



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

April 17, 2023

Mr. John Rapp
Toxics Cleanup Program
Washington State Department of Ecology
Northwest Regional Office
15700 Dayton Avenue North
Shoreline, Washington 98133

SUBJECT: YEAR 4 ANNUAL GROUNDWATER MONITORING EVENT: MARCH 2023
Former Wesmar Company, Inc. (Ballard Blocks II Property)
1401 and 1451 Northwest 46th Street, Seattle, Washington
Project No. 1249-001-06

Dear Mr. Rapp:

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 4 (2023) annual groundwater monitoring event performed in March 2023 at the Former Wesmar Company, Inc. Site, which is located at 1401 and 1451 Northwest 46th Street in Seattle, Washington (the Site), and is also identified as the Ballard Blocks II property.

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

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 Year 4 (2023) annual subgrade drainage water quality monitoring event in March 2023 and the permanent arsenic treatment system performance monitoring activities performed at the Site during the fourth quarter of 2022 and first quarter of 2023.

October 2022 through March 2023 Permanent Arsenic Treatment System Operations and Maintenance 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 October 23, November 18, and December 21, 2022, and January 23, February 23, and March 22, 2023. During the October 2022 through March 2023 operations and maintenance monitoring events and prior to discharge to the municipal stormwater system, water samples were collected from (1) a pre-treatment influent water port (INF) located immediately ahead of the three arsenic-targeting media treatment vessels; (2) a mid-treatment system monitoring port (MID01) located between the first and second arsenic-targeting media treatment vessels; (3) a second mid-treatment system monitoring port (MID02) located between the second and third arsenic-targeting media treatment vessels; (4) and a post-treatment effluent water monitoring port (EFF) located immediately downstream of the permanent arsenic-treatment system vessels. The approximate locations of these four water monitoring ports (INF, MID01, MID02, and EFF) are shown on the general design schematic of the treatment system in Attachment A.

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 the project number; placed on ice in a cooler; and transported to Friedman & Bruya, Inc. of Seattle, Washington (F&B) 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 4 Annual Subgrade Drainage Groundwater Monitoring Event (March 2023)

A subgrade drainage groundwater sample was collected from the subgrade groundwater collection sump inlet pipes on March 22, 2023. 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 March 22, 2023, water was observed as flowing from the pipe on the northern side and from 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 pipes producing water from the sub-slab drainage system on March 22, 2023. The water volume was collected from the pipes that were producing water flow. The total water flow rate into the subgrade sump during the monitoring event was approximately 0.6 gallons per minute.

Water quality analytical results for the permanent arsenic treatment system performance monitoring activities are summarized below and in 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.

RESULTS OF OCTOBER 2023 THROUGH MARCH 2023 PERMANENT ARSENIC TREATMENT SYSTEM PERFORMANCE MONITORING EVENTS

Effluent water samples collected following treatment through the permanent arsenic treatment system included the sample IDs listed below:

- 1249_GW_EFF_20221023
- 1249_GW_EFF_20221118
- 1249_GW_EFF_20221221
- 1249_GW_EFF_20230123
- 1249_GW_EFF_20230223
- 1249_GW_EFF_20230322

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 effluent water samples collected during treatment system performance monitoring events on October 23, November 18, and December 21, 2022, and January 23, February 23, and March 22, 2023.

RESULTS OF YEAR 4 ANNUAL SUBGRADE DRAINAGE GROUNDWATER MONITORING EVENT (MARCH 2023)

The March 2023 Year 4 annual flow-weighted water sample (sample ID 1249_SSGW_20230322; Table 2) was collected from the subgrade groundwater drainage system on March 22, 2023, prior to treatment through the permanent arsenic treatment system. In the flow-weighted pre-treatment subgrade groundwater sample, total arsenic was detected at a concentration of 18.4 $\mu\text{g/L}$, 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_20230322) was collected on March 22, 2023, following treatment of the collected subgrade drainage water through the permanent arsenic treatment system. Arsenic was not detected at a concentration exceeding the laboratory reporting limit of 1 $\mu\text{g/L}$ in the effluent water sample. The arsenic laboratory reporting limit is below the MTCA Method A cleanup level of 5 $\mu\text{g/L}$ for arsenic in groundwater for post-treatment effluent discharge water.

SUMMARY OF FINDINGS AND CONCLUSIONS

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

Total arsenic concentrations in both pre-treatment and post-treatment subgrade discharge water were below the aquatic life marine/acute cleanup standard for arsenic in surface water of 69 $\mu\text{g/L}$ and below the marine/chronic cleanup standard for arsenic in surface water of 36 $\mu\text{g/L}$ (Section 240 of Chapter 173-201A of the Washington Administrative Code). These cleanup standards are relevant to Salmon Bay, the surface water body that receives treated effluent from the Site.

