249_GW_INF/MID/EFF_20210222	02/22/21	13.9	5.25	<1
1249_GW_INF/MID/EFF_20210326	03/26/21	14.1	11.3	<1
1249_GW_INF/MID/EFF_20210426	04/26/21	25.9	6.93	<1
1249_GW_INF/MID/EFF_20210527	05/27/21	26.5	8.30	<1
1249_GW_INF/MID/EFF_20210628	06/28/21	27.4	9.43	<1
1249_GW_INF/MID/EFF_20210728	07/28/21	26.7	13.1	<1
1249_GW_INF/MID/EFF_20210826	08/26/21	29.8	18.5	<1
MTCA Cleanup Level for Groundwater		--	--	5 ⁽²⁾

NOTES:

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

⁽¹⁾Samples analyzed by EPA Method 200.8.

⁽²⁾MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels for Groundwater, revised November 2007.

-- = not applicable

EPA = US Environmental Protection Agency

GPM = gallons per minute

MTCA = Washington State Model Toxics Control Act

WAC = Washington Administrative Code



Table 2
Summary of Groundwater Analytical Results for
Raw Pre-Treatment Subgrade Water Control System Water
Ballard Blocks II
1401 and 1451 Northwest 46th Street
Seattle, Washington

Sample ID	Date Sampled	Average Estimated Total Water Flow Rate Into Subgrade Sump (GPM)	Total Arsenic Analytical Results for Raw Subgrade Drainage Groundwater ⁽¹⁾ (micrograms per liter)
1249_SSGW_20191121	11/21/19	0.7	8.69
1249_SSGW_20200123	01/23/20	0.5	15.4
1249_SSGW_20200523	05/23/20	0.4	10.0
1249_SSGW_20200828	08/28/20	0.5	23.9
1249_SSGW_20210222	02/22/21	0.1	13.6
1249_SSGW_20210728	07/28/21	0.5	28.7
MTCA Cleanup Level for Groundwater			5 ⁽²⁾

NOTES:

Red denotes concentration exceeds MTCA cleanup level for groundwater.

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

⁽¹⁾ Samples analyzed by EPA Method 200.8.

⁽²⁾ MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels for Groundwater, revised November 2007.

EPA = US Environmental Protection Agency

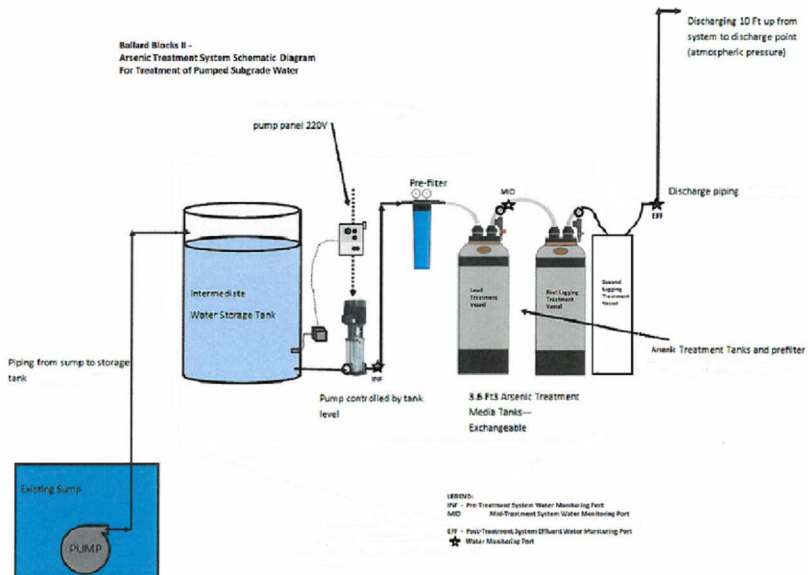
GPM = gallons per minute

MTCA = Washington State Model Toxics Control Act

WAC = Washington Administrative Code

ATTACHMENT A
ARSENIC TREATMENT SYSTEM SCHEMATIC DIAGRAM FOR
TREATMENT OF PUMPED SUBGRADE WATER

**Ballard Blocks II -
Arsenic Treatment System Schematic Diagram
For Treatment of Pumped Subgrade Water**



Images source: Evoqua Water Technologies Corp.

