SoundEarth Strategies, Inc.
1011 SW Klickitat Way, Suite 212
Seattle, Washington 98134

November 25, 2024

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

SUBJECT: YEAR 5 ANNUAL REPORT
Wesmar Company, Inc. Site (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 5 (2024) annual groundwater monitoring event performed in March 2024 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 (Figure 1).

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 the Year 5 annual 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 dated October 20, 2017 (Consent Decree).

A summary of permanent arsenic treatment system monthly operations and maintenance performance monitoring activities conducted at the Site between April 2023 and October 2024 is also included in this report.

In 2018–2019, the portion of the Site located outside of the sheet pile shoring system for the parking garage of the building, where contaminated soil remained on the property, was capped with a combination of asphalt, landscaping, and concrete sidewalks. In 2020, an environmental covenant was recorded for the remaining portions of the Site that exhibited contaminants of concern at concentrations in excess of cleanup levels, designated as Area B and Area C (Figure 2). This report also includes a discussion of the Year 5 cap inspection performed by SoundEarth on November 13, 2024, for Area B and Area C, which are subject to the conditions of the environmental covenant.

SUBGRADE DRAINAGE GROUNDWATER 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 3. 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 5 (2024) annual subgrade drainage water quality monitoring event in March 2024 and the permanent arsenic treatment system monthly operations and maintenance performance monitoring activities conducted at the Site between April 2023 and October 2024.

April 2023 through October 2024 Permanent Arsenic Treatment System Operations and Maintenance 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 3).

Permanent arsenic treatment system performance monitoring activities, performed since the Year 4 (2023) annual monitoring report, were conducted on April 26, May 22, June 26, July 26, August 17, September 25, October 25, November 21, and December 28, 2023, and January 30, February 28, and March 27, April 25, May 29, August 27, September 26, and October 28, 2024.

During the April 2023 through October 2024operations 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 upstream 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 under standard chain-of-custody protocols for laboratory analysis.

All of the collected water samples submitted for laboratory analysis were analyzed by US Environmental Protection Agency (EPA) Method 200.8 for total arsenic. The influent and effluent water samples collected from the treatment system during the operations and maintenance monitoring events between April 2023 and September 2023 were analyzed by EPA Method 200.8 for both total arsenic and dissolved arsenic.

Year 5 Annual Subgrade Drainage Groundwater Monitoring Event (March 2024)

A subgrade drainage groundwater sample was collected from the subgrade groundwater collection sump inlet pipes on March 27, 2024. 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 3).

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 27, 2024, 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 pipe 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 27, 2024. 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 0.15 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 APRIL 2023 THROUGH OCTOBER 2024 ARSENIC TREATMENT SYSTEM OPERATIONS AND MAINTENANCE PERFORMANCE MONITORING EVENTS

Effluent water samples collected following treatment through the permanent arsenic treatment system between April 2023 and October 2024 included the sample IDs listed below:

- 1249_GW_EFF_20230426
- 1249_GW_EFF_20230522
- 1249_GW_EFF_20230626
- 1249_GW_EFF_20230726
- 1249_GW_EFF_20230817
- 1249_GW_EFF_20230925
- 1249_GW_EFF_20231025
- 1249_GW_EFF_20231121
- 1249_GW_EFF_20231228
- 1249_GW_EFF_20240130
- 1249_GW_EFF_20240228
- 1249_GW_EFF_20240327
- 1249_GW_EFF_20240425
- 1249_GW_EFF_20240529
- 1249_GW_EFF_20240827
- 1249_GW_EFF_20240926
- 1249_GW_EFF_20241028

Monthly O&M sampling events were not performed in June and July 2024.

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 (µg/L) in the effluent water

samples collected during the treatment system operation and maintenance performance monitoring events between April 2023 and October 2024 (Table 1).

Dissolved arsenic was monitored for in treatment system influent and effluent water samples collected during the monitoring events performed between April 2023 and September 2023. Dissolved arsenic was detected at concentrations ranging from 19.6 µg/L to 34.4 ug/L in influent water samples. Dissolved arsenic was detected at concentrations ranging from <1 µg/L to 4.42 µg/L in effluent water samples (Table 1).

RESULTS OF YEAR 5 ANNUAL SUBGRADE DRAINAGE GROUNDWATER MONITORING EVENT (MARCH 2024)

The March 2024 Year 5 annual flow-weighted water sample (sample ID 1249_SSGW_20240327; Table 2) was collected from the subgrade groundwater drainage system on March 27, 2024, prior to treatment through the permanent arsenic treatment system. Total arsenic was detected at a concentration of 21 µg/L, which is above the MTCA Method A cleanup level of 5 µg/L, in the flow-weighted pre-treatment subgrade groundwater sample.

The post-treatment effluent water sample (sample ID 1249_GW_EFF_20240327) was collected on March 27, 2024, 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 µg/L in the effluent water sample (Table 1). The laboratory reporting limit for arsenic is below the MTCA Method A cleanup level of 5 µg/L for arsenic in groundwater for post-treatment effluent discharge water.

YEAR 5 CAP INSPECTION AND RESULTS

In 2018–2019, the portion of the Site located outside of the sheet pile shoring system for the parking garage of the building, where contaminated soil remained on the property, was capped with a combination of asphalt, landscaping, and concrete sidewalks. In 2020, an environmental covenant was recorded for the remaining portions of the Site that exhibited contaminants of concern at concentrations in excess of cleanup levels, designated as Area B and Area C (Figure 2). Area B is located along the perimeter of the property, between the sheet pile shoring system and the property boundary, and Area C is located beyond the property boundary beneath the Northwest 46th Street right-of-way (ROW; Figure 2). The carcinogenic polycyclic aromatic hydrocarbon–contaminated soil in Area C is limited to approximately 18 cubic yards in volume and is capped by the ROW improvements.

The environmental covenant includes instructions for regulatory notification, waste handling, and disposal profiling if contaminated soil within Area C is accessed. The City of Seattle (City) was previously notified in writing of the Area C soil contamination and that an environmental covenant would be recorded for Area C. If the City conducts any maintenance or repair of street and sidewalk surfaces or any excavation for utility placement or repair in Area C, the City is responsible for following appropriate health, safety, and soil management protocols, as described in the environmental covenant.

On November 13, 2024, SoundEarth performed a cap inspection of Areas B and C of the Site (Figure 2), which are subject to the conditions of the environmental covenant.

SoundEarth observed no evidence of substantial erosion, settlement, or other potentially damaging conditions to the concrete-asphalt-landscaping cap overlying Areas B and C. In addition, no major cracks were observed in the hardscape surfaces of the cap and no exposures of the underlying soil were noted

during the cap inspection of Areas B and C on November 13, 2024. Photographs of the cap overlying Areas B and C at the Site, taken on November 13, 2024, are provided in Attachment C.

SUMMARY OF FINDINGS AND CONCLUSIONS

Analytical results for pre-treatment raw water samples collected from the subgrade groundwater drainage system at the Site for each of the monitoring events performed during a 5-year monitoring period, between 2019 and 2024, revealed total arsenic concentrations consistently above the MTCA Method A cleanup level of 5 µg/L, with a range of 8.69 µg/L (in November 2019) to 28.7 µg/L (in July 2021; Table 2). The total arsenic result for the Year 5 (2024) annual monitoring event for the pre-treatment raw subgrade water sample was 21 µg/L.

Arsenic concentrations in pre- and post-treatment subgrade discharge water samples, collected during monthly treatment system performance monitoring events conducted between October 2019 and October 2024, have remained consistently below the aquatic life marine/acute cleanup standard for arsenic in surface water of 69 µg/L and below the marine/chronic cleanup standard for arsenic in surface water of 36 µg/L (Section 240 of Chapter 173-201A of the Washington Administrative Code), with the exception of a single pre-treatment influent sample collected on December 28, 2023, which had a total arsenic concentration of 38.6 µg/L. Total arsenic concentrations in post-treatment subgrade drainage water have been consistently below the MTCA Method A cleanup level of 5 µg/L for groundwater in all monthly treatment system performance monitoring events performed to date, since the treatment system operation began in October 2019 (Table 1).

Based on the results of analytical testing, the permanent arsenic treatment system performed as designed during the 5-year long-term monitoring period from October 2019 to October 2024, and effectively treated arsenic concentrations in subgrade drainage water in compliance with the conditions of the Consent Decree.

The results of the Year 5 cap inspection indicated that the cap covering Areas B and C at the Site remains in good condition (Figure 2; Attachment C). The cap covering Area B and Area C has functioned as designed since the cap was completed in 2019.

LIMITATIONS

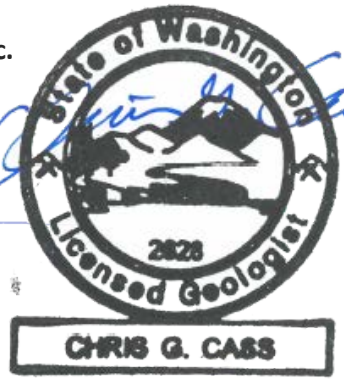
The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with SoundEarth's agreement with the client. This report is solely for the 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, Property Location Map
Figure 2, Site Boundary Definition
Figure 3, Arsenic Treatment System Basement Location Map
Table 1, Summary of Influent, Mid-Treatment, and Effluent Water Analytical Results for 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. #304402
Friedman & Bruya, Inc. #305501
Friedman & Bruya, Inc. #306427 and additional
Friedman & Bruya, Inc. #307386
Friedman & Bruya, Inc. #308369
Friedman & Bruya, Inc. #309489
Friedman & Bruya, Inc. #310516
Friedman & Bruya, Inc. #311401
Friedman & Bruya, Inc. #312480
Friedman & Bruya, Inc. #401407
Friedman & Bruya, Inc. #403009
Friedman & Bruya, Inc. #403416
Friedman & Bruya, Inc. #404444
Friedman & Bruya, Inc. #406036
Friedman & Bruya, Inc. #408514
Friedman & Bruya, Inc. #409461
Friedman & Bruya, Inc. #411018
Friedman & Bruya, Inc. #403418
C, Site Photographs