Long-term groundwater monitoring is planned to continue as outlined in the Revised Cleanup Action Plan of the Consent Decree. The next subgrade drainage water monitoring event is planned for the first quarter of 2024 (the Year 5 annual 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 the 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



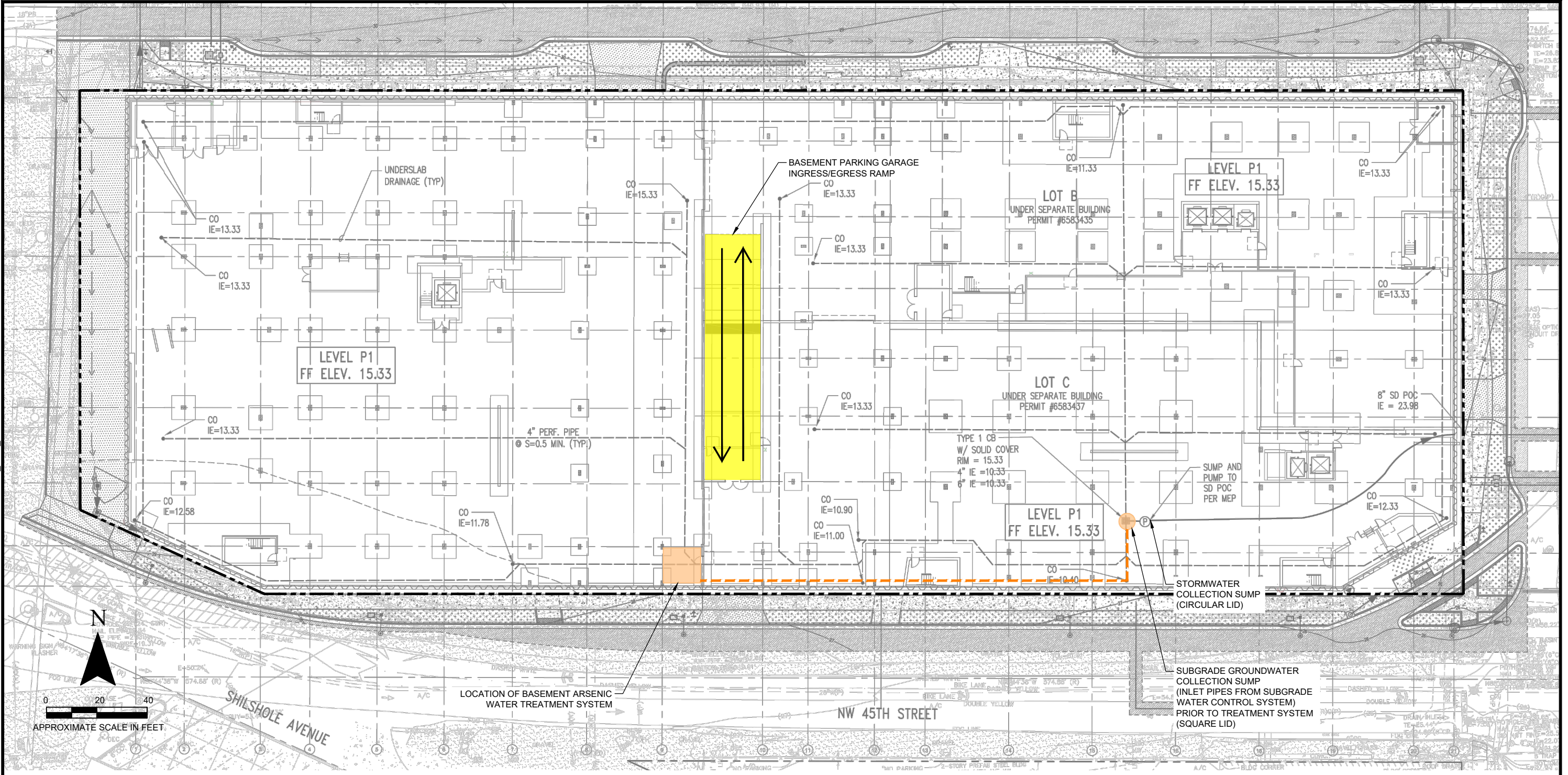
Chris M. Carter
Managing Principal

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. #210404
Friedman & Bruya, Inc. #211307
Friedman & Bruya, Inc. #212355
Friedman & Bruya, Inc. #301365
Friedman & Bruya, Inc. #302347
Friedman & Bruya, Inc. #303387
Friedman & Bruya, Inc. #303385

cc: Eric Silvers, Regency Centers Corporation

JSL/kar

FIGURE



LEGEND

- PROPERTY BOUNDARY
- BASEMENT PARKING GARAGE INGRESS/EGRESS RAMP

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

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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 Property
1401 and 1451 Northwest 46th Street
Seattle, Washington

