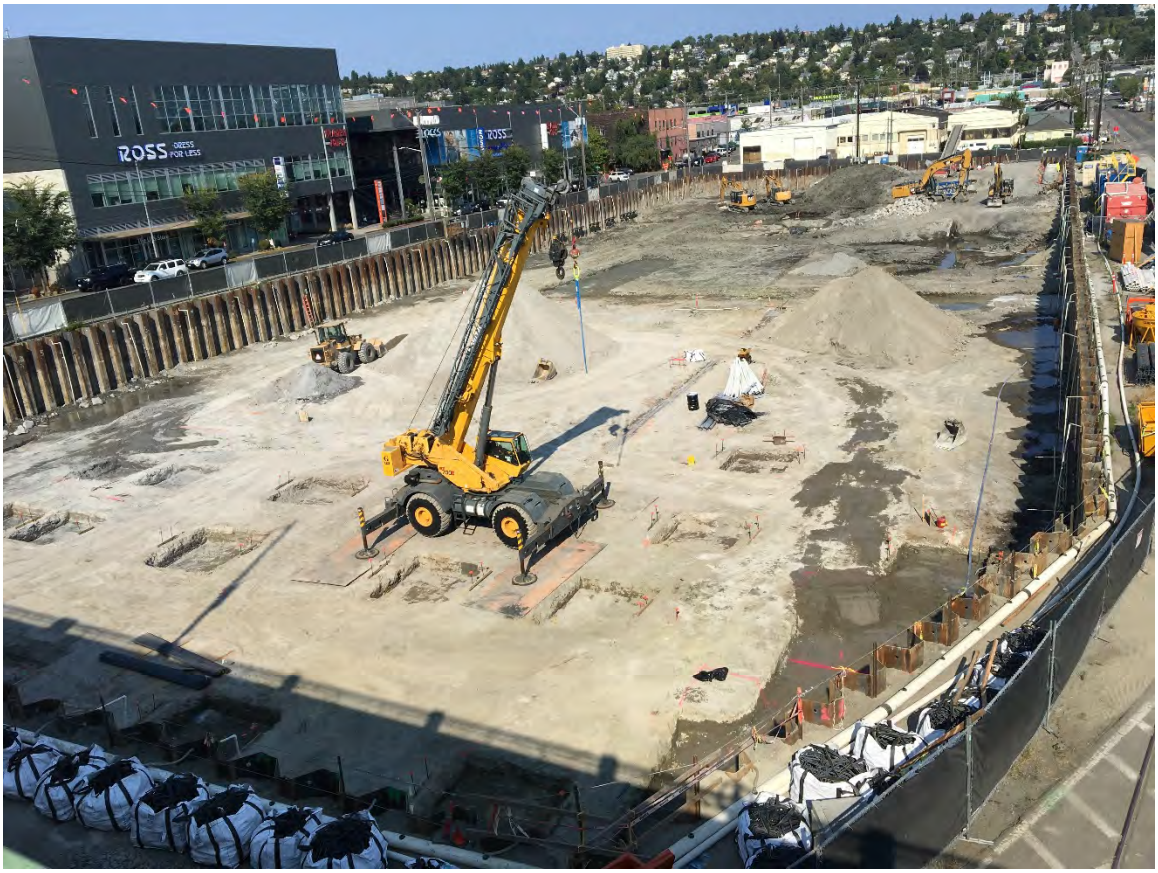
SoundEarth Strategies, Inc.
2811 Fairview Avenue East, Suite 2000
Seattle, Washington 98102

FINAL CLEANUP ACTION REPORT



Property:

Wesmar Company, Inc. Site
(Ballard Blocks II)
1401 and 1451 Northwest 46th Street
Seattle, Washington

Report Date:

February 25, 2020

Prepared for:

Washington State Department of Ecology
Bellingham Field Office
913 Squalicum Way, Unit 101
Bellingham, Washington

Final Cleanup Action Report

Prepared for:

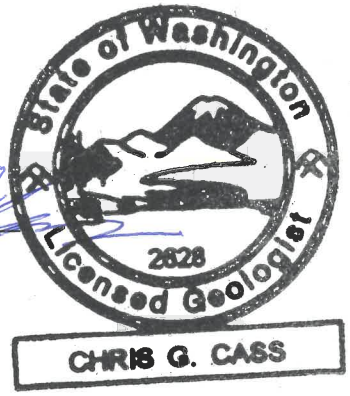
Washington State Department of Ecology
Bellingham Field Office
913 Squalicum Way, Unit 101
Bellingham, Washington 98225

Project:

Wesmar Company Inc. Site
(Ballard Blocks II)
1401 and 1451 Northwest 46th Street
Seattle, Washington

Project No.: 1249-001-05

Prepared by:



Chris G. Cass, LG
Associate Geologist

Sarah N. Welter
Staff Geologist

Reviewed by:

Chris Carter
Managing Principal

February 25, 2020

SoundEarth Strategies

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

FIGURES

TABLES

PHOTOGRAPHS

TABLE OF CONTENTS (CONTINUED)

APPENDICES

TABLE OF CONTENTS (CONTINUED)

TABLE OF CONTENTS (CONTINUED)

ACRONYMS AND ABBREVIATIONS

µg/L	micrograms per liter
AO	Administrative Order
ARAR	applicable or relevant and appropriate requirement
BBI property	redeveloped property north of the Property
bgs	below pre-construction ground surface
BINMIC	Ballard Interbay Northend Manufacturing and Industrial Center
BNSF	Burlington Northern Santa Fe
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CAP	Cleanup Action Plan
CAR	Cleanup Action Report
CFR	Code of Federal Regulations
City	City of Seattle
COC	contaminants of concern
Color Tech	Color Tech, Inc.
cPAH	carcinogenic polycyclic aromatic hydrocarbon
CSWGP	Construction Stormwater General Permit
DRPH	diesel-range petroleum hydrocarbons
Ecology	Washington State Department of Ecology
EPA	US Environmental Protection Agency
F&B	Friedman & Bruya, Inc.
GAC	granular activated carbon
GPM	gallons per minute
HASP	Health and Safety Plan
mg/kg	milligrams per kilogram

ACRONYMS AND ABBREVIATIONS (CONTINUED)

mg/L	milligram per liter
MTCA	Washington State Model Toxics Control Act
NAVD88	North American Vertical Datum of 1988
ORPH	oil-range petroleum hydrocarbons
PCA	Proposed Cleanup Action
PID	photoionization detector
PLP	potentially liable party
the Property	the Wesmar Company, Inc., also known as Ballard Blocks II, property located at 1401 and 1451 Northwest 46th Street in Seattle, Washington
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
RIFS	remedial investigation and feasibility study
ROW	right-of-way
SES	Sound Environmental Strategies Corporation
SoundEarth	SoundEarth Strategies, Inc.
TCE	trichloroethene
TEQ	toxicity equivalent
TCLP	Toxicity Characteristic Leachate Procedure
UCL	upper confidence limit
USC	United States Code
UST	underground storage tank
VGT	Vashon Glacial Till
VOC	volatile organic compounds
VRO	Vashon Recessional Outwash
WAC	Washington Administrative Code

EXECUTIVE SUMMARY

SoundEarth Strategies, Inc. (SoundEarth) has prepared this final Cleanup Action Report on behalf of Block at Ballard II, LLC, to provide a summary of the environmental cleanup action conducted at the property located at 1401 and 1451 Northwest 46th Street in Seattle, Washington (the Property; Figure 1). The cleanup action was performed pursuant to the requirements of the October 20, 2017, First Amended Consent Decree (No. DE 10-2-21304-0 SEA; Consent Decree), and associated Revised Cleanup Action Plan,between Block at Ballard II, LLC and the Washington State Department of Ecology (Ecology).

The Site is referred to as Wesmar Company, Inc. Site. The Site is also identified as Ballard Blocks II.

Based on the findings from previous investigations along with historical research conducted by Sound Environmental Strategies Corporation (SoundEarth's previous name), the Site was defined to include the following criteria:

- Extent of carcinogenic polycyclic aromatic hydrocarbon-contaminated soil both on and off of the Property associated with historical property use and artificial fill. The off-Property extent of carcinogenic polycyclic aromatic hydrocarbon-contaminated soil associated with the Property is limited to Area C, identified on Figure 2.
- Arsenic-contaminated soil beneath the Property.
- Arsenic-contaminated groundwater beneath the Property. Ecology has determined that the groundwater contamination associated with the historical use of the Property is limited to Area A, identified in Figure 2.

Based on the location of the Property within the Ballard Interbay Northend Manufacturing and Industrial Center (BINMIC) area, the heavy railroad use in the rights-of-way adjacent to the Property, and the absence of historical uses on Property that would have contributed to the local and regional arsenic soil and groundwater contamination, the following criteria were excluded from the Site definition.

- Arsenic in soil beyond the Property boundary.
- Arsenic in groundwater beyond the Property boundary.

Based on the information acquired during the remedial investigation, three remedial areas were designated for the Site: those portions of the Property located within the proposed shoring system (Area A), those portions of the Property that are located outside the shoring system (Area B), and the portion of the Site located within the Northwest 46th Street right-of-way (Area C) as depicted on Figure 2.

Earthwork construction activities in the form of shoring wall installation work at the Site began on March 20, 2018, with sheet pile installations completed on June 2, 2018.

Remedial excavation activities began at the Property on June 21, 2018, and were completed on January 15, 2019. The remedial excavation work was performed pursuant to the requirements of the October 20, 2017, Consent Decree.

A total of 41,859 tons of soil contaminated with carcinogenic polycyclic aromatic hydrocarbons and arsenic at concentrations above their respective Washington State Model Toxics Control Act (MTCA) Method A cleanup levels were removed from Area A of the Site in the course of shoring installation and

the remedial mass excavation activities and disposed of at Resource Conservation and Recovery Act Subtitle D landfills under waste profiles approved for the material.

A total of approximately 2,942 tons of concrete encrusted with soil contaminated with carcinogenic polycyclic aromatic hydrocarbon or arsenic at concentrations above MTCA Method A cleanup levels was exported to Waste Management's Greater Wenatchee Regional Landfill for the duration of the cleanup activities performed in 2018.

Approximately 102 tons of arsenic- and carcinogenic polycyclic aromatic hydrocarbon-contaminated wood waste debris mixed with soil (primarily buried tree trunks, railroad ties, and dimensional lumber scraps encountered in fill material during remedial excavation activities) was exported to Republic Services' Subtitle D landfill in Roosevelt, Washington, under a profile approved for the material. No treated wood pipe materials, or other treated wood materials suspected of originating from past process activities at the Property, were observed in the encountered wood debris removed in the course of remedial mass excavation activities.

A temporary construction stormwater treatment system was installed and operated at the Site by Clear Creek Systems, Inc. during the cleanup action. Initial dewatering activities began on January 19, 2018, for dewatering of on-Property ponded construction stormwater and groundwater. Dewatering and treatment of construction wastewater (from groundwater and surface water collection) continued through the duration of the soil cleanup action. SoundEarth performed construction dewatering sampling activities in accordance with the Construction Stormwater General Permit #WAR305762 and associated Administrative Order (AO) Docket No. 15341. At the completion of soil excavation activities, approximately 3.6 million gallons of construction dewatering water had been removed, treated, and discharged from the Property between January 19, 2018 and January 18, 2019.

A previously unknown and abandoned heating oil underground storage tank (UST) was discovered on the Property during shoring installation activities on April 9, 2018, proximal to sheet pile #288 along the western portion of the north shoring wall. This tank is identified as UST01 in SoundEarth's records. Results of the assessment of soil conditions surrounding the former UST along with reconnaissance groundwater sampling and analysis performed following removal of the tank indicated that no release of heating oil occurred at concentrations exceeding Model Toxics Control Act Method A cleanup levels.

Following the completion of the remedial excavation and the new basement parking garage foundation, an arsenic in groundwater evaluation program was initiated in June 2019, as outlined in Section 6.4.1 of the Revised Cleanup Action Plan. Because the total arsenic results were above 5 micrograms per liter during each of the six weekly monitoring events for subgrade water control system discharge water, a permanent arsenic treatment system was installed for the subgrade water control system to treat arsenic concentrations in discharge water to 5 micrograms per liter or less prior to discharge, as outlined in the Revised Cleanup Action Plan.

Long-term groundwater monitoring, as outlined in the Revised Cleanup Action Plan, began in Fourth Quarter 2019. Water discharged from the subgrade water control system (prior to treatment for arsenic) will be sampled for total arsenic quarterly during the first year, semiannually during the second and third years, and annually during the fourth and fifth years. If concentrations of arsenic are not detected above the applicable cleanup level in groundwater after 5 years, then monitoring may be discontinued, as outlined in the Revised Cleanup Action Plan. During the long-term groundwater monitoring period, the

subgrade drainage water will be routed through the permanent arsenic treatment system prior to discharge to the municipal stormwater system.

With the implementation of the remedial action and based on the confirmation soil and groundwater data, the requirements of the First Amended Consent Decree (No. DE 10-2-21304-0 SEA; Consent Decree) between Block at Ballard II, LLC and Ecology have been met and no further remedial action at the Property is warranted.

Details regarding the cleanup action activities performed are summarized in the following report.

1.0 INTRODUCTION

SoundEarth Strategies, Inc. (SoundEarth) has prepared this final Cleanup Action Report (CAR) on behalf of Block at Ballard II, LLC, to provide a summary of the environmental cleanup action conducted at the property located at 1401 and 1451 Northwest 46th Street in Seattle, Washington (the Property; Figure 1). The cleanup action was performed pursuant to the requirements of the October 20, 2017, First Amended Consent Decree (No. DE 10-2-21304-0 SEA; Consent Decree), and associated Revised Cleanup Action Plan, between Block at Ballard II, LLC and the Washington State Department of Ecology (Ecology).

The Site is referred to as Wesmar Company, Inc. Site. The Site is also identified as Ballard Blocks II.

The Site is depicted on Exhibit B: Site Diagram of the Consent Decree and is also schematically shown on Figure 2—Site Boundary Definition.

Based on the findings from previous investigations along with historical research conducted by Sound Environmental Strategies Corporation (SES; SoundEarth's previous name), the primary contaminants of concern (COCs) and affected media identified for the Site were carcinogenic polycyclic aromatic hydrocarbons (cPAHs) including naphthalene in soil and arsenic in soil and groundwater. The Site was defined to include the following criteria:

- Extent of cPAH-contaminated soil both on and off of the Property associated with historical property use and artificial fill. The off-Property extent of cPAH-contaminated soil associated with the Property is limited to Area C, identified on Figure 2.
- Arsenic-contaminated soil beneath the Property.
- Arsenic-contaminated groundwater beneath the Property. Ecology has determined that the groundwater contamination associated with the historical use of the Property is limited to Area A, identified on Figure 2 (the remedial excavation area).

Based on the location of the Property within the Ballard Interbay Northend Manufacturing and Industrial Center (BINMIC) area, the heavy railroad use in the rights-of-way (ROWs) adjacent to the Property, and the absence of historical uses on Property that would have contributed to the local and regional arsenic soil and groundwater contamination, the following criteria have been excluded from the Site definition:

- Arsenic in soil beyond the Property boundary.
- Arsenic in groundwater beyond the Property boundary.

The Site is listed on Ecology's Hazardous Sites List as "Wesmar Company, Inc." with the Facility Site ID No. 2194. The Property was previously operated by Wesmar Company Inc., a chemical product manufacturer and distributor, and Color Tech, Inc., a metal coating service. Historically, the Property is also known to have been operated by various other industrial entities including a wooden pipe manufacturing facility, a produce cannery, a paper box manufacturing facility, a fiberglass products manufacturer, and a plastic products manufacturing facility.

Bridge Group II, LLC, which owned the Property immediately prior to Block at Ballard II, LLC, retained SES to perform environmental investigations at the Site and to prepare technical documents summarizing the results of the investigations. Beginning in October 2006, SES performed several investigations at the Site

as independent actions. The investigations identified the presence of cPAHs and arsenic as COCs in soil and arsenic as a COC in groundwater at the Site.

In December 2007, Ecology and Bridge Group II entered into an Agreed Order (Agreed Order Do. DE 5242) which required Bridge Group II to conduct supplemental remedial investigation work at the Site; to prepare and submit to Ecology a draft Remedial Investigation and Feasibility Study (RIFS) reporting the extent and character of contamination at the Site and proposing a method of performing an environmental cleanup of the affected areas; and to prepare and submit to Ecology a draft Cleanup Action Plan (CAP). A draft RIFS and CAP report, dated September 12, 2008, was submitted to Ecology. The RIFS report findings confirmed that contaminants of cPAHs and arsenic in soil and arsenic in groundwater at the Site were present in excess of Washington State Model Toxics Control Act (MTCA) cleanup levels. Ecology subsequently accepted it as the final Remedial Investigation and Feasibility Study and Proposed Cleanup Action (RIFS and PCA) report.

Based on the information acquired during the remedial investigation, three remedial areas were designated for the Site: those portions of the Property located within the proposed shoring system (Area A), those portions of the Property that are located outside the shoring system (Area B), and the portion of the Site located within the Northwest 46th Street right-of-way (Area C) as depicted on Figure 2.

The streets surrounding the Property were raised to their current elevation during a regrading event that occurred in 1913. cPAH soil contamination resulting from the historical uses at the Property is limited to the Ballard Blocks II property and the deeper fill layer in 46th Street (identified in the Revised CAP as "Area C") pre-dating the 1913 regrading event that raised the streets on the surrounding ROWs to their current elevation. Within the exception of Area C, contaminated soil in the surrounding ROWs is not part of the Site because it resulted from historical placement of uncontrolled contaminated fill from unknown off-Property source locations to raise the street levels to their current grades.

On January 27, 2009, Block at Ballard II, LLC purchased the Property from Bridge Group II. In February 2009, Ecology notified Block at Ballard II that it was a potentially liable party (PLP) for the Site based on its ownership of the Property. Block at Ballard II, LLC did not contest PLP status and on March 17, 2009, Ecology determined Block at Ballard II to be a PLP for the Site.

A CAP was included in the Consent Decree, dated June 11, 2010. Changes to redevelopment plans for the Property and extensions to the construction schedule due to changing market conditions necessitated minor adjustments to the CAP.

The cleanup alternative analysis conducted in the RIFS and PCA was reanalyzed, considering the minor adjustments proposed for the redevelopment plans. This analysis indicated that the minor adjustments to the shoring design and a shallower planned depth of the construction excavation did not change the selection of the preferred remedial alternative and was not anticipated to significantly impact the implementation of the original CAP. Ecology updated the 2010 CAP document to include the construction plan changes in the Revised CAP, included as Exhibit A in the amended Consent Decree between Block at Ballard II, LLC and Ecology on October 20, 2017, First Amended Consent Decree (No. DE 10-2-21304-0 SEA; Consent Decree).

Earthwork construction activities in the form of shoring wall installation work at the Site began on March 20, 2018, with sheet pile installations completed on June 2, 2018.

Remedial excavation activities began at the Property on June 21, 2018, and were completed on January 15, 2019. The remedial excavation work was performed pursuant to the requirements of the October 20, 2017, First Amended Consent Decree (No. DE 10-2-21304-0 SEA; Consent Decree) between Block at Ballard II, LLC and Ecology.

This report summarizes historical information regarding the former use of the Property, previous environmental reports prepared for the Property, the scope of work completed for the cleanup action and implementation of institutional controls, and results, findings, and conclusions of the cleanup action.

1.1 PURPOSE

The purpose of this CAR is to describe the cleanup action performed for the Site, pursuant to the requirements of the October 20, 2017, Consent Decree.

The objective of this cleanup action was to segregate and remove contaminated soil from Area A of the Property concurrent with excavation and construction activities related to redevelopment. The CAR documents environmental cleanup-related activities performed during Property redevelopment in 2018 and 2019.

1.2 REPORT ORGANIZATION

This report is organized into the following sections:

- **Section 2.0, Property Background.** This section discusses the Property location and description, the land use history of the Property and surrounding parcels, Property geology and hydrology, and the previous investigations conducted at the Property. This section also provides a summary of the selected cleanup action and the remediation levels for the Property.
- **Section 3.0, Cleanup Action Implementation.** This section describes the components of the cleanup action: monitoring well decommissioning, shoring installation, soil excavation, heating oil underground storage tank (UST) decommissioning and removal, and institutional controls.
- **Section 4.0, Compliance Monitoring.** This section describes the protection, performance, and confirmation monitoring that were conducted as part of the cleanup action, including a discussion of soil sampling results.
- **Section 5.0, Summary of Findings and Conclusions.** This section presents conclusions based on the results of the cleanup action completed at the Property.
- **Section 6.0, Limitations.** This section presents SoundEarth's standard limitations associated with conducting the work reported herein and preparing this report.
- **Section 7.0, Bibliography.** This section lists information sources used in this document.

The Property location is shown on Figure 1. The Site is schematically shown on Figure 2, Site Boundary Definition. Figure 3 depicts approximate locations and elevations of performance soil sample locations, and Figure 4 depicts the approximate locations and elevations of confirmation soil sample locations. The approximate final remedial excavation extent and bottom elevations in North American Datum of 1988 (NAVD88) are shown on Figure 5A. A north–south-trending cross section through a portion of the remedial excavation is shown on Figure 5B. Soil sample locations associated with the removed heating oil tank UST01 are shown on Figure 6.

2.0 PROPERTY BACKGROUND

This section provides a description of the Property's features and location, a summary of the land use history of the Property, Property geology and hydrology, a summary of previous investigation conducted at the Property, and a summary of the selected cleanup action and remediation levels.

2.1 PROPERTY LOCATION AND DESCRIPTION

The Property includes three contiguous tax parcels (King County parcel numbers 276830-3245, 276830-3247, and 276830-3315) that cover a combined total of approximately 108,782 square feet (2.50 acres) of land. The Property is located at 1401 and 1451 Northwest 46th Street, approximately 5 miles northwest of downtown Seattle, Washington, within the Ballard area (Figure 1). The Property includes an easement at the southeastern corner for a railroad spur track.

The Property is currently in the process of being redeveloped with a commercial-retail complex with a one-story below-ground parking garage.

The Property is located within the Ballard Interbay Northend Manufacturing and Industrial Center (BINMIC) area, an approximate 971-acre area incorporating waterfront and uplands northwest of downtown Seattle. The BINMIC area is well known as a region with significant environmental issues as a result of the various historical industrial operations that were conducted in the area. The BINMIC boundaries are generally designated by Northwest Market Street and Northwest Leary Way in Ballard to the north; Third Avenue Northwest and Third Avenue West to the east; the Chittenden Locks and Magnolia to the west; and Dravus Street to the south. The Property is located within the North BINMIC area, which is typically zoned general industrial or industrial buffer and includes such maritime businesses as commercial fishing, ship repair and boatyards, metal fabricators, print shops, warehousing, and storage. In the vicinity of the Property, retail stores, office buildings, service providers, and commercial properties are prominent tenants. In addition to industrial applications, several single-family homes and apartment buildings are located near the northern boundary of the North BINMIC area.