cc: Eric Silvers, Regency Centers Corporation

JSL/kak

FIGURES

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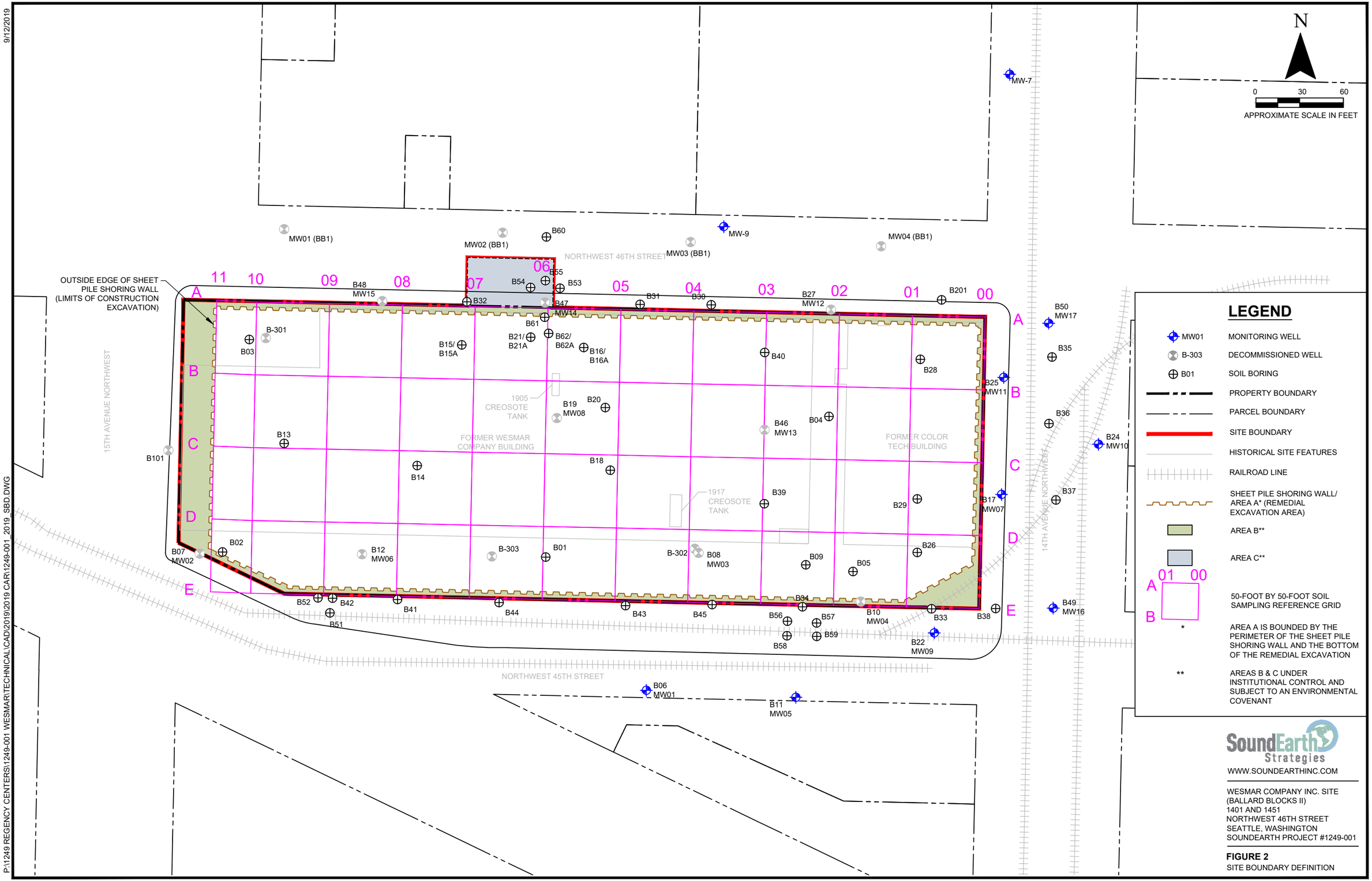
WESMAR PROPERTY
1401 AND 1451
NORTHWEST 46TH STREET
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #1249-001

FIGURE 1
PROPERTY LOCATION MAP

9/12/2019



P:\1249 REGENCY CENTERS\1249-001 WESMAR\TECHNICAL\CAD\2019\2019 CAR\1249-001_2019_SBD.DWG

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

FIGURE 2
SITE BOUNDARY DEFINITION

11/21/2019

P:\1249 REGENCY CENTERS\1249-001 WESMARTECHNICAL\CAD\2019\2019 PERMANENT AS TREATMENT SYSTEM\1249-001_2019 AS-BASE.DWG

UNDERSLAB DRAINAGE (TYP)

BASEMENT PARKING GARAGE INGRESS/EGRESS RAMP

LEVEL P1
FF ELEV. 15.33

LOT B
UNDER SEPARATE BUILDING PERMIT #6583435

LOT C
UNDER SEPARATE BUILDING PERMIT #6583437

CO IE=13.33

CO IE=15.33

CO IE=11.33

CO IE=12.58

CO IE=11.78

CO IE=10.90

CO IE=11.00

CO IE=10.40

CO IE=12.33

4" PERF. PIPE @ S=0.5 MIN. (TYP.)

TYPE 1 CB
W/ SOLID COVER
RIM = 15.33
4" IE =10.33
6" IE =10.33

8" SD POC
IE = 23.98

SUMP AND PUMP TO SD POC PER MEP

STORMWATER COLLECTION SUMP (CIRCULAR LID)

SUBGRADE GROUNDWATER COLLECTION SUMP (INLET PIPES FROM SUBGRADE WATER CONTROL SYSTEM) PRIOR TO TREATMENT SYSTEM (SQUARE LID)

LOCATION OF BASEMENT ARSENIC WATER TREATMENT SYSTEM

SHILSHOLE AVENUE

NW 45TH STREET

N

0 20 40

APPROXIMATE SCALE IN FEET

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 3
ARSENIC TREATMENT SYSTEM
BASEMENT LOCATION MAP

TABLES

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

Sample IDs	Date Sampled	Pre-Treatment Influent Water 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 Arsenic Analytical Results[1] (micrograms per liter)	
		Total	Dissolved			Total	Dissolved
Treatment System Efficacy Evaluation Period							
1249-GW_INF/MID/EFF_2091010	10/10/19	17.0	--	1.25	--	<1	--
1249-GW_INF/MID/EFF_2091017	10/17/19	13.4	--	1.05	--	<1	--
1249-GW_INF/MID/EFF_2091030	10/30/19	9.85	--	3.00	--	<1	--
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	--
1249_GW_INF/MID01/MID02/EFF_20230426	04/26/23	20.3	20.5	6.35	<1	<1	<1
1249_GW_INF/MID01/MID02/EFF_20230522	05/22/23	18.2	19.6	2.27	<1	<1	<1
1249_GW_INF/MID01/MID02/EFF_20230626	06/26/23	30.4	34.4	3.77	<1	<1	<1
1249_GW_INF/MID01/MID02/EFF_20230726	07/26/23	28.2	28.5	2.35	<1	<1	<1
1249_GW_INF/MID01/MID02/EFF_20230817	08/17/23	28.9	29.1	1.39	<1	<1	<1
1249_GW_INF/MID01/MID02/EFF_20230925	09/25/23	21.8	24.2	4.87	1.78	1.03	4.42
1249_GW_INF/MID01/MID02/EFF_20231025	10/25/23	15.3	--	5.58	2.14	1.48	--
1249_GW_INF/MID01/MID02/EFF_20231121	11/21/23	6.62	--	1.82	1.64	1.48	--
1249_GW_INF/MID01/MID02/EFF_20231228	12/28/23	38.6	--	5.89	<1	<1	--
1249_GW_INF/MID01/MID02/EFF_20240130	01/30/24	27.9	--	2.80	<1	<1	--
1249_GW_INF/MID01/MID02/EFF_20240228	02/28/24	24	--	2.7	<1	<1	--
1249_GW_INF/MID01/MID02/EFF_20240327	03/27/24	32	--	2.8	<1	<1	--
1249_GW_INF/MID01/MID02/EFF_20240425	04/25/24	25	--	2.0	<1	<1	--
1249_GW_INF/MID01/MID02/EFF_20240529	05/29/24	33	--	2.5	<1	<1	--
No Sampling Events Performed in June and July 2024	--	--	--	--	--	--	--
1249_GW_INF/MID01/MID02/EFF_20240827	08/27/24	23	--	1.0	<1	<1	--
1249_GW_INF/MID01/MID02/EFF_20240926	09/26/24	18	--	1.2	<1	<1	--
1249_GW_INF/MID01/MID02/EFF_20241028	10/28/24	19	--	3.1	<1	<1	--
MTCA Cleanup Level for Groundwater		--	--	--	--	**5**[2]	**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 Level for Groundwater.

-- = not applicable/not analyzed

< = 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**
1249_SSGW_20240327	03/27/24	0.15	**21**
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.

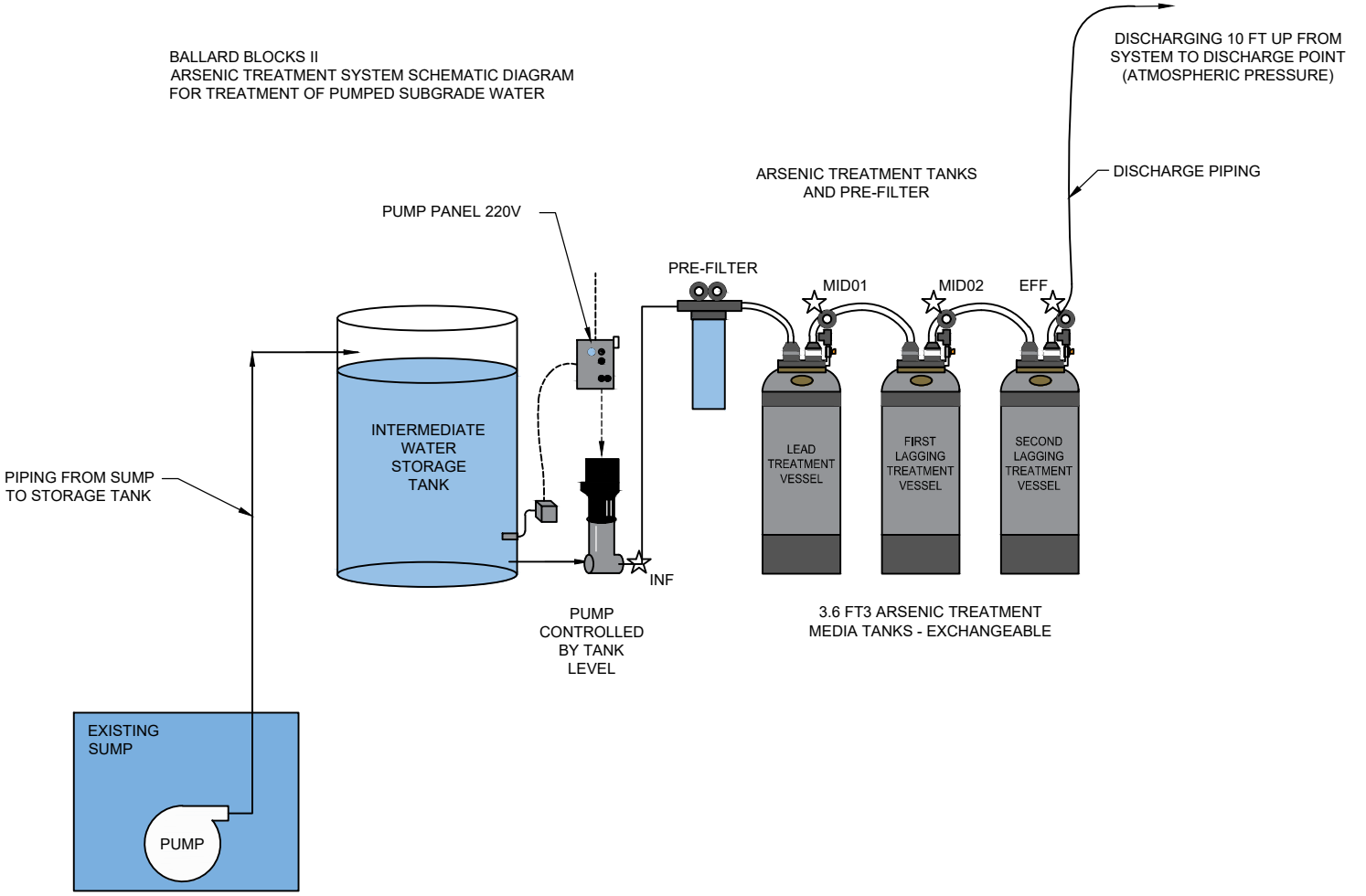
[2]MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Level for Groundwater.