Sample IDs	Date Sampled	Pre-Treatment Influent Water Total Arsenic Analytical Results ⁽¹⁾ (micrograms per liter)	First Mid-Treatment System Total Arsenic Analytical Results ⁽¹⁾ (micrograms per liter)	Second 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
1249_GW_INF/MID/EFF_20210929	09/29/21	18.2	13.4	--	<1
1249_GW_INF/MID/EFF_20211020	10/20/21	20.7	17.4	--	<1
1249_GW_INF/MID/EFF_20211118	11/18/21	18.2	17.8	--	<1
1249_GW_INF/MID/EFF_20211220	12/20/21	14.0	15.7	--	1.46
1249_GW_INF/MID/EFF_20220122	01/22/22	10.6	10.1	--	1.20
1249_GW_INF/MID/EFF_20220216	02/16/22	20.9	20.7	--	<1
--	--	--	First mid-treatment system sampling port relabeled as MID01 in March 2022	Second mid-treatment system sampling port (MID02) installed in March 2022	--
1249_GW_INF/MID01/MID02/EFF_20220324	03/24/22	15.3	15.4	4.74	<1
1249_GW_INF/MID01/MID02/EFF_20220420	04/20/22	17.0	16.7	5.53	1.26
1249_GW_INF/MID01/MID02/EFF_20220518	05/18/22	16.7	17.0	6.63	2.20
1249_GW_INF/MID01/MID02/EFF_20220622	06/22/22	16.2	1.61	1.12	<1
1249_GW_INF/MID01/MID02/EFF_20220725	07/25/22	20.3	4.29	4.50	<1
1249_GW_INF/MID01/MID02/EFF_20220818	08/18/22	18.8	1.32	<1	<1
1249_GW_INF/MID01/MID02/EFF_20220921	09/21/22	21.8	7.06	<1	<1
1249_GW_INF/MID01/MID02/EFF_20221023	10/23/22	24.9	16.2	<1	<1
1249_GW_INF/MID01/MID02/EFF_20221118	11/18/22	18.1	<2	<2	<2
1249_GW_INF/MID01/MID02/EFF_20221221	12/21/22	18.8	5.16	<1	<1
1249_GW_INF/MID01/MID02/EFF_20230123	01/23/23	14.0	3.18	<1	<1
1249_GW_INF/MID01/MID02/EFF_20230223	02/23/23	15.6	1.30	1.02	<1
1249_GW_INF/MID01/MID02/EFF_20230322	03/22/23	18.5	1.57	<1	<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

< = not detected at a concentration exceeding the laboratory reporting limit

EPA = US Environmental Protection Agency

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 Property
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
1249_SSGW_20220324	03/24/22	1.3	15.7
1249_SSGW_20220921	09/21/22	0.99	15.9
1249_SSGW_20230322	03/22/23	0.6	18.4
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

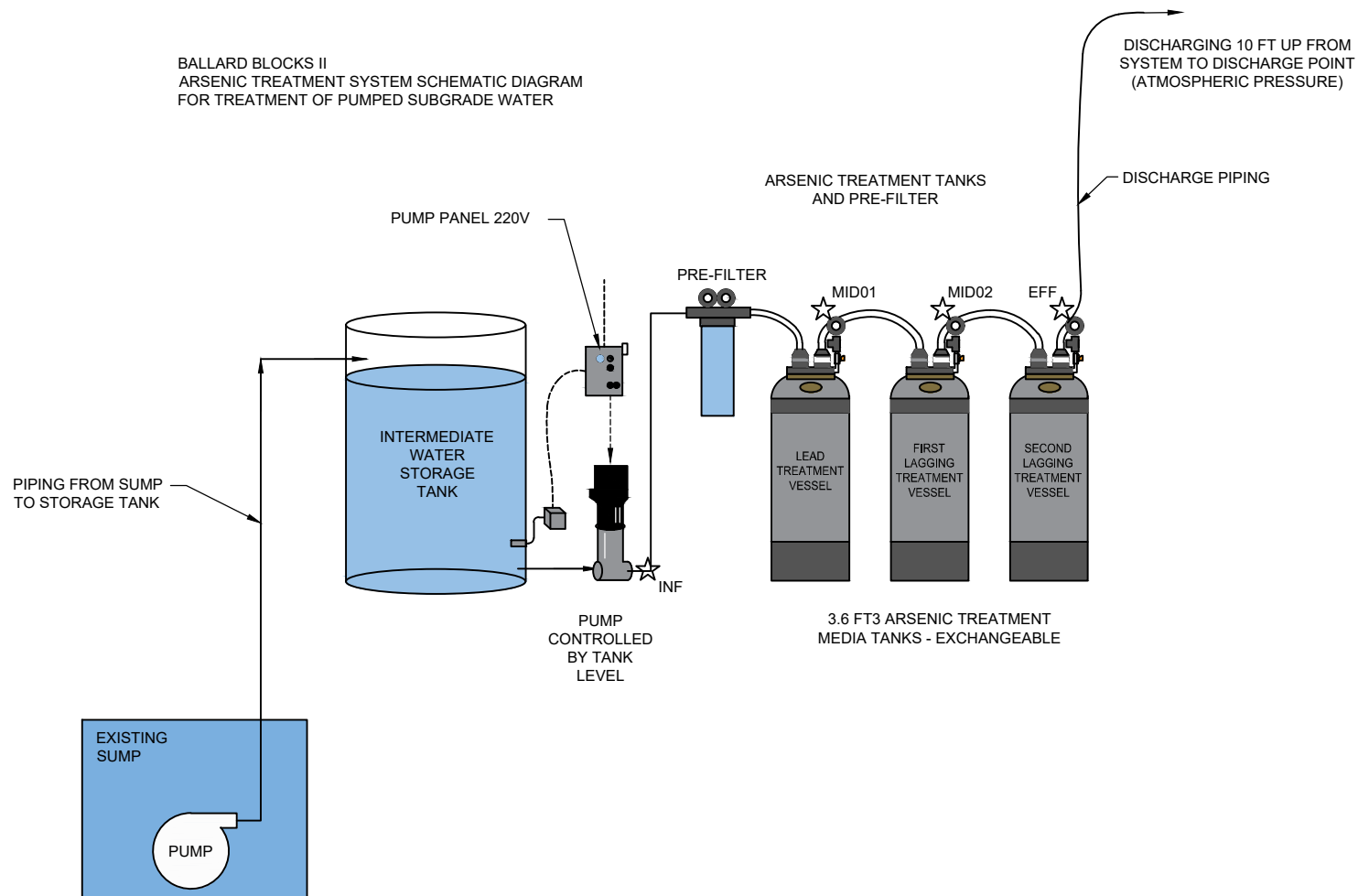
MTCA = Washington State Model Toxics Control Act