2.1.1 Adjoining Properties

Development in the vicinity of the Property is primarily commercial and industrial. Uses of nearby parcels at the time this report was prepared are summarized below:

- **North.** Northwest 46th Street, a City of Seattle ROW, bounds the Property to the north. General Disposal formerly occupied the area beyond Northwest 46th Street. The parcels were mostly redeveloped in 2008 with a commercial office building complex and retail stores (BBI property). An early 1900s-vintage, abandoned single-family residence is located on an inset parcel of the BBI property. A 1940-vintage, masonry commercial building, occupied by Mike's Tavern and Chili Parlor, is located on an inset parcel at the northwestern corner of the BBI property.
- **South.** Northwest 45th Street, a City of Seattle ROW, provides the southern Property boundary, along which runs a rail line. Bowman Refrigeration currently occupies the parcel across Northwest 45th Street, including a 1979-vintage warehouse building.
- **East.** The eastern Property boundary is provided by 14th Avenue Northwest, a City of Seattle ROW. Warehouses along with a residence occupy the land across 14th Avenue Northwest.

- **West.** The Property is bounded to the west by 15th Avenue Northwest, a City of Seattle ROW. The main road deck of 15th Avenue Northwest is elevated as part of the Ballard Bridge in this area. A restaurant and bar (Pono Ranch) lies to the west of the Property across 15th Avenue Northwest. That parcel was formerly occupied by a bulk storage tank facility used to store organic oils associated with the Lyle E. Branchflower fat extraction plant and was more recently historically occupied by Lake Union Boat Repair.

2.1.2 Adjoining Utilities

A 96-inch-diameter sewer main and a 54-inch-diameter sewer main are located beneath the 14th Avenue Northwest and the Northwest 45th Street ROWs, respectively. The top of the sewer main within 14th Avenue Northwest is located approximately 16 feet below ground surface (bgs), and the top of the sewer main within Northwest 45th Street is located approximately 5 feet bgs.

A natural gas line, which is approximately 36 inches bgs, runs along Northwest 46th Street, approximately 20 feet north of the Property boundary. A sanitary sewer line, which is located approximately 10 feet north of the gas line, is approximately 9.75 feet bgs and runs along the approximate center line of the Northwest 46th Street ROW. A water line, which is located approximately 10 feet north of the sanitary sewer line along the north side of Northwest 46th Street, is approximately 4 feet bgs. A water line is also located beneath 14th Avenue Northwest.

2.2 LAND USE HISTORY

The Property lies approximately 175 feet north of the Lake Washington Ship Canal. The Property was used for heavy industrial operations from the early 1900s until approximately 2007. Historical Property use activities include a wooden pipe manufacturing facility, cannery, plastic products manufacturing facility, and a chemical product manufacturer/distributor (Wesmar).

Based on information reviewed in the course of the final RIFS and PCA (SES 2010), including SoundEarth's review of historical maps and archived King County Assessor records, it appears that the original grade of the Property was approximately 11.5 feet below the current surrounding street grade. An 1894-dated State Land Commissioners Map of Ballard Harbor depicts the shoreline of Salmon bay inset onto a part of the eastern portion of the Property, and no structures are shown on the Property. The remainder of the Salmon Bay shoreline near the Property was mostly located along or immediately south of present-day Northwest 45th Street (historically identified as Salmon Street) in 1884. By 1889, the ROWs surrounding the Property were deeded to the City of Seattle.

By 1903, the grade of the Property and surrounding streets had been raised by artificial filling to the foundation grade of the former Wesmar Building, which was constructed in approximately 1906, when Pacific Coast Pipe Co. and City Electric Light and Waterworks occupied the Property.

The surrounding streets were raised to their current elevation during a subsequent regrading event that occurred in 1913. The shoreline of Salmon Bay was further artificially filled, and the waterfront was shifted to the south to near its present-day location.

By 1917, the eastern portion of the Property was used for the storage of pipes manufactured by the Pacific Coast Pipe Co. A pipe manufacturing facility operated on the Property until at least 1937 and ceased operations prior to approximately 1946.

Durabilt Luggage Co. operated at the Property by 1946. In 1950, R.D. Bodle Fruit and Vegetable Cannery operated on the Property in the 1906-vintage building. By 1968, the 1906-vintage building was in use by a shoe warehouse and a paper box manufacturing company.

A new industrial building was constructed on the eastern portion of the Property in 1957. A fiberglass products manufacturing company occupied the 1957-vintage building by 1968.

The most recent occupants of the Property, prior to demolition of these structures in 2008, Wesmar Company, Inc. and Color Tech, Inc. (Color Tech), occupied the Property between the 1970s and 2007.

Wesmar Company, Inc. operated in the 1906-vintage building and was a chemical distributor specializing in cleaners, sanitizers, and water treatment compounds.

Color Tech operated in the 1957-vintage building beginning in approximately 1976 and was a company that provided coating services for metals and metal-formed products.

The two former single-story, slab-on-grade buildings on the Property, constructed in approximately 1906 and 1957, respectively, were demolished in approximately 2008. The floor grade of the former buildings was approximately 8 to 10 feet below the existing surrounding street grade. The concrete floor slabs remained in place after building demolition activities in 2008, and the majority the lower floor slab area remained submerged under ponded water for approximately 10 years until dewatering activities for Property redevelopment began in January 2018.

2.3 ENVIRONMENTAL SETTING

2.3.1 Land Use

As discussed above, the Property is located within the North BINMIC area, and land use on the Property and surrounding parcels is primarily commercial and industrial. Additionally, there are several retail stores, office buildings, and other commercial uses within BINMIC, the majority of which are located in the vicinity of Northwest Leary Way to the north of the Property (Floyd Snider McCarthy 2003).

Although a small number of residential properties are located within the north BINMIC area, the Property and vicinity are zoned for industrial use by the City of Seattle (Seattle Municipal Code 23.50), and new residential developments are not permitted. Any residences located within the BINMIC area were constructed prior to adoption of the industrial zoning codes. The Property is presently zoned IG2 U/65, a general industrial use designation that allows for a broad range of uses where the industrial function of an area is less established than in IG1 zones.

The Property is currently in the process of being redeveloped with a mixed-use commercial-retail complex. Redevelopment plans involve construction of a subsurface parking garage with the floor slab surface at an approximate elevation of 14 feet NAVD88, several feet below the surrounding street-surface grade. The construction project also includes new sidewalks, trees, and improved lighting surrounding the Property.

2.3.2 Topography

The Property slopes very gently toward the Lake Washington Ship Canal, which is located approximately one block to the south of the Property. Street grade elevations are between

approximately 25 feet NAVD88 (Northwest 45th Street) and 30 feet NAVD88 (Northwest 46th Street).

2.3.3 Meteorology

The climate of the area is maritime and experiences moderate seasonal fluctuations in temperature. The historical average annual rainfall in the Seattle area is approximately 33.7 inches (Richardson et al. 1968), with peak rainfall occurring in the months of December and January. More recent averages suggest upwards of 38 inches of annual rainfall (http://www.weather.com/weather/wxclimatology/monthly/USWA0395). Surface water runoff and evapotranspiration are estimated at 15 inches annually in the North BINMIC area (Richardson et. al 1968), leaving only a modest amount of annual rainfall as potential recharge to groundwater.

2.3.4 Groundwater Use

No active production wells are located within the North BINMIC area, and groundwater use is generally limited to non-potable emergency and industrial supply wells. According to Washington Administrative Code (WAC) chapter 173-340-720, "Groundwater cleanup levels shall be based on estimates of the highest beneficial use and the reasonable maximum exposure expected to occur under both current and future site conditions." The highest beneficial use of regional shallow groundwater and groundwater beneath the Property has, therefore, been identified in the BINMIC Hydrogeological and Environmental Settings Report (BINMIC report; Floyd Snider McCarthy 2003) as surface water discharge. However, Ecology has determined that the Site groundwater is a potential future source of drinking water because it may be hydrologically connected to the Lake Washington Ship Canal, which is designated as domestic water according to WAC 173-201A§602. As a result, the MTCA Method A cleanup levels for groundwater (WAC 173-340-720) are used as the Site-specific cleanup levels.

2.3.5 Environmental Quality of Regional Soil and Groundwater

By 1896, Ballard was known as the "Shingle Mill Capital of the World." Archived records for the area and historical photographs taken in the early 1900s suggest that much of the area was occupied by railroad lines and industrial facilities, which included cedar shingle mills, lumber factories, wood treatment facilities, and metal works. By-products of such extensive railroad use and industrial activities included contamination of soil and groundwater by metals, PAHs, and petroleum hydrocarbons. In addition, the use of fill material, of unknown origin, to bring the Property and surrounding streets up to their current grade contained these contaminants.

The environmental quality of soil and groundwater within the North BINMIC area has been evaluated in the BINMIC Hydrogeological and Environmental Settings Report (Floyd Snider McCarthy 2003). According to the report, the most commonly encountered contaminants include petroleum hydrocarbons, PAHs, volatile organic compounds (VOCs), and heavy metals. It should be noted that the BINMIC report excluded any data collected from facilities owned and operated by Burlington Northern Santa Fe (BNSF) Railway. Data relevant to the Property is summarized below.

2.3.5.1 Environmental Quality of Groundwater

Shallow groundwater in the North BINMIC Area is generally encountered between 2 and 20 feet bgs within the near-surface fill material, much of which has been adversely impacted by historical and on-going industrial activities in the area. The Vashon Till, a unit of dense glacial deposits,

serves as a confining layer beneath the fill, and it reduces the downward migration of contaminated groundwater. In addition, groundwater within the North BINMIC area is not currently used as a drinking water source or for industrial purposes. Concentrations of contaminants commonly encountered within the shallow groundwater of the North BINMIC area and applicable to this RI are summarized below.

Polycyclic Aromatic Hydrocarbons. The average concentrations of PAHs detected in groundwater within the North BINMIC area ranged from 0.08 micrograms per liter (µg/L) to 35 µg/L (Floyd Snider McCarthy 2003).

Petroleum hydrocarbons as gasoline ranged in average concentration from 7,474 µg/L to nearly 100,000 µg/L and petroleum hydrocarbons as diesel ranged from 292 µg/L to more than 19,000 µg/L (Floyd Snider McCarthy 2003).

Heavy Metals. According to the BINMIC report, average concentrations of arsenic in shallow groundwater ranged from 3 µg/L to 160 µg/L (Floyd Snider McCarthy 2003).

2.3.5.2 Environmental Quality of Soil

The near-shore areas within the North BINMIC area, which include the Property, were filled with materials generally derived from anthropogenic sources. Near-surface soil in the area has been widely impacted by historical industrial activities; contaminants commonly identified within the fill and shallow native soil are described below.

Polycyclic Aromatic Hydrocarbons. For the purposes of this discussion, polyaromatic hydrocarbons include both PAHs and petroleum hydrocarbons as gasoline, diesel, and oil.

According to Ecology's *Urban Seattle Area Soil Dioxin and PAH Concentrations Initial Summary Report*, concentrations of cPAHs (toxicity equivalent) in shallow soil in the Ballard neighborhood study area, which included the immediate Property vicinity, reportedly ranged from 0.035 milligrams per kilogram (mg/kg) to 1.200 mg/kg, with an average concentration of 0.340 mg/kg (Ecology 2011).

The average concentrations of PAHs detected in near-surface soil at locations within the North BINMIC area ranged from 0.10 mg/kg to 116 mg/kg. PAHs in soil, which are among the most prevalent contaminants within the North BINMIC Area, frequently resulted from the historical use of fill material during the Ballard regrade activities, treated wood processing and storage, and creosote-treated piers and rail ties (Floyd Snider McCarthy 2003). In addition to the sources identified in the BINMIC report, other potential sources of PAHs in the BINMIC area may include the use of waste oils containing bunker fuel, which is laden with PAHs, for dust suppression on the former exposed unpaved ROWs, as well as railroad activities incorporating the use of bunker oils to fuel train engines.

Concentrations of petroleum hydrocarbons as gasoline ranged from 285 mg/kg to more than 44,000 mg/kg; concentrations of petroleum hydrocarbons as diesel ranged from 267 mg/kg to nearly 5,000 mg/kg. Sources of petroleum hydrocarbon contamination in soil include underground heating oil tanks, maintenance and other activities conducted along rail lines, and vehicle maintenance and repair (Floyd Snider McCarthy 2003). In addition to the sources identified in the BINMIC report, other potential sources of petroleum hydrocarbons in the BINMIC area include the use of waste oil for dust suppression on the formerly exposed ROWs and railroad activities, including the use of bunker oils to fuel train engines.

Heavy Metals. Arsenic has been identified as a COC for the Property, and according to the BINMIC report, average concentrations of arsenic in near-surface soil in the Property vicinity ranged from 7 mg/kg to 116 mg/kg (Floyd Snider McCarthy 2003). Although the source for the arsenic contamination was not discussed in the BINMIC report, likely sources include fill materials, American Smelting and Refining Company (ASARCO) slag used in railroad ballast, and the historical use of arsenic-containing herbicides along the rail lines and roads in the area. Further discussion of potential arsenic sources is included in Section 4.2.

2.4 GEOLOGIC AND HYDROGEOLOGIC SETTING

2.4.1 Regional Geology

The native geologic materials underlying the North BINMIC area generally consist of unconsolidated glacial and non-glacial deposits to depths of more than 1,500 feet bgs. Fill materials predominate from the surface to depths of between approximately 10 and 30 feet bgs. The area-wide fill generally consists of loose silt, sand, and clay with wood and construction debris, including creosote-treated railroad ties and old piers. Because of the thick fill layer in the area and the shallow depth to groundwater, perched groundwater is frequently encountered within the fill deposits. Native soil consisting of stiff to loose silt and fine sand layers with occasional clay and peat layers underlies the fill materials. The uppermost soil deposits underlying the fill is described as Holocene Depression Fillings, below which is generally the Vashon Recessional Outwash (VRO) consisting of medium-dense silt to gravelly sand at depths generally between 10 and 30 feet bgs. Underlying the VRO and Holocene fill is Vashon Glacial Till (VGT) and Lawton Clay generally beginning at depths of approximately 30 to 60 feet and extending to depths of 90 feet or more (Floyd Snider McCarthy 2003). Regional geologic maps show the VRO is absent or very thin in the area of the Property, and the Holocene deposits rest directly on top of the VGT. A more complete description of the regional geology is available in the BINMIC report (Floyd Snider McCarthy 2003).

2.4.2 Regional Hydrogeology

Within the North BINMIC area, shallow groundwater is generally present within the fill material at depths between 1 and 20 feet bgs (Floyd Snider McCarthy 2003). The saturated thickness of the shallow aquifer is between approximately 20 and 30 feet. Shallow groundwater flows downward from the surrounding hillsides into the Ship Canal and Salmon Bay, although vertical movement is limited due to the dense VGT and Lawton Clay confining layers that are located beneath the first water-bearing interval. The general regional groundwater flow direction is toward the south, although it is noted that local variations in stratigraphy and anthropogenic influences, including sanitary and storm sewer lines, impact groundwater movement and flow direction (Floyd Snider McCarthy 2003).

2.4.3 Property Geology

The shallow subsurface geology at the Property is primarily comprised of two distinct geological units. The uppermost unit consists of anthropogenic fill materials from ground surface to depths of approximately 7 to over 20 feet deep (elevations of approximately 18 feet to under 5 feet NAVD88) around the edges of the Property, with fill thickness generally increasing in thickness from northwest to southeast across the Property.

The fill material is comprised of a wide range of grain sizes and materials, but generally consists of a sand-silt mixture with wood and construction debris. A relatively uniform and laterally

extensive layer of silt with fine sand unit underlies the fill. This unit has been interpreted to be native deposits, and it is classified as VGT, although it may consist of some less consolidated Holocene deposits. This material generally extends to elevations of approximately 10 to 5 feet NAVD88.

Dense to very dense silts, sands, and clays are found from approximately 5 feet NAVD88 to the maximum depth explored of approximately -30.5 feet NAVD88. This material is interpreted to be glacial till from the Pre-Vashon glaciation period. It consists of silty sand primarily at the upper interface and grades discontinuously to clay and silt at the planned excavation depth (SES 2008b). However, native glacial till was encountered during remedial excavation activities on the western portion of the Property in 2018 at elevations as high as approximately 20 feet NAVD88.

The elevation of the fill/native interface on the Property and in the surrounding ROWs is generally consistent with the grade elevations identified in the 1903 historical information. During earthwork construction activities in 2018, the fill thickness was generally found to be thinner in the northern portion of the Property and deeper along the southern margin of the Property (Figure 5B).

2.4.4 Property Hydrogeology

Depths to groundwater historically ranged from approximately 0 to 9 feet bgs across the Property.

Based upon the groundwater elevation data and inference from topography, local drainage patterns, and surface water flow, it appears that shallow groundwater in the vicinity of the Property generally flows in a southerly direction with some local variations toward sewer lines and other subsurface features that may provide preferential pathways. For instance, groundwater beneath the eastern portion of the Property flows toward the 96-inch-diameter combined sewer, which acts as a hydrogeologic depression located beneath 14th Avenue Northwest. Groundwater surfaces near well MW09, near the southeastern corner of the Property, in the Northwest 45th Street ROW in the form of a seep. According to former occupants of the Property, perennial water seepage has been observed over the past 25 years near the southeastern corner of the Property. Seep water historically flowed northward from the seep into an adjacent catch basin at an estimated rate of approximately 22 gallons per minute. The seep locally affects the potentiometric surface of the on-Property groundwater by creating a groundwater mound in the potentiometric surface and causing groundwater in its immediate vicinity to flow north toward the Property. In general, however, groundwater flows in a southerly direction toward the Lake Washington Ship Canal.

2.5 SUMMARY OF PREVIOUS INVESTIGATIONS

The results of subsurface investigations conducted at the Site between September 2005 and August 2008 indicate that cPAH-contaminated soil and arsenic-contaminated soil and groundwater are present at the Site.

CPAH-contaminated soil associated with the Property generally appears to be limited to within the Property boundaries and a portion of the Northwest 46th Street ROW. Concentrations of benzo(a)pyrene that exceeded the MTCA Method A cleanup level generally were observed at depths between approximately 2.5 and 11.5 feet bgs and were confined to the fill layer beneath the Property and a portion of the Northwest 46th Street ROW. The toxicity equivalent cPAH concentration exceedances at each

location were correlative with the detection of benzo(a)pyrene. Groundwater was not found to be impacted by cPAHs.

Concentrations of arsenic detected in soil samples collected from within the ROWs and along the former BNSF railroad lines are likely a result of regional impacts and do not appear to be associated with activities conducted on the Property. Concentrations of arsenic exceeded the MTCA Method A cleanup level in soil on the eastern portion of the Property and along the northern Property boundary, although soil concentrations generally exceeded the MTCA Method A cleanup Level by less than 5 mg/kg. Two on-Property soil samples collected from near the southern Property boundary also contained elevated arsenic concentrations.

Concentrations of arsenic in soil and groundwater collected from the North BINMIC area commonly exceed the MTCA Method A cleanup level. This is likely a result of the fill materials beneath the Property and vicinity and associated with the ballast used in the construction of the railroads. Three collected and analyzed ballast samples contained the highest arsenic concentrations relative to other soil samples collected from the Property and surrounding off-Property areas. In addition, arsenic is a common compound used in herbicides and was regularly used historically along roads and railways in an effort to reduce the growth of vegetation.

Based on the findings from the previous investigations and historical research conducted by SES, the Site was defined to include the following criteria:

- Extent of cPAH-contaminated soil both on and off of the Property associated with historical Property use and artificial fill. The off-Property extent of cPAH soil contamination associated with the Property is limited to Area C, identified on Figure 2.
- Arsenic-contaminated soil beneath the Property.
- Arsenic-contaminated groundwater beneath the Property. Ecology previously determined that the groundwater contamination associated with the historical use of the Property is limited to Area A of the Property, identified on Figure 2.

2.6 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

The cleanup conducted on a site must comply with applicable or relevant and appropriate requirements (ARARs). ARARs were screened in order to assess their applicability to the Site. The following list identifies the ARARs that may be applicable to the Site:

- State Environmental Policy Act (Chapter 43.21C Revised Code of Washington [RCW])
- Washington State Shoreline Management Act (RCW 90.58; WAC 173-18, 173-22, and 173-27)
- The Clean Water Act (33 United States Code (USC) 1251 et seq.)
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 USC 9601 et seq., and 40 CFR 300)
- The Fish and Wildlife Coordination Act
- Endangered Species Act (16 USC 1531 et seq.; 50 CFR 17, 225, and 402)
- Native American Graves Protection and Repatriation Act (25 USC 3001–3013; 43 CFR 10) and Washington's Indian Graves and Records Law (RCW 27.44)

- Archaeological Resources Protection Act (16 USC 470aa et seq.; 43 CFR 7)
- Washington Dangerous Waste Regulations (WAC 173–303)
- Solid Waste Management Act (RCW 70.95; WAC 173-304 and 173-351)
- Water Quality Standards for Surface Waters of the State of Washington (RCW 90.48 and 90.54; WAC 173-201A)
- Department of Transportation Hazardous Materials Regulations (40 CFR 100–185)
- Washington State Water Well Construction Act (RCW 18.104; WAC 173-160)
- City of Seattle and King County regulations, codes, and standards

2.7 SELECTED CLEANUP ACTION

Based on the results of the FS, a combination of Cleanup Alternatives 1a, 2b, and 2c, which entails installing a low-permeability shoring wall, excavating cPAH- and arsenic-contaminated soil from within Area A, capping contaminated soil within Areas B and C, and monitoring the discharge of arsenic-impacted groundwater from the building subgrade groundwater control system, was selected for the cleanup action.

Based on the information acquired during the RI, SES designated three remedial areas on the Site: those portions of the Property that are located within the shoring system (Area A), those portions of the Property that are located outside the shoring system (Area B), and the portion of the Site located within the Northwest 46th Street ROW (Area C; Figure 2). The shoring location was chosen for cost and logistical reasons associated with the constructability of the planned development and in coordination with the disproportionate cost analyses conducted as part of the FS. Technologies reviewed for each of the areas (Areas A, B, and C) are summarized below. Technologies are discussed in greater detail in RI/FS and PCA Section 5.6.

While revising the CAP in 2017, the technologies reviewed for each of the areas (Areas A, B, and C) were reevaluated to include the modifications in the cleanup action activities.

Summary of Alternatives

In the FS, the following cleanup alternatives were evaluated for Area A:

- Cleanup Alternative 1a—Low-permeability wall shoring (secant or sealed sheet pile) combined with the excavation of the source area and discharge to the storm system of the water captured in the proposed subgrade water intrusion control system.
- Cleanup Alternative 2a—Pervious wall shoring (soldier pile or unsealed sheet pile) combined with excavation of the source area and installing a permeable reactive barrier to pre-treat the water captured in the proposed subgrade water intrusion control system.
- Cleanup Alternative 3a—Pervious wall shoring combined with excavation of the source area and installing a permanent system to treat the water captured in the proposed subgrade water intrusion control system.

In the FS, the following cleanup alternatives were evaluated for Area B:

- Cleanup Alternative 1b—Shored excavation with off-site disposal.
- Cleanup Alternative 2b—Capping arsenic- and cPAH-contaminated soil.

In the FS, the following cleanup alternatives were evaluated for Area C:

- Cleanup Alternative 1c—Shored excavation with off-site disposal.
- Cleanup Alternative 2c—Capping cPAH-contaminated soil.

Rationale For Selection of Cleanup Alternatives

Based on the results of the FS, a combination of Cleanup Alternatives 1a, 2b, and 2c, which entails installing a low-permeability shoring wall, excavating contaminated soil from within Area A, capping contaminated soil within Areas B and C, and monitoring the discharge of arsenic-impacted groundwater from the building subgrade groundwater control system, was selected for the cleanup action.