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

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 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.

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

May 5, 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 April 28, 2023 from the SOU_1249-001-06_ 20230428, F&BI 304402 project. There are 12 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
SOU0505R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 28, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20230428, F&BI 304402 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
304402 -01	1249_GW_INF_20230426
304402 -02	1249_GW_MID01_20230426
304402 -03	1249_GW_MID02_20230426
304402 -04	1249_GW_EFF_20230426

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20230426	Client:	SoundEarth Strategies
Date Received:	04/28/23	Project:	SOU_1249-001-06_ 20230428
Date Extracted:	05/02/23	Lab ID:	304402-01
Date Analyzed:	05/03/23	Data File:	304402-01.106
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	20.5

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230426	Client:	SoundEarth Strategies
Date Received:	04/28/23	Project:	SOU_1249-001-06_ 20230428
Date Extracted:	05/02/23	Lab ID:	304402-04
Date Analyzed:	05/02/23	Data File:	304402-04.150
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-06_ 20230428
Date Extracted:	05/02/23	Lab ID:	I3-342 mb
Date Analyzed:	05/03/23	Data File:	I3-342 mb.085
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20230426	Client:	SoundEarth Strategies
Date Received:	04/28/23	Project:	SOU_1249-001-06_ 20230428
Date Extracted:	05/01/23	Lab ID:	304402-01
Date Analyzed:	05/01/23	Data File:	304402-01.157
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	20.3

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20230426	Client:	SoundEarth Strategies
Date Received:	04/28/23	Project:	SOU_1249-001-06_ 20230428
Date Extracted:	05/01/23	Lab ID:	304402-02
Date Analyzed:	05/01/23	Data File:	304402-02.158
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.35

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20230426	Client:	SoundEarth Strategies
Date Received:	04/28/23	Project:	SOU_1249-001-06_ 20230428
Date Extracted:	05/01/23	Lab ID:	304402-03
Date Analyzed:	05/01/23	Data File:	304402-03.159
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230426	Client:	SoundEarth Strategies
Date Received:	04/28/23	Project:	SOU_1249-001-06_ 20230428
Date Extracted:	05/01/23	Lab ID:	304402-04
Date Analyzed:	05/01/23	Data File:	304402-04.160
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

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_ 20230428
Date Extracted:	05/01/23	Lab ID:	I3-336 mb
Date Analyzed:	05/01/23	Data File:	I3-336 mb.130
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 05/05/23
Date Received: 04/28/23
Project: SOU_1249-001-06_ 20230428, F&BI 304402

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

Laboratory Code: 304402-01 (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	20.5	83 b	79 b	70-130	5 b

Laboratory Code: Laboratory Control Sample

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

Date of Report: 05/05/23
Date Received: 04/28/23
Project: SOU_1249-001-06_ 20230428, F&BI 304402

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	96	96	85-115	0

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.

304402

SAMPLE CHAIN OF CUSTODY

04/28/23 J2

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

REMARKS
* BOTTLES MARKED "FIELD FILTERED" HAVE BEEN FILTERED IN THE FIELD W/ 0.45 micron FILTER

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: Total Arsenic (200.8)	Dissolved Arsenic (200.8)				Notes
1249_GW_INF_20230426	Influent	N/A	01A-B	4/26/23	1435	WATER	1	X	X				HNO_3 preserved *
1249_GW_MID01_20230426	First Mid-Treatment	N/A	02		1430		1	X					HNO_3 preserved
1249_GW_MID02_20230426	Second Mid-Treatment	N/A	03		1425		1	X					HNO_3 preserved
1249_GW_EFF_20230426	Effluent	N/A	04A-B		1420		1	X	X				HNO_3 preserved *

4/26/23

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	4/28/23	1335
Received by:	Nhan Phan	FLBI	4/28/23	1335
Relinquished by:				
Received by:				

Samples received at 4 °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

June 7, 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 May 31, 2023 from the SOU_ 1249-001-06_ 20230531, F&BI 305501 project. There are 12 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
SOU0607R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 31, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-06_ 20230531, F&BI 305501 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
305501 -01	1249_GW_INF_20230522
305501 -02	1249_GW_MID01_20230522
305501 -03	1249_GW_MID02_20230522
305501 -04	1249_GW_EFF_20230522

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20230522	Client:	SoundEarth Strategies
Date Received:	05/31/23	Project:	SOU_ 1249-001-06_ 20230531
Date Extracted:	06/01/23	Lab ID:	305501-01
Date Analyzed:	06/01/23	Data File:	305501-01.187
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	19.6

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230522	Client:	SoundEarth Strategies
Date Received:	05/31/23	Project:	SOU_ 1249-001-06_ 20230531
Date Extracted:	06/01/23	Lab ID:	305501-04
Date Analyzed:	06/01/23	Data File:	305501-04.188
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-06_ 20230531
Date Extracted:	06/01/23	Lab ID:	I3-442 mb2
Date Analyzed:	06/01/23	Data File:	I3-442 mb2.123
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20230522	Client:	SoundEarth Strategies
Date Received:	05/31/23	Project:	SOU_ 1249-001-06_ 20230531
Date Extracted:	06/02/23	Lab ID:	305501-01
Date Analyzed:	06/02/23	Data File:	305501-01.167
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	18.2

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20230522	Client:	SoundEarth Strategies
Date Received:	05/31/23	Project:	SOU_ 1249-001-06_ 20230531
Date Extracted:	06/02/23	Lab ID:	305501-02
Date Analyzed:	06/02/23	Data File:	305501-02.168
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.27

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20230522	Client:	SoundEarth Strategies
Date Received:	05/31/23	Project:	SOU_ 1249-001-06_ 20230531
Date Extracted:	06/02/23	Lab ID:	305501-03
Date Analyzed:	06/02/23	Data File:	305501-03.176
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230522	Client:	SoundEarth Strategies
Date Received:	05/31/23	Project:	SOU_ 1249-001-06_ 20230531
Date Extracted:	06/02/23	Lab ID:	305501-04
Date Analyzed:	06/02/23	Data File:	305501-04.177
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

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_ 20230531
Date Extracted:	06/02/23	Lab ID:	I3-446 mb
Date Analyzed:	06/02/23	Data File:	I3-446 mb.139
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 06/07/23
Date Received: 05/31/23
Project: SOU_ 1249-001-06_ 20230531, F&BI 305501

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

Laboratory Code: 305427-01 (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	89	90	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

Date of Report: 06/07/23
Date Received: 05/31/23
Project: SOU_ 1249-001-06_ 20230531, F&BI 305501

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

Laboratory Code: 306002-01 (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	1.93	95	96	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	86	85-115

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

305501

SAMPLE CHAIN OF CUSTODY

5/31/23

K2

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

REMARKS 2 SAMPLES COLLECTED FOR DISSOLVED ARSENIC ANALYSIS WERE FILTERED IN FIELD w/ 0.45 micron FILTER.

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: Total Arsenic (200.8)	DISSOLVED ARSENIC				Notes
1249_GW_INF_20230522	Influent	N/A	01A-B	5/22/23	1255	WATER	1	X	X				HNO_3 preserved Additional FF poly rec'd Aw06/1
1249_GW_MID01_20230522	First Mid-Treatment	N/A	02		1250		1	X	[redacted]				HNO_3 preserved
1249_GW_MID02_20230522	Second Mid-Treatment	N/A	03		1245		1	X	[redacted]				HNO_3 preserved
1249_GW_EFF_20230522	Effluent	N/A	04A-B		1240		1	X	X				HNO_3 preserved Additional FF poly rec'd Aw06/1

5/22/23

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	5/31/23	1640
Received by:	VINA	FBI	5-31-23	16400
Relinquished by:				
Received by:		Samples received at 6 °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

July 3, 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 June 28, 2023 from the SOU_1249-001-06_ 20230628, F&BI 306427 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
SOU0703R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 28, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20230628, F&BI 306427 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
306427 -01	1249_GW_INF_20230626
306427 -02	1249_GW_MID01_20230626
306427 -03	1249_GW_MID02_20230626
306427 -04	1249_GW_EFF_20230626

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20230626	Client:	SoundEarth Strategies
Date Received:	06/28/23	Project:	SOU_1249-001-06_ 20230628
Date Extracted:	06/28/23	Lab ID:	306427-01
Date Analyzed:	06/28/23	Data File:	306427-01.140
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	30.4

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20230626	Client:	SoundEarth Strategies
Date Received:	06/28/23	Project:	SOU_1249-001-06_ 20230628
Date Extracted:	06/28/23	Lab ID:	306427-02
Date Analyzed:	06/28/23	Data File:	306427-02.141
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	3.77

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20230626	Client:	SoundEarth Strategies
Date Received:	06/28/23	Project:	SOU_1249-001-06_ 20230628
Date Extracted:	06/28/23	Lab ID:	306427-03
Date Analyzed:	06/28/23	Data File:	306427-03.142
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230626	Client:	SoundEarth Strategies
Date Received:	06/28/23	Project:	SOU_1249-001-06_ 20230628
Date Extracted:	06/28/23	Lab ID:	306427-04
Date Analyzed:	06/28/23	Data File:	306427-04.143
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

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_ 20230628
Date Extracted:	06/28/23	Lab ID:	I3-516 mb2
Date Analyzed:	06/28/23	Data File:	I3-516 mb2.137
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 07/03/23
Date Received: 06/28/23
Project: SOU_1249-001-06_ 20230628, F&BI 306427

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

Laboratory Code: 306414-01 (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	4.21	97 b	93 b	70-130	4 b

Laboratory Code: Laboratory Control Sample

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

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

SAMPLE CHAIN OF CUSTODY

306427 06/28/23 L4

Send Report to Chris Cass; Chris Carter; Jonathan Loeffler and Kyle Lowery

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

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: Total Arsenic (200.8)					Notes
1249_GW_INF_20230626	Influent	N/A	01A-B	6/26/23	1300	WATER	2	X					HNO_3 preserved
1249_GW_MID01_20230626	First Mid-Treatment	N/A	02	"	1255	"	1	X					HNO_3 preserved
1249_GW_MID02_20230626	Second Mid-Treatment	N/A	03	"	1250	"	1	X					HNO_3 preserved
1249_GW_EFF_20230626	Effluent	N/A	04A-B	"	1245	"	2	X					HNO_3 preserved

JJF 6/26/23

Samples received at 0 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	6/28/23	1011
Received by:	ANH PHAN	FSB	06/28/23	10:11
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

July 11, 2023

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

Dear Mr Cass:

Included are the additional results from the testing of material submitted on June 28, 2023 from the SOU_1249-001-06_ 20230628, F&BI 306427 project. There are 6 pages included in this report.