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



LEGEND

INF	PRE-TREATMENT SYSTEM WATER MONITORING PORT
MID01	FIRST MID-TREATMENT SYSTEM WATER MONITORING PORT
MID02	SECOND MID-TREATMENT SYSTEM WATER MONITORING PORT
EFF	POST-TREATMENT SYSTEM EFFLUENT WATER MONITORING PORT
☆	WATER MONITORING PORT

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SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #1249-001

FIGURE 1
ARSENIC TREATMENT SYSTEM
SCHEMATIC DIAGRAM FOR
TREATMENT OF PUMPED
SUBGRADE WATER

ATTACHMENT B

Laboratory Analytical Reports

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

November 4, 2022

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 October 26, 2022 from the SOU_1249-001-06_ 20221026, F&BI 210404 project. There is 1 page 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
SOU1104R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 26, 2022 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20221026, F&BI 210404 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
210404 -01	1249_GW_INF_20221023
210404 -02	1249_GW_MID01_20221023
210404 -03	1249_GW_MID02_20221023
210404 -04	1249_GW_EFF_20221023

The samples were sent to Fremont Analytical for total arsenic analysis. The report is enclosed.

210404

SAMPLE CHAIN OF CUSTODY

10/26/22

A12

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.

Ballard Blocks II Property; Arsenic
Treatment System Water Sampling

PO #

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

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_20221023	Influent	N/A	01	10/23/22	1545	WATER	1	X			HNO ₃ preserved
1249_GW_MID01_20221023	First Mid-Treatment	N/A	02		1540		1	X			HNO ₃ preserved
1249_GW_MID02_20221023	Second Mid-Treatment	N/A	03		1535		1	X			HNO ₃ preserved
1249_GW_EFF_20221023	Effluent	N/A	04		1530		1	X			HNO ₃ preserved
<i>[Signature]</i> 10/23/22											

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: *[Signature]*

JONATHAN LOEFFLER

SOUNDEARTH

10/24

17:00

Received by: *[Signature]*

Eric Llan

FERB

10/26

17:00

Relinquished by:

Received by:

Samples received at 4:00





Fremont
Analytical

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Friedman & Bruya
Michael Erdahl
3012 16th Ave. W.
Seattle, WA 98119

RE: 201404
Work Order Number: 2210516

November 03, 2022

Attention Michael Erdahl:

Fremont Analytical, Inc. received 4 sample(s) on 10/27/2022 for the analyses presented in the following report.

Total Metals by EPA Method 200.8

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

*DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.3 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910*

Original

www.fremontanalytical.com

CLIENT: Friedman & Bruya
Project: 201404
Work Order: 2210516

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2210516-001	1249_GW_INF_20221023	10/23/2022 3:45 PM	10/27/2022 8:30 AM
2210516-002	1249_GW_MID1_20221023	10/23/2022 3:40 PM	10/27/2022 8:30 AM
2210516-003	1249_GW_MID2_20221023	10/23/2022 3:35 PM	10/27/2022 8:30 AM
2210516-004	1249_GW_EFF_20221023	10/23/2022 3:30 PM	10/27/2022 8:30 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: Friedman & Bruya
Project: 201404

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2210516
Date Reported: 11/3/2022

CLIENT: Friedman & Bruya
Project: 201404

Lab ID: 2210516-001
Client Sample ID: 1249_GW_INF_20221023
Collection Date: 10/23/2022 3:45:00 PM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 38337		Analyst: EH
Arsenic	24.9	1.00		µg/L	1	11/2/2022 5:30:22 PM

Lab ID: 2210516-002
Client Sample ID: 1249_GW_MID1_20221023
Collection Date: 10/23/2022 3:40:00 PM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 38337		Analyst: EH
Arsenic	16.2	1.00		µg/L	1	11/2/2022 5:33:21 PM