Cleanup Alternatives 1a, 2b, and 2c meet the requirements set forth in WAC 173-340-360(3) and 173-340-370. These cleanup alternatives received "favorable" scores for the evaluation criteria of protectiveness, permanence, cost, long-term effectiveness, implementation, and consideration of public concern. The rating of "average" was assigned for short-term risk management, as a result of possible dust issues associated with the excavation. The rating of "favorable" was assigned for implementation because the sealed sheet pile wall creates a physical barrier that reduces the likelihood that the regional plume of arsenic-impacted groundwater will migrate beyond the boundary of the shoring barrier on the Property while the other two alternatives rely on treatment systems. Cleanup Alternatives 1a, 2b, and 2c received "very favorable" overall scores for the evaluation criteria of cost due to the significant cost savings over Alternatives 2a, 1b, and 1c. (Additional information available in RI/FS and PCA Tables 9a–9g; Charts 1–3.)

The selected cleanup alternatives must comply with MTCA cleanup regulations specified in WAC 173-340 and with applicable state and federal laws. Under WAC 173-340-350 and 173-340-710, applicable requirements include regulatory cleanup standards, standards of control, and other environmental requirements, criteria, or limitations established under state or federal law that specifically address a contaminant, remedial action, location, or other circumstances at a site.

Alternatives 1a, 2b, and 2c, hereafter referred to as Alternative A, Alternative B, and Alternative C, respectively, were selected as the most effective, feasible, and appropriate remedial options. These alternatives were reevaluated with respect to the modifications made to cleanup action activities in 2017. The evaluation indicated that the minor modifications would not significantly impact the cleanup alternatives. Therefore, the previously selected remedy would be selected as the cleanup action.

2.8 CLEANUP LEVELS

On-Property soil results are compared to MTCA Method A cleanup levels for unrestricted land uses. Much of the subgrade soil was removed prior to the construction of a below-ground parking garage in 2018. Preliminary soil cleanup levels for arsenic were based on unrestricted land use as defined in MTCA. Soil cleanup levels for cPAHs were compared to the cleanup level established for benzo(a)pyrene (0.1 mg/kg). Using the toxicity equivalent methodology in WAC 173-340-708(8), equivalent concentrations of the remaining cPAHs, including benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene,

indeno(1,2,3-cd)pyrene, and dibenz(a,h)anthracene, were calculated and summed to obtain the total toxicity soil concentration for the total cPAH mixture as it compares to the cleanup level for benzo(a)pyrene.

The table below presents the cleanup levels used for the Site remediation activities as outlined in the Revised CAP. Arsenic in soil and groundwater and cPAHs, along with naphthalene, in soil are the COCs for the Site that were addressed by the Site remediation.

MTCA Method A cleanup levels for the compounds listed in the table below were established in the Revised CAP for the on-Property remediation activities.

Table 1: Cleanup Levels for Site Remediation Activities

COC	**Soil** (mg/kg)	**Groundwater** (µg/L)
Arsenic	20[a]	5[b]
Benzo(a)pyrene	0.1[a]	NA
Naphthalene	5[a]	NA

NOTES:
µg/L = micrograms per liter
COC = contaminant of concern
mg/kg = milligrams per kilogram
NA = not applicable
WAC = Washington Administrative Code
Laboratory Notes:
[a]MTCA Cleanup Regulation WAC 173-340-900, Table 740-1, Method A Soil Cleanup Levels for Unrestricted Land Uses.
[b]MTCA Cleanup Regulation WAC 173-340-900, Table 720-1 Method A Groundwater Cleanup Levels for Unrestricted Land Uses.

Secondary COCs previously identified during pre-2010 subsurface investigation activities at the Property included diesel-range petroleum hydrocarbons (DRPH) and oil-range petroleum hydrocarbons (ORPH) that coincided with highly elevated concentrations of total cPAHs at boring locations B61 (at approximately 3 feet bgs), B62 (at 3 feet bgs), and B08 (at 4 feet bgs). These isolated occurrences of DRPH and ORPH concentrations above the MTCA Method A cleanup levels of 2,000 mg/kg at former soil boring locations B61, B62, and B08 were removed during remedial excavation activities at the Property in 2018, along with the cPAH-contaminated soil. Confirmation soil analytical results for DRPH and ORPH for soil samples collected following excavation of DRPH/OPRH-impacted soil at former boring locations B61, B62, and B08 are summarized in Table 1.

3.0 CLEANUP ACTION IMPLEMENTATION

The following major remedial components were implemented by the excavation and general contractors in accordance with detailed plans and specifications included within the Project Plan Set (Appendix A):

- Installation of the perimeter shoring wall system using static press methods.
- Removal of arsenic- and cPAH-contaminated soil (identified soil containing COC concentrations above applicable MTCA Method A cleanup levels) from Area A (within the perimeter shoring system).
- Loading and transporting of excavated soil to appropriate disposal facilities.

- Collection of confirmation soil samples from Area A.
- Capping of Area B with concrete sidewalks, asphalt driveways, and landscaping surrounding the planned building.
- Retention of the concrete cap on Area C as part of the Northwest 46th Street ROW.

The work involved securing the Property from trespass and from entry by the unprotected public. The preparations included installing or repairing fencing around the perimeter of the Property, posting suitable warning signs every 50 feet along the temporary fence, posting a notice at Property entrances to convey information of the exposure hazards that are represented by the contamination on the Property, and submitting a written notice to the City of Seattle and regulatory agencies as prescribed in the private rights of action section of MTCA (WAC 173-340-545).

A Remedial Action Implementation Work Plan for the Property, based on the Revised CAP, was published by SoundEarth on April 5, 2018, and was provided to Ecology on May 8, 2018. The Remedial Action Implementation Work Plan was intended to provide supplemental technical guidance for SoundEarth field staff working on the Ballard Blocks II project.

Work activities described below in subsections 3.1 through 3.7 occurred and are generally presented in chronological order concurrent with the construction sequence and schedule.

3.1 SOIL DISPOSAL PROFILE AND SOIL CLASSIFICATION

Historical soil analytical data, performance soil sampling performed as a part of the cleanup action, along with the Revised CAP and SouthEarth's Remedial Action Implementation Work Plan provided general guidance for field segregation of excavated soil and enabled the direct loading of haul trucks. Soil export waste streams established for the remedial excavation are described below.

Profiles and disposal for On-Property Class 3 contaminated material

"Class 3" contaminated material from the remedial excavation, generally fill soil or native soil with analytical results indicating concentrations of COCs above MTCA Method A cleanup levels or soil exhibiting visual or physical evidence of contamination, was exported to Resource Conservation and Recovery Act (RCRA) Subtitle D landfills under waste profiles approved by Republic Services and Waste Management. A summary of these Class 3 contaminated material waste profiles is provided below:

- Republic Services profile #TB-4702—contaminated soil export via 3rd and Lander transfer station in Seattle to Roosevelt Regional Landfill in Roosevelt, Washington (a RCRA Subtitle D landfill).
- Republic Services profile #TB-10328—contaminated wood waste export, via 3rd and Lander transfer station in Seattle to Roosevelt Regional Landfill in Roosevelt, Washington (a RCRA Subtitle D landfill).
- Waste Management profile #113191WA—contaminated soil export via Alaska Street and Duwamish Reload facilities in Seattle to Columbia Ridge Landfill in Arlington, Oregon (a RCRA Subtitle D landfill).
- Waste Management profile #113192WA—wet (water-saturated) soil export (also approved for disposal of water-saturated sediment removed periodically from the construction dewatering

system water holding tank) via Duwamish Reload facility in Seattle for decanting before delivery to Columbia Ridge Landfill in Arlington, Oregon (a RCRA Subtitle D landfill).

- Waste Management profile #113435WA—contaminated concrete export, direct haul to the Greater Wenatchee Landfill in East Wenatchee, Washington (a RCRA Subtitle D landfill).

Disposal for On-Property Class 2 low-level impacted material

- Removal of identified "Class 2" (low-level impacted) soil and concrete in the construction excavation (generally native soil, concrete, or fill soil with analytical results indicating concentrations of COCs below MTCA Method A cleanup levels and exhibiting no visual or physical evidence of contamination) was periodically monitored by SoundEarth field staff for segregation, export, and disposal at an appropriate facility. Identified "Class 2" soil and concrete were exported to AAA Monroe Rock Corporation's facility in Snohomish, under approval from the receiving facility following their review of representative analytical results for the materials.

Disposal of non-impacted Class 1 material

- Removal of identified non-impacted "Class 1" material, non-impacted native soil without debris and without aesthetic impacts and generally with analytical results indicating no detectable concentrations of COCs above laboratory reporting limits, in accordance with Table 12.1 of Ecology's *Guidance for Remediation of Petroleum Contaminated Sites*, in the western portion of the construction excavation for utility trenches, an elevator pit, and building foundation footings was monitored by SoundEarth field staff for segregation and export to contractor-selected receiving facilities (Simpson Sand & Gravel LLC, located at 6610 140th Street Northwest in Stanwood, Washington; Lakeside Industries, Inc., located in Monroe, Washington; BR & RD, LLC, located in Sultan, Washington; and K & T We Do Dirt, located in Arlington, Washington).

3.2 SITE-SPECIFIC HEALTH AND SAFETY

Before the commencement of construction activities, SoundEarth prepared a Site-Specific Health and Safety Plan (HASP) in accordance with Part 1910.120 of Title 29 of the Code of Federal Regulations (29 CFR 1910.120). SoundEarth personnel operated under the HASP and additionally in compliance with the HASP prepared by Graham Construction, who was responsible for the health and safety of their workers on the Property. Worker protection air monitoring activities are discussed further in Section 4.1.

3.3 MONITORING WELL DECOMISSIONING

A total of 14 groundwater monitoring wells located on and adjacent to the Property were decommissioned because of planned mass excavation or utility excavations in those areas.

A summary of the monitoring wells decommissioned by a licensed driller (Holt Services, Inc.) is provided below.

Well ID	Well Tag Number (if available)	Decommissioning Date	Decommissioning Method	General Location (see Figure 2)
MW02	APN 094	12/21/17	In Situ with bentonite	Southwestern portion of the Property
MW03	--	07/30/18	In Situ with bentonite	Near reference grid lines D and 04
MW04	APN 095	02/23/18	In Situ with bentonite	Near reference grid lines E and 02
MW06	APN 096	12/21/17	In Situ with bentonite	Between reference grid lines 08 and 09; see Property Photographs, Photograph 3.
MW08	--	06/26/18	Overdrilled and backfilled with bentonite	Between reference grid lines B and C and near grid line 06
MW12	APJ 805	12/21/17	In Situ with bentonite	Along the north Property boundary
MW13	BAB 855	02/23/18	In Situ with bentonite	Between reference grid lines B and C and near grid line 03
MW14	BAB 856	12/21/17	In Situ with bentonite	Along the north Property boundary
MW15	BAB 857	12/21/17	In Situ with bentonite	Along the north Property boundary
B-301	BAB 028	07/30/18	In Situ with bentonite	Between reference grid lines A and B and near grid line 10
B-302	BAB 029	--	Not located	Near reference grid lines D and 04
B-303	BAB 027	02/23/18	In Situ with bentonite	Between reference grid lines D and E and near grid line 07; see Property Photographs, Photograph 4.
B-101	ALT 831	12/21/17	In Situ with bentonite	15th Ave W Right-of-Way adjacent west of the Property
None	APH 875	12/21/17	Overdrilled and backfilled with bentonite	15th Ave W Right-of-Way adjacent west of the Property, south of well B-101 (previously unidentified well; not mapped)

NOTE:
-- = not available; not applicable

The sole remaining monitoring well on the Property, B-302, could not be located for decommissioning.

Copies of well decommissioning records prepared by Holt Services, Inc. are included in Appendix B.

3.4 SHORING INSTALLATION

Prior to beginning the remedial excavation, sheet piles were installed and interlocked to create a low permeability sheet pile shoring wall within the perimeter of the Property. The steel sheet piles are impervious; therefore, the only possible route for groundwater to pass through the shoring wall is via the interlocks. The approximate location of the shoring system is shown on Figure 2.

SoundEarth performed periodic observations of shoring installation activities that began on March 20, 2018 (Property Photographs, Photographs 5 and 6). The perimeter shoring system was installed by Blue

Iron, Inc. and Howard Baker, Inc. using static press methods. The sheet pile shoring wall extended through the water-bearing zone into a less-permeable geologic formation, the Vashon Till. The lowest elevation of the shoring wall was generally at approximately -10 feet NAVD88, which resulted in embedment of the lower end of the sheet piles into the Vashon Till formation. Prior to the installation of each sheet pile, Adeka A-30 sealant was applied by the contractor to both pre-joined and non-joined sheet pile seams. The sheet pile seams were filled with Adeka sealant material in an effort to reduce groundwater seepage through the pile interlocks. The contractor used a plastic cover to assist in keeping the sheet piles out of the rain during the Adeka product application (Property Photographs, Photograph 7).

As the excavation progressed, soil tiebacks were installed by Pile Contractors, Inc. in the southwestern and northeastern portion of the perimeter shoring wall, approximately 8 feet below the street grade into Area B and the surrounding ROW. A 6-inch auger was used to install the tiebacks.

The soil cuttings generated from sheet pile installation, from drilling for pressure grouting activities, and soil tieback augers were segregated and exported to a Subtitle D landfill under a waste profile approved for the material. The sheet pile shoring perimeter wall installation was completed on June 2, 2018. Drilling and pressure grouting activities by Blue Iron Inc. and Hayward Baker, Inc. were completed in sections of the perimeter wall in June 2018. Drilling and installation of tiebacks in a section of the southwestern portion of the perimeter shoring wall were completed by Pile Contractors, Inc. in July 2018.

The completion of shoring installation work was delayed by several weeks because of the presence of buried obstructions, primarily near the southeastern corner of the Property. Buried concrete obstructions at sheet pile number 143 near the southeastern corner of the Property were initially encountered in fill material at approximately 6 feet bgs on May 1, 2018. The contractor performed coring through concrete obstructions that were found down to near elevation 0 feet NAVD88 in the southeastern portion of the Property, to allow for continuing installation of sheet piles in this remaining section of the shoring wall. A pre-existing water seep in this area further slowed shoring wall installation progress. The water seep source could not be determined in the course of shoring installation work; however, the seep was kept in its original location outside of the shoring wall at the completion of the shoring system. Shoring wall installation activities were completed in early June 2018.

In an effort to further seal the upper portions of the sheetpile wall, the interior sides of the sheet pile seams were welded from the top of the sheet piles down to the basement floor elevation of approximately 14 feet NAVD88.

3.5 JUNE 2018 FORMER BORING B16 EVALUATION AND SOIL PH ASSESSMENT IN FORMER CAUSTIC MIXING AREA

SoundEarth performed an evaluation of historical (pre-2007) trace concentrations of benzene and trichloroethene at former Boring B16 and a soil pH assessment beneath the former caustic mixing area on the Property.

Previous sampling and testing performed in September 2006 at the Property by SES at the location of boring B16 from a sample depth of 4.5 feet bgs (elevation 15.5 feet NAVD88) revealed trace concentrations of benzene and trichloroethene (TCE) of 0.04 mg/kg, slightly exceeding the MTCA Method A cleanup level of 0.03 mg/kg for each of those compounds. Trace concentrations of toluene, ethylbenzene, and xylenes, well below their respective MTCA Method A cleanup levels, were historically detected in the soil sample collected at the location of boring B16 at 4.5 feet bgs. Concentrations of other

chlorinated VOCs, including tetrachloroethene, cis-1,2-dichloroethene, and vinyl chloride, were not detected above the laboratory reporting limits or applicable MTCA Method A cleanup levels in that September 2006 analyzed soil sample.

Location of historical detection of benzene and TCE concentrations in soil, Boring B16A

To evaluate whether detectable concentrations of benzene and TCE remained in the vicinity of the former boring B16 location, SoundEarth performed sampling and testing from a hand auger boring (boring B16A) on June 1, 2018. Boring B16A was advanced adjacent to the September 2006 boring B16 within approximately 3 feet of the former sampled boring that historically contained concentrations of benzene and TCE in soil in 2006.

On June 1, 2018, soil samples were collected from hand auger boring B16A in accordance with US Environmental Protection Agency (EPA) Method 5035A at approximate elevations of 17.5 feet, 15.5 feet and 14.5 feet NAVD88 (approximately 2.5 feet, 4.5 feet, and 5.5 feet bgs). The samples were submitted for laboratory analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) and chlorinated VOCs by EPA Method 8260C to evaluate whether detectable concentrations of benzene and TCE were present above the laboratory reporting limits and MTCA Method A cleanup levels.

Analysis of the soil samples collected from approximate elevations of 17.5 feet, 15.5 feet, and 14.5 feet NAVD88 (approximately 2.5 feet, 4.5 feet, and 5.5 feet bgs, respectively) from boring B16A revealed no detectable concentrations of BTEX or chlorinated VOCs (including benzene and TCE) above the laboratory reporting limits or above their respective MTCA Method A soil cleanup levels (Table 2).

Relying on the results of laboratory testing, soil at the location and depth of the historical (September 2006) detections of benzene and TCE concentrations no longer contains detectable concentrations of BTEX or VOCs (including benzene and TCE) above the laboratory reporting limits or above applicable MTCA Method A cleanup levels. Therefore, the historical trace benzene and TCE concentrations at the location of former boring B16 have likely degraded since 2006 and are no longer considered to be potential contaminants of concern in this area.

Soil in this area was subsequently removed during remedial excavation activities in 2018. Because soil in this area was contaminated with COCs (cPAHs), the removed soil was exported as Class 3 contaminated soil to a RCRA Subtitle D landfill under a soil waste profile approved for the material.

Former caustic mixing area soil evaluation

On June 1, 2018, six soil samples were collected from the former Wesmar caustic mixing area on the Property using a hand auger to evaluate whether caustic soil (pH equal to or greater than 12.5 standard units) was present at that area.

Assessment of soil pH in the former caustic mixing area was previously proposed in the CAP for the Property. The soil pH evaluation was performed ahead of mass excavation activities to reduce the risk for potential cross-contamination of waste streams during excavation and to remove the need for the continued use of a soil pH meter in the field as mentioned in the CAP.

Three of the soil samples were collected from borings B62A, B21A, and B15A (within approximately 3 feet of historical borings B62, B21, and B15, respectively), at approximate elevation 19 feet NAVD88 (Figure 2). Three soil samples were collected from hand auger boring B16A at approximate elevations of 17.5 feet, 15.5 feet and 14.5 feet NAVD88 (approximately 2.5 feet, 4.5 feet, and 5.5 feet bgs, respectively). The soil sample collected from approximately 19 feet NAVD88 at the location of hand auger boring B62A exhibited an elevated photoionization detector (PID) reading and a strong detergent-like odor. Because of the elevated PID reading and strong odor, this sample was analyzed for BTEX and chlorinated solvents by EPA Method 8260C. Soil samples collected from borings B15A, B21A, B62A, and B16A were analyzed for pH by EPA Method 9045D.

Analysis of these six near-surface soil samples, collected within or immediately proximal to the former Wesmar caustic mixing area on the Property, revealed pH results ranging from 8.3 to 12 standard units (Table 2). The average (mean) of the pH results for these six soil samples was 9.7 standard units. Relying upon the laboratory analytical results, the sampled soil from the former caustic mixing area is not considered corrosive waste as defined under dangerous waste regulations (WAC 173-303-090) because the pH results are below 12.5 standard units and above 2 standard units.

As noted earlier, the soil sample collected from approximately 19 feet NAVD88 at the location of hand auger boring B62A exhibited an elevated PID reading and a strong detergent-like odor. Trace concentrations of toluene, ethylbenzene and xylenes, well below their respective MTCA Method A soil cleanup levels were reported in the laboratory tested soil sample collected from approximate elevation 19 feet NAVD88 in boring B62A. Concentrations of chlorinated VOCs and benzene were not detected above laboratory reporting limits or above applicable MTCA cleanup levels in this analyzed soil sample collected from boring B62A (Table 2).

The concentration of cPAHs in the soil sample analyzed from boring B62A collected from 1 foot bgs revealed a toxicity equivalent (TEQ) of 0.79 mg/kg, exceeding the MTCA Method A cleanup level of 0.1 mg/kg (Table 3). The cPAH result is consistent with COC concentrations anticipated to be found in this area of the Site and the soil was removed during the remedial excavation.

The laboratory analytical report for the former soil boring B16 area soil evaluation is included in Appendix C.

3.6 CONCRETE EVALUATION AND REMOVAL ACTIVITIES

Concrete characterization activities were performed in June 2018 to characterize surface concrete slabs and demolished concrete retaining walls for disposal purposes. As mentioned earlier in this report, the majority of the concrete slab area (composed of former building foundations) had been submerged beneath ponded water since 2008 and was inaccessible for evaluation and sampling until after construction dewatering activities began in January 2018. Dewatering of on-Property ponded stormwater was completed in February 2018, allowing for access to much of the lower concrete slab area of the Property.

Concrete samples were collected using an electric jackhammer (Property Photographs, Photograph 9). Concrete samples were submitted to the project laboratory for analysis under standard chain-of-custody protocols. Analytical results for concrete samples collected on June 7 and 11, 2018, are included in Appendix D and are summarized on Table 4.

Calculated TEQs for cPAHs in all of the analyzed concrete samples collected in June 2018 were below the MTCA Method A cleanup level of 0.1 mg/kg (Table 4).

Lower Concrete Surface Slab

Concrete characterization activities revealed the presence of elevated concentrations of arsenic (concentrations above the MTCA Method A soil cleanup level) in concrete samples collected from the lower elevation surface concrete slab on the Property within the perimeter shoring wall and west of approximate sample reference grid line 02 shown on Figure 2. Arsenic results for these composite concrete samples collected from the lower elevation surface concrete slab ranged from 22.1 mg/kg to 42.2 mg/kg (Table 4). The presence of elevated concentrations of arsenic in the concrete samples is likely attributable to the historical concrete formulation process at the cement plant where the concrete was originally mixed, prior to being poured at the Property prior to the 1960s.

Demolition of this lower elevation concrete slab and buried concrete footings began in June 2018 (Property Photographs, Photographs 8 and 10) with the removed concrete exported as Class 3 arsenic-contaminated material (concentrations of arsenic above the MTCA Method A soil cleanup level) to Waste Management's Greater Wenatchee Regional Landfill under an approved waste profile for the material. Concrete footings encrusted in contaminated fill soil were removed and disposed of at Waste Management's Greater Wenatchee Regional Landfill in the course of remedial mass excavation activities between June 2018 and January 2019.

A total of approximately 2,941.36 tons of "Class 3" arsenic-contaminated concrete waste was exported under an approved waste profile to Waste Management's Greater Wenatchee Regional Landfill for the duration of the project beginning on June 21, 2018, through the completion of the remedial excavation on January 15, 2019.

Eastern-Most Concrete Surface Slab (Area 2) And Vertical Concrete Retaining Walls

Low-level concentrations of COCs below MTCA Method A cleanup levels were identified in representative concrete samples collected from the upper elevation concrete slab on the eastern portion of the Property (generally east of sample reference grid line 02 shown on Figure 2, and generally referred to as Area 2), the concrete retaining wall proximal to sample reference grid line 02, and stockpiles of demolished site perimeter retaining walls (Table 4). Low-level impacted concrete (concentrations of site COCs below MTCA Method A cleanup levels) was exported as Class 2 material to AAA Monroe Rock Corporation (AAA Monroe) in Snohomish, Washington, under approval obtained from the receiving facility following their review of the provided representative concrete analytical results.