ATTACHMENT B
LABORATORY ANALYTICAL REPORTS

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 6, 2021

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on April 29, 2021 from the SOU_1249-001-06_ 20210429, F&BI 104536 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0506R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 29, 2021 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20210429, F&BI 104536 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
104536 -01	1249_GW_INF_20210426
104536 -02	1249_GW_MID_20210426
104536 -03	1249_GW_EFF_20210426

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20210426	Client:	SoundEarth Strategies
Date Received:	04/29/21	Project:	SOU_1249-001-06_ 20210429
Date Extracted:	05/03/21	Lab ID:	104536-01
Date Analyzed:	05/04/21	Data File:	104536-01.082
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	25.9
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID_20210426	Client:	SoundEarth Strategies
Date Received:	04/29/21	Project:	SOU_1249-001-06_ 20210429
Date Extracted:	05/03/21	Lab ID:	104536-02
Date Analyzed:	05/04/21	Data File:	104536-02.083
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	6.93
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20210426	Client:	SoundEarth Strategies
Date Received:	04/29/21	Project:	SOU_1249-001-06_ 20210429
Date Extracted:	05/03/21	Lab ID:	104536-03
Date Analyzed:	05/03/21	Data File:	104536-03.145
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-06_ 20210429
Date Extracted:	05/03/21	Lab ID:	I1-288 mb
Date Analyzed:	05/03/21	Data File:	I1-288 mb.116
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/06/21

Date Received: 04/29/21

Project: SOU_1249-001-06_ 20210429, F&BI 104536

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 104534-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	3.70	97	97	70-130	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	91	85-115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

AT 3

Phone # 206-306-1900 Fax # 206-306-1907

Page # 1 of 1

TURNAROUND TIME

Standard (5 days)

Rush charges authorized by: _____

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	JONATHAN LOEFFLER	SOUNDEARTH	4/29/21	
Received by: 	Fred	Fib	4/29	10:21
Relinquished by: 	Liz Weber-Bryce		4/29	12:02
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

June 8, 2021

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on May 27, 2021 from the SOU_1249-001-06_ 20210527, F&BI 105526 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Chris Carter, Jonathan Loeffler
SOU0608R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 27, 2021 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20210527, F&BI 105526 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
105526 -01	1249_GW_INF_20210527
105526 -02	1249_GW_MID_20210527
105526 -03	1249_GW_EFF_20210527

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20210527	Client:	SoundEarth Strategies
Date Received:	05/27/21	Project:	SOU_1249-001-06_ 20210527
Date Extracted:	06/01/21	Lab ID:	105526-01
Date Analyzed:	06/03/21	Data File:	105526-01.095
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	26.5
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID_20210527	Client:	SoundEarth Strategies
Date Received:	05/27/21	Project:	SOU_1249-001-06_ 20210527
Date Extracted:	06/01/21	Lab ID:	105526-02
Date Analyzed:	06/03/21	Data File:	105526-02.096
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	8.30
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20210527	Client:	SoundEarth Strategies
Date Received:	05/27/21	Project:	SOU_1249-001-06_ 20210527
Date Extracted:	06/01/21	Lab ID:	105526-03
Date Analyzed:	06/03/21	Data File:	105526-03.097
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-06_ 20210527
Date Extracted:	06/01/21	Lab ID:	I1-344 mb
Date Analyzed:	06/02/21	Data File:	I1-344 mb.044
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/08/21

Date Received: 05/27/21

Project: SOU_1249-001-06_ 20210527, F&BI 105526

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 105528-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<1	99	98	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	93	85-115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

SAMPLE CHAIN OF CUSTODY *ME* 65-27-21

~~SECRET~~
A12

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)	
PROJECT NAME/NO.	PO #
Ballard Blocks II Property; Arsenic Treatment System Water Sampling	1249-001-06
REMARKS	

Page # 1 of 1

TURNAROUND TIME
Standard (5 days)

Rush charges authorized by: _____

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

ANALYSES REQUESTED												
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	Total Arsenic (200.8)				Notes
1249_GW_INF_20210527	Influent	N/A	01	5/27/21	1225	WATER	1	X				HNO ₃ preserved
1249_GW_MID_20210527	Mid-Treatment	N/A	02	5/27/21	1220	WATER	1	X				HNO ₃ preserved
1249_GW_EFF_20210527	Effluent	N/A	03	5/27/21	1215	WATER	1	X				HNO ₃ preserved
												
Samples received at 4 °C												

SoundEarth
Strategies

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	JONATHAN LEFFLER	SoundEarth	5/27/21	1335
Received by: 	Ann Wbraga	FXB	5/27	1335
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

July 8, 2021

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on June 30, 2021 from the SOU_1249-001-06_ 20210630, F&BI 106558 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Chris Carter, Jonathan Loeffler
SOU0708R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 30, 2021 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_20210630, F&BI 106558 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
106558 -01	1249_GW_INF_20210628
106558 -02	1249_GW_MID_20210628
106558 -03	1249_GW_EFF_20210628