Lab ID: 2210516-003
Client Sample ID: 1249_GW_MID2_20221023
Collection Date: 10/23/2022 3:35:00 PM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 38337		Analyst: EH
Arsenic	ND	1.00		µg/L	1	11/2/2022 5:36:19 PM

Lab ID: 2210516-004
Client Sample ID: 1249_GW_EFF_20221023
Collection Date: 10/23/2022 3:30:00 PM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 38337		Analyst: EH
Arsenic	ND	1.00		µg/L	1	11/2/2022 5:39:17 PM



Work Order: 2210516
CLIENT: Friedman & Bruya
Project: 201404

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: MB-38337		SampType: MBLK		Units: µg/L		Prep Date: 11/1/2022			RunNo: 79517		
Client ID: MBLKW		Batch ID: 38337					Analysis Date: 11/2/2022			SeqNo: 1639144	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	ND	1.00									
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Sample ID: LCS-38337		SampType: LCS			Units: µg/L		Prep Date: 11/1/2022			RunNo: 79517		
Client ID: LCSW		Batch ID: 38337			Analysis Date: 11/2/2022			SeqNo: 1639145				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Arsenic	103	1.00	100.0	0	103	85	115				
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Sample ID: 2210477-001ADUP		SampType: DUP			Units: µg/L		Prep Date: 11/1/2022			RunNo: 79517		
Client ID: BATCH		Batch ID: 38337			Analysis Date: 11/2/2022			SeqNo: 1639147				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Arsenic	ND	1.00						0		30	
---------	----	------	--	--	--	--	--	---	--	----	--

Sample ID: 2210477-001AMS		SampType: MS			Units: µg/L		Prep Date: 11/1/2022			RunNo: 79517		
Client ID: BATCH		Batch ID: 38337			Analysis Date: 11/2/2022			SeqNo: 1639148				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Arsenic	102	1.00	100.0	0.4302	102	70	130				
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Sample ID: 2210483-001AMS		SampType: MS			Units: µg/L		Prep Date: 11/1/2022			RunNo: 79517		
Client ID: BATCH		Batch ID: 38337			Analysis Date: 11/2/2022			SeqNo: 1639158				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Arsenic	100	1.00	100.0	1.376	98.6	70	130				
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Client Name: FB

Work Order Number: 2210516

Logged by: Gabrielle Coeuille

Date Received: 10/27/2022 8:30:00 AM

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
4. Shipping container/cooler in good condition? Yes ☒ No ☐
5. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
7. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
8. Sample(s) in proper container(s)? Yes ☒ No ☐
9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
10. Are samples properly preserved? Yes ☒ No ☐
11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
14. Does paperwork match bottle labels? Yes ☒ No ☐
15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
16. Is it clear what analyses were requested? Yes ☒ No ☐
17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

19. Additional remarks:

Item Information

Item #	Temp °C
Sample 1	1.3

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

2210516

Phone # (206) 285-8282 merdahl@friedmanandbrya.com

TURNAROUND TIME

☒ Standard TAT

☐ RUSH _____

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Page 8 of 8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

December 1, 2022

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 November 21, 2022 from the SOU_1249-001-06_ 20221121, F&BI 211307 project. There are 8 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
SOU1201R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on November 21, 2022 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20221121, F&BI 211307 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
211307 -01	1249_GW_INF_20221118
211307 -02	1249_GW_MID01_20221118
211307 -03	1249_GW_MID02_20221118
211307 -04	1249_GW_EFF_20221118

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_20221118	Client:	SoundEarth Strategies
Date Received:	11/21/22	Project:	SOU_1249-001-06_ 20221121
Date Extracted:	11/23/22	Lab ID:	211307-01 x2
Date Analyzed:	11/28/22	Data File:	211307-01 x2.149
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	18.1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20221118	Client:	SoundEarth Strategies
Date Received:	11/21/22	Project:	SOU_1249-001-06_ 20221121
Date Extracted:	11/23/22	Lab ID:	211307-02 x2
Date Analyzed:	11/28/22	Data File:	211307-02 x2.150
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	<2
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20221118	Client:	SoundEarth Strategies
Date Received:	11/21/22	Project:	SOU_1249-001-06_20221121
Date Extracted:	11/23/22	Lab ID:	211307-03 x2
Date Analyzed:	11/28/22	Data File:	211307-03 x2.151
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<2
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20221118	Client:	SoundEarth Strategies
Date Received:	11/21/22	Project:	SOU_1249-001-06_ 20221121
Date Extracted:	11/23/22	Lab ID:	211307-04 x2
Date Analyzed:	11/28/22	Data File:	211307-04 x2.189
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	<2
---------	----

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_ 20221121
Date Extracted:	11/23/22	Lab ID:	I2-835 mb
Date Analyzed:	11/23/22	Data File:	I2-835 mb.049
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: 12/01/22

Date Received: 11/21/22

Project: SOU_1249-001-06_ 20221121, F&BI 211307

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

Laboratory Code: 211253-02 (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	1.25	100	101	70-130	1

Laboratory Code: Laboratory Control Sample

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

11/21/22

M1

211307

Send Report to Chris Cassi, 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