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
SOU0711R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 28, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-06_ 20230628, F&BI 306427 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
306427 -01	1249_GW_INF_20230626
306427 -02	1249_GW_MID01_20230626
306427 -03	1249_GW_MID02_20230626
306427 -04	1249_GW_EFF_20230626

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20230626	Client:	SoundEarth Strategies
Date Received:	06/28/23	Project:	SOU_1249-001-06_ 20230628
Date Extracted:	07/05/23	Lab ID:	306427-01
Date Analyzed:	07/05/23	Data File:	306427-01.056
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	34.4

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230626	Client:	SoundEarth Strategies
Date Received:	06/28/23	Project:	SOU_1249-001-06_ 20230628
Date Extracted:	07/05/23	Lab ID:	306427-04
Date Analyzed:	07/05/23	Data File:	306427-04.059
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-06_ 20230628
Date Extracted:	07/05/23	Lab ID:	I3-526 mb
Date Analyzed:	07/05/23	Data File:	I3-526 mb.105
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 07/11/23
Date Received: 06/28/23
Project: SOU_ 1249-001-06_ 20230628, F&BI 306427

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

Laboratory Code: 306427-01 (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	34.4	80 b	72 b	70-130	11 b

Laboratory Code: Laboratory Control Sample

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

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

306427 and Kyle Lowery

SAMPLE CHAIN OF CUSTODY

06/28/23 L4

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

REMARKS

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: Total Arsenic (200.8)	Dissolved As				Notes
1249_GW_INF_20230626	Influent	N/A	01A-B	6/26/23	1300	WATER	2	X	X				(X) Run per JL 7/3 EMB HNO_3 preserved
1249_GW_MID01_20230626	First Mid-Treatment	N/A	02		1255		1	X					HNO_3 preserved
1249_GW_MID02_20230626	Second Mid-Treatment	N/A	03		1250		1	X					HNO_3 preserved
1249_GW_EFF_20230626	Effluent	N/A	04A-B		1245		2	X	X				HNO_3 preserved

6/26/23

Samples received at 0 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	6/28/23	1011
Received by:	ANH PHAN	FSB	06/29/23	10:11
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

August 4, 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 July 28, 2023 from the SOU_1249-001-06_ 20230728, F&BI 307386 project. There are 12 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
SOU0804R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 28, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20230728, F&BI 307386 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
307386 -01	1249_GW_INF_20230726
307386 -02	1249_GW_MID01_20230726
307386 -03	1249_GW_MID02_20230726
307386 -04	1249_GW_EFF_20230726

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20230726	Client:	SoundEarth Strategies
Date Received:	07/28/23	Project:	SOU_1249-001-06_ 20230728
Date Extracted:	07/31/23	Lab ID:	307386-01
Date Analyzed:	08/01/23	Data File:	307386-01.207
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	28.5

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230726	Client:	SoundEarth Strategies
Date Received:	07/28/23	Project:	SOU_1249-001-06_ 20230728
Date Extracted:	07/31/23	Lab ID:	307386-04
Date Analyzed:	08/01/23	Data File:	307386-04.208
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-06_ 20230728
Date Extracted:	07/31/23	Lab ID:	I3-592 mb
Date Analyzed:	07/31/23	Data File:	I3-592 mb.059
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20230726	Client:	SoundEarth Strategies
Date Received:	07/28/23	Project:	SOU_1249-001-06_ 20230728
Date Extracted:	07/31/23	Lab ID:	307386-01
Date Analyzed:	08/01/23	Data File:	307386-01.214
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	28.2

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20230726	Client:	SoundEarth Strategies
Date Received:	07/28/23	Project:	SOU_1249-001-06_ 20230728
Date Extracted:	07/31/23	Lab ID:	307386-02
Date Analyzed:	08/01/23	Data File:	307386-02.220
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.35

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20230726	Client:	SoundEarth Strategies
Date Received:	07/28/23	Project:	SOU_1249-001-06_ 20230728
Date Extracted:	07/31/23	Lab ID:	307386-03
Date Analyzed:	08/01/23	Data File:	307386-03.221
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230726	Client:	SoundEarth Strategies
Date Received:	07/28/23	Project:	SOU_1249-001-06_ 20230728
Date Extracted:	07/31/23	Lab ID:	307386-04
Date Analyzed:	08/01/23	Data File:	307386-04.222
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

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_ 20230728
Date Extracted:	07/31/23	Lab ID:	I3-593 mb
Date Analyzed:	07/31/23	Data File:	I3-593 mb.061
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 08/04/23
Date Received: 07/28/23
Project: SOU_1249-001-06_ 20230728, F&BI 307386

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

Laboratory Code: 307376-01 (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	94	92	70-130	2

Laboratory Code: Laboratory Control Sample

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

Date of Report: 08/04/23
Date Received: 07/28/23
Project: SOU_1249-001-06_ 20230728, F&BI 307386

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

Laboratory Code: 307386-01 (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	27.1	79 b	83 b	70-130	5 b

Laboratory Code: Laboratory Control Sample

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

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

307386

SAMPLE CHAIN OF CUSTODY

07/28/23

J3

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)*

PROJECT NAME/NO. | PO #

Ballard Blocks II Property; Arsenic Treatment System Water Sampling | 1249-001-06

REMARKS

* SAMPLES COLLECTED FOR DISSOLVED ARSENIC ANALYSIS WERE FILTERED THROUGH 0.45 MICRON FIELD FILTER

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: Total Arsenic (200.8)	Dissolved Arsenic (200.8)				Notes
1249_GW_INF_20230726	Influent	N/A	01A-B	7/26/23	1155	WATER	2	X	X				HNO_3 preserved *
1249_GW_MID01_20230726	First Mid-Treatment	N/A	02		1150		1	X					HNO_3 preserved
1249_GW_MID02_20230726	Second Mid-Treatment	N/A	03		1145		1	X					HNO_3 preserved
1249_GW_EFF_20230726	Effluent	N/A	04A-B		1140		2	X	X				HNO_3 preserved *

7/26/23

~~Samples received at~~ 6 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	7/28/23	1405
Received by:	DeeDee Webber	F+B	7/28/23	1410
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

August 29, 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 August 23, 2023 from the SOU_1249-001-06_ 20230823, F&BI 308369 project. There are 12 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
SOU0829R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 23, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20230823, F&BI 308369 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
308369 -01	1249_GW_INF_20230817
308369 -02	1249_GW_MID01_20230817
308369 -03	1249_GW_MID02_20230817
308369 -04	1249_GW_EFF_20230817

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20230817	Client:	SoundEarth Strategies
Date Received:	08/23/23	Project:	SOU_1249-001-06_ 20230823
Date Extracted:	08/23/23	Lab ID:	308369-01
Date Analyzed:	08/24/23	Data File:	308369-01.042
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	29.1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230817	Client:	SoundEarth Strategies
Date Received:	08/23/23	Project:	SOU_1249-001-06_ 20230823
Date Extracted:	08/23/23	Lab ID:	308369-04
Date Analyzed:	08/24/23	Data File:	308369-04.043
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-06_ 20230823
Date Extracted:	08/23/23	Lab ID:	I3-659 mb2
Date Analyzed:	08/23/23	Data File:	I3-659 mb2.128
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20230817	Client:	SoundEarth Strategies
Date Received:	08/23/23	Project:	SOU_1249-001-06_ 20230823
Date Extracted:	08/23/23	Lab ID:	308369-01
Date Analyzed:	08/24/23	Data File:	308369-01.044
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	28.9

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20230817	Client:	SoundEarth Strategies
Date Received:	08/23/23	Project:	SOU_1249-001-06_ 20230823
Date Extracted:	08/23/23	Lab ID:	308369-02
Date Analyzed:	08/24/23	Data File:	308369-02.045
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.39

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20230817	Client:	SoundEarth Strategies
Date Received:	08/23/23	Project:	SOU_1249-001-06_ 20230823
Date Extracted:	08/23/23	Lab ID:	308369-03
Date Analyzed:	08/24/23	Data File:	308369-03.057
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230817	Client:	SoundEarth Strategies
Date Received:	08/23/23	Project:	SOU_1249-001-06_ 20230823
Date Extracted:	08/23/23	Lab ID:	308369-04
Date Analyzed:	08/24/23	Data File:	308369-04.058
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

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_ 20230823
Date Extracted:	08/23/23	Lab ID:	I3-659 mb2
Date Analyzed:	08/23/23	Data File:	I3-659 mb2.128
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 08/29/23
Date Received: 08/23/23
Project: SOU_1249-001-06_ 20230823, F&BI 308369

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	94	95	85-115	1

Date of Report: 08/29/23
Date Received: 08/23/23
Project: SOU_1249-001-06_ 20230823, F&BI 308369

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	94	95	85-115	1

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

SAMPLE CHAIN OF CUSTODY 08/23/23 K3

3083369 and Kyle Lowery

Send Report to Chris Cass; Chris Carter; Jonathan Loeffler

Company SoundEarth Strategies, Inc.

Address 1011 SW KLICKITAT WAY, SUITE 212 ~~2811 Fairview Avenue E, Suite 2000~~

City, State, ZIP Seattle, Washington 98134 ~~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
* SAMPLES COLLECTED FOR DISSOLVED ARSENIC ANALYSIS WERE FILTERED IN THE FIELD THROUGH 0.45 MICRON FILTER.