Class 2 concrete being exported to AAA Monroe was periodically monitored by SoundEarth to assess that no apparent adhered contaminated soil was visible on demolished concrete surfaces or being mixed in with the concrete.

The contractor was instructed to remove soil adhering to concrete surfaces, with removed soil segregated, stockpiled, and covered with plastic for later export at a permitted RCRA Subtitle D landfill under an approved soil waste profile. Demolished concrete that remained encrusted with impacted soil or visual evidence of contamination was segregated for export as Class 3 contaminated material to Waste

Management's Greater Wenatchee Regional Landfill in Wenatchee, Washington, under the approved waste profile for the material.

3.7 REMEDIAL EXCAVATION

Remedial excavation activities began at the Property on June 21, 2018, starting on the western portion of the Property and generally working easterly down to elevations where confirmation soil sample analytical results indicated concentrations of Site COCs (arsenic, cPAHs, and naphthalenes) below their respective MTCA Method A cleanup levels (Property Photographs, Photographs 12, and 17 through 20).

Safety and project status meetings were conducted periodically prior to the start of the workday to inform existing and new site personnel of changing work conditions and to reinforce key safety requirements and anticipated work activities for the day.

A Soil Loading Technician was present at all times during the loading of soil into dump trucks to help identify when each truck was fully loaded. Truck drivers were instructed that they were to remain in their trucks at all times with the windows closed. The Soil Loading Technician was also responsible for inspecting the truck after loading to confirm that spillage of soil had not occurred onto the outside structures of the trucks (e.g., running boards, tongue) and that the load was properly covered, if required. If spillage had occurred, the Soil Loading Technician collected the spillage and placed it back into the truck.

Identified arsenic-contaminated and non-impacted concrete slabs were removed as excavation activities proceeded eastward. Identified contaminated and non-impacted concrete were kept segregated and stockpiled separately for export.

Performance monitoring and field screening of soil was conducted during remedial excavation activities to assist in advancement of the excavation. A SoundEarth geologist observed the excavation of identified impacted soil during the remedial excavation activities and performed field screening and sampling of the non-impacted soil areas to confirm the absence of notable impacts.

Excavation limits for removal of contaminated soil within Area A were based on results of historical soil sample analytical results along with field observations and results for performance and confirmation soil samples collected during the remedial excavation activities.

Identified soil contaminated with COCs within the shoring boundary (Area A) on the Property was excavated until field screening and analytical results of confirmation soil sampling indicated that soil with COCs above their respective MTCA Method A cleanup levels was removed. For areas where the remedial excavation extended below the planned subgrade elevation of the new building foundation (where such excavation proceeded under the direction of the geotechnical consultant: PanGEO, Inc.), those overexcavated areas were backfilled with controlled density fill following receipt of confirmation soil sample analytical results.

Due to the observed inconsistency of fill depth on the Property and the corresponding variable extent of the remedial excavation, it was necessary to modify the confirmation sampling methodology. The modified confirmation sampling methodology was approved by Ecology's case manager for the project on August 2, 2018. The alternate confirmation sampling methodology was implemented to minimize the handling and potential redistribution of contaminated soil near the vertical extent of the remedial excavation and to reduce the risk to the structural integrity of shoring components proximal to the

perimeter of the excavation. The modification generally consisted of collecting confirmation samples on a surveyed grid from excavated potholes ahead of the remedial excavation to determine the horizontal and vertical extent of soil contaminated with COCs across the Property. The procedure is further described in the paragraphs below.

As outlined in the CAP, a systemic 50-foot soil sampling reference grid was established across the Property prior to the start of remedial excavation activities. The sampling reference grid size of 50 feet resulted in a statistically valid number of confirmation soil samples based on the area of the remedial excavation (Figure 4). Confirmation soil samples were collected from each sampling grid node intersection.

As part of the remedial excavation process, "pothole" excavations were performed ahead of the mass excavation at the pre-established sampling grid node sampling locations (Property Photographs, Photograph 11). Pothole excavations were also performed at former soil boring locations where concentrations of COCs were historically confirmed above MTCA Method A cleanup levels in soil samples. Soil sample collection was performed at various elevations within each pothole location with sample collection elevations surveyed by the earthwork contractor using a laser level and grade rod with a precision of less than 0.1 vertical foot. Pothole soil samples were generally collected in intervals of 0.5 to 1.5 vertical feet below a starting elevation of 15 feet NAVD88 (approximately 5 vertical feet below the pre-construction ground surface) and laboratory-analyzed for site contaminants of concern (arsenic, cPAHs, and naphthalenes).

As the remedial excavation progressed over the pothole locations, a precision vertical survey was used (with a laser level and grade rod) by the contractor to confirm that the mass excavation was extending down to elevations of MTCA Method A cleanup level-compliant confirmation samples collected from the pothole locations. The extent of the remedial excavation in the vicinity of each grid node sample location was implemented consistent with the Revised CAP. The sampling and remedial excavation process was monitored and documented by SoundEarth field staff.

Confirmation soil samples were also collected following the excavation of historical performance soil sample locations at former soil borings that had exhibited concentrations of COCs above MTCA Method A cleanup levels (Figures 3 and 4). Confirmation soil samples at each of these locations were collected at lower elevations than the historical performance soil samples obtained from those borings.

Native glacial till was encountered at variable elevations during excavation activities on the northwestern portion of the Property. The glacial till was overlain by anthropogenic fill. The fill-glacial till interface was generally encountered during the remedial excavation on the northwestern portion of the Property near elevations of approximately 18 to 15 feet NAVD88, approximately 4 to 7 feet below the pre-construction ground surface. Glacial till was locally encountered as high as approximate elevation 20 feet NAVD88 on the northwestern portion of the Property.

Other portions of the Property were excavated deeper in fill material to elevations between approximately 14 to 9.5 feet NAVD88 (approximately 6 to 10.5 feet below pre-construction ground surface; Figures 5A and 5B). Fill soil remaining at the bottom of the final excavation limits generally consisted of silty sand and silty clay.

Observed fill soil removed in the course of excavation activities generally consisted of a heterogeneous mix of silty sand to silty clay, with intermittent anthropogenic debris in various areas including crushed

brick, concrete, and wood debris. Wood debris impacted by arsenic and cPAHs (primarily buried tree trunks, railroad ties, and dimensional lumber scraps), encountered in fill material during remedial excavation activities, was segregated and exported to Republic Services' Subtitle D landfill in Roosevelt, Washington. No treated wood pipe materials, or other treated wood materials suspected of originating from past process activities at the Property, were observed in the encountered wood debris removed in the course of remedial excavation activities.

Samples of wood material encrusted in soil were collected and analyzed for COCs. Analytical results indicated concentrations of COCs were above their respective MTCA Method A cleanup levels. A wood waste profile was approved by Republic Services for disposal of the wood waste debris at a Subtitle D landfill. Wood debris encountered during the excavation activities was segregated for disposal under the approved wood waste profile.

Fill material identified overlying the glacial till was characterized by performance soil sampling results as impacted by concentrations of COCs above their respective cleanup standards. The identified contaminated fill material was segregated for export as Class 3 contaminated material to Subtitle D landfills under profiles approved for the material by Republic Services and Waste Management.

Identified non-impacted native glacial till was segregated from the export waste stream for disposal as non-impacted material. Removal of identified non-impacted "Class 1" soil (generally non-impacted native soil without debris and with analytical results indicating no detectable concentrations of COCs above laboratory reporting limits, in accordance with Table 12.1 of Ecology's *Guidance for Remediation of Petroleum Contaminated Sites*) in the western portion of the construction excavation for utility trenches, building footings, and the western elevator pit was monitored by SoundEarth field staff for segregation and export to contractor-selected receiving facilities (Simpson Sand & Gravel LLC, located at 6610 140th Street Northwest in Stanwood, Washington; Lakeside Industries, Inc., located in Monroe, Washington; BR & RD, LLC, located in Sultan, Washington; and K & T We Do Dirt, located in Arlington, Washington).

Soil samples were collected in a manner consistent with SES's Sampling and Analysis Plan that was included in the RIFS and PCA (SES 2010). Soil samples were placed on ice in a cooler and delivered to Friedman & Bruya, Inc. (F&B) under standard chain-of-custody protocols for laboratory analysis. While under SoundEarth custody, soil samples were contained in pre-cleaned jars and stored in coolers between 0 and 4 degrees Celsius. A field trip blank accompanied each cooler of soil samples from the site that was delivered to the project laboratory.

The approximate final remedial excavation extent and bottom elevations are shown on Figure 5A. A north–south cross-sectional view along the A–A' line shown on Figure 5A is portrayed on Figure 5B. The cross-sectional view on Figure 5B shows the general estimated vertical extent of fill soil encountered and the varying bottom elevations of the remedial excavation along the A–A' line.

3.8 UST DECOMMISSIONING AND ASSESSMENT

A previously unknown and abandoned heating oil UST was discovered on the Property during shoring installation activities on April 9, 2018, proximal to sheet pile #288 along the north shoring wall (proximal to sampling grid node A-09 shown on Figure 6; Property Photographs, Photograph 13). This tank is identified as UST01 in SoundEarth's records.

To allow for shoring activities to proceed in April 2018, oily water from within the UST was pumped out by Marine Vacuum Services, Inc. and, following Seattle Fire Department approval, the northern portion of UST was excavated, cut off (the northern approximately 5 lateral feet of the tank), and removed from the Site (Property Photographs, Photograph 14). UST decommissioner services for UST01 were provided by Tankwise, LLC of Seattle, Washington.

Based on field observations, including the size and configuration of the UST along with the presence of diesel-like odors, UST01 appeared to be a former heating oil UST. UST01 tank content disposal records are included in Appendix E.

The top of the former UST was encountered at approximately elevation 18 feet NAVD88. The tank diameter was measured to be approximately 5 feet and the entire tank length was approximately 11 feet. The estimated volume of the former heating oil UST was approximately 1,600 gallons, based on field measurements of the UST.

Soil samples were collected by SoundEarth from the UST01 soil stockpiles and one soil sample was collected from the north sidewall of the partial UST excavation, immediately north of the planned sheetpile wall on April 11, 2018, for laboratory analysis. Faint potential heating oil odors were observed in the collected soil samples.

To assist in later location of the UST for full removal during the mass excavation, plastic sheeting was placed along the edges of the partial UST excavation and the excavation was backfilled to surface grade with Type 17 fill to allow for equipment access to continue sheetpile shoring installation work.

The remaining metal scrap of the UST (the southern approximately 6 lateral feet of the tank) was excavated and removed on June 28, 2018 (Property Photographs, Photographs 15 and 16), after the temporary construction dewatering system became operational on the Property to allow for soil excavation.

The following confirmation soil samples were collected from the UST01 excavation on April 11, 2018, and on June 28, 2018, for laboratory analysis:

- Sample UST01-B01-13 was collected from the excavation bottom at an elevation of approximately 13 feet NAVD88.
- Samples UST01-ESW01-15, UST01-NSW01-15, UST01-SSW01-15, and UST01-WSW01-15 were each collected at a depth of approximately 15 feet elevation from the east, north, south, and west sidewalls of the excavation, respectively.
- Sample UST01-WSW02-15 was collected approximately 15 lateral feet west of UST01-WSW01-15 at a depth of approximately 15 feet elevation.
- Samples UST01-SP01 and UST01-SP02 were collected from stockpiled overburden soil from the UST01 excavation.

Analytical results for the UST01 excavation soil samples revealed no detectable concentrations of DRPH (by Northwest Total Petroleum Hydrocarbon Method NWTPH-Dx) above the laboratory reporting limits, except for low concentrations of DRPH in the stockpile samples and in the initial north sidewall and initial

west sidewall samples, which were well below the MTCA Method A soil cleanup level of 2,000 mg/kg (Table 5).

Analytical results for the soil samples collected from the initial UST excavation north sidewall and from associated soil stockpiles on April 11, 2018, revealed concentrations of gasoline-range petroleum hydrocarbons below the MTCA Method A cleanup level (Table 5). No detectable concentrations of ORPH and BTEX were reported in these three analyzed soil samples (Table 5). The presence of low concentrations of gasoline-range petroleum hydrocarbons in these soil samples is attributable to the surrounding anthropogenic fill material.

Heating oil-affected stockpiled soil from the initial UST01 excavation was exported to a permitted Subtitle D landfill for disposal.

Soil types observed in the UST01 excavation generally consisted of moist silty sand and silt. No groundwater was observed in the UST01 excavation on June 28, 2018.

Overburden soil and drill cuttings soil from the UST01 excavation and the immediately proximal sheetpile shoring wall was stockpiled on the Property. This stockpiled soil was subsequently exported from the Property as Class 3 contaminated material, based on field observations of fill debris in soil and analytical data for cPAHs in soil in the vicinity of UST01. Soil surrounding UST01 down to elevation 15 feet NAVD88 was excavated and exported as Class 3 contaminated material based on analytical data for cPAHs in soil in the vicinity of UST01, as a part of the mass remedial excavation activities performed on the Property in 2018.

To resolve the uncertainty regarding the potential for environmental impacts to groundwater related to the former heating oil UST01, a temporary well point was drilled and installed immediately proximal to the former UST01 location on July 30, 2018, to collect a reconnaissance groundwater sample for analysis for heating-oil range petroleum hydrocarbons.

A boring for the temporary well point was drilled to approximately –5 feet NAVD88 (approximately 20 feet below the current surface grade) by Holt Services, Inc. Groundwater was initially encountered in the boring at approximate elevation 7.5 feet NAVD88 (and approximately 7.5 feet below the surface grade at the time of drilling on July 30, 2018). A temporary PVC well point was installed in the boring and screened from approximate elevation 10 to 5 feet NAVD88 (approximately 5 to 10 feet below the surface grade at the time of drilling). The groundwater sample was collected using a peristaltic pump. The sample was submitted to F&B, under standard chain-of-custody protocols.

The temporary well point was removed following sample collection, and the borehole was backfilled to grade with bentonite chips by the licensed driller.

Analytical results for the groundwater sample collected from the temporary well point located proximal to the former UST01 location revealed no detectable concentrations of ORPH above the laboratory reporting limit of 250 µg/L. A low concentration of DRPH of 130 µg/L, below the MTCA Method A cleanup level of 500 µg/L, was reported in the analyzed sample. This result was flagged by the project laboratory as not indicative of DRPH. This detected concentration of DRPH, which was flagged by the project laboratory, is likely attributable to organic interferences in the sample matrix and is not considered to be indicative of a release of heating oil to groundwater.

The analytical reports for the analyzed soil samples and the groundwater sample collected form the former UST01 area are included in Appendix F.

3.9 MATERIAL WASTE TRANSPORTATION AND DISPOSAL TRACKING

Truck drivers were instructed to keep waste manifests and bills of lading with them at all times while transporting impacted materials. Drivers were also instructed that direct routes to the waste facilities were to be used and no overnight layovers were permitted while the trucks were loaded. Soil and concrete disposal records are included in Appendix G.

Class 3 Soil and Concrete Export

A total of approximately 41,859 tons of Class 3 arsenic- and cPAH-contaminated soil from the remedial excavation activities and cuttings from the sheet pile shoring wall installation activities were exported to Republic Services and Waste Management RCRA Subtitle D landfills under profiles approved for the material during the course of the Property remediation activities from April 6, 2018, through the completion of the remedial excavation activities in January 2019.

A total of approximately 2,942 tons of concrete encrusted with soil contaminated with cPAHs or arsenic at concentrations above MTCA Method A cleanup levels was exported under an approved waste profile for the material to Waste Management's Greater Wenatchee Regional Landfill in the duration of the remedial excavation activities between June 21, 2018, to January 15, 2019.

Tonnage reports for Class 3 soil and concrete disposal are included in Appendix G.

Class 3 Wood Waste Debris Export

Approximately 102 tons of arsenic- and cPAH-contaminated wood waste debris mixed with soil (primarily buried tree trunks, railroad ties, and dimensional lumber scraps), encountered in fill material during remedial excavation activities, was exported to Republic Services' Subtitle D landfill in Roosevelt, Washington, under a profile approved for the material. No treated wood pipe materials, or other treated wood materials suspected of originating from past process activities at the Property, were observed in the encountered wood debris removed in the course of remedial mass excavation activities.

A tonnage report for Class 3 wood waste debris disposal is included in Appendix G.

Class 2 Material Export

Removal of identified Class 2 soil in the construction excavation (generally native soil or fill soil with analytical results indicating concentrations of COCs below MTCA Method A cleanup levels and exhibiting no visual or physical evidence of contamination) was periodically monitored by SoundEarth field staff for segregation, export, and disposal at an appropriate facility. Approximately 8,727 tons of Class 2 soil and concrete were exported to AAA Monroe Rock Corporation's facility in Snohomish, Washington in the course of remedial excavation activities between July 6, 2018, and January 25, 2019, under approval from the receiving facility following their review of representative analytical results for the material. A tonnage report for Class 2 soil and concrete disposal is included in Appendix G.

Class 1 Material Export

Removal of identified non-impacted Class 1 soil (generally non-impacted native soil without debris and with analytical results indicating no detectable concentrations of COCs above laboratory reporting limits, in accordance with Table 12.1 of Ecology's *Guidance for Remediation of Petroleum Contaminated Sites*) in the western portion of the construction excavation generally for utility trenches, building footings, and an elevator pit was monitored by SoundEarth field staff for segregation and export to contractor-selected receiving facilities (Simpson Sand & Gravel LLC, located at 6610 140th Street Northwest in Stanwood, Washington; Lakeside Industries, Inc., located in Monroe, Washington; BR & RD, LLC, located in Sultan, Washington; and K & T We Do Dirt, located in Arlington, Washington). Soil export documentation for Class 1 non-impacted soil disposal is included in Appendix G. A total of approximately 2,697 tons of Class 1 non-impacted soil was exported to the above-listed contractor-selected receiving facilities.

3.10 PERMANAENT GROUNDWATER TREATMENT

Section 6.4.1 of the Revised CAP advised that if arsenic concentrations in the discharge water in the six weekly sampling events contain an average concentration greater than 5 µg/L, then a treatment system would be added to the permanent dewatering system. A description of the sampling procedures and results are included later in Section 4.3 of this CAR.

A permanent arsenic treatment system was designed and installed by Evoqua Water Technologies, LLC in Autumn 2019. Discharge water from the subgrade water control system is routed through the permanent arsenic treatment system.

Post-treatment water is pumped from the arsenic treatment system and discharged to the municipal storm system. The discharge water from the building subgrade water control system will continue to be monitored to confirm that arsenic concentrations comply with regulatory standards. Long-term groundwater monitoring is described in Section 4.3.

3.11 CONSTRUCTION DEWATERING

Stormwater and groundwater that collected within the excavation was pumped into holding tanks prior to treatment through a construction stormwater treatment system. The treatment system consisted of a raw water holding tank, sand filter units with chitosan injections, two granular activated carbon (GAC) units in series, and a treated water holding tank (Property Photographs, Photograph 2). In September 2018, the treatment system was modified with the addition of ion exchange vessels for treatment of arsenic.

SoundEarth performed weekly construction dewatering sampling activities in accordance with the CSWGP #WAR305762 and associated Administrative Order (AO) Docket No. 15341, and submitted Discharge Monitoring Reports to Ecology as required on a monthly basis.

Operation of the stormwater treatment system was performed by Clear Creek Systems, Inc. of Pacific, Washington. Initial construction dewatering activities began on January 19, 2018, for dewatering of on-Property ponded stormwater and groundwater (Property Photographs, Photograph 1) to allow for access to lower elevation portions of the Property.

Dewatering of on-Property ponded stormwater was completed in February 2018, allowing for access to much of the lower concrete slab area of the Property.

Installation of temporary well points within the shoring perimeter wall, under the direction of the general contractor (Graham Construction), was completed in June 2018 for subsurface dewatering of the Property within the shoring perimeter wall prior to the start of excavation activities. Water collected from the perimeter well point temporary construction dewatering system was treated through the temporary construction wastewater treatment system prior to discharge in accordance with the conditions of the CSWGP #WAR305762 and associated AO Docket No. 15341. The flow rate of total water pumped from the perimeter well point system generally varied from approximately 5 to 50 gallons per minute, with the higher flow rates observed during the earlier timeframe of the construction dewatering. After water levels within the shoring perimeter wall were low enough to allow for soil excavation to proceed downward to the final planned grade, the temporary well points were taken out of service. The temporary well points were taken out of service in early July 2018 and were removed during excavation activities.

Analytical results from previous sampling events (beginning on January 19, 2018, through the monitoring event on July 25, 2018) showed that the AO-listed cPAHs and metals concentrations were compliant with their respective permit indicator levels for the flow-through post-treatment water.

The GAC media in two in-series treatment vessels was changed on July 31, 2018, because cPAH concentrations were detected in analyzed water sampled from the mid-GAC sample port on July 25, 2018, indicating that potential "break-through" of cPAH contaminants through the lead GAC vessel may have occurred. Concentrations of cPAHs in post-treatment effluent discharge water (downstream of the lag GAC unit) sampled on July 25, 2018, were not detected above laboratory reporting limits or above the AO-listed indicator levels. Prior to replacement of the GAC media, a sample was collected for waste profiling analysis. Analytical results revealed detectable concentrations of cPAHs and arsenic, below MTCA Method A soil cleanup levels. Because of the detectable concentrations of cPAHs and arsenic in the spent GAC media, the spent media was exported to a Subtitle D landfill under the approved waste profile for Waste Management.

Analytical results received on August 1, 2018, revealed an effluent water arsenic concentration of 82.7 µg/L, exceeding the AO-listed indicator level for total arsenic of 69 µg/L for the dewatering monitoring event performed on July 31, 2018. The flow-through configuration of the system to the municipal stormwater system was changed immediately upon receiving analytical results, and treatment reverted from flow-through to batch treatment until all AO-listed indicator levels could be met through batch treatment and testing. The AO-listed indicator level exceedance for total arsenic was promptly reported to Ecology on August 2, 2018 (Environmental Report Tracking System # 683045), and a written report regarding the AO-listed indicator level exceedance was submitted to Ecology on August 6, 2018, in accordance with the reporting requirements of the AO.

Batch treatment and testing continued to occur in accordance with the requirements of the AO, and arsenic-contaminated water was trucked off-site for disposal in an approved manner during August 2018. Results of batch treatment sampling for events performed on August 3, 14, 16, and 20, 2018, revealed total arsenic concentrations above the AO-listed indicator level of 69 µg/L. Batch water from the August 3, 14, 16, and 20, 2018, sampling events was trucked off-site for disposal in an approved manner, and no discharge to the municipal stormwater system occurred during August 2018. A total of approximately 68,554 gallons of wastewater was trucked off-site for treatment and disposal at PRS Group Inc.'s facility

at 3003 Taylor Way in Tacoma, Washington, between August 8 and September 4, 2018. Disposal documentation for the wastewater trucked off-site is provided in Appendix H.

Arsenic-targeting media vessels were added to the construction stormwater treatment system at the Site in early September, prior to a batch treatment sampling event performed on September 5, 2018.

Batch treatment of construction wastewater was performed following the installation of the arsenic-targeting treatment media vessels, with results showing compliance with all AO-listed indicator levels for two consecutive batches of treated water. The two consecutive batch treatment events were performed on September 5 and September 11, 2018.

All treated water results for the two consecutive batch treatment sampling events performed on September 5 and September 11, 2018, were below their respective AO-listed indicator levels. Field measurements of batch-treated water for pH and turbidity were within and below their AO-listed benchmarks, respectively.