SAMPLES (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

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_20221118	Influent	N/A	01	11/18/22	1335	WATER	1	X			HNO ₃ preserved
1249_GW_MID01_20221118	First Mid-Treatment	N/A	02		1330		1	X			HNO ₃ preserved
1249_GW_MID02_20221118	Second Mid-Treatment	N/A	03		1325		1	X			HNO ₃ preserved
1249_GW_EFF_20221118	Effluent	N/A	04		1320		1	X			HNO ₃ preserved
<i>[Handwritten signature]</i> 11/18/22											

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: *[Signature]*

Received by: *[Signature]*

JONATHAN LOEFFLER

SOUNDEARTH

11/21/22

1425

Relinquished by:

Received by: *[Signature]*

ANAPHAN

F8B

11/21/22

14:25

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

January 3, 2023

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 December 22, 2022 from the SOU_1249-001-06_ 20221222, F&BI 212355 project. There are 8 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
SOU0103R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on December 22, 2022 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20221222, F&BI 212355 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
212355 -01	1249_GW_INF_20221221
212355 -02	1249_GW_MID01_20221221
212355 -03	1249_GW_MID02_20221221
212355 -04	1249_GW_EFF_20221221

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_20221221	Client:	SoundEarth Strategies
Date Received:	12/22/22	Project:	SOU_1249-001-06_20221222, F&BI 212355
Date Extracted:	12/27/22	Lab ID:	212355-01
Date Analyzed:	12/28/22	Data File:	212355-01.099
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	18.8
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20221221	Client:	SoundEarth Strategies
Date Received:	12/22/22	Project:	SOU_1249-001-06_20221222, F&BI 212355
Date Extracted:	12/27/22	Lab ID:	212355-02
Date Analyzed:	12/28/22	Data File:	212355-02.100
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	5.16
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20221221	Client:	SoundEarth Strategies
Date Received:	12/22/22	Project:	SOU_1249-001-06_20221222, F&BI 212355
Date Extracted:	12/27/22	Lab ID:	212355-03
Date Analyzed:	12/28/22	Data File:	212355-03.101
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:	1249_GW_EFF_20221221	Client:	SoundEarth Strategies
Date Received:	12/22/22	Project:	SOU_1249-001-06_20221222, F&BI 212355
Date Extracted:	12/27/22	Lab ID:	212355-04
Date Analyzed:	12/28/22	Data File:	212355-04.102
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_20221222, F&BI 212355
Date Extracted:	12/27/22	Lab ID:	I2-928 mb
Date Analyzed:	12/28/22	Data File:	I2-928 mb.054
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/03/23

Date Received: 12/22/22

Project: SOU_1249-001-06_ 20221222, F&BI 212355

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

Laboratory Code: 212351-01 (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	1.73	117	114	70-130	3

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.

212355

SAMPLE CHAIN OF CUSTODY

ME 12-22-22

M-2

Send report to Chris Cass, Chris Carter, Jonathan Loeffler

Company SoundEarth Strategies, Inc.

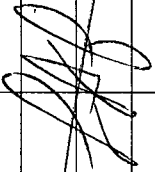
Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) <i>Jonathan Loeffler</i>		PO #
PROJECT NAME/NO.		1249-001-06
Ballard Blocks II Property: Arsenic Treatment System Water Sampling		
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_20221221	Influent	N/A	01	12/21/22	2115	WATER	1	X			HNO3 preserved
1249_GW_MID01_20221221	First Mid-Treatment	N/A	02		2110		1	X			HNO3 preserved
1249_GW_MID02_20221221	Second Mid-Treatment	N/A	03		2105		1	X			HNO3 preserved
1249_GW_EFF_20221221	Effluent	N/A	04		2100		1	X			HNO3 preserved
Signature:  Date: 12/21/22											

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Jonathan Loeffler</i>	JONATHAN LOEFFLER	SOUNDEARTH	12/22/22	1615
Received by: <i>D. Webb</i>	Liz Webber-Bry	EPB	12/22/22	1615
Relinquished by:				
Received by:				

SoundEarth
Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

January 31, 2023

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

Dear Mr Cass:

Included are the results from the testing of material submitted on January 24, 2023 from the SOU_1249-001-06_20230124, F&BI 301365 project. There are 8 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
SOU0131R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 24, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_20230124, F&BI 301365 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
301365 -01	1249_GW_INF_20230123
301365 -02	1249_GW_MID01_20230123
301365 -03	1249_GW_MID02_20230123
301365 -04	1249_GW_EFF_20230123