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: Total Arsenic (200.8)	DISSOLVED ARSENIC (200.8)				Notes
1249_GW_INF_20230817	Influent	N/A	01A-B	8/17/23	1310	WATER	2	X	X				HNO_3 preserved *
1249_GW_MID01_20230817	First Mid-Treatment	N/A	02		1315		1	X					HNO_3 preserved
1249_GW_MID02_20230817	Second Mid-Treatment	N/A	03		1320		1	X					HNO_3 preserved
1249_GW_EFF_20230817	Effluent	N/A	04A-B		1325		2	X	X				HNO_3 preserved *

Samples received at 4 °C

8/17/23

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	8/23/23	1235
Received by: Hong Nguyen	HONG NGUYEN	FSI	8/23/23	12:35
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

October 5, 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 September 28, 2023 from the SOU_1249-001-06_ 20230928, F&BI 309489 project. There are 12 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, Kyle Lowery, Jonathan Loeffler
SOU1005R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 28, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20230928, F&BI 309489 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
309489 -01	1249_GW_INF_20230925
309489 -02	1249_GW_MID01_20230925
309489 -03	1249_GW_MID02_20230925
309489 -04	1249_GW_EFF_20230925

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20230925	Client:	SoundEarth Strategies
Date Received:	09/28/23	Project:	SOU_1249-001-06_ 20230928
Date Extracted:	10/02/23	Lab ID:	309489-01
Date Analyzed:	10/02/23	Data File:	309489-01.179
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	24.2

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230925	Client:	SoundEarth Strategies
Date Received:	09/28/23	Project:	SOU_1249-001-06_ 20230928
Date Extracted:	10/02/23	Lab ID:	309489-04
Date Analyzed:	10/02/23	Data File:	309489-04.180
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	4.42

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-06_ 20230928
Date Extracted:	10/02/23	Lab ID:	I3-770 mb
Date Analyzed:	10/02/23	Data File:	I3-770 mb.158
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20230925	Client:	SoundEarth Strategies
Date Received:	09/28/23	Project:	SOU_1249-001-06_ 20230928
Date Extracted:	09/29/23	Lab ID:	309489-01
Date Analyzed:	09/29/23	Data File:	309489-01.088
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	21.8

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20230925	Client:	SoundEarth Strategies
Date Received:	09/28/23	Project:	SOU_1249-001-06_ 20230928
Date Extracted:	09/29/23	Lab ID:	309489-02
Date Analyzed:	09/29/23	Data File:	309489-02.089
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	4.87

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20230925	Client:	SoundEarth Strategies
Date Received:	09/28/23	Project:	SOU_1249-001-06_ 20230928
Date Extracted:	09/29/23	Lab ID:	309489-03
Date Analyzed:	09/29/23	Data File:	309489-03.090
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.78

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20230925	Client:	SoundEarth Strategies
Date Received:	09/28/23	Project:	SOU_1249-001-06_ 20230928
Date Extracted:	09/29/23	Lab ID:	309489-04
Date Analyzed:	09/29/23	Data File:	309489-04.091
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.03

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_ 20230928
Date Extracted:	09/29/23	Lab ID:	I3-760 mb
Date Analyzed:	09/29/23	Data File:	I3-760 mb.136
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 10/05/23
Date Received: 09/28/23
Project: SOU_1249-001-06_ 20230928, F&BI 309489

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

Laboratory Code: 309532-05 (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	18.9	102 b	97 b	70-130	5 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	94	85-115

Date of Report: 10/05/23
Date Received: 09/28/23
Project: SOU_1249-001-06_ 20230928, F&BI 309489

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

Laboratory Code: 309470-01 (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	90	89	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	87	85-115

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

309489

SAMPLE CHAIN OF CUSTODY 09/28/23 L3

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

Company SoundEarth Strategies, Inc.

Address 1101 Southwest Klickitat Way, Suite 212

City, State, ZIP Seattle, Washington 98134

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

* Samples collected for Dissolved Arsenic analysis were filtered in the field through 0.45micron filter

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: Total Arsenic (200.8)	Dissolved Arsenic (200.8)				Notes
1249_GW_INF_20230925	Influent	N/A	01A-B	9/25/23	1150	WATER	2	X	X				HNO_3 preserved *
1249_GW_MID01_20230925	First Mid-Treatment	N/A	02		1145		1	X					HNO_3 preserved
1249_GW_MID02_20230925	Second Mid-Treatment	N/A	03		1140		1	X					HNO_3 preserved
1249_GW_EFF_20230925	Effluent	N/A	04A-B		1135		2	X	X				HNO_3 preserved *

Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	9/28/23	1100
Received by:	ANH PHAN	FSO	09/28/23	11:00
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

November 2, 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 October 27, 2023 from the SOU_1249-001-06_ 20231027, F&BI 310516 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, Kyle Lowery, Jonathan Loeffler
SOU1102R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on October 27, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20231027, F&BI 310516 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
310516 -01	1249_GW_INF_20231025
310516 -02	1249_GW_MID01_20231025
310516 -03	1249_GW_MID02_20231025
310516 -04	1249_GW_EFF_20231025

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20231025	Client:	SoundEarth Strategies
Date Received:	10/27/23	Project:	SOU_1249-001-06_ 20231027
Date Extracted:	10/30/23	Lab ID:	310516-01
Date Analyzed:	10/30/23	Data File:	310516-01.155
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	15.3

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20231025	Client:	SoundEarth Strategies
Date Received:	10/27/23	Project:	SOU_1249-001-06_ 20231027
Date Extracted:	10/30/23	Lab ID:	310516-02
Date Analyzed:	10/30/23	Data File:	310516-02.156
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	5.58

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20231025	Client:	SoundEarth Strategies
Date Received:	10/27/23	Project:	SOU_1249-001-06_ 20231027
Date Extracted:	10/30/23	Lab ID:	310516-03
Date Analyzed:	10/30/23	Data File:	310516-03.157
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.14

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20231025	Client:	SoundEarth Strategies
Date Received:	10/27/23	Project:	SOU_1249-001-06_ 20231027
Date Extracted:	10/30/23	Lab ID:	310516-04
Date Analyzed:	10/30/23	Data File:	310516-04.158
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.48

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_ 20231027
Date Extracted:	10/30/23	Lab ID:	I3-863 mb
Date Analyzed:	10/30/23	Data File:	I3-863 mb.114
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 11/02/23
Date Received: 10/27/23
Project: SOU_1249-001-06_ 20231027, F&BI 310516

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

Laboratory Code: 310516-04 (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	1.48	99	101	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	92	85-115

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

310516

SAMPLE CHAIN OF CUSTODY

10/27/23 JJ

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

Company SoundEarth Strategies, Inc.

Address 1101 Southwest Klickitat Way, Suite 212

City, State, ZIP Seattle, Washington 98134

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

~~* Samples collected for Dissolved Arsenic analysis were filtered in the field through 0.45micron filter~~ JJ

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: Total Arsenic (200.8)	Dissolved Arsenic (200.8)				Notes
1249_GW_INF_20231025	Influent	N/A	01	10/25/23	1515	WATER	1	X					HNO_3 preserved JJ
1249_GW_MID01_20231025	First Mid-Treatment	N/A	02	"	1510	"	1	X					HNO_3 preserved
1249_GW_MID02_20231025	Second Mid-Treatment	N/A	03	"	1505	"	1	X					HNO_3 preserved
1249_GW_EFF_20231025	Effluent	N/A	04	"	1500	"	1	X					HNO_3 preserved JJ

JJ 10/25/23

~~Samples received at~~ 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	10/27/23	1152
Received by:	Nhan Phan	FedEx	10/27/23	1152
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

December 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 November 30, 2023 from the SOU_1249-001-06_ 20231130, F&BI 311401 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, Kyle Lowery, Jonathan Loeffler
SOU1206R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on November 30, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20231130, F&BI 311401 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
311401 -01	1249_GW_INF_20231121
311401 -02	1249_GW_MID01_20231121
311401 -03	1249_GW_MID02_20231121
311401 -04	1249_GW_EFF_20231121

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20231121	Client:	SoundEarth Strategies
Date Received:	11/30/23	Project:	SOU_1249-001-06_ 20231130
Date Extracted:	11/30/23	Lab ID:	311401-01
Date Analyzed:	12/01/23	Data File:	311401-01.130
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.62

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20231121	Client:	SoundEarth Strategies
Date Received:	11/30/23	Project:	SOU_1249-001-06_ 20231130
Date Extracted:	11/30/23	Lab ID:	311401-02
Date Analyzed:	12/01/23	Data File:	311401-02.131
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.82

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20231121	Client:	SoundEarth Strategies
Date Received:	11/30/23	Project:	SOU_1249-001-06_ 20231130
Date Extracted:	11/30/23	Lab ID:	311401-03
Date Analyzed:	12/01/23	Data File:	311401-03.134
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.64

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20231121	Client:	SoundEarth Strategies
Date Received:	11/30/23	Project:	SOU_1249-001-06_ 20231130
Date Extracted:	11/30/23	Lab ID:	311401-04
Date Analyzed:	12/01/23	Data File:	311401-04.135
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.48

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_ 20231130
Date Extracted:	11/30/23	Lab ID:	I3-941 mb
Date Analyzed:	12/01/23	Data File:	I3-941 mb.081
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 12/06/23
Date Received: 11/30/23
Project: SOU_1249-001-06_ 20231130, F&BI 311401

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

Laboratory Code: 311393-01 (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	10.6	78 b	78 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	86	85-115

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

11401

SAMPLE CHAIN OF CUSTODY

11/30/23 KS

Page # 1 of 1

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

Company SoundEarth Strategies, Inc.