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20210628	Client:	SoundEarth Strategies
Date Received:	06/30/21	Project:	SOU_1249-001-06_ 20210630
Date Extracted:	07/01/21	Lab ID:	106558-01
Date Analyzed:	07/01/21	Data File:	106558-01.142
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	27.4
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID_20210628	Client:	SoundEarth Strategies
Date Received:	06/30/21	Project:	SOU_1249-001-06_20210630
Date Extracted:	07/01/21	Lab ID:	106558-02
Date Analyzed:	07/01/21	Data File:	106558-02.143
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	9.43
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20210628	Client:	SoundEarth Strategies
Date Received:	06/30/21	Project:	SOU_1249-001-06_20210630
Date Extracted:	07/01/21	Lab ID:	106558-03
Date Analyzed:	07/01/21	Data File:	106558-03.144
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-06_ 20210630
Date Extracted:	07/01/21	Lab ID:	I1-409 mb
Date Analyzed:	07/01/21	Data File:	I1-409 mb.092
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/08/21

Date Received: 06/30/21

Project: SOU_1249-001-06_ 20210630, F&BI 106558

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 106511-05 x10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<10	95	95	70-130	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	95	85-115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

106555

106558

SAMPLE CHAIN OF CUSTODY

ME

06/30/2021

412

Send Report to Chris Cass, Chris Carter, Jonathan Loeffler

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, Washington 98102

Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)

PROJECT NAME/NO.

PO #

Ballard Blocks II Property, Arsenic Treatment System Water Sampling

1249-001-06

TURNAROUND TIME
Standard (5 days)

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED				Notes
								Total Arsenic (200.8)				
1249_GW_INF_20210628	Influent	N/A	01	6/28/21	1425	WATER	1	X				HNO3 preserved
1249_GW_MID_20210628	Mid-Treatment	N/A	02	6/28/21	1420	WATER	1	X				HNO3 preserved
1249_GW_EFF_20210628	Effluent	N/A	03	6/28/21	1415	WATER	1	X				HNO3 preserved
6/28/21												

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

JONATHAN LOEFFLER

SOUNDEARTH

6/30/21

1655

Received by:

NHAN PHAN

FEBI

6/30/21

1655

Relinquished by:

Received by:

Samples received at 200C



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

August 5, 2021

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on July 29, 2021 from the SOU_1249-001-06/210_ 20210729, F&BI 107501 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Chris Carter, Jonathan Loeffler
SOU0805R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 29, 2021 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06/210_ 20210729, F&BI 107501 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
107501 -01	1249_SSGW_20210728

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_SSGW_20210728	Client:	SoundEarth Strategies
Date Received:	07/29/21	Project:	SOU_1249-001-06/210_ 20210729
Date Extracted:	08/02/21	Lab ID:	107501-01
Date Analyzed:	08/02/21	Data File:	107501-01.128
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	28.7
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-06/210_ 20210729
Date Extracted:	08/02/21	Lab ID:	I1-462 mb
Date Analyzed:	08/02/21	Data File:	I1-462 mb.102
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/05/21

Date Received: 07/29/21

Project: SOU_1249-001-06/210_ 20210729, F&BI 107501

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 107452-01 x10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	77.3	58 b	58 b	70-130	0 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	88	85-115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

107501

SAMPLE CHAIN OF CUSTODY

ME 7/29/21

AI1

Send Report to Chris Cass; Chris Carter; Jonathan Loeffler

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature) <i>Jonathan Loeffler</i>	
PROJECT NAME/NO.	PO #
Ballard Blocks II Property - Subgrade	1249-001-06 /
Groundwater Monitoring	210
REMARKS	

Page # 1 of 1
TURNAROUND TIME
Standard (5 day)
RUSH
Rush charges authorized by:
SAMPLE DISPOSAL
Dispose after 30 days
Return samples
Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED		Notes
								Total As (200.8)		
1249_SSGW_20210728	Sub slab GW	N/A	01	7/28/21	1515	Water	1	X		HNO ₃ preserved
Samples received at 4 °C										

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Jonathan Loeffler</i>	JONATHAN LOEFFLER	SOUNDEARTH	7/29/21	1725
Received by: <i>B. J.</i>	BISLAT TADDESE	FB1	7/29/21	1725
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

August 5, 2021

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on July 29, 2021 from the SOU_1249-001-06_ 20210729, F&BI 107503 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Chris Carter, Jonathan Loeffler
SOU0805R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 29, 2021 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20210729, F&BI 107503 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
107503 -01	1249_GW_INF_20210728
107503 -02	1249_GW_MID_20210728
107503 -03	1249_GW_EFF_20210728