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_20230123	Client:	SoundEarth Strategies
Date Received:	01/24/23	Project:	SOU_1249-001-06_20230124
Date Extracted:	01/26/23	Lab ID:	301365-01
Date Analyzed:	01/26/23	Data File:	301365-01.133
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	14.0
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20230123	Client:	SoundEarth Strategies
Date Received:	01/24/23	Project:	SOU_1249-001-06_20230124
Date Extracted:	01/26/23	Lab ID:	301365-02
Date Analyzed:	01/26/23	Data File:	301365-02.134
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	3.18
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20230123	Client:	SoundEarth Strategies
Date Received:	01/24/23	Project:	SOU_1249-001-06_20230124
Date Extracted:	01/26/23	Lab ID:	301365-03
Date Analyzed:	01/26/23	Data File:	301365-03.135
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:	1249_GW_EFF_20230123	Client:	SoundEarth Strategies
Date Received:	01/24/23	Project:	SOU_1249-001-06_20230124
Date Extracted:	01/26/23	Lab ID:	301365-04
Date Analyzed:	01/26/23	Data File:	301365-04.136
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_20230124
Date Extracted:	01/26/23	Lab ID:	I3-57 mb
Date Analyzed:	01/26/23	Data File:	I3-57 mb.108
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: 01/31/23

Date Received: 01/24/23

Project: SOU_ 1249-001-06_ 20230124, F&BI 301365

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

Laboratory Code: 301355-02 (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	86	84	70-130	2

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.

301365

SAMPLE CHAIN OF CUSTODY

01-24-23 JT

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>		Page # 1 of 1
PROJECT NAME/NO. Ballard Blocks II Property; Arsenic Treatment System Water Sampling		TURNAROUND TIME Standard (5 days)
PO # 1249-001-06		Rush charges authorized by:
REMARKS		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	Total Arsenic (200.8)	ANALYSES REQUESTED	Notes
1249_GW_INF_20230123	Influent	N/A	01	1/23/23	1520	Water	1	X		HNO ₃ preserved
1249_GW_MID01_20230123	First Mid-Treatment	N/A	02		1515		1	X		HNO ₃ preserved
1249_GW_MID02_20230123	Second Mid-Treatment	N/A	03		1500		1	X		HNO ₃ preserved
1249_GW_EFF_20230123	Effluent	N/A	04		1505		1	X		HNO ₃ preserved
<i>Signature</i> 1/23/23										

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<i>Jonathan Loeffler</i>	JONATHAN LOEFFLER	SOUNDEARTH	1/24/23	1720
Received by: <i>Wesley Brand</i>	Wesley Brand	FBI	08/1/23	17:20
Relinquished by:				
Received by:				

Samples received at 2 °C

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

March 6, 2023

Chris Cass, Project Manager
SoundEarth Strategies
1011 SW Klickitat Way, Suite 104
Seattle, WA 98134

Dear Mr Cass:

Included are the results from the testing of material submitted on February 24, 2023 from the SOU_1249-001-06_ 20230224, F&BI 302347 project. There are 8 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
SOU0306R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 24, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20230224, F&BI 302347 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
302347 -01	1249_GW_INF_20230223
302347 -02	1249_GW_MID01_20230223
302347 -03	1249_GW_MID02_20230223
302347 -04	1249_GW_EFF_20230223

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_20230223	Client:	SoundEarth Strategies
Date Received:	02/24/23	Project:	SOU_1249-001-06_20230224
Date Extracted:	02/27/23	Lab ID:	302347-01
Date Analyzed:	02/27/23	Data File:	302347-01.127
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	MG

Analyte:	Concentration ug/L (ppb)
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Arsenic	15.6
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20230223	Client:	SoundEarth Strategies
Date Received:	02/24/23	Project:	SOU_1249-001-06_20230224
Date Extracted:	02/27/23	Lab ID:	302347-02
Date Analyzed:	02/27/23	Data File:	302347-02.128
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	MG

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

Arsenic	1.30
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20230223	Client:	SoundEarth Strategies
Date Received:	02/24/23	Project:	SOU_1249-001-06_20230224
Date Extracted:	02/27/23	Lab ID:	302347-03
Date Analyzed:	02/27/23	Data File:	302347-03.129
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	MG

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

Arsenic	1.02
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230223	Client:	SoundEarth Strategies
Date Received:	02/24/23	Project:	SOU_1249-001-06_20230224
Date Extracted:	02/27/23	Lab ID:	302347-04
Date Analyzed:	02/27/23	Data File:	302347-04.130
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	MG

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_ 20230224
Date Extracted:	02/27/23	Lab ID:	I3-138 mb
Date Analyzed:	02/27/23	Data File:	I3-138 mb.083
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	MG

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/06/23

Date Received: 02/24/23

Project: SOU_1249-001-06_ 20230224, F&BI 302347

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

Laboratory Code: 302347-01 (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	14.5	75	70	70-130	7

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, biased high; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

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

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

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

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

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

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

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

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

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

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

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

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

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

302347

SAMPLE CHAIN OF CUSTODY

02/24/23

K5

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) *Jonathan Loeffler*

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

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_20230223	Influent	N/A	01	2/23/23	1425	water	1	X			HNO ₃ preserved
1249_GW_MID01_20230223	First Mid-Treatment	N/A	02		1430		1	X			HNO ₃ preserved
1249_GW_MID02_20230223	Second Mid-Treatment	N/A	03		1435		1	X			HNO ₃ preserved
1249_GW_EFF_20230223	Effluent	N/A	04		1440		1	X			HNO ₃ preserved
<i>2/23/23</i>											