Address 1101 Southwest Klickitat Way, Suite 212

City, State, ZIP Seattle, Washington 98134

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

~~* Samples collected for Dissolved Arsenic analysis were filtered in the field through 0.45micron filter~~ JJ

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: Total Arsenic (200.8)	Dissolved Arsenic (200.8)				Notes
1249_GW_INF_20231121	Influent	N/A	01	11/21/23	1320	WATER	1	X					HNO_3 preserved * JJ
1249_GW_MID01_20231121	First Mid-Treatment	N/A	02	"	1315	"	1	X					HNO_3 preserved
1249_GW_MID02_20231121	Second Mid-Treatment	N/A	03	"	1310	"	1	X					HNO_3 preserved
1249_GW_EFF_20231121	Effluent	N/A	04	"	1305	"	1	X					HNO_3 preserved * JJ

JJ 11/21/23

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	11/30/23	1010
Received by:	ANH PHAN	FSA	11/30/23	10:10
Relinquished by:		Samples received at 8 oC		
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 5, 2024

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 December 29, 2023 from the SOU_1249-001-06_ 20241229, F&BI 312480 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, Kyle Lowery, Jonathan Loeffler
SOU0105R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 29, 2023 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20241229, F&BI 312480 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
312480 -01	1249_GW_INF_20231228
312480 -02	1249_GW_MID01_20231228
312480 -03	1249_GW_MID02_20231228
312480 -04	1249_GW_EFF_20231228

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20231228	Client:	SoundEarth Strategies
Date Received:	12/29/23	Project:	SOU_1249-001-06_ 20241229
Date Extracted:	01/02/24	Lab ID:	312480-01
Date Analyzed:	01/02/24	Data File:	312480-01.043
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	38.6

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20231228	Client:	SoundEarth Strategies
Date Received:	12/29/23	Project:	SOU_1249-001-06_ 20241229
Date Extracted:	01/02/24	Lab ID:	312480-02
Date Analyzed:	01/02/24	Data File:	312480-02.164
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	5.89

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20231228	Client:	SoundEarth Strategies
Date Received:	12/29/23	Project:	SOU_1249-001-06_ 20241229
Date Extracted:	01/02/24	Lab ID:	312480-03
Date Analyzed:	01/02/24	Data File:	312480-03.165
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20231228	Client:	SoundEarth Strategies
Date Received:	12/29/23	Project:	SOU_1249-001-06_ 20241229
Date Extracted:	01/02/24	Lab ID:	312480-04
Date Analyzed:	01/02/24	Data File:	312480-04.166
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

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_ 20241229
Date Extracted:	01/02/24	Lab ID:	I4-2 mb
Date Analyzed:	01/02/24	Data File:	I4-2 mb.041
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 01/05/24
Date Received: 12/29/23
Project: SOU_1249-001-06_ 20241229, F&BI 312480

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

Laboratory Code: 312480-01 (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	38.6	96 b	103 b	70-130	7 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	97	85-115

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

312480

SAMPLE CHAIN OF CUSTODY

12/29/23 L2

Page # 1 of 1

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

Company SoundEarth Strategies, Inc.

Address 1101 Southwest Klickitat Way, Suite 212

City, State, ZIP Seattle, Washington 98134

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

~~X Samples collected for Dissolved Arsenic analysis were filtered in the field through 0.45micron filter.~~ JF

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: Total Arsenic (200.8)	Dissolved Arsenic (200.8)				Notes
1249_GW_INF_20231228	Influent	N/A	01	12/28/23	1440	WATER	1	X					HNO_3 preserved X JF
1249_GW_MID01_20231228	First Mid-Treatment	N/A	02		1435		1	X					HNO_3 preserved
1249_GW_MID02_20231228	Second Mid-Treatment	N/A	03		1430		1	X					HNO_3 preserved
1249_GW_EFF_20231228	Effluent	N/A	04		1425		1	X					HNO_3 preserved X JF

Samples received at 2 °C

JF 12/28/23

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	12/29/23	1505
Received by:	ANH PHAN	FSB	12/29/23	15:05
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 Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

February 8, 2024

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 January 31, 2024 from the SOU_1249-001-06_ 20240131, F&BI 401407 project. There are 10 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, Kyle Lowery
SOU0208R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 31, 2024 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_ 20240131, F&BI 401407 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
401407 -01	1249_GW_INF_20240130
401407 -02	1249_GW_MID01_20240130
401407 -03	1249_GW_MID02_20240130
401407 -04	1249_GW_EFF_20240130

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20240130	Client:	SoundEarth Strategies
Date Received:	01/31/24	Project:	SOU_1249-001-06_ 20240131
Date Extracted:	02/01/24	Lab ID:	401407-01
Date Analyzed:	02/01/24	Data File:	401407-01.137
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	27.9

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20240130	Client:	SoundEarth Strategies
Date Received:	01/31/24	Project:	SOU_1249-001-06_ 20240131
Date Extracted:	02/01/24	Lab ID:	401407-02
Date Analyzed:	02/01/24	Data File:	401407-02.138
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.80

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20240130	Client:	SoundEarth Strategies
Date Received:	01/31/24	Project:	SOU_1249-001-06_ 20240131
Date Extracted:	02/01/24	Lab ID:	401407-03
Date Analyzed:	02/01/24	Data File:	401407-03.139
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20240130	Client:	SoundEarth Strategies
Date Received:	01/31/24	Project:	SOU_1249-001-06_ 20240131
Date Extracted:	02/05/24	Lab ID:	401407-04
Date Analyzed:	02/05/24	Data File:	401407-04.083
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	MG

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

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_ 20240131
Date Extracted:	02/01/24	Lab ID:	I4-73 mb2
Date Analyzed:	02/01/24	Data File:	I4-73 mb2.065
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

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_ 20240131
Date Extracted:	02/05/24	Lab ID:	I4-86 mb
Date Analyzed:	02/05/24	Data File:	I4-86 mb.076
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	MG

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

Date of Report: 02/08/24
Date Received: 01/31/24
Project: SOU_1249-001-06_ 20240131, F&BI 401407

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

Laboratory Code: 401383-01 (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	88	98	70-130	11

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	94	85-115

Date of Report: 02/08/24
Date Received: 01/31/24
Project: SOU_1249-001-06_ 20240131, F&BI 401407

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

Laboratory Code: 401407-04 (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	101	101	70-130	0

Laboratory Code: Laboratory Control Sample

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

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

401407

SAMPLE CHAIN OF CUSTODY

01/31/24 JH

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

Company SoundEarth Strategies, Inc.

Address 1101 Southwest Klickitat Way, Suite 212

City, State, ZIP Seattle, Washington 98134

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

~~* Samples collected for Dissolved Arsenic analysis were filtered in the field through 0.45micron filter~~ JF

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: Total Arsenic (200.8)	Dissolved Arsenic (200.8)				Notes
1249_GW_INF_20240130	Influent	N/A	01	1/30/24	1305	WATER	1	X					HNO3 preserved ~~X~~ JF
1249_GW_MID01_20240130	First Mid-Treatment	N/A	02		1300		1	X					HNO3 preserved
1249_GW_MID02_20240130	Second Mid-Treatment	N/A	03		1255		1	X					HNO3 preserved
1249_GW_EFF_20240130	Effluent	N/A	04		1250		1	X					HNO3 preserved ~~X~~ JF
													Samples received at 2 °C

01/30/24

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	1/31/24	1250
Received by:	ANH PHAN	FSS	01/31/24	12:50
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 Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

March 8, 2024

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 1, 2024 from the SOU_1249-001-06_20240301, F&BI 403009 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
SOU0308R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 1, 2024 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_20240301, F&BI 403009 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
403009 -01	1249_GW_INF_20240228
403009 -02	1249_GW_MID01_20240228
403009 -03	1249_GW_MID02_20240228
403009 -04	1249_GW_EFF_20240228

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20240228	Client:	SoundEarth Strategies
Date Received:	03/01/24	Project:	SOU_1249-001-06_20240301
Date Extracted:	03/04/24	Lab ID:	403009-01
Date Analyzed:	03/04/24	Data File:	403009-01.059
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	24

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20240228	Client:	SoundEarth Strategies
Date Received:	03/01/24	Project:	SOU_1249-001-06_20240301
Date Extracted:	03/04/24	Lab ID:	403009-02
Date Analyzed:	03/04/24	Data File:	403009-02.077
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.7

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20240228	Client:	SoundEarth Strategies
Date Received:	03/01/24	Project:	SOU_1249-001-06_20240301
Date Extracted:	03/04/24	Lab ID:	403009-03
Date Analyzed:	03/04/24	Data File:	403009-03.078
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20240228	Client:	SoundEarth Strategies
Date Received:	03/01/24	Project:	SOU_1249-001-06_20240301
Date Extracted:	03/04/24	Lab ID:	403009-04
Date Analyzed:	03/04/24	Data File:	403009-04.079
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

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_20240301
Date Extracted:	03/04/24	Lab ID:	I4-169 mb
Date Analyzed:	03/04/24	Data File:	I4-169 mb.056
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 03/08/24
Date Received: 03/01/24
Project: SOU_1249-001-06_20240301, F&BI 403009

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

Laboratory Code: 403009-01 (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	24.4	90 b	104 b	70-130	14 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	98	85-115

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

403009

SAMPLE CHAIN OF CUSTODY

03/01/24 L2

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)*

PROJECT NAME/NO.: Ballard Blocks II Property; Arsenic Treatment System Water Sampling

PO #: 1249-001-06

REMARKS

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: Total Arsenic (200.8)					Notes
1249_GW_INF_20240228	Influent	N/A	01	2/28/24	1545	WATER	1	X					HNO_3 preserved
1249_GW_MID01_20240228	First Mid-Treatment	N/A	02		1540		1	X					HNO_3 preserved
1249_GW_MID02_20240228	Second Mid-Treatment	N/A	03		1535		1	X					HNO_3 preserved
1249_GW_EFF_20240228	Effluent	N/A	04		1530		1	X					HNO_3 preserved
													Samples received at 1 °C
							2/28/24						

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	3/1/24	1140
Received by:	ANH PHAN	F&B	03/01/24	11:40
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 Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

April 3, 2024

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 27, 2024 from the SOU_1249-001-06_20240327, F&BI 403416 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, Kyle Lowery, Jonathan Loeffler
SOU0403R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 27, 2024 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_20240327, F&BI 403416 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
403416 -01	1249_GW_INF_20240327
403416 -02	1249_GW_MID01_20240327
403416 -03	1249_GW_MID02_20240327
403416 -04	1249_GW_EFF_20240327

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20240327	Client:	SoundEarth Strategies
Date Received:	03/27/24	Project:	SOU_1249-001-06_20240327
Date Extracted:	03/28/24	Lab ID:	403416-01 x10
Date Analyzed:	03/29/24	Data File:	403416-01 x10.160
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	32

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20240327	Client:	SoundEarth Strategies
Date Received:	03/27/24	Project:	SOU_1249-001-06_20240327
Date Extracted:	03/28/24	Lab ID:	403416-02
Date Analyzed:	03/29/24	Data File:	403416-02.161
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.8

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20240327	Client:	SoundEarth Strategies
Date Received:	03/27/24	Project:	SOU_1249-001-06_20240327
Date Extracted:	03/28/24	Lab ID:	403416-03
Date Analyzed:	03/29/24	Data File:	403416-03.162
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20240327	Client:	SoundEarth Strategies
Date Received:	03/27/24	Project:	SOU_1249-001-06_20240327
Date Extracted:	03/28/24	Lab ID:	403416-04
Date Analyzed:	03/29/24	Data File:	403416-04.167
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

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_20240327
Date Extracted:	03/28/24	Lab ID:	I4-246 mb2
Date Analyzed:	03/28/24	Data File:	I4-246 mb2.056
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 04/03/24
Date Received: 03/27/24
Project: SOU_1249-001-06_20240327, F&BI 403416

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

Laboratory Code: 403402-01 (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	84	89	70-130	6

Laboratory Code: Laboratory Control Sample

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

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

403416

SAMPLE CHAIN OF CUSTODY

03/27/24 L1

Page # 1 of 1

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

Company SoundEarth Strategies, Inc.