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20210728	Client:	SoundEarth Strategies
Date Received:	07/29/21	Project:	SOU_1249-001-06_ 20210729
Date Extracted:	08/02/21	Lab ID:	107503-01
Date Analyzed:	08/02/21	Data File:	107503-01.125
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	26.7
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID_20210728	Client:	SoundEarth Strategies
Date Received:	07/29/21	Project:	SOU_1249-001-06_20210729
Date Extracted:	08/02/21	Lab ID:	107503-02
Date Analyzed:	08/02/21	Data File:	107503-02.126
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	13.1
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20210728	Client:	SoundEarth Strategies
Date Received:	07/29/21	Project:	SOU_1249-001-06_ 20210729
Date Extracted:	08/02/21	Lab ID:	107503-03
Date Analyzed:	08/02/21	Data File:	107503-03.127
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-06_ 20210729
Date Extracted:	08/02/21	Lab ID:	I1-462 mb
Date Analyzed:	08/02/21	Data File:	I1-462 mb.102
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/05/21

Date Received: 07/29/21

Project: SOU_1249-001-06_ 20210729, F&BI 107503

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 107452-01 x10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	77.3	58 b	58 b	70-130	0 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	88	85-115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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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.

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

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ip - Recovery fell outside of control limits due to sample matrix effects.

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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.

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

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

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

SAMPLE CHAIN OF CUSTODY

ME 7/29/21

AI

107503

Page # 1 of 1

Send Report to Chris Cass; Chris Carter; Jonathan Loeffler

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature) [Signature]

PROJECT NAME/NO. [Blank]

PO # 1249-001-06

Ballard Blocks II Property; Arsenic Treatment System Water Sampling

REMARKS

TURNAROUND TIME
Standard (5 days)

Rush charges authorized by: [Blank]

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED				Notes
								Total Arsenic (200.8)				
1249_GW_INF_20210728	Influent	N/A	B1	7/28/21	1615	WATER	1	X				HNO3 preserved
1249_GW_MID_20210728	Mid-Treatment	N/A	B2	7/28/21	1610	WATER	1	X				HNO3 preserved
1249_GW_EFF_20210728	Effluent	N/A	B3	7/28/21	1605	WATER	1	X				HNO3 preserved
Signature: JAG 7/28/21 Samples received at 4 °C												

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

September 1, 2021

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on August 27, 2021 from the SOU_1249-001-06_ 20210827, F&BI 108476 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Chris Carter, Jonathan Loeffler
SOU0901R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 27, 2020 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20210827, F&BI 108476 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
108476 -01	1249_GW_INF_20210826
108476 -02	1249_GW_MID_20210826
108476 -03	1249_GW_EFF_20210826

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20210826	Client:	SoundEarth Strategies
Date Received:	08/27/21	Project:	SOU_1249-001-06_ 20210827
Date Extracted:	08/30/21	Lab ID:	108476-01
Date Analyzed:	08/30/21	Data File:	108476-01.043
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	29.8
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID_20210826	Client:	SoundEarth Strategies
Date Received:	08/27/21	Project:	SOU_1249-001-06_ 20210827
Date Extracted:	08/30/21	Lab ID:	108476-02
Date Analyzed:	08/30/21	Data File:	108476-02.054
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	18.5
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20210826	Client:	SoundEarth Strategies
Date Received:	08/27/21	Project:	SOU_1249-001-06_20210827
Date Extracted:	08/30/21	Lab ID:	108476-03
Date Analyzed:	08/30/21	Data File:	108476-03.055
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-06_ 20210827
Date Extracted:	08/30/21	Lab ID:	I1-535 mb
Date Analyzed:	08/30/21	Data File:	I1-535 mb.040
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/21

Date Received: 08/27/21

Project: SOU_1249-001-06_ 20210827, F&BI 108476

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 108476-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	29.8	106	109	70-130	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	99	85-115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

ME 08/27/21 AT3

108476

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, Washington 98102

Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature) 		Page # <u>1</u> of <u>1</u>
PROJECT NAME/NO. Ballard Blocks II Property; Arsenic Treatment System Water Sampling		TURNAROUND TIME <u>Standard (5 days)</u>
PO # 1249-001-06		
REMARKS Rush charges authorized by: _____ SAMPLE DISPOSAL Dispose after 30 days Return samples Will call with instructions		

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED				Notes
								Total Arsenic (200.8)				
1249_GW_INF_20210826	Influent	N/A	61	8/26/21	0810	Water	1	X				HNO ₃ preserved
1249_GW_MID_20210826	Mid-Treatment	N/A	62	8/26/21	0805	Water	1	X				HNO ₃ preserved
1249_GW_EFF_20210826	Effluent	N/A	63	8/26/21	0800	Water	1	X				HNO ₃ preserved
												

Sound Strategies