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: *Jonathan Loeffler*

JONATHAN LOEFFLER

SOUNDEARTH

2/24/23 1700

Received by: *Michelle*

MICHELLE NGUYEN

FBI

2/24/23

Relinquished by:

Received by:

Samples received at

4 °C



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

March 30, 2023

Chris Cass, Project Manager
SoundEarth Strategies
1011 SW Klickitat Way, Suite 104
Seattle, WA 98134

Dear Mr Cass:

Included are the results from the testing of material submitted on March 23, 2023 from the SOU_ 1249-001-06_ 20230323, F&BI 303387 project. There are 8 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, Kyle Lowery
SOU0330R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 23, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-06_ 20230323, F&BI 303387 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
303387 -01	1249_GW_INF_20230322
303387 -02	1249_GW_MID01_20230322
303387 -03	1249_GW_MID02_20230322
303387 -04	1249_GW_EFF_20230322

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_20230322	Client:	SoundEarth Strategies
Date Received:	03/23/23	Project:	SOU_1249-001-06_20230323
Date Extracted:	03/24/23	Lab ID:	303387-01
Date Analyzed:	03/24/23	Data File:	303387-01.071
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	18.5
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20230322	Client:	SoundEarth Strategies
Date Received:	03/23/23	Project:	SOU_ 1249-001-06_ 20230323
Date Extracted:	03/24/23	Lab ID:	303387-02
Date Analyzed:	03/24/23	Data File:	303387-02.072
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	1.57
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20230322	Client:	SoundEarth Strategies
Date Received:	03/23/23	Project:	SOU_ 1249-001-06_ 20230323
Date Extracted:	03/24/23	Lab ID:	303387-03
Date Analyzed:	03/24/23	Data File:	303387-03.073
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:	1249_GW_EFF_20230322	Client:	SoundEarth Strategies
Date Received:	03/23/23	Project:	SOU_ 1249-001-06_ 20230323
Date Extracted:	03/24/23	Lab ID:	303387-04
Date Analyzed:	03/24/23	Data File:	303387-04.074
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_ 20230323
Date Extracted:	03/24/23	Lab ID:	I3-219 mb2
Date Analyzed:	03/24/23	Data File:	I3-219 mb2.057
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: 03/30/23

Date Received: 03/23/23

Project: SOU_ 1249-001-06_ 20230323, F&BI 303387

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

Laboratory Code: 303359-01 (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	10.3	93 b	86 b	70-130	8 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	105	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, biased high; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

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

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

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

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

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

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

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

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

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

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

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

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

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

303387

SAMPLE CHAIN OF CUSTODY

03/23/23 L3

Send Report to Chris Cass; Chris Carter; Jonathan Loeffler,

Kyle Lowrey

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.

Ballard Blocks II Property; Arsenic
Treatment System Water Sampling

PO #

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

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_20230322	Influent	N/A	01	3/22/23	1230	water	1	X				HNO ₃ preserved
1249_GW_MID01_20230322	First Mid-Treatment	N/A	02		1225		1	X				HNO ₃ preserved
1249_GW_MID02_20230322	Second Mid-Treatment	N/A	03		1220		1	X				HNO ₃ preserved
1249_GW_EFF_20230322	Effluent	N/A	04		1215		1	X				HNO ₃ preserved
_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____												

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

March 30, 2023

Chris Cass, Project Manager
SoundEarth Strategies
1011 SW Klickitat Way, Suite 104
Seattle, WA 98134

Dear Mr Cass:

Included are the results from the testing of material submitted on March 23, 2023 from the SOU_1249-001-06/210_20230323, F&BI 303385 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, Kyle Lowery
SOU0330R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 23, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06/210_20230323, F&BI 303385 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
303385 -01	1249_SSGW_20230322

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_SSGW_20230322	Client:	SoundEarth Strategies
Date Received:	03/23/23	Project:	SOU_1249-001-06/210_20230323
Date Extracted:	03/24/23	Lab ID:	303385-01
Date Analyzed:	03/24/23	Data File:	303385-01.070
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	18.4
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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_1249-001-06/210_20230323
Date Extracted:	03/24/23	Lab ID:	I3-219 mb2
Date Analyzed:	03/24/23	Data File:	I3-219 mb2.057
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: 03/30/23

Date Received: 03/23/23

Project: SOU_1249-001-06/210_20230323, F&BI 303385

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

Laboratory Code: 303359-01 (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	10.3	93 b	86 b	70-130	8 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	105	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, biased high; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

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

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

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

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

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

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

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

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

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

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

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

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

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

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Kyle Lewis

SoundEarth Strategies, Inc.

2811 Fairview Avenue E, Suite 2000

Seattle, Washington 98102

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

SAVILE 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_2023C322	Sub slab GW	N/A	01	3/22/23	1400	water	1	X				HNO ₃ preserved
 3/22/23 												

Sound Strategies

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
	JONATHAN LEFFLER	SOUNDEARTH	3/23/23	1635
Received by: 	VINET	FBI	3-23-23	1635
Relinquished by:				
Received by:				

Samples received at 100C