Address 1101 Southwest Klickitat Way, Suite 212

City, State, ZIP Seattle, Washington 98134

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

SAMPLERS *(signature)* [signature]

PROJECT NAME/NO.: Ballard Blocks II Property; Arsenic Treatment System Water Sampling

PO #: 1249-001-06

REMARKS

~~* Samples collected for Dissolved Arsenic analysis were filtered in the field through 0.45micron filter~~ JJ

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: Total Arsenic (200.8)	Dissolved Arsenic (200.8)				Notes
1249_GW_INF_20240327	Influent	N/A	01	3/27/24	1055	WATER	1	X					HNO3 preserved X JJ
1249_GW_MID01_20240327	First Mid-Treatment	N/A	02	"	1052	"	1	X					HNO3 preserved
1249_GW_MID02_20240327	Second Mid-Treatment	N/A	03	"	1050	"	1	X					HNO3 preserved
1249_GW_EFF_20240327	Effluent	N/A	04	"	1047	"	1	X					HNO3 preserved X JJ

JJ 3/27/24

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	JONATHAN LOEFFLER	SOUNDEARTH	3/27/24	13:18
Received by: [signature]	ANH PHAN	FSS	03/27/24	13:18
Relinquished by:		Samples received at 3 °C		
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 Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

May 1, 2024

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 April 26, 2024 from the SOU_1249-001-06_20240426, F&BI 404444 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, Kyle Lowery, Jonathan Loeffler
SOU0501R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 26, 2024 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_20240426, F&BI 404444 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
404444 -01	1249_GW_INF_20240425
404444 -02	1249_GW_MID01_20240425
404444 -03	1249_GW_MID02_20240425
404444 -04	1249_GW_EFF_20240425

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20240425	Client:	SoundEarth Strategies
Date Received:	04/26/24	Project:	SOU_1249-001-06_20240426
Date Extracted:	04/29/24	Lab ID:	404444-01
Date Analyzed:	04/29/24	Data File:	404444-01.120
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	25

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20240425	Client:	SoundEarth Strategies
Date Received:	04/26/24	Project:	SOU_1249-001-06_20240426
Date Extracted:	04/29/24	Lab ID:	404444-02
Date Analyzed:	04/29/24	Data File:	404444-02.123
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.0

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20240425	Client:	SoundEarth Strategies
Date Received:	04/26/24	Project:	SOU_1249-001-06_20240426
Date Extracted:	04/29/24	Lab ID:	404444-03
Date Analyzed:	04/29/24	Data File:	404444-03.124
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20240425	Client:	SoundEarth Strategies
Date Received:	04/26/24	Project:	SOU_1249-001-06_20240426
Date Extracted:	04/29/24	Lab ID:	404444-04
Date Analyzed:	04/29/24	Data File:	404444-04.125
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

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_20240426
Date Extracted:	04/29/24	Lab ID:	I4-343 mb
Date Analyzed:	04/29/24	Data File:	I4-343 mb.086
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 05/01/24
Date Received: 04/26/24
Project: SOU_1249-001-06_20240426, F&BI 404444

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

Laboratory Code: 404444-01 (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	24.6	90 b	76 b	70-130	17 b

Laboratory Code: Laboratory Control Sample

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

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

404444

SAMPLE CHAIN OF CUSTODY

04/26/24 JJ

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

Company SoundEarth Strategies, Inc.

Address 1101 Southwest Klickitat Way, Suite 212

City, State, ZIP Seattle, Washington 98134

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

SAMPLERS *(signature)* [redacted]

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

REMARKS

~~* Samples collected for Dissolved Arsenic analysis were filtered in the field through 0.45micron filter~~ JJ

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: Total Arsenic (200.8)	Dissolved Arsenic (200.8)				Notes
1249_GW_INF_20240425	Influent	N/A	01	4/25/24	1120	WATER	1	X					HNO3 preserved ~~*~~ JJ
1249_GW_MID01_20240425	First Mid-Treatment	N/A	02	"	1115	"	1	X					HNO3 preserved
1249_GW_MID02_20240425	Second Mid-Treatment	N/A	03	"	1110	"	1	X					HNO3 preserved
1249_GW_EFF_20240425	Effluent	N/A	04	"	1105	"	1	X					HNO3 preserved ~~*~~ JJ

Samples received at 4

JJF 4/25/24

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	4/26/24	1511
Received by:	ERIC YOUNG	F-B	4/26/24	15[illegible]
Relinquished by:				
Received by:				

SoundEarth Strategies

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 404444 CLIENT SOU INITIALS/ DATE: AP 04/26/24

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

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

Were samples received on ice/cold packs? ☑ YES ☐ NO

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

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

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO
*or other representative documents, letters, and/or shipping memos

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

Is the following information provided on the COC* ? (explain "no" answer below)

Sample ID's	☑ Yes	☐ No	# of Containers	☑ Yes	☐ No
Date Sampled	☑ Yes	☐ No	Relinquished	☑ Yes	☐ No
Time Sampled	☑ Yes	☐ No	Requested analysis	☑ Yes	☐ No

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

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

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

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

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

If Yes:
Number of unused TO15 canisters _____ Number of unused TO17 tubes _____

Explain "no" items from above (use the back if needed)

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

June 10, 2024

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 June 4, 2024 from the SOU_1249-001-06_20240604, F&BI 406036 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, Kyle Lowery
SOU0610R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 4, 2024 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_20240604, F&BI 406036 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
406036 -01	1249_GW_INF_20240529
406036 -02	1249_GW_MID01_20240529
406036 -03	1249_GW_MID02_20240529
406036 -04	1249_GW_EFF_20240529

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20240529	Client:	SoundEarth Strategies
Date Received:	06/04/24	Project:	SOU_1249-001-06_20240604
Date Extracted:	06/05/24	Lab ID:	406036-01
Date Analyzed:	06/06/24	Data File:	406036-01.216
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	33

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20240529	Client:	SoundEarth Strategies
Date Received:	06/04/24	Project:	SOU_1249-001-06_20240604
Date Extracted:	06/05/24	Lab ID:	406036-02
Date Analyzed:	06/06/24	Data File:	406036-02.217
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.5

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20240529	Client:	SoundEarth Strategies
Date Received:	06/04/24	Project:	SOU_1249-001-06_20240604
Date Extracted:	06/05/24	Lab ID:	406036-03
Date Analyzed:	06/06/24	Data File:	406036-03.218
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20240529	Client:	SoundEarth Strategies
Date Received:	06/04/24	Project:	SOU_1249-001-06_20240604
Date Extracted:	06/05/24	Lab ID:	406036-04
Date Analyzed:	06/06/24	Data File:	406036-04.219
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

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_20240604
Date Extracted:	06/05/24	Lab ID:	I4-449 mb2
Date Analyzed:	06/05/24	Data File:	I4-449 mb2.049
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 06/10/24
Date Received: 06/04/24
Project: SOU_1249-001-06_20240604, F&BI 406036

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

Laboratory Code: 406031-01 (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	1.58	96	93	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

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

406036

SAMPLE CHAIN OF CUSTODY

06/04/24

45

Page # 1 of 1

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

Company SoundEarth Strategies, Inc.

Address 1101 Southwest Klickitat Way, Suite 212

City, State, ZIP Seattle, Washington 98134

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

SAMPLERS *(signature)* Jonathan Loeffler

PROJECT NAME/NO.: Ballard Blocks II Property; Arsenic Treatment System Water Sampling

PO #: 1249-001-06

REMARKS

~~Samples collected for Dissolved Arsenic analysis were filtered in the field through 0.45micron filter~~ JJ

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: Total Arsenic (200.8)	Dissolved Arsenic (200.8)				Notes
1249_GW_INF_20240529	Influent	N/A	01	5/29/24	1250	WATER	1	X					HNO3 preserved ~~X~~ JJ
1249_GW_MID01_20240529	First Mid-Treatment	N/A	02	"	1245	"	1	X					HNO3 preserved
1249_GW_MID02_20240529	Second Mid-Treatment	N/A	03	"	1240	"	1	X					HNO3 preserved
1249_GW_EFF_20240529	Effluent	N/A	04	"	1235	"	1	X					HNO3 preserved ~~X~~ JJ
						JJ		5/29/24					

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Jonathan Loeffler	JONATHAN LOEFFLER	SOUNDEARTH	6/4/24	1315
Received by: Nhan Pham	Nhan Pham	FEDEX	6/4/24	1315
Relinquished by:				
Received by:		Samples received at 4 °C		

SoundEarth Strategies

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 406036 CLIENT Soundtarth INITIALS/ DATE: (NP) 6/4/24

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

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

Were samples received on ice/cold packs? ☑ YES ☐ NO

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

Is there a Chain-of-Custody* (COC)? ☐ YES ☐ NO Initials/ Date: (NP) 6/4/24
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 6 days

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

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

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

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

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

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

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

Other comments (use a separate page if needed)

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

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

September 5, 2024

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 August 29, 2024 from the SOU_1249-001-06_20240829, F&BI 408514 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, Kyle Lowery, Jonathan Loeffler
SOU0905R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 29, 2024 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_20240829, F&BI 408514 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
408514 -01	1249_GW_INF_20240827
408514 -02	1249_GW_MID01_20240827
408514 -03	1249_GW_MID02_20240827
408514 -04	1249_GW_EFF_20240827

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20240827	Client:	SoundEarth Strategies
Date Received:	08/29/24	Project:	SOU_1249-001-06_20240829
Date Extracted:	08/30/24	Lab ID:	408514-04
Date Analyzed:	08/30/24	Data File:	408514-04.208
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20240827	Client:	SoundEarth Strategies
Date Received:	08/29/24	Project:	SOU_1249-001-06_20240829
Date Extracted:	08/30/24	Lab ID:	408514-01
Date Analyzed:	08/30/24	Data File:	408514-01.211
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	23

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20240827	Client:	SoundEarth Strategies
Date Received:	08/29/24	Project:	SOU_1249-001-06_20240829
Date Extracted:	08/30/24	Lab ID:	408514-02
Date Analyzed:	08/30/24	Data File:	408514-02.212
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.0

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20240827	Client:	SoundEarth Strategies
Date Received:	08/29/24	Project:	SOU_1249-001-06_20240829
Date Extracted:	08/30/24	Lab ID:	408514-03
Date Analyzed:	08/30/24	Data File:	408514-03.213
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

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

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_20240829
Date Extracted:	08/30/24	Lab ID:	I4-718 mb
Date Analyzed:	08/30/24	Data File:	I4-718 mb.086
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 09/05/24
Date Received: 08/29/24
Project: SOU_1249-001-06_20240829, F&BI 408514

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

Laboratory Code: 408514-04 (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	97	96	70-130	1

Laboratory Code: Laboratory Control Sample

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

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

408514

SAMPLE CHAIN OF CUSTODY

08/29/24

K2

~~Send Report~~ to Chris Cass; Chris Carter; Kyle Lowery, Jonathan Loeffler

Company SoundEarth Strategies, Inc.