On September 13, 2018, SoundEarth requested permission from Ecology's Water Quality Program, on behalf of Regency Centers, to switch from batch treatment to flow through treatment in accordance with AO 15341, because of the achievement of two consecutive batch treatment sampling events that showed results compliant with all AO-listed indicator levels.

On September 17, 2018, Ecology's Water Quality Program inspectors approved switching from batch treatment to flow-through treatment for the construction stormwater treatment system.

Flow-through treatment and weekly monitoring and sampling events in accordance with AO 15341 resumed on September 18, 2018, and continued through the completion of soil remedial excavation activities on the Property in January 2019. Analytical results for all weekly flow-through treatment monitoring events since the Ecology-approved switch to flow-through treatment in September 2018 have showed that the AO-listed cPAHs and metals concentrations were compliant with their respective indicator levels for the flow-through post-treatment effluent water. In addition, field measurements of flow-through treated effluent water for pH and turbidity during all of the construction wastewater monitoring events to date have been within and below their AO-listed benchmarks, respectively.

At the completion of soil excavation activities, approximately 3.6 million gallons of water had been removed, treated, and discharged from the Property between January 19, 2018, and January 18, 2019.

Disposal records for GAC and arsenic treatment media removed from the treatment system vessels and for sediment removed from the treatment system settling tanks are included in Appendix G. A total of approximately 37.5 tons of spent GAC and arsenic treatment media removed from treatment system vessels and sediment removed from settling tanks was disposed of at a RCRA Subtitle D landfill (Waste Management's Columbia Ridge landfill in Arlington, Oregon) under approved Waste Management profile number 113192WA between July 18, 2018 and January 28, 2019.

3.12 INSTITUTIONAL CONTROLS

The portion of the Property located outside of the sheetpile shoring system for the parking garage of the new development is being capped with a combination of asphalt, landscaping, and concrete sidewalks. An environmental covenant will be recorded for the portions of the Site that exhibit concentrations of

COCs in excess of cleanup levels for Area B and Area C. Recording of the environmental covenant will be completed by May 1, 2020. In accordance with Section XV of the Consent Decree, this date supplants the "Record Institutional Controls" date shown in Exhibit C of the Consent Decree.

The upper approximate 6 to 8 vertical feet of soil to approximate elevation 21 feet NAVD88 was removed from along the western margin of the Property in Area B (west of the current perimeter sheetpile shoring wall location) for installation of new utilities and transported to a Subtitle D landfill for disposal under an approved waste profile. This area was backfilled with imported non-impacted soil.

As described in Section 5.0 of the RIFS and PCA, one area beyond the Property boundary—Area C—has been confirmed to contain concentrations of cPAHs in excess of the MTCA Method A cleanup levels. The cPAH contaminated soil in Area C is limited to approximately 18 cubic yards in volume, and it is capped by the ROW improvements.

The environmental covenant will be placed on Area B of the Property and for the cPAH-contaminated soil located within Area C (Figure 2). The covenant includes instructions for regulatory notification, waste handling, and disposal profiling if contaminated soil within Area C is accessed. In reference to the soil contamination within Area C, the covenant extends from 6 feet bgs to below the maximum depth of soil contamination encountered in previous soil borings (13 feet bgs; Figure 2). The City of Seattle (City) has been notified in writing of the Area C contamination and that a restrictive environmental covenant was planned for on Area C. Ecology has determined that the environmental covenant will be sufficiently protective of human health and the environment without subrogation of the City's ROW interest. 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 restrictive covenant.

Following approval from Ecology, the finalized environmental covenant will be recorded with the King County Tax Assessor and attached to the title of the Property. The remainder of the Property is covered by a mixed-use commercial/retail building, a below-grade parking garage, with perimeter landscaping, and concrete or asphalt-pavement being installed over remaining portions of Area B. The surrounding ROWs are capped with asphalt or concrete. The extent of the area subject to the environmental covenant is depicted on Figure 2.

A copy the environmental covenant, after the document is completed and filed with the King County Tax Assessor and attached to the title of the Property, will be provided to Ecology. A copy of the draft environmental covenant is included in Appendix I of this final Cleanup Action Report.

3.13 EIM DATA

SoundEarth has uploaded all available SoundEarth soil data related to the soil cleanup action at the Property to Ecology's EIM database. Ecology confirmed that submitted soil data files were successfully loaded into the EIM database on February 20, 2019.

4.0 COMPLIANCE MONITORING

There are three types of compliance monitoring identified for the cleanup action (WAC 173-340-410): protection, performance, and confirmation monitoring. A paraphrased definition for each is presented below (WAC 173-340-410[1]):

- **Protection Monitoring**. To evaluate whether human health and the environment are adequately protected during cleanup action.
- **Performance Monitoring**. To document that the remedial activities have resulted in compliance with the applicable cleanup standards.
- **Confirmation Monitoring**. To evaluate the long-term effectiveness of the remedial activities when cleanup standards or other performance standards have been attained.

4.1 PROTECTION MONITORING

A HASP was prepared for the remedial action that met the minimum requirements for such a plan identified in federal (29 CFR 1910.120 and 1926) and state regulations (WAC 296). A complete job hazard analysis was prepared for the HASP that identified known physical, chemical, and biological hazards; hazard monitoring protocols; and administrative and engineering controls to mitigate the identified hazards.

SoundEarth completed a worker exposure air monitoring assessment scenario for remedial excavation work performed at the beginning of remedial excavation activities at the Property. The air monitoring worker exposure assessment scenario was performed on June 21, 2018. Laboratory results are summarized below and on Table 6.

Laboratory results from the remedial excavation worker air exposure monitoring event performed on June 21, 2018, revealed that concentrations of arsenic, naphthalene, and PAHs ("coal tar pitch volatiles") were not detected above their respective laboratory reporting limits or above their applicable Washington State time-weighted average Permissible Exposure Limits (Table 6).

A copy of the laboratory report for the remedial excavation worker air exposure monitoring event is included in Appendix J.

4.2 PERFORMANCE MONITORING

Performance soil samples were collected to assess that performance criteria were met. Performance monitoring included the collection of soil samples from the remedial excavation area. Soil sample locations with analytical results exhibiting elevated concentrations of COCs were overexcavated and resampled. Additional details of performance sampling were discussed previously in section 3.7.

The objective of performance monitoring was to document compliance with waste analysis profiles.

Wastes that were generated from the remedial action destined for off-site disposal included the following:

- Contaminated soil and concrete removed by installing the sheet pile shoring wall and through excavation.
- Contaminated construction wastewater from excavation dewatering.
- Contaminated wood waste debris removed during mass excavation activities.

Each waste stream was profiled separately in accordance with the minimum waste analyses requirements of the respective permitted Treatment, Storage, and Disposal Facility. Excavated contaminated soil was subjected to performance monitoring.

Results of performance soil sampling are summarized in Table 3. Laboratory analytical reports are provided in Appendix K. The performance soil analytical results demonstrated compliance with waste profiles for the material. Performance soil sample collection locations and their respective approximate elevations in NAVD88 are shown on Figure 3. All performance soil sample locations within Area A were overexcavated during further remedial excavation activities on the Property.

One soil sample (sample ID EX-B28-15; Table 3) collected at former soil boring location B28 on August 9, 2018, showed an arsenic result of 134 mg/kg. For waste disposal purposes, Toxicity Characteristic Leachate Procedure (TCLP) analysis (EPA Methods 200.8 and 1311) was performed on this sample for arsenic. The result of the arsenic TCLP analysis performed on soil sample EX-B28-15 was below the laboratory reporting limit of 1 milligram per liter (mg/L), and compliant with the RCRA dangerous waste threshold TCLP limit for arsenic of 5.0 mg/L.

A composite performance soil sample was collected from the temporary construction access ramp on the southeastern portion of the Property on September 6, 2018 (Table 3). Analytical results indicated concentrations of cPAHs above the MTCA Method A cleanup level. Soil from this temporary construction access ramp was subsequently removed from the Property for disposal as Class 3 soil at a Subtitle D landfill.

Laboratory analytical reports for soil are included in Appendix K.

4.3 CONFIRMATION MONITORING

Confirmation monitoring included the collection of soil samples from the final extents of the remedial excavation on the Property in Area A, consistent with the sampling grid outlined in the CAP.

The objective of confirmation monitoring was to document that soil cleanup levels were achieved for COCs in Area A.

Confirmation soil sample locations and their respective approximate elevations in NAVD88 are shown on Figure 4. Analytical results for confirmation soil samples are presented in Table 7. Laboratory analytical reports for soil are included in Appendix K.

The excavation was conducted based on the findings of the RI and previous investigations and upon the results of confirmation soil sampling. A 50-foot systematic sampling grid was superimposed over the exposed excavation area being tested. A grid size of 50 feet resulted in a statistically valid number of confirmation soil samples based on the size of Area A (*RIFS and PCA* Figure 22). Confirmation soil samples were collected from each grid node ahead of the remedial excavation, as described in Section 3.7, and submitted for analysis of COCs for soil (arsenic, cPAHs, and naphthalenes). Soil was excavated to approximate depths of generally 6 feet to 9 feet below the grade of the former Wesmar Company, Inc. building and 9 feet below the grade of the former Color Tech building (approximately to elevation 14 to 11 feet NAVD88). Some areas were excavated deeper to remove soil contaminated with COCs at concentrations above MTCA Method A cleanup levels. The minimum elevation of the remedial excavation was 20 feet NAVD88 (approximately 2 feet bgs where native glacial till was encountered on the western portion of the Property surrounding grid node C-11). The maximum elevation of the remedial excavation was approximately 9.5 feet NAVD88 (approximately 10.5 feet bgs along the southern portion of the Property surrounding grid node E-05).

The confirmation analytical results collected from the historical boring locations where concentrations of DRPH and ORPH were historically detected in soil samples above the MTCA Method A cleanup level demonstrate that DRPH/ORPH-impacted soil above the MTCA Method A unrestricted land use cleanup level was removed at those former boring locations (Table 1).

The analytical results for soil sampling locations at the final limits of the remedial excavation in Area A revealed that concentrations of COCs for soil were confirmed to be below the MTCA Method A cleanup levels for unrestricted land use.

Upper Confidence Limit for Arsenic

Concentrations of arsenic in confirmation soil samples collected from the final remedial excavation limits at the Property ranged from less than 1 mg/kg to 19.1 mg/kg, below the MTCA Method A cleanup level of 20 mg/kg. An arsenic concentration of 20.3 mg/kg was historically reported in a soil sample collected in September 2006 from former soil boring B08 at approximately 19.5 feet bgs (0 feet NAVD88; sample ID B08-19.5), approximately 12 vertical feet below the bottom of the remedial excavation in this area (near sample reference grid node D-04; Figure 3). This isolated arsenic occurrence could not be practically excavated because the depth was over 10 feet below the water table and performing excavation to that depth would have risked compromising the structural integrity of the nearby sheet pile shoring system wall.

In an effort to demonstrate compliance with MTCA cleanup standards, SoundEarth used statistical analysis to determine the upper 95 percent confidence limit (UCL) for arsenic analytical results for confirmation soil samples collected from the Property, including the historical soil sample B08-19.5. The purpose of the analysis was to determine if the UCL for the data set exceeded the MTCA Method A cleanup level for arsenic (20 mg/kg). Ecology allows statistical analyses to determine compliance with cleanup levels in accordance with WAC 173-340-740. The UCL was calculated using Ecology's MSTAT statistical analysis package. The MSTAT analysis table for the UCL calculation is provided in Appendix L.

The data set for the analysis of UCL included arsenic soil analytical results for 86 soil samples (arsenic results for 85 confirmation soil samples plus the arsenic concentration result for historical soil sample B08-19.5 that remained in place). The laboratory reported sample results for arsenic as greater than the laboratory practical quantitation limits for 77 out of the 86 total soil samples. Therefore, there were a total of nine censored results (i.e., results showing arsenic concentrations not detectable above the laboratory practical quantitation limits).

To determine the suitable statistical method for determining the UCL for the data set, SoundEarth first tested the data set to determine if the data set fit a normal or lognormal distribution. Results of the test for normalcy showed the data set had a lognormal distribution.

Using the lognormal distribution, the calculated UCL for the data set was 5.21 mg/kg, which is less than the MTCA Method A arsenic soil cleanup level of 20 mg/kg. Therefore, the site meets the MTCA cleanup standard for arsenic in soil and no further action is warranted in this regard.

Permanent Subgrade Water Control System Monitoring

It was anticipated that on-Property groundwater quality would be substantially restored by virtue of the installed sheetpile shoring wall, dewatering of the excavation, and removal of the identified contaminated soil within Area A, as was implemented under the remedial action.

The cleanup action implemented included the installation of a water-resistant shoring wall that extends approximately 40 feet below the street surface grade and approximately 20 feet below the soil-groundwater interface. These controls reduce the potential for the regional arsenic-impacted groundwater to significantly infiltrate into the permanent subgrade water control system that was installed beneath the building (Sheet C4.00 and C4.10; Weber Thompson 2017; Appendix A).

A permanent arsenic treatment system was designed and subsequently installed by Evoqua Water Technologies, LLC in Autumn 2019. Discharge water from the subgrade water control system is routed through the permanent arsenic treatment system for treatment prior to discharge to the municipal stormwater system.

Sampling for arsenic in the subgrade water control system was initiated upon startup of the permanent dewatering system, after construction of the building foundation.

The arsenic monitoring program for the subgrade water control system, as outlined in section 6.4.1 of the Revised CAP, began on June 17, 2019. Subgrade drainage pipes drain water to a sump by gravity feed in the basement parking garage in the southeastern portion of the Property. Water collected from the subgrade water control system in the sump was routed through the temporary construction stormwater treatment system prior to discharge to the municipal storm sewer. Sampling of subgrade drainage groundwater was collected directly from the sub-slab drainage outlet pipes in the sump. Outlet pipes draining into the sump from the subgrade drainage system include one pipe on the north side of the sump, a lower pipe on the east side, and an upper pipe on the east side, and one pipe on the south side of the sump. Average flow rates were measured for each outlet pipe producing water from the sub-slab drainage system and the average total flow rate was also recorded during each monitoring event. The water volume collected for analysis was collected for each pipe proportionate to the flow rate of water for the pipe entering the sump. The total water flow rate into the subgrade sump during six monitoring events ranged from approximately 0.7 to 4.5 gallons per minute (GPM), with an overall average (mean) of approximately 1.7 GPM.

Section 6.4.1 of the Revised CAP states that “If arsenic concentrations in the discharge water in any one of the three weekly sampling events contain concentrations greater than 5 µg/L, then weekly sampling will be extended for an additional three weeks.” Because the total arsenic result was above 5 µg/L during the first monitoring event, the weekly arsenic evaluation program was extended from 3 weeks to 6 weeks in accordance with the Revised CAP.

Results of laboratory analysis of the flow-proportionate water samples collected from the subgrade water control system during the six weekly monitoring events for the subgrade water control system, along with average flow rates of subgrade water into the basement sump are summarized in Table 8. Analytical results for the six weekly subgrade water monitoring events performed between June 17 and July 24, 2019, revealed concentrations of total arsenic ranging from 11.8 µg/L to 16.6 µg/L, with an average (mean) total arsenic concentration of 14.1 µg/L for these six monitoring events (Table 8). The total arsenic concentration results are above the MTCA Method A cleanup level of 5 µg/L. Concentrations of dissolved arsenic ranged from 12.6 to 15.3 µg/L for the six weekly monitoring events.

Laboratory analytical reports for the subgrade drainage groundwater monitoring events are included in Appendix M.

Long-term groundwater monitoring

Per WAC 173-340-410, compliance monitoring is required for any site that utilizes containment as a part of the cleanup action plan. Consequently, a groundwater monitoring program has been established to evaluate whether the cleanup action completed on the Property in January 2019 is sufficient for the protection of human health and the environment. Water discharged from the subgrade water control system (prior to treatment for arsenic) will be sampled for total arsenic quarterly during the first year, semiannually during the second and third years, and annually during the fourth and fifth years. If arsenic is not detected above the applicable cleanup level in the groundwater after 5 years, then monitoring may be discontinued as outlined in the revised CAP. During the long-term groundwater monitoring period, the subgrade drainage water will continue to be routed through the permanent arsenic treatment system prior to discharge to the municipal stormwater system. The results of the monitoring events will be submitted to Ecology.

5.0 SUMMARY OF FINDINGS AND CONCLUSIONS

Based on the analytical results for confirmation soil samples collected from the final remedial excavation extent, all identified soil with concentrations of COCs exceeding the MTCA Method A CULs has been removed from Area A (the remedial excavation area), with the exception of an isolated arsenic occurrence from historical soil boring B08 (arsenic concentration of 20.3 mg/kg at elevation 0.0 feet NAVD88, approximately 20 feet below the pre-construction ground surface). Using the MSTAT analysis (Appendix L), the calculated UCL for the data set was 5.21 mg/kg, which is less than the MTCA Method A arsenic soil cleanup level of 20 mg/kg. Therefore, the site meets the MTCA cleanup standard for arsenic in soil and the point of compliance for all COCs in soil within Area A has been met.

A previously unknown and abandoned heating oil UST was discovered on the Property during shoring installation activities on April 9, 2018, proximal to sheet pile #288 along the western portion of the north shoring wall. Results of the assessment of soil conditions surrounding the former UST along with groundwater sampling and analysis performed following removal of the tank indicated that no release of heating oil occurred at concentrations exceeding MTCA Method A cleanup levels.

Because some contaminated soil was left in place outside of the perimeter shoring wall at the Site (outside of Area A) and was contained by capping in Areas B and C, the conditional point of compliance for soil at the Site is “containment” per WAC 173-340-740(6)(f). A standard point of compliance is being used for arsenic-contaminated groundwater associated with the Site, per WAC 173-340-720(8)(b).

An environmental covenant pertaining to Area B and Area C of the Site (Figure 2) is in the process of being finalized and recorded with the King County Tax Assessor and attached to the title of the Property. Capping of Area B with concrete sidewalks, asphalt driveways, and landscaping surrounding the new buildings has been completed. The concrete cap on Area C is being retained as part of the Northwest 46th Street ROW. The extent of Area B and Area C that will be subject to the environmental covenant is depicted on Figures 2 through 4. The remainder of the Property is covered by a mixed-use commercial/retail buildings and the associated below-grade parking garage.

With respect to groundwater, per WAC 173-340-410, compliance monitoring is required for any site that utilizes containment as a part of the cleanup action plan. As discussed in this report, a groundwater monitoring program has been established to evaluate whether the cleanup action completed on the Property in January 2019 is sufficient for the protection of human health and the environment.

Groundwater from the subgrade water control system is currently routed through the temporary construction stormwater treatment system prior to discharge to the public stormwater sewer. A permanent arsenic treatment system was installed for the subgrade water control system to treat arsenic concentrations in discharge water to 5 µg/L or less prior to discharge as outlined in the revised CAP.

Long-term groundwater monitoring, as outlined in the Revised CAP, began in Fourth Quarter 2019. Water discharged from the subgrade water control system (prior to treatment for arsenic) will be sampled for total arsenic quarterly during the first year, semiannually during the second and third years, and annually during the fourth and fifth years. If concentrations of arsenic are not detected above the applicable cleanup level in groundwater after five years, then monitoring may be discontinued as outlined in the Revised CAP. During the long-term groundwater monitoring period, the subgrade drainage water will be routed through the permanent arsenic treatment system prior to discharge to the municipal stormwater system. The results of the monitoring events will be submitted to Ecology.

With the implementation of the remedial action and based on the confirmation soil and groundwater data, the requirements of the First Amended Consent Decree (No. DE 10-2-21304-0 SEA; Consent Decree) between Block at Ballard II, LLC and Ecology have been met and no further remedial action at the Property is warranted.

6.0 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 our agreement with our client. This report is solely for the use and information of our client and Ecology 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. We do not warrant and are 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. We do not warrant the use of segregated portions of this report.

7.0 BIBLIOGRAPHY

The Floyd Snider McCarthy Team (The Floyd Snider McCarthy). 2003. Practical Guidance and Tools to Streamline Property Environmental Assessment and Cleanup in the North BINMIC – Hydrogeological and Environmental Settings Report.

National Oceanic Atmospheric Administration. 2008. Online Weather Data website <http://weather.gov/climate/xmacis.php?wfo=sew>. July 21.

Richardson, Donald, J.W. Bingham, R.J. Madison. United States Geological Survey. 1968. *Water Supply Paper 1852, "Water Resources of King County, Washington."* United States Government Printing Office, Washington D.C.

Sound Environmental Strategies Corporation (SES). 2006a. *Subsurface Investigation, Wesmar Ballard Property, 1451 Northwest 46th Street Seattle, Washington.* Prepared for Bridge Group II, LLC and KG Investment Management. October 20.

_____. 2006b. *Supplemental Subsurface Investigation Wesmar Ballard Property, 1451 Northwest 46th Street Seattle, Washington.* Prepared for Bridge Group II, LLC and KG Investment Properties IV. December 18.

_____. 2007a. *Reconnaissance Investigation Report, Wesmar Property, 1451 Northwest 46th Street Seattle, Washington.* Prepared for Bridge Group, LLC. March 14.

_____. 2007b. *Memorandum Regarding Seep Flow Rate Determination, Near 1451 Northwest 46th Street Seattle, Washington.* Prepared for Bridge Group II, LLC. June 18.

_____. 2007c. *Memorandum Regarding Former Wesmar Property Seep Evaluation.* Prepared for Bridge Group II, LLC and KG Investments IV, LLC. July 24.

_____. 2007d. *Groundwater Monitoring Report, June 2007, Former Wesmar Ballard Property, 1451 Northwest 46th Street Seattle, Washington.* Prepared for Bridge Group II LLC, and KG Investment Properties IV, LLC. September 19.

_____. 2007e. *Remedial Investigation Work Plan, Former Wesmar Property, 1401 & 1451 Northwest 46th Street Seattle, Washington.* Prepared for Bridge Group II, LLC. November 21.

_____. 2008a. *Supplemental Remedial Investigation Work Plan, Former Wesmar Property, 1401 & 1451 Northwest 46th Street Seattle, Washington.* Prepared for Bridge Group II, LLC. April 21.

_____. 2008b. *Revised Hydrogeologic Report. Ballard Blocks 2. 1451 Northwest 46th Street, Seattle, Washington.* Prepared for Clark Design Group, PLLC. June 30.

_____. 2010. *Final Remedial Investigation Report, Feasibility Study, and Proposed Cleanup Action, Former Wesmar Property, 1401 & 1451 Northwest 46th Street, Seattle, Washington.* January 19.

Washington State Department of Ecology (Ecology). 1992. *Statistical Guide for Ecology Site Managers*. Toxics Cleanup Program. Publication No. 92-54. August 1992.

_____. 2011. *Urban Seattle Area Soil Dioxin and PAH Concentrations Initial Summary Report.* Toxics Cleanup Program. Publication No. 11-09-049. September.

_____. 2016. *Guidance for Remediation of Petroleum Contaminated Sites.* Toxics Cleanup Program. Publication No. 10-09-057. Revised June 2016.

_____. 2017a. Re: Administrative Order Docket No. 15341, Ballard Blocks II, Seattle, Washington, coverage under Construction Stormwater General Permit No. WAR305762.

_____. 2017b. First Amended Consent Decree, No. 10-2-21304-0 SEA, Ballard Blocks II, Seattle, Washington, between State of Washington Department of Ecology and Block at Ballard II, LLC. October 20. Includes Revised Cleanup Action Plan.

_____. 2018. Re: Coverage under the Construction Stormwater General Permit (CSWGP), permit number WAR305762, Ballard Blocks II, Seattle, Washington. January 8.

FIGURES

SoundEarth Strategies

WWW.SOUNDEARTHINC.COM

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

FIGURE 1
PROPERTY LOCATION MAP

9/12/2019

N

0 30 60

APPROXIMATE SCALE IN FEET

MW-7

MW01 (BB1)

MW02 (BB1)

B60

MW-9

MW03 (BB1)

MW04 (BB1)

NORTHWEST 46TH STREET

OUTSIDE EDGE OF SHEET PILE SHORING WALL (LIMITS OF CONSTRUCTION EXCAVATION)

11 10 09 08 07 06 05 04 03 02 01 00

A B C D E

B48 MW15 B32 B55 B54 B53 B47 MW14 B61 B31 B30 B27 MW12 B201

B03 B-301 B15/ B15A B21/ B21A B62/ B62A B16/ B16A B40 B28 B25 MW11

1905 CREOSOTE TANK

B19 MW08 B20

B13 B14 B18 B46 MW13 B04

FORMER WESMAR COMPANY BUILDING

FORMER COLOR TECH BUILDING

1917 CREOSOTE TANK

B39 B29 B17 MW07

B101 B02 B07 MW02 B12 MW06 B-303 B01 B-302 B08 MW03 B09 B05 B26

B52 B42 B41 B44 B43 B45 B56 B57 B34 B10 MW04 B33 B38

B51 B58 B59 B22 MW09

B49 MW16

NORTHWEST 45TH STREET

B06 MW01

B11 MW05

15TH AVENUE NORTHWEST

14TH AVENUE NORTHWEST

B50 MW17 B35 B36 B24 MW10 B37

LEGEND

- MW01 — MONITORING WELL
- B-303 — DECOMMISSIONED WELL
- B01 — SOIL BORING
- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- SITE BOUNDARY
- HISTORICAL SITE FEATURES
- RAILROAD LINE
- SHEET PILE SHORING WALL/ AREA A* (REMEDIAL EXCAVATION AREA)
- AREA B**
- AREA C**
- 50-FOOT BY 50-FOOT SOIL SAMPLING REFERENCE GRID
- AREA A IS BOUNDED BY THE PERIMETER OF THE SHEET PILE SHORING WALL AND THE BOTTOM OF THE REMEDIAL EXCAVATION
- ** AREAS B & C UNDER INSTITUTIONAL CONTROL AND SUBJECT TO AN ENVIRONMENTAL COVENANT

SoundEarth Strategies

WWW.SOUNDEARTHINC.COM

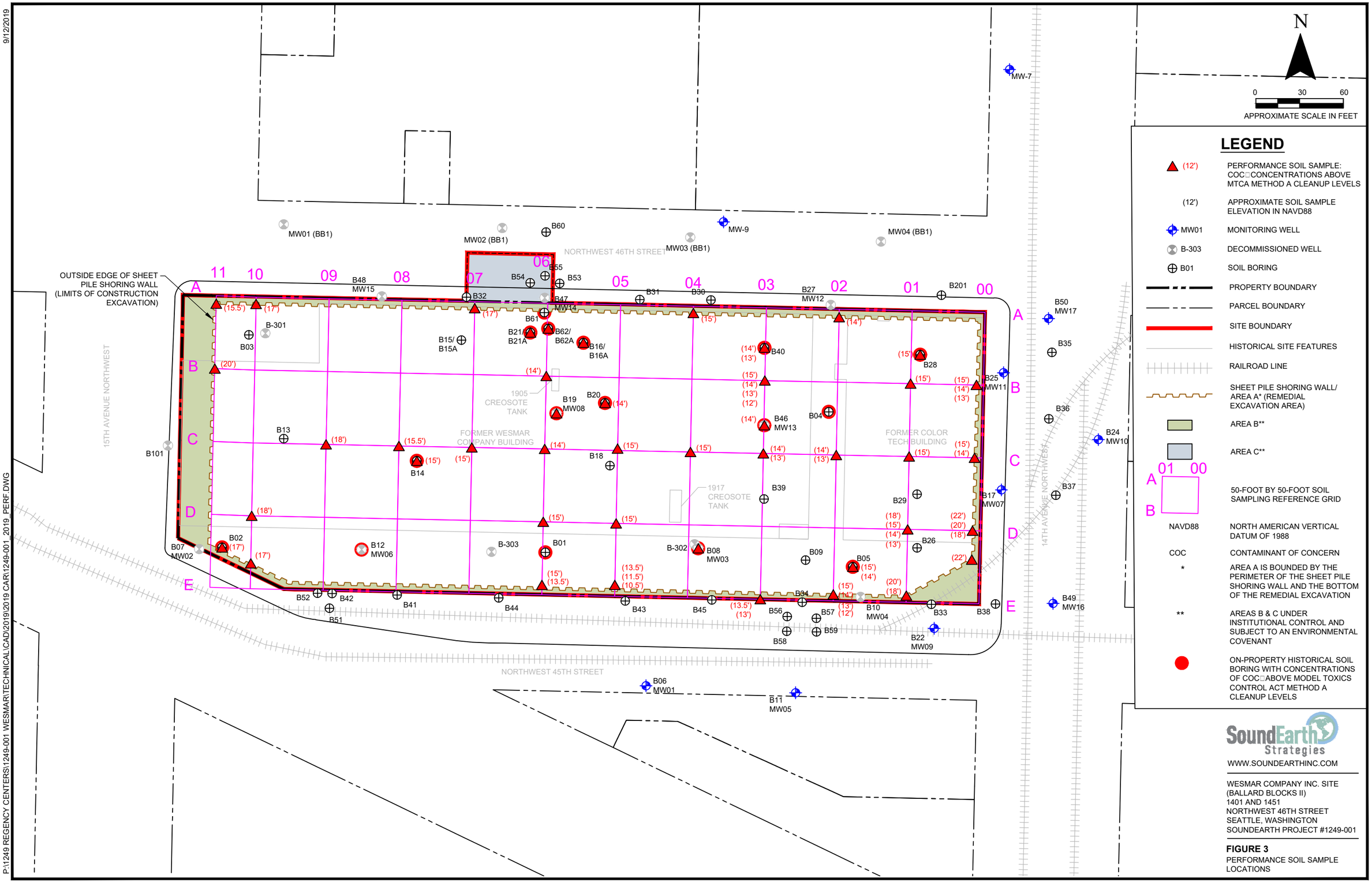
WESMAR COMPANY INC. SITE
(BALLARD BLOCKS II)
1401 AND 1451
NORTHWEST 46TH STREET
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #1249-001

FIGURE 2
SITE BOUNDARY DEFINITION

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

9/12/2019

P:\1249 REGENCY CENTERS\1249-001 WESMAR\TECHNICAL\CAD\2019\2019 CAR\1249-001_2019_PERF.DWG



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 3
PERFORMANCE SOIL SAMPLE LOCATIONS

9/12/2019

P:\1249 REGENCY CENTERS\1249-001 WESMAR TECHNICAL\CAD\2019\2019 CAR\1249-001_2019_CONF.DWG

N

0 30 60

APPROXIMATE SCALE IN FEET

MW01 (BB1) MW02 (BB1) B60 MW-9 MW03 (BB1) MW04 (BB1) MW-7

APPROXIMATE LOCATION OF UST01 (REMOVED)

OUTSIDE EDGE OF SHEET PILE SHORING WALL (LIMITS OF CONSTRUCTION EXCAVATION)

NORTHWEST 46TH STREET

NORTHWEST 45TH STREET

15TH AVENUE NORTHWEST

14TH AVENUE NORTHWEST

1905 CREOSOTE TANK

1917 CREOSOTE TANK

FORMER WESMAR COMPANY BUILDING

FORMER COLOR TECH BUILDING

B48 MW15 B32 B54 B55 B53 B47 MW14 B31 B30 B27 MW12 B201 B50 MW17 B35 B36 B24 MW10 B37 B49 MW16 B03 B-301 B15/ B15A B61 B21 B21A B62/ B62A B16/ B16A B40 B28 B25 MW11 B19 MW08 B20 B46 MW13 B04 B13 B101 B14 B18 B39 B29 B17 MW07 B07 MW02 B02 B12 MW06 B-303 B01 B-302 B08 MW03 B09 B05 B26 B52 B42 B41 B44 B43 B45 B56 B57 B34 B10 MW04 B33 B38 B51 B58 B59 B22 MW09 B06 MW01 B11 MW05

LEGEND

CONFIRMATION SOIL SAMPLE LOCATIONS:

- (12') — "CLASS 2" SOIL SAMPLE, COC□ CONCENTRATIONS DETECTED, BELOW MTCA METHOD A CLEANUP LEVELS (FILL OR NATIVE SOIL)
- (12') — "CLASS 1" SOIL SAMPLE, GENERALLY COC□ CONCENTRATIONS NOT DETECTED ABOVE LABORATORY REPORTING LIMITS AND MTCA METHOD A CLEANUP LEVELS (NATIVE SOIL)
- (12') — APPROXIMATE SOIL SAMPLE ELEVATION IN NAVD88
- MW01 — MONITORING WELL
- B-303 — DECOMMISSIONED WELL
- B01 — SOIL BORING
- UST01-B01-13 — SOIL SAMPLE
- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- SITE BOUNDARY
- HISTORICAL SITE FEATURES
- RAILROAD LINE
- SHEET PILE SHORING WALL/ AREA A* (REMEDIAL EXCAVATION AREA)
- AREA B**
- AREA C**
- 50-FOOT BY 50-FOOT SOIL SAMPLING REFERENCE GRID
- MTCA — WASHINGTON STATE MODEL TOXICS CONTROL ACT
- NAVD88 — NORTH AMERICAN VERTICAL DATUM OF 1988
- COC — CONTAMINANT OF CONCERN
- * — AREA A IS BOUNDED BY THE PERIMETER OF THE SHEET PILE SHORING WALL AND THE BOTTOM OF THE REMEDIAL EXCAVATION
- ** — AREAS B & C UNDER INSTITUTIONAL CONTROL AND SUBJECT TO AN ENVIRONMENTAL COVENANT
- ON-PROPERTY HISTORICAL SOIL BORING WITH CONCENTRATIONS OF COC□ ABOVE MODEL TOXICS CONTROL ACT METHOD A CLEANUP LEVELS

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 4
CONFIRMATION SOIL SAMPLE LOCATIONS

9/12/2019

P:\1249 REGENCY CENTERS\1249-001 WESMAR\TECHNICAL\CAD\2019\2019 CAR\1249-001_2019_FINAL.DWG

N

0 30 60

APPROXIMATE SCALE IN FEET

OUTSIDE EDGE OF SHEET PILE SHORING WALL (LIMITS OF CONSTRUCTION EXCAVATION)

NORTHWEST 45TH STREET

15TH AVENUE NORTHWEST

14TH AVENUE NORTHWEST

FORMER WESMAR COMPANY BUILDING

FORMER COLOR TECH BUILDING

MW01 (BB1) MW02 (BB1) MW03 (BB1) MW04 (BB1) MW-7 MW-9

B01 B02 B03 B04 B05 B06 MW01 B07 MW02 B08 MW03 B09 B10 MW04 B11 MW05 B12 MW06 B13 B14 B15/B15A B16/B16A B17 MW07 B18 B19 MW08 B20 B21/B21A B22 MW09 B24 MW10 B25 MW11 B26 B27 MW12 B28 B29 B30 B31 B32 B33 B34 B35 B36 B37 B38 B39 B40 B41 B42 B43 B44 B45 B46 MW13 B47 MW14 B48 MW15 B49 MW16 B50 MW17 B51 B52 B53 B54 B55 B56 B57 B58 B59 B60 B61 B62/B62A B101 B201 B-301 B-302 B-303

LEGEND

- MW01 — MONITORING WELL
- B-303 — DECOMMISSIONED WELL
- B01 — SOIL BORING
- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- SITE BOUNDARY
- HISTORICAL SITE FEATURES
- RAILROAD LINE
- SHEET PILE SHORING WALL/ AREA A* (REMEDIAL EXCAVATION AREA)
- A 01 00 / B — 50-FOOT BY 50-FOOT SOIL SAMPLING REFERENCE GRID
- 17 — APPROXIMATE FINAL REMEDIAL EXCAVATION BOTTOM ELEVATION IN NAVD88. DARKER SHADE INDICATES LOWER ELEVATION
- NAVD88 — NORTH AMERICAN VERTICAL DATUM OF 1988
- * — AREA A IS BOUNDED BY THE PERIMETER OF THE SHEET PILE SHORING WALL AND THE BOTTOM OF THE REMEDIAL EXCAVATION

SoundEarth Strategies

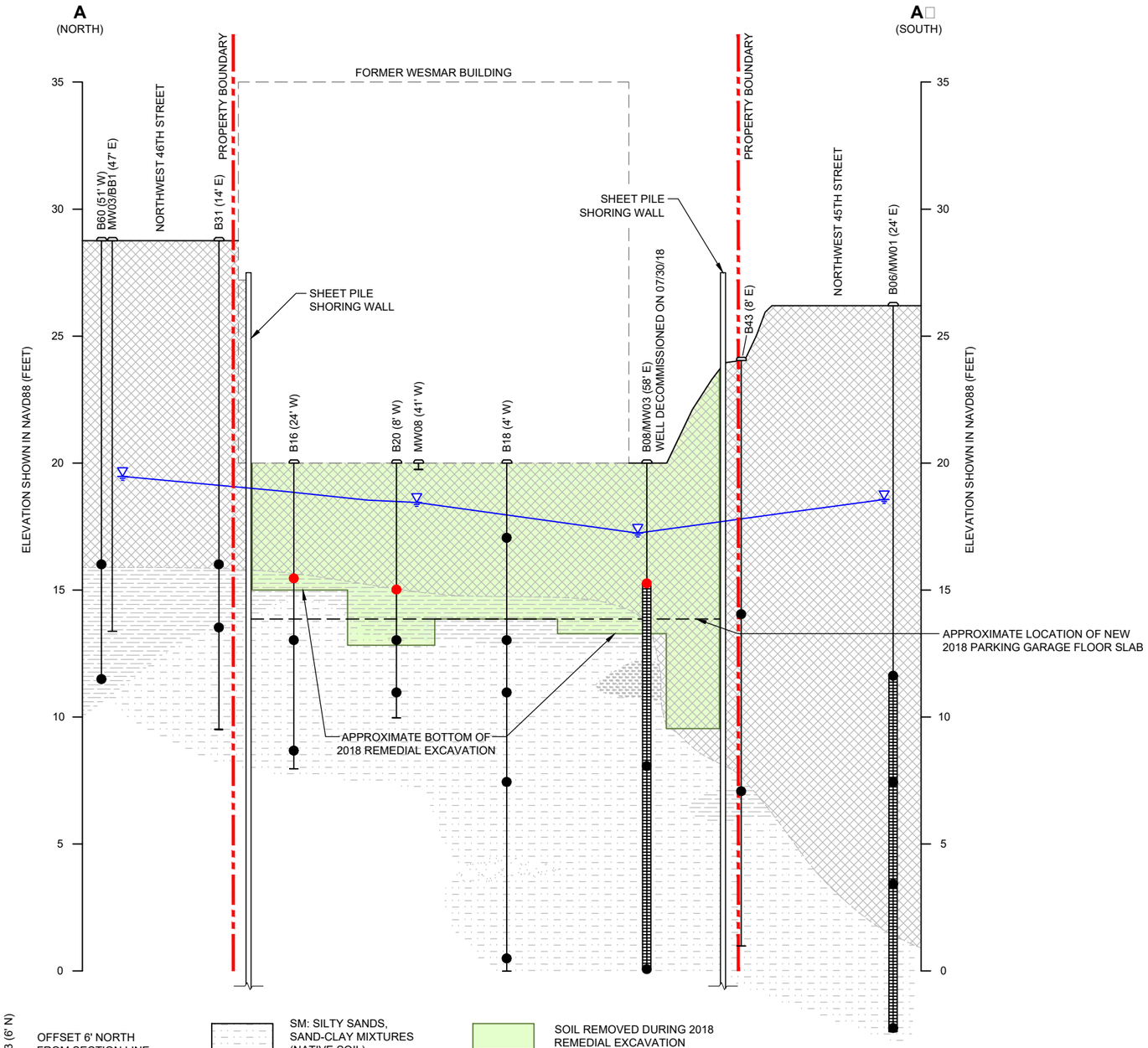
WWW.SOUNDEARTHINC.COM

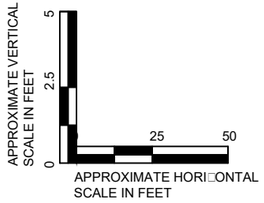
WESMAR COMPANY INC. SITE
(BALLARD BLOCKS II)
1401 AND 1451
NORTHWEST 46TH STREET
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #1249-001

FIGURE 5A
APPROXIMATE FINAL REMEDIAL EXCAVATION EXTENT AND BOTTOM ELEVATIONS

9/10/2019

P:\1249 REGENCY CENTERS\1249-001 WESMAR\TECHNICAL\CAD\2019\2019 CAR\1249-001_2019_SCTN.DWG





LEGEND

- MW03 (6' N) — OFFSET 6' NORTH FROM SECTION LINE
- MONITORING WELL
- SCREEN INTERVAL
- GROUNDWATER LEVEL (DECEMBER 2007)
- SM: SILTY SANDS, SAND-CLAY MIXTURES (NATIVE SOIL)
- ML: INORGANIC SILTS AND VERY FINE SANDS
- SP: POORLY GRADED SANDS WITH SILT AND GRAVEL
- OL: ORGANIC SILTS, ORGANIC SILTY CLAYS
- ANTHROPOGENIC FILL
- SOIL REMOVED DURING 2018 REMEDIAL EXCAVATION

HISTORICAL CONCENTRATION OF CPAH IN SOIL:

- CPAH CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL
- CPAH CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL
- PROPERTY BOUNDARY
- INTERPRETED FILL/NATIVE INTERFACE
- APPROXIMATE BOTTOM OF 2018 REMEDIAL EXCAVATION

MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
CPAH	CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBONS

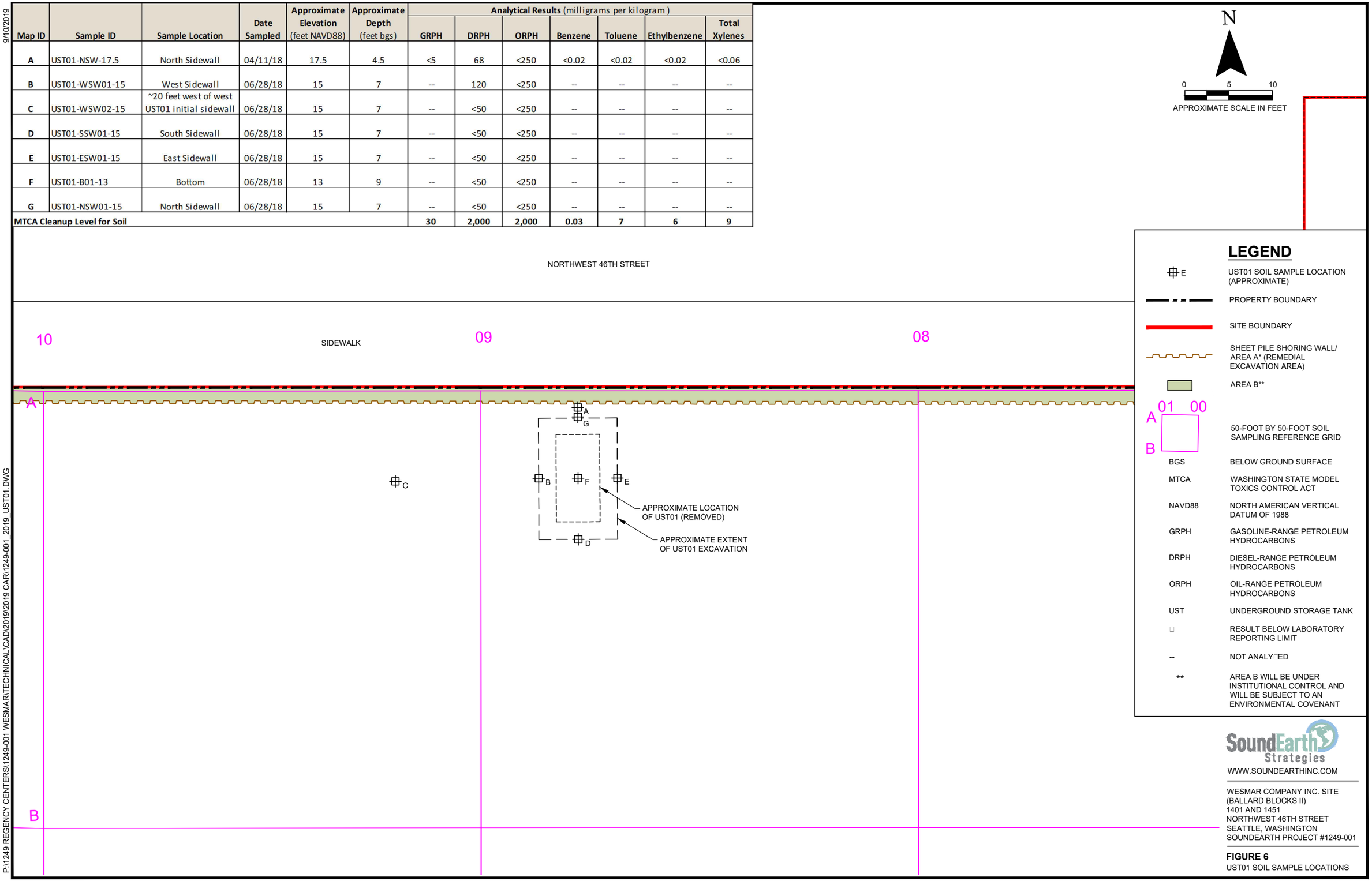
SoundEarth Strategies
WWW.SOUNDEARTHINC.COM

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

FIGURE 5B
CROSS SECTION A-A'

9/10/2019

Map ID	Sample ID	Sample Location	Date Sampled	Approximate Elevation (feet NAVD88)	Approximate Depth (feet bgs)	Analytical Results (milligrams per kilogram) GRPH	DRPH	ORPH	Benzene	Toluene	Ethylbenzene	Total Xylenes
A	UST01-NSW-17.5	North Sidewall	04/11/18	17.5	4.5	<5	68	<250	<0.02	<0.02	<0.02	<0.06
B	UST01-WSW01-15	West Sidewall	06/28/18	15	7	--	120	<250	--	--	--	--
C	UST01-WSW02-15	~20 feet west of west UST01 initial sidewall	06/28/18	15	7	--	<50	<250	--	--	--	--
D	UST01-SSW01-15	South Sidewall	06/28/18	15	7	--	<50	<250	--	--	--	--
E	UST01-ESW01-15	East Sidewall	06/28/18	15	7	--	<50	<250	--	--	--	--
F	UST01-B01-13	Bottom	06/28/18	13	9	--	<50	<250	--	--	--	--
G	UST01-NSW01-15	North Sidewall	06/28/18	15	7	--	<50	<250	--	--	--	--
MTCA Cleanup Level for Soil						**30**	**2,000**	**2,000**	**0.03**	**7**	**6**	**9**



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 6
UST01 SOIL SAMPLE LOCATIONS

P:\1249 REGENCY CENTERS\1249-001 WESMAR\TECHNICAL\CAD\2019\2019 CAR\1249-001_2019_UST01.DWG

TABLES

Table 1
Confirmation Soil Analytical Results for DRPH and ORPH
Ballard Blocks II
1401 and 1451 Northwest 46th Street
Seattle, Washington

Sample ID	Location	Sample Type (Bottom/Sidewall)	Sample Status	Performance or Confirmation Sample	Approximate Elevation (feet NAVD88)	Approximate Depth (feet bgs)	Date Sampled	Analytical Results (milligrams per kilogram)	
								DRPH[(1)]	ORPH[(1)]
A-06-15	Grid node A-06 and Former Boring Location B61	Bottom	In Place	Confirmation	15	5	07/11/18	<50	<250
EX-B62-15	Former Boring Location B62	Bottom	In Place	Confirmation	15	5	07/19/18	<50	<250
B08-12.25	Former Boring Location B08	Bottom	In Place	Confirmation	12.25	7.75	08/31/18	<50	<250
MTCA Cleanup Level for Soil[(3)]								**2,000**	**2,000**

NOTES:

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

[(1)]Analyzed by Method NWTPH-Dx.

[(3)]MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Cleanup Levels for Soil, Unrestricted Land Uses, revised November 2007.

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

bgs = below pre-construction ground surface

DRPH = diesel-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

NAVD88 = North American Vertical Datum of 1988

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbons

WAC = Washington Administrative code

Table 2
Former Soil Boring B16 Area Soil Analytical Results for pH, CVOCs, and BTEX
Ballard Blocks II
1401 and 1451 Northwest 46th Street
Seattle, Washington

Boring ID	Sample ID	Date Sampled	Approximate Elevation (feet NAVD88)	Approximate Depth (feet bgs)	pH[1]	CVOCs[2]						BTEX[2]			
						Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Benzene	Toluene	Ethylbenzene	Total Xylenes
B62A	B62A-1	06/01/18	19	1	11	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05	<0.03	0.13	0.21	1.13
B21A	B21A-1	06/01/18	19	1	12	--	--	--	--	--	--	--	--	--	--
B16A	B16A-2.5	06/01/18	17.5	2.5	8.3	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.2
	B16A-4.5	06/01/18	15.5	4.5	8.6	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.2
	B16A-5.5	06/01/18	14.5	5.5	8.9	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.2
B15A	B15A-1	06/01/18	19	1	9.2	--	--	--	--	--	--	--	--	--	--
Non-corrosive pH range in standard units for a solid[3] or MTCA Cleanup Level for Soil[4][5][6]					**≥ 2 and ≤ 12.5[3]**	**0.05[4]**	**0.03[4]**	**160[5]**	**1,600[5]**	**4,000[5]**	**0.67[6]**	**0.03[4]**	**7[4]**	**6[4]**	**9[4]**

NOTES:

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

[1]Samples analyzed by EPA Method 9045D.

[2]Samples analyzed by EPA Method 8260C.

[3]Dangerous Waste Regulations, Chapter 173-303-090 (6)(a)(iii) of WAC, revised December 2014.

[4]MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Cleanup Levels for Soil, Unrestricted Land Uses, revised November 2007.

[5]MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Noncancer, Direct Contact, CLARC Website <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

[6]MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Cancer, Direct Contact, CLARC Website <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

≥ = equal or greater than

≤ = equal or less than

< = less than

-- = not analyzed

bgs = below pre-construction ground surface

BTEX = benzene, toluene, ethylbenzene, and total xylenes

CLARC = Cleanup Levels and Risk Calculations

CVOC = chlorinated volatile organic compound

EPA = US Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

NAVD88 = North American Vertical Datum of 1988

WAC = Washington Administrative Code

Table 3
Performance Soil Analytical Results for Arsenic, Napthalenes, and cPAHs
Ballard Blocks II
1401 and 1451 Northwest 46th Street
Seattle, Washington

Sample ID	Location	Sample Type (Bottom/Sidewall)	Performance or Confirmation Sample	Approximate Elevation (feet NAVD88)	Approximate Depth (feet bgs)	Date Sampled	Analytical Results (milligrams per kilogram)				cPAHs Toxicity Equivalency[1] (milligrams per kilogram)								TEQ[1] (milligrams per kilogram)
							Arsenic	Naphthalene	2-Methyl-naphthalene	1-Methyl-naphthalene	Benzo(a)- anthracene TEF: 0.1	Chrysene TEF: 0.01	Benzo(a)pyrene TEF: 1	Benzo(b)- fluoranthene TEF: 0.1	Benzo(k)- fluoranthene TEF: 0.1	Indeno(1,2,3-cd)- pyrene TEF: 0.1	Dibenz(a,h)- anthracene TEF: 0.1	
Remedial Excavation Soil Samples																			
A-02-14	Grid node A-02	Bottom	Performance	14	6	07/31/18	5.83	1.5	0.76	0.40	< 0.18	< 0.18	**0.18**	< 0.16	0.051	< 0.082	< 0.019		**0.231**
A-04-15	Grid node A-04	Bottom	Performance	15	5	07/23/18	**20.9**	0.010	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.008
A-07-17	Grid node A-07	Bottom	Performance	17	3	07/06/18	**27.5**	<0.01	<0.01	<0.01	< 0.01	0.013	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.008
A-11-15.5-B	Grid node A-11	Bottom	Performance	15.5	5.5	06/26/18	1.57	<0.01	<0.01	<0.01	0.53	0.56	**0.51**	0.48	0.18	0.27	< 0.1		**0.667**
TP-A-10-17	Grid node A-10	Sidewall	Performance	17	4	06/20/18	2.49	0.17	<0.1	<0.1	0.57	0.64	**0.64**	0.65	0.21	0.31	< 0.1		**0.825**
B-00-13	Grid node B-00	Bottom	Performance	13	10	08/09/18	**30.4**	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.008
B-00-14	Grid node B-00	Bottom	Performance	14	9	08/09/18	**41.2**	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.008
B-00-15	Grid node B-00	Bottom	Performance	15	8	08/09/18	**49.4**	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.008
B-01-15	Grid node B-01	Bottom	Performance	15	8	08/09/18	**21.0**	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.008
B-03-12	Grid node B-03	Bottom	Performance	12	8	08/07/18	6.59	**13**	4.8	5.9	5.1	4.5	**4.6**	4.4	1.4	1.8	0.56		**5.97**
B-03-13	Grid node B-03	Bottom	Performance	13	7	07/31/18	**27.2**	**430**	180	**76**	27	25	**24**	22	6.9	8.7	2.3		**30.9**
B-03-14	Grid node B-03	Bottom	Performance	14	6	07/31/18	**29.2**	**530**	170	**80**	26	24	**23**	20	8.4	8.7	2.3		**29.8**
B-03-15	Grid node B-03	Bottom	Performance	15	5	07/31/18	18.7	260	110	55	18	15	**16**	15	4.8	5.4	1.5		**20.6**
B-06-14	Grid node B-06	Bottom	Performance	14	6	07/11/18	1.66	1.3	0.41	0.26	0.46	0.51	**0.47**	0.48	0.15	0.26	0.062		**0.616**
B-11-20-WSW	Grid node B-11	Sidewall	Performance	20	2	06/25/18	1.26	0.44	0.22	0.30	3.7	4.3	**4.3**	5.3	2.1	2.5	0.56		**5.759**
C-00-14	Grid node C-00	Bottom	Performance	14	9	09/06/18	**32.0**	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.008
C-00-15	Grid node C-00	Bottom	Performance	15	8	09/06/18	14.5	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.008
C-01-15	Grid node C-01	Bottom	Performance	15	8	09/06/18	8.00	0.028	0.022	0.015	0.11	0.12	**0.14**	0.15	0.052	0.066	< 0.01		**0.180**
C-02-13	Grid node C-02	Bottom	Performance	13	7	08/02/18	**32.6**	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.008
C-02-14	Grid node C-02	Bottom	Performance	14	6	08/02/18	**27.4**	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.008
C-03-13	Grid node C-03	Bottom	Performance	13	7	08/02/18	**34.0**	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.008
C-03-14	Grid node C-03	Bottom	Performance	14	4	08/02/18	**91.7**	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.008
C-04-15	Grid node C-04	Bottom	Performance	15	5	07/31/18	5.31	0.10	0.028	0.014	0.076	0.075	**0.10**	0.10	0.032	0.060	0.012	fb	**0.129**
C-05-15	Grid node C-05	Bottom	Performance	15	5	07/23/18	15.5	0.15	0.057	0.027	0.18	0.24	**0.23**	0.23	0.081	0.12	0.030		**0.297**
C-06-14	Grid node C-06	Bottom	Performance	14	6	07/09/18	**33.3**	0.84	0.45	0.28	0.31	0.33	**0.33**	0.31	0.12	0.14	0.033		**0.425**
C-07-15	Grid node C-07	Bottom	Performance	15	5	07/06/18	5.36	0.20	0.13	0.13	0.97	1.0	**1.3**	1.4	0.54	0.40	0.093		**1.650**
C-08-15.5	Grid node C-08	Bottom	Performance	15.5	6.5	07/02/18	1.50	<0.01	<0.01	<0.01	0.079	0.088	0.091	0.10	0.030	0.056	0.012		**0.120**
C-09-18-SW	Grid node C-09	Sidewall	Performance	18	3	06/20/18	2.59	0.046	0.025	0.025	0.60	0.68	**0.78**	0.81	0.29	0.36	0.079		**1.001**
D-00-18	Grid node D-00	Bottom	Performance	18	5	09/06/18	3.02	<0.01	<0.01	<0.01	0.12	0.11	**0.15**	0.14	0.055	0.088	0.018		**0.193**
D-00-20	Grid node D-00	Bottom	Performance	20	3	09/06/18	1.93	0.14	<0.1	<0.1	4.6	4.5	**5.8**	6.5	1.9	1.8	0.41		**7.37**
D-00-22	Grid node D-00	Bottom	Performance	22	1	09/06/18	4.65	1.4	1.1	1.4	40	38	**50**	55	15	15	3.3		**63.2**
D-01-13	Grid node D-01	Bottom	Performance	13	10	12/17/18	1.92	<0.1	<0.1	<0.1	0.18	0.18	**0.19**	0.19	< 0.1	0.12	< 0.1		**0.25**
D-01-14	Grid node D-01	Bottom	Performance	14	9	12/17/18	7.87	0.018	<0.01	<0.01	0.24	0.24	**0.32**	0.31	0.12	0.20	0.042		**0.414**
D-01-15	Grid node D-01	Bottom	Performance	15	8	09/06/18	2.15	0.017	<0.01	<0.01	0.12	0.12	**0.18**	0.19	0.057	0.10	0.019		**0.230**
D-01-18	Grid node D-01	Bottom	Performance	18	5	09/06/18	1.83	0.25	0.25	0.17	0.20	0.20	**0.25**	0.29	0.085	0.072	0.015		**0.318**
D-05-15	Grid node D-05	Bottom	Performance	15	5	07/13/18	3.56	0.078	0.055	0.044	0.84	0.87	**1.1**	1.1	0.35	0.34	0.074		**1.379**
D-06-15	Grid node D-06	Bottom	Performance	15	5	07/06/18	2.78	0.069	0.041	0.040	0.61	0.63	**0.68**	0.63	0.25	0.27	0.058		**0.868**
D-10-18-SW	Grid node D-10	Sidewall	Performance	18	3	06/20/18	3.64	0.31	<0.1	<0.1	7.7	8.0	**8.0**	7.5	2.9	3.2	0.84		**10.29**
MTCA Cleanup Level for Soil							**20**[2]	**5**[2]	**320**[3]	**34**[4]	**NE**	**NE**	**0.1**[2]	**NE**	**NE**	**NE**	**NE**		**0.1**[2]

Table 3
Performance Soil Analytical Results for Arsenic, Napthalenes, and cPAHs
Ballard Blocks II
1401 and 1451 Northwest 46th Street
Seattle, Washington

Sample ID	Location	Sample Type (Bottom/Sidewall)	Performance or Confirmation Sample	Approximate Elevation (feet NAVD88)	Approximate Depth (feet bgs)	Date Sampled	Analytical Results (milligrams per kilogram)				cPAHs Toxicity Equivalency[1] (milligrams per kilogram)												TEQ[1] (milligrams per kilogram)
							Arsenic	Naphthalene	2-Methyl-naphthalene	1-Methyl-naphthalene	Benzo(a)- anthracene	TEF: 0.1	Chrysene	TEF: 0.01	Benzo(a)pyrene	TEF: 1	Benzo(b)- fluoranthene	TEF: 0.1	Benzo(k)- fluoranthene	TEF: 0.1	Indeno(1,2,3-cd)- pyrene	TEF: 0.1	Dibenz(a,h)- anthracene	TEF: 0.1	
E-00-22	Grid node E-00	Bottom	Performance	22	1	09/06/18	5.56	0.61	<0.5	<0.5		5.9		6.1		**7.7**		7.9		3.1		2.6		0.60	**9.77**
E-01-18	Grid node E-01	Bottom	Performance	18	2	09/06/18	2.79	0.056	0.021	0.014		0.73		0.74		**1.2**		1.2		0.37		0.43		0.096	**1.490**
E-01-20	Grid node E-01	Bottom	Performance	20	3	09/06/18	8.09	0.52	0.33	0.28		4.5		4.4		**6.0**		6.6		1.8		2.0		0.42	**7.58**
E-02-12	Grid node E-01	Bottom	Performance	12	8	12/17/18	8.01	0.083	0.021	0.010		0.076		0.083		**0.11**		0.12		0.043		0.084		0.016	**0.14**
E-02-13	Grid node E-02	Bottom	Performance	13	7	09/06/18	5.11	<0.5	<0.5	<0.5		1.2		1.2		**1.4**		1.4	<	0.5		0.89	<	0.5	**1.81**
E-02-14	Grid node E-02	Bottom	Performance	14	6	09/06/18	6.28	0.87	0.37	0.20		0.83		0.93		**0.99**		1.0		0.30		0.50		0.11	**1.273**
E-02-15	Grid node E-02	Bottom	Performance	15	5	09/06/18	4.72	0.020	<0.01	<0.01		0.34		0.31		**0.36**		0.33		0.12		0.19		0.037	**0.465**
E-03-13	Grid node E-03	Bottom	Performance	13	7	09/05/18	16.7	0.95	1.1	1.0		3.3		3.5		**3.3**		3.3		1.0		1.5	<	0.1	**4.25**
E-03-13.5	Grid node E-03	Bottom	Performance	13.5	6.5	08/30/18	2.96	0.15	0.052	0.039		0.11		0.097		0.090		0.091		0.033		0.043		0.011	**0.120**
E-05-10.5	Grid node E-05	Bottom	Performance	10.5	9.5	07/23/18	<1	0.074	0.42	0.31		0.16		0.14		0.080		0.098		0.030		0.037	<	0.01	**0.114**
E-05-11.5	Grid node E-05	Bottom	Performance	11.5	8.5	07/13/18	5.95	0.020	0.82	1.2		0.42		0.41		**0.23**		0.25		0.096		0.098		0.024	**0.323**
E-05-13.5	Grid node E-05	Bottom	Performance	13.5	6.5	07/13/18	8.40	**23**	21	15		2.5		2.5		**1.4**		1.6		0.056		0.49		0.12	**1.902**
E-06-13.5	Grid node E-06	Bottom	Performance	13.5	6.5	07/06/18	**20.1**	<0.01	<0.01	<0.01		0.064		0.066		0.067		0.061		0.024		0.033	<	0.01	0.086
E-06-15	Grid node E-06	Bottom	Performance	15	5	07/06/18	2.15	0.19	0.095	0.078		0.95		0.97		**1.1**		1.1		0.42		0.37		0.082	**1.402**
E-10-17-B	Grid node E-10	Bottom	Performance	17	10	06/21/18	5.71	0.15	0.15	0.16		2.0		2.1		**2.0**		1.9	<	1		1.1	<	1	**2.62** [ve,J]
EX-B02-17	Former boring B02	Bottom	Performance	17	10	06/21/18	4.27	0.083	0.043	0.027		2.0		1.9		**2.1**		1.9		0.75		0.73		0.19	**2.68** [ve]
EX-B05-14	Former boring B05	Bottom	Performance	14	6	09/06/18	2.28	0.17	0.18	0.14		0.75		0.78		**0.94**		0.92		0.30		0.57		0.13	**1.21**
EX-B05-15	Former boring B05	Bottom	Performance	15	5	09/06/18	7.84	0.58	0.56	0.37		1.2		1.2		**1.4**		1.7		0.55		0.37		0.077	**1.802**
EX-B20-14.0	Former boring B20	Bottom	Performance	14	6	07/23/18	**36.7**	<0.01	<0.01	<0.01	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	0.008
EX-B28-15	Former boring B28	Bottom	Performance	15	8	08/09/18	**134 (TCLP <1 mg/L[5])**	<0.01	<0.01	<0.01	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01	0.008
EX-B40-13	Former boring B40	Bottom	Performance	13	7	08/07/18	1.85	0.064	0.012	0.21		0.53		0.47		**0.49**		0.44		0.13		0.20		0.056	**0.630**
EX-B40-14	Former boring B40	Bottom	Performance	14	6	07/31/18	15.4	0.80	0.41	0.38		0.81		0.75		**0.76**		0.67		0.20		0.30		0.076	**0.973**
EX-MW-13-14	Former boring B46/MW14	Bottom	Performance	14	6	07/31/18	9.57	<0.1	<0.1	<0.1		22		21		**22**		19		6.7		7.6		1.8	**27.920**
B14-15	Former boring B14	Bottom	Performance	15	5	07/06/18	1.96	0.021	0.011	<0.01		0.099		0.11		**0.12**		0.12		0.043		0.065		0.014	**0.155**
B62A-1	Adjacent to former boring B62	Bottom	Performance	19	1	6/1/2018	--	0.78	0.29	0.26		0.50		0.57		**0.62**		0.62		0.22		0.33	<	0.01	**0.79**
Southeast Temporary Construction Ramp Soil Sample																									
SE-Ramp Composite	SE temporary ramp	Composite	Performance	--	--	09/06/18	11.4	3.8	3.2	2.0		2.7		2.8		**2.8**		3.0		0.91		1.4	<	0.1	**3.63**
MTCA Cleanup Level for Soil							**20[2]**	**5[2]**	**320[3]**	**34[4]**	**NE**		**NE**		**0.1[2]**		**NE**		**NE**		**NE**		**NE**		**0.1[2]**

NOTES:

Red denotes concentration exceeds MTCA cleanup level for soil.

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

Samples analyzed by EPA Method 200.8 or EPA Method 8270D SIM.

[1]Analytical result for each individual cPAH is multiplied by the TEF, and all seven cPAH values are added. When analytical results are reported as less than the LRL, one half of the LRL is multiplied by the TEF to calculate the TEQ.

[2]MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Cleanup Levels for Soil, Unrestricted Land Uses, revised November 2007.

[3]MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Non cancer, Direct Contact, CLARC Website <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

[4]MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Cancer, Direct Contact, CLARC Website <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

[5]Sample EX-B28-15 was analyzed for TCLP arsenic by EPA Method 200.8 and 1311 for soil disposal purposes. The Resource Conservation and Recovery Act dangerous waste criteria limit for arsenic is 5.0 mg/L.

Laboratory Notes:

[fb]The analyte was detected in the method blank.

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

[ve]The analyte response exceeded the valid instrument calibratrion range. The value reported is an estimate.

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

bgs = below pre-construction ground surface

CLARC = Cleanup Levels and Risk Calculation

cPAH = carcinogenic polycyclic aromatic hydrocarbon

EPA = US Environmental Protection Agency

LRL = lower reporting limit

mg/L = millligrams per Liter

MTCA = Washington State Model Toxics Control Act

NAVD88 = North American Vertical Datum of 1988

NE = not established

TCLP = Toxicity Characteristic Leachate Procedure

TEF = toxicity equivalency factor

TEQ = toxicity equivalent

WAC = Washington Administrative Code

Table 4
Concrete Analytical Results for Arsenic, cPAHs, and Naphthalene
Ballard Blocks II
1401 and 1451 Northwest 46th Street
Seattle, Washington

Sample ID	Date Sampled	Arsenic[1] (milligrams per kilogram)	cPAHs[2] (milligrams per kilogram)								Naphthalene[2] (milligrams per kilogram)
			Benzo(a)- anthracene TEF: 0.1	Chrysene TEF: 0.01	Benzo(a)pyrene TEF: 1	Benzo(b)- fluoranthene TEF: 0.1	Benzo(k)- fluoranthene TEF: 0.1	Indeno(1,2,3-cd)- pyrene TEF: 0.1	Dibenz(a,h)- anthracene TEF: 0.1	cPAH TEQ[3]	
Demolished Concrete Piles from Retaining Walls											
Conc-Pile01-20180607	06/07/18	3.20	< 0.013	0.013	0.011	0.012	< 0.01	< 0.01	< 0.01	0.014	<0.01
Conc-Pile02-20180607	06/07/18	5.80	0.019	0.021	0.018	0.019	< 0.01	0.01	< 0.01	0.024	<0.01
Conc-Pile01-Comp-20180611	06/11/18	2.60[ca]	0.022	0.028	0.025	0.031	< 0.01	0.012	< 0.01	0.033	0.011
Lower Elevation Concrete Floor Slabs—Composite Samples											
Slab-Comp01	06/11/18	**22.1**	< 0.01	0.027	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.071	<0.01
Slab-Comp02	06/11/18	**25.0**	0.059	0.072	0.070	0.086	0.031	0.019	< 0.01	0.091	<0.01
Slab-Comp03	06/11/18	**30.0**	0.023	0.028	0.024	0.030	0.010	< 0.01	< 0.01	0.032	<0.01
Slab-Comp04	06/11/18	**42.2**	0.061	0.068	0.064	0.073	0.027	0.022	< 0.01	0.083	<0.01
Upper Elevation Concrete Floor Slab (Area 2)—Composite Samples											
Slab-Comp05	06/11/18	2.80	0.020	0.025	0.026	0.031	0.012	< 0.01	< 0.01	0.034	<0.01
Lower Elevation Concrete Floor Slabs—Discrete Samples											
Conc-Slab01-20180607	06/07/18	**53.7**	0.033	0.04	0.036	0.041	0.013	0.02	< 0.01	0.048	<0.01
Conc-Slab02-20180607	06/07/18	4.98	0.04	0.052	0.052	0.061	0.018	0.03	< 0.01	0.068	0.013
MTCA Cleanup Level for Soil		**20**[4]	**NE**	**NE**	**0.1**[4]	**NE**	**NE**	**NE**	**NE**	**0.1**[4]	**5**[4]

NOTES:

Red denotes concentration exceeds MTCA cleanup level for soil.

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

[1]Samples analyzed by EPA Method 200.8.

[2]Samples analyzed by GC/MS-SIM or EPA Method 8270D.

[3]Analytical result for each individual cPAH is multiplied by the TEF and all seven cPAH values are added. When analytical results are reported as less than the LRL, one half of the LRL is multiplied by the TEF to calculate the TEQ.

[4]MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Cleanup Levels for Soil, Unrestricted Land Uses, revised November 2007.

Laboratory Note:

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

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

cPAH =carcinogenic polycyclic aromatic hydrocarbon

EPA = US Environmental Protection Agency

LRL = laboratory reporting limit

MTCA = Washington State Model Toxics Control Act

NE = not established

TEF = toxicity equivalency factor

TEQ = toxicity equivalent

WAC = Washington Administrative Code

Table 5
UST01 Soil Analytical Results for GRPH, DRPH, ORPH, and BTEX
Ballard Blocks II
1401 and 1425 Northwest 46th Street
Seattle, Washington

Sample ID	Sample Location	Date Sampled	Approximate Elevation (feet NAVD88)	Approximate Depth (feet bgs)	Analytical Results (milligrams per kilogram)						
					GRPH[1]	DRPH[2]	ORPH[2]	Benzene[3]	Toluene[3]	Ethylbenzene[3]	Total Xylenes[3]
UST01-SP01	Stockpile	04/11/18	--	--	16	100[x]	<250	<0.02	<0.02	<0.02	<0.06
UST01-SP02	Stockpile	04/11/18	--	--	7.2	60[x]	<250	<0.02	<0.02	<0.02	<0.06
UST01-NSW-17.5	North Sidewall	04/11/18	17.5	4.5	<5	68[x]	<250	<0.02	<0.02	<0.02	<0.06
UST01-WSW01-15	West Sidewall	06/28/18	15	7	--	120	<250	--	--	--	--
UST01-WSW02-15	~20 feet west of west UST01 initial sidewall	06/28/18	15	7	--	<50	<250	--	--	--	--
UST01-SSW01-15	South Sidewall	06/28/18	15	7	--	<50	<250	--	--	--	--
UST01-ESW01-15	East Sidewall	06/28/18	15	7	--	<50	<250	--	--	--	--
UST01-B01-13	Bottom	06/28/18	13	9	--	<50	<250	--	--	--	--
UST01-NSW01-15	North Sidewall	06/28/18	15	7	--	<50	<250	--	--	--	--
MTCA Cleanup Level for Soil[4]					**30**	**2,000**	**2,000**	**0.03**	**7**	**6**	**9**

NOTES:

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

[1]Analyzed by Method NWTPH-Gx.

[2]Analyzed by Method NWTPH-Dx.

[3]Analyzed by EPA Method 8021B.

[4]MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Cleanup Levels for Soil, Unrestricted Land Uses, revised November 2007.

Laboratory Note:

[x]The sample chomatographic pattern does not resemble the fuel standard used for quantitation.

-- = not applicable, not measured, not analyzed

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

bgs = below ground surface

BTEX = benzene, toluene, ethylbenzene, and total xylenes

DRPH = diesel-range petroleum hydrocarbons

EPA = US Environmental Protection Agency

GRPH = gasoline-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

NAVD88 = North American Vertical Datum of 1988

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbons

WAC = Washington Administrative code

Table 6
Air Monitoring Analytical Results for
Arsenic, Naphthalene, and PAHs - June 21, 2018
Ballard Blocks II
1401 and 1451 NW 46th Street
Seattle, Washington

Employee and Employer	Sample IDs	Date Sampled	Activity/Location	Analytical Results (milligrams per cubic meter)		
				Arsenic[1]	Naphthalene[2]	Coal Tar Pitch Volatiles[3] (PAHs)
Michael-Ponderosa Pacific	P01A-20180621 P01B-20180621 P01C-20180621	06/21/18	Excavator Operator Within Exclusion Zone	<0.00038	<0.69	<0.16
Rich - Ponderosa Pacific	P02A-20180621 P02B-20180621 P02C-20180621	06/21/18	Loader Operator Within Exclusion Zone	<0.00042	<0.75	<0.083
Field Blank	FB01A-20180621 FB01B-20180621 FB01C-20180621	06/21/18	Field Blank	NA	NA	NA
Washington State TWA[4]				**0.01**	**10**	**0.2**

NOTES:

Sample analyses conducted by SGS North America Inc. of East Syracuse, New York.

[1]Analyzed by Method mod. NIOSH 7303/mod. OSHA ID-125G.

[2]Analyzed by Method mod. NIOSH 1501.

[3]Analyzed by Method mod. OSHA 58.

[4]WAC 296-841-20025, Permissible Exposure Limits (PELs).

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

NA = not applicable

NIOSH = National Institute for Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

PAH = polycyclic aromatic hydrocarbon

TWA = time-weighted average

WAC = Washington Administrative Code

Table 7
Confirmation Soil Analytical Results for Arsenic, Napthalenes, and cPAHs
Ballard Blocks II
1401 and 1451 Northwest 46th Street
Seattle, Washington

Sample ID	Location	Sample Type (Bottom/Sidewall)	Performance or Confirmation Sample	Approximate Elevation (feet NAVD88)	Approximate Depth (feet bgs)	Date Sampled	Analytical Results (milligrams per kilogram)				cPAHs Toxicity Equivalency[1] (milligrams per kilogram)							TEQ[1] (milligrams per kilogram)
							Arsenic	Naphthalene	2-Methyl-naphthalene	1-Methyl-naphthalene	Benzo(a)-anthracene TEF: 0.1	Chrysene TEF: 0.01	Benzo(a)pyrene TEF: 1	Benzo(b)-fluoranthene TEF: 0.1	Benzo(k)-fluoranthene TEF: 0.1	Indeno(1,2,3-cd)-pyrene TEF: 0.1	Dibenz(a,h)-anthracene TEF: 0.1	
Remedial Excavation Soil Samples																		
B01-11.5	Former boring B01	Bottom	Confirmation	11.5	8.5	07/06/18	2.23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
EX-B04-14	Former boring B04	Bottom	Confirmation	14	6	07/31/18	1.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
EX-B05-13	Former boring B05	Bottom	Confirmation	13	7	09/06/18	1.69	<0.01	<0.01	<0.01	0.012	0.013	0.017	0.016	<0.01	<0.01	<0.01	0.021
B08-12.25	Former boring B08	Bottom	Confirmation	12.25	7.75	08/31/18	8.86	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
EX-B12-17	Former boring B12	Bottom	Confirmation	17	5	06/22/18	2.61	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
B14-14	Former boring B14	Bottom	Confirmation	14	6	07/10/18	1.05	<0.01	<0.01	<0.01	0.044	0.050	0.050	0.053	0.017	0.031	<0.01	0.066
EX-B16-15	Former boring B16	Bottom	Confirmation	15	5	07/19/18	10.2	0.14	0.081	0.067	0.052	0.055	0.051	0.053	0.021	0.033	<0.01	0.068
EX-MW08-13	Former boring B19/MW08	Bottom	Confirmation	13	7	07/19/18	7.62	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
EX-B20-13	Former boring B20	Bottom	Confirmation	13	7	07/25/18	19.1	0.032	0.011	<0.01	0.014	0.013	0.014	0.013	<0.01	<0.01	<0.01	0.018
EX-B21-15	Former boring B21	Bottom	Confirmation	15	5	07/19/18	9.60	0.049	0.022	0.013	0.031	0.033	0.032	0.030	0.012	0.022	<0.01	0.042
EX-B28-14	Former boring B28	Bottom	Confirmation	14	9	08/09/18	10.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
EX-B40-12	Former boring B40	Bottom	Confirmation	12	8	08/07/18	4.11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
EX-MW13-13	Former boring B46/MW13	Bottom	Confirmation	13	7	08/07/18	<1	<0.1	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
EX-B62-15	Former boring B62	Bottom	Confirmation	15	5	07/19/18	5.84	0.076	0.032	0.018	0.045	0.048	0.049	0.048	0.019	0.032	<0.01	0.064
A-00-15	Grid node A-00	Bottom	Confirmation	15	8	08/09/18	1.18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
A-01-15	Grid node A-01	Bottom	Confirmation	15	8	08/09/18	8.55	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
A-02-13	Grid node A-02	Bottom	Confirmation	13	7	07/31/18	<1	0.027	0.035	0.020	0.018	0.015	0.014	0.013	<0.01	<0.01	<0.01	0.019
A-03-15	Grid node A-03	Bottom	Confirmation	15	5	07/31/18	10.6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
A-04-14	Grid node A-04	Bottom	Confirmation	14	6	07/23/18	2.13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
A-05-15	Grid node A-05	Bottom	Confirmation	15	5	07/13/18	4.25	0.012	0.013	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
A-06-15	B61	Bottom	Confirmation	15	5	07/11/18	2.00	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
A-07-15	Grid node A-07	Bottom	Confirmation	15	5	07/06/18	1.73	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
A-08-17	Grid node A-08	Bottom	Confirmation	17	3	07/05/18	2.84	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
A-09-15.5-B	Grid node A-09	Bottom	Confirmation	15.5	6.5	06/28/18	1.39	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
A-10-15.5-B	Grid node A-10	Bottom	Confirmation	15.5	6.5	06/26/18	1.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
A-11-14	Grid node A-11	Bottom	Confirmation	14	8	07/03/18	<1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
B-00-12	Grid node B-00	Bottom	Confirmation	12	11	08/20/18	9.29	<0.01	<0.01	<0.01	0.011	0.013	0.011	0.011	<0.01	<0.01	<0.01	0.015
B-01-14	Grid node B-01	Bottom	Confirmation	14	9	08/09/18	17.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
B-02-14	Grid node B-02	Bottom	Confirmation	14	6	07/31/18	<1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
B-03-11	Grid node B-03	Bottom	Confirmation	11	9	08/07/18	1.07	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
B-04-15	Grid node B-04	Bottom	Confirmation	15	5	07/23/18	2.08	0.054	0.033	0.031	0.018	0.021	0.014	0.016	<0.01	<0.01	<0.01	0.019
B-05-15	Grid node B-05	Bottom	Confirmation	15	5	07/13/18	11.6	0.027	0.011	<0.01	0.034	0.043	0.027	0.035	0.011	0.021	<0.01	0.038
B-06-13	Grid node B-06	Bottom	Confirmation	13	7	07/11/18	<1	0.072	0.028	0.016	0.029	0.029	0.027	0.027	0.011	0.010	<0.01	0.035
B-07-17	Grid node B-07	Bottom	Confirmation	17	5	07/06/18	3.44	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
B-08-17	Grid node B-08	Bottom	Confirmation	17	3	07/05/18	1.87	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
B-09-18-SW	Grid node B-09	Sidewall/Bottom	Confirmation	18	3	06/20/18	2.00	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
TP-B-10-17	Grid node B-10	Sidewall/Bottom	Confirmation	17	4	06/20/18	1.31	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
B-11-15.5-WSW	Grid node B-11	Sidewall/Bottom	Confirmation	15.5	6.5	06/27/18	<1	<0.01	<0.01	<0.01	0.033	0.040	0.041	0.041	0.016	0.027	<0.01	0.054
MTCA Cleanup Level for Soil							**20**[2]	**5**[2]	**320**[3]	**34**[4]	**NE**	**NE**	**0.1**[2]	**NE**	**NE**	**NE**	**NE**	**0.1**[2]

Table 7
Confirmation Soil Analytical Results for Arsenic, Napthalenes, and cPAHs
Ballard Blocks II
1401 and 1451 Northwest 46th Street
Seattle, Washington

Sample ID	Location	Sample Type (Bottom/Sidewall)	Performance or Confirmation Sample	Approximate Elevation (feet NAVD88)	Approximate Depth (feet bgs)	Date Sampled	Analytical Results (milligrams per kilogram)				cPAHs Toxicity Equivalency[1] (milligrams per kilogram)								TEQ[1] (milligrams per kilogram)
							Arsenic	Naphthalene	2-Methyl-naphthalene	1-Methyl-naphthalene	Benzo(a)-anthracene TEF: 0.1	Chrysene TEF: 0.01	Benzo(a)pyrene TEF: 1	Benzo(b)-fluoranthene TEF: 0.1	Benzo(k)-fluoranthene TEF: 0.1	Indeno(1,2,3-cd)-pyrene TEF: 0.1	Dibenz(a,h)-anthracene TEF: 0.1	
C-00-13	Grid node C-00	Bottom	Confirmation	13	7	09/06/18	13.6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
C-01-14	Grid node C-01	Bottom	Confirmation	14	9	09/06/18	3.38	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
C-02-12	Grid node C-02	Bottom	Confirmation	12	8	08/07/18	8.05	0.062	0.034	0.018	0.049	0.047	0.051	0.057	0.016	0.029	<0.01	0.067
C-03-12	Grid node C-03	Bottom	Confirmation	12	8	08/07/18	11.7	<0.01	0.022	0.014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
C-04-14	Grid node C-04	Bottom	Confirmation	14	6	07/31/18	7.69	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
C-05-14	Grid node C-05	Bottom	Confirmation	14	6	07/23/18	5.38	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
C-06-13	Grid node C-06	Bottom	Confirmation	13	7	07/09/18	7.30	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
C-07-14	Grid node C-07	Bottom	Confirmation	14	6	07/06/18	6.16	<0.01	<0.01	<0.01	0.055	0.059	0.059	0.060	0.020	0.031	<0.01	0.077
C-08-15	Grid node C-08	Bottom	Confirmation	15	7	07/05/18	1.33	<0.01	<0.01	<0.01	<0.01	0.010	0.010	0.011	<0.01	<0.01	<0.01	0.013
C-09-16	Grid node C-09	Bottom	Confirmation	16	6	07/02/18	1.11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
TP-C-10-17	Grid node C-10	Sidewall/Bottom	Confirmation	17	4	06/20/18	1.71	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
C-11-20-WSW	Grid node C-11	Sidewall/Bottom	Confirmation	20	2	06/25/18	1.21	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
D-00-17	Grid node D-00	Bottom	Confirmation	17	6	12/17/18	3.05	<0.01	<0.01	<0.01	0.017	0.019	0.028	0.027	0.011	0.022	<0.01	0.036
D-01-12	Grid node D-01	Bottom	Confirmation	12	11	12/17/18	6.84	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
D-02-15	Grid node D-02	Bottom	Confirmation	15	5	09/06/18	7.54	0.13	0.028	0.013	0.064	0.066	0.067	0.091	0.025	0.044	<0.01	0.091
D-03-13.5	Grid node D-03	Bottom	Confirmation	13.5	6.5	08/30/18	16.1	0.025	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
D-04-13.5	Grid node D-04	Bottom	Confirmation	13.5	6.5	07/23/18	10.8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
D-05-13.5	Grid node D-05	Bottom	Confirmation	13.5	6.5	07/13/18	12.3	<0.01	<0.01	<0.01	0.016	0.018	0.015	0.016	<0.01	<0.01	<0.01	0.020
D-06-13.5	Grid node D-06	Bottom	Confirmation	13.5	6.5	07/06/18	5.86	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
D-07-15	Grid node D-07	Bottom	Confirmation	15	7	07/05/18	5.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
D-08-17-B	Grid node D-08	Bottom	Confirmation	17	5	06/27/18	<1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
D-09-17-B	Grid node D-09	Bottom	Confirmation	17	5	06/25/18	1.35	0.019	<0.01	<0.01	0.047	0.053	0.052	0.052	0.020	0.029	<0.01	0.068
D-10-15	Grid node D-10	Sidewall/Bottom	Confirmation	15	6	07/05/18	4.20	0.026	0.016	<0.01	0.017	0.018	0.017	0.017	<0.01	<0.01	<0.01	0.022
D-11-17-WSW	Grid node D-11	Sidewall/Bottom	Confirmation	17	5	06/25/18	4.99	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
E-00-17	Grid node E-00	Bottom	Confirmation	17	6	12/17/18	2.58	<0.01	<0.01	<0.01	<0.01	0.011	0.011	0.012	<0.01	<0.01	<0.01	0.014
E-01-15	Grid node E-01	Bottom	Confirmation	15	8	09/06/18	<1	0.012	<0.01	<0.01	0.039	0.041	0.061	0.066	0.020	0.039	<0.01	0.078
E-02-11	Grid node E-00	Bottom	Confirmation	11	9	12/17/18	2.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
E-03-12	Grid node E-03	Bottom	Confirmation	12	8	09/07/18	4.77	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
E04-13.5	Grid node E-04	Bottom	Confirmation	13.5	6.5	07/16/18	1.30	0.028	0.014	0.012	0.011	0.013	0.011	0.011	<0.01	<0.01	<0.01	0.015
E-05-9.5	Grid node E-05	Bottom	Confirmation	9.5	10.5	07/23/18	1.35	0.017	0.030	0.033	0.014	0.014	<0.01	0.011	<0.01	<0.01	<0.01	0.009
E-06-11.5	Grid node E-06	Bottom	Confirmation	11.5	8.5	07/06/18	1.35	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
E-07-15	Grid node E-07	Bottom	Confirmation	15	7	07/05/18	4.90	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008
E-08-17-B	Grid node E-08	Bottom	Confirmation	17	5	06/26/18	4.61	0.013	<0.01	<0.01	0.016	0.018	0.019	0.020	<0.01	0.011	<0.01	0.025
E-09-17-B	Grid node E-09	Bottom	Confirmation	17	9	06/21/18	2.16	<0.01	<0.01	<0.01	0.017	0.018	0.021	0.021	<0.01	0.010	<0.01	0.027
E-10-15	Grid node E-10	Bottom	Confirmation	15	7	07/06/18	1.77	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	0.011	<0.01	<0.01	<0.01	0.014
E-11-15	Former boring B02/Grid node E-11	Bottom	Confirmation	15	7	07/06/18	5.56	0.033	0.024	0.015	0.049	0.060	0.050	0.054	0.021	0.028	<0.01	0.066
MTCA Cleanup Level for Soil							**20**[2]	**5**[2]	**320**[3]	**34**[4]	**NE**	**NE**	**0.1**[2]	**NE**	**NE**	**NE**	**NE**	**0.1**[2]

NOTES:

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

Samples analyzed by EPA Method 8270D SIM and EPA Method 200.8.

[1]Analytical result for each individual cPAH is multiplied by the TEF and all seven cPAH values are added. When analytical results are reported as less than the LRL, one half of the LRL is multiplied by the TEF to calculate the TEQ.

[2]MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Cleanup Levels for Soil, Unrestricted Land Uses, revised November 2007.

[3]MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Non cancer, Direct Contact, CLARC Website <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

[4]MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Cancer, Direct Contact, CLARC Website <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

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

bgs = below pre-construction ground surface

CLARC = Cleanup Levels and Risk Calculation

cPAH = carcinogenic polycyclic aromatic hydrocarbon

EPA = US Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

NAVD88 = North American Vertical Datum of 1988

LRL = lower reporting limit

NE = not established

TEF = toxicity equivalency factor

TEQ = toxicity equivalent

WAC = Washington Administrative Code

Table 8
Subgrade Water Control System Discharge Analytical Results for Arsenic
Ballard Blocks II
1401 and 1451 Northwest 46th Street
Seattle, Washington

Sample ID	Date Sampled	Averae Estimated Total Water Flow Rate Into Subgrade Sump (GPM)	Analytical Results[(1)] (micrograms per liter)	
			Arsenic	
			Total	Dissolved[f]
1249-SSGW_20190617	06/17/19	0.8	**11.8**	**12.6**
1249-SSGW_20190624	06/24/19	4.5	**13.0**	**13.6**
1249-SSGW_20190701	07/01/19	1.5	**12.0**	**14.6**
1249-SSGW_20190708	07/08/19	1.7	**14.8**	**15.3**
1249-SSGW_20190717	07/17/19	1.1	**16.4**	**14.9**
1249-SSGW_20190724	07/24/19	0.7	**16.6**	**14.7**
Average (Mean) Arsenic Concentration	--	--	**14.1**	**14.3**
MTCA Cleanup Level for Groundwater			**5**[(2)]	

NOTES:

Red denotes concentration exceeds MTCA cleanup level for groundwater.

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

[(1)]Samples analyzed by EPA Method 200.8.

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

Laboratory Note:

[f] Sample was laboratory-filtered prior to analysis for dissolved arsenic.

-- = no data

EPA = US Environmental Protection Agency

GPM = gallons per minute

MTCA = Washington State Model Toxics Control Act

WAC = Washington Administrative Code

PHOTOGRAPHS

PROPERTY PHOTOGRAPHS
Wesmar Company, Inc. Site (Ballard Blocks II)
1401 and 1451 Northwest 46th Street
Seattle, Washington

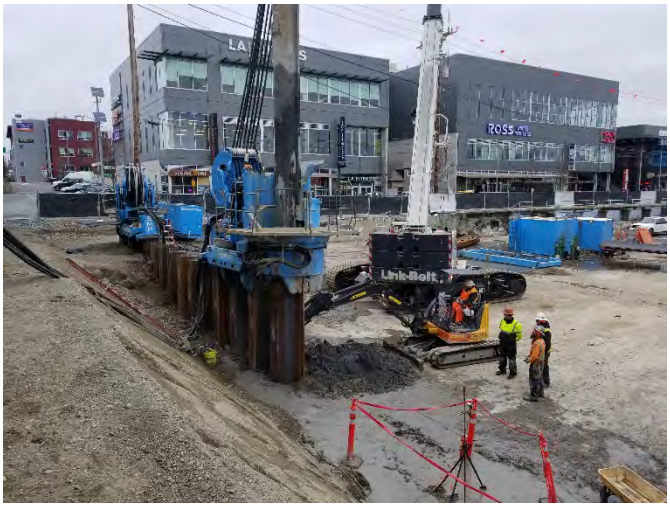
Project No.:	1249-001-05
Date:	08/20/19
Drawn By:	KJL
Chk By:	CGC

Photograph 1. Temporary dewatering sump, prior to earthwork construction activities. 01/19/18. View facing northeast.

Photograph 2. A portion of the temporary construction stormwater dewatering treatment system. 01/19/18. View facing southeast.

Photograph 3. Licensed driller decommissioning well MW06. 02/23/18. View facing northwest.

Photograph 4. Licensed driller decommissioning well B-303. 02/23/18. View facing northeast.



Photograph 5. Perimeter sheet pile shoring wall installation. 03/27/18. View facing northeast.

Photograph 6. Perimeter sheet pile shoring wall installation in progress. 03/28/18. View facing west.

Photograph 7. Shoring wall installation: Adeka sealant application on sheet pile seams. 04/12/18. View facing southwest.

Photograph 8. Demolished concrete stockpile. 06/08/18. View facing east.

Photograph 9. Concrete slab sampling. 06/11/18. View facing forth.

Photograph 10. Concrete slab removal in progress. 06/19/18. View facing southeast.

Photograph 11. Pothole sampling locations on the western portion of the property. 06/20/18. View facing north.

Photograph 12. Remedial excavation in progress on the southwest portion of the property. 06/22/18. View facing southeast.

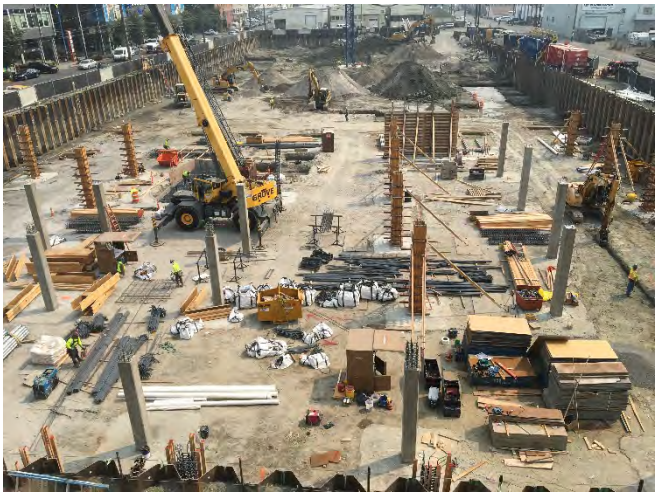
Photograph 13. UST01 location prior to removal, following tank discovery along the north shoring wall. 04/11/18. View facing