Address 1101 Southwest Klickitat Way, Suite 212

City, State, ZIP Seattle, Washington 98134

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

~~* Samples collected for Dissolved Arsenic analysis were filtered in the field through 0.45micron filter~~ JJ

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: Total Arsenic (200.8)	Dissolved Arsenic (200.8)				Notes
1249_GW_INF_20240827	Influent	N/A	01	8/27/24	1150	WATER	1	X					HNO_3 preserved ~~X~~ JJ
1249_GW_MID01_20240827	First Mid-Treatment	N/A	02	"	1145	"	1	X					HNO_3 preserved
1249_GW_MID02_20240827	Second Mid-Treatment	N/A	03	"	1140	"	1	X					HNO_3 preserved
1249_GW_EFF_20240827	Effluent	N/A	04	"	1135	"	1	X					HNO_3 preserved ~~X~~ JJ

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	8/29/24	1305
Received by:	ANN WBRUYA	FAB	8/29/24	1305
Relinquished by:				
Received by:		Samples received at 5 °C		

SoundEarth Strategies

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 408514 CLIENT SDY INITIALS/ DATE: AWB 8/29

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

Cooler/Sample temperature 5 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☒ YES ☐ NO

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

Is there a Chain-of-Custody* (COC)? ☒ YES ☐ NO Initials/ Date: AWB 8/29
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 2 days

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

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

Were appropriate sample containers used? ☒ YES ☐ NO ☐ Unknown

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

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

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

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

Other comments (use a separate page if needed)

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

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

October 7, 2024

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 September 27, 2024 from the SOU_1249-001-06_20240927, F&BI 409461 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
SOU1007R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 27, 2024 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_20240927, F&BI 409461 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
409461 -01	1249_GW_INF_20240926
409461 -02	1249_GW_MID01_20240926
409461 -03	1249_GW_MID02_20240926
409461 -04	1249_GW_EFF_20240926

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20240926	Client:	SoundEarth Strategies
Date Received:	09/27/24	Project:	SOU_1249-001-06_20240927
Date Extracted:	09/30/24	Lab ID:	409461-01
Date Analyzed:	10/01/24	Data File:	409461-01.132
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	18

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20240926	Client:	SoundEarth Strategies
Date Received:	09/27/24	Project:	SOU_1249-001-06_20240927
Date Extracted:	09/30/24	Lab ID:	409461-02
Date Analyzed:	10/01/24	Data File:	409461-02.133
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.2

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20240926	Client:	SoundEarth Strategies
Date Received:	09/27/24	Project:	SOU_1249-001-06_20240927
Date Extracted:	09/30/24	Lab ID:	409461-03
Date Analyzed:	10/01/24	Data File:	409461-03.134
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20240926	Client:	SoundEarth Strategies
Date Received:	09/27/24	Project:	SOU_1249-001-06_20240927
Date Extracted:	09/30/24	Lab ID:	409461-04
Date Analyzed:	10/01/24	Data File:	409461-04.139
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

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

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_20240927
Date Extracted:	09/30/24	Lab ID:	I4-815 mb
Date Analyzed:	09/30/24	Data File:	I4-815 mb.079
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 10/07/24
Date Received: 09/27/24
Project: SOU_1249-001-06_20240927, F&BI 409461

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

Laboratory Code: 409434-01 (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	101	100	70-130	1

Laboratory Code: Laboratory Control Sample

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

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

409461

SAMPLE CHAIN OF CUSTODY

09/27/24 LI

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

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: Total Arsenic (200.8)					Notes
1249_GW_INF_20240926	Influent	N/A	01	9/26/24	1505	WATER	1	X					HNO_3 preserved
1249_GW_MID01_20240926	First Mid-Treatment	N/A	02	"	1500	"	1	X					HNO_3 preserved
1249_GW_MID02_20240926	Second Mid-Treatment	N/A	03	"	1455	"	1	X					HNO_3 preserved
1249_GW_EFF_20240926	Effluent	N/A	04	"	1450	"	1	X					HNO_3 preserved

9/26/24

SoundEarth Strategies

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	9/27/24	1330
Received by:	Anh Phan	FBI	09/27/24	13:30
Relinquished by:		Samples received at 0 °C		
Received by:				

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 409461 CLIENT Sound INITIALS/ DATE: AP 09/27/24

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

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

Were samples received on ice/cold packs? ☑ YES ☐ NO

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

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ AP
*or other representative documents, letters, and/or shipping memos Date: 09/27/24

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

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

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

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

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

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

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

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

Other comments (use a separate page if needed)

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

Number of unused TO15 canisters** _____ **Number of unused TO17 tubes** _____
**Fill out Green manifolds billing sheet

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

November 7, 2024

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 November 1, 2024 from the SOU_1249-001-06_20241101, F&BI 411018 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
SOU1107R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on November 1, 2024 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06_20241101, F&BI 411018 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
411018 -01	1249_GW_INF_20241028
411018 -02	1249_GW_MID01_20241028
411018 -03	1249_GW_MID02_20241028
411018 -04	1249_GW_EFF_20241028

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_INF_20241028	Client:	SoundEarth Strategies
Date Received:	11/01/24	Project:	SOU_1249-001-06_20241101
Date Extracted:	11/04/24	Lab ID:	411018-01
Date Analyzed:	11/05/24	Data File:	411018-01.087
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	19

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID01_20241028	Client:	SoundEarth Strategies
Date Received:	11/01/24	Project:	SOU_1249-001-06_20241101
Date Extracted:	11/04/24	Lab ID:	411018-02
Date Analyzed:	11/05/24	Data File:	411018-02.094
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	3.1

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_MID02_20241028	Client:	SoundEarth Strategies
Date Received:	11/01/24	Project:	SOU_1249-001-06_20241101
Date Extracted:	11/04/24	Lab ID:	411018-03
Date Analyzed:	11/05/24	Data File:	411018-03.095
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_GW_EFF_20241028	Client:	SoundEarth Strategies
Date Received:	11/01/24	Project:	SOU_1249-001-06_20241101
Date Extracted:	11/04/24	Lab ID:	411018-04
Date Analyzed:	11/05/24	Data File:	411018-04.096
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

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

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_20241101
Date Extracted:	11/04/24	Lab ID:	I4-945 mb
Date Analyzed:	11/05/24	Data File:	I4-945 mb.070
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 11/07/24
Date Received: 11/01/24
Project: SOU_1249-001-06_20241101, F&BI 411018

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

Laboratory Code: 411018-04 (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	102	99	70-130	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	104	85-115

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

411018

SAMPLE CHAIN OF CUSTODY

11/01/24 K1

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)

PROJECT NAME/NO: Ballard Blocks II Property; Arsenic Treatment System Water Sampling

PO #: 1249-001-06

REMARKS

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: Total Arsenic (200.8)				Lab ID	Notes
1249_GW_INF_20241028	Influent	N/A		10/28/24	1345	WATER	1	X				01	HNO_3 preserved
1249_GW_MID01_20241028	First Mid-Treatment	N/A			1340		1	X				02	HNO_3 preserved
1249_GW_MID02_20241028	Second Mid-Treatment	N/A			1335		1	X				03	HNO_3 preserved
1249_GW_EFF_20241028	Effluent	N/A			1330		1	X				04	HNO_3 preserved

10/28/24

Samples received at 2 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	11/1/24	1510
Received by:	Anh Phan	FBI	11/01/24	15:10
Relinquished by:				
Received by:				

SoundEarth Strategies

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 411018 CLIENT Sound INITIALS/ DATE: AP 11/01/24

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

Cooler/Sample temperature 2 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

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

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: NP 11/4
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 5 days

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

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

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

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

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

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

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

Other comments (use a separate page if needed)

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

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

April 3, 2024

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 27, 2024 from the SOU_1249-001-06/210_20240327, F&BI 403418 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
SOU0403R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 27, 2024 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-06/210_20240327, F&BI 403418 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
403418 -01	1249_SSGW_20240327

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_SSGW_20240327	Client:	SoundEarth Strategies
Date Received:	03/27/24	Project:	SOU_1249-001-06/210_20240327
Date Extracted:	03/28/24	Lab ID:	403418-01 x5
Date Analyzed:	03/29/24	Data File:	403418-01 x5.157
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	21

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_20240327
Date Extracted:	03/28/24	Lab ID:	I4-252 mb
Date Analyzed:	03/28/24	Data File:	I4-252 mb.057
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 04/03/24
Date Received: 03/27/24
Project: SOU_1249-001-06/210_20240327, F&BI 403418

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

Laboratory Code: 403423-01 (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	10.2	81 b	75 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	94	85-115

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported 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.

SAMPLE CHAIN OF CUSTODY

403418

03/27/24 L5

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)*

PROJECT NAME/NO.	PO #
Ballard Blocks II Property – Subgrade Groundwater Monitoring	1249-001-06 / 210

REMARKS

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: Total As (200.8)					Notes
1249_SSGW_20240327	Sub slab GW	N/A	01	3/27/24	1213	WATER	1	X					HNO_3 preserved

3/27/24

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	3/27/24	13:18
Received by:	ANH PHAN	FSG	03/27/24	13:18
Relinquished by:		Samples received at 3 °C		
Received by:				

SoundEarth Strategies

ATTACHMENT C

Site Photographs

SITE PHOTOGRAPHS
Ballard Blocks II
1401 and 1451 Northwest 46th Street
Seattle, Washington

Project No.: 1249-001-06
Date: November 13, 2024
Drawn By: CGC
Chk By: CMC

Photograph 1. Easterly-facing view of the Area B cap (left of the sidewalk) along the southern side of the Site.

Photograph 2. Southerly-facing view of the Area B cap along the western side of the Site.

Photograph 3. Easterly-facing view of the Area B cap (right of the sidewalk) along the northern side of the Site.

Photograph 4. Northeasterly-facing view toward the Area C cap in the Northwest 46th Street right-of-way.

Photograph 5. Northwesterly-facing view toward the Area C cap in the Northwest 46th Street right-of-way.

Photograph 6. Southerly-facing view over the Area B Cap along the eastern side of the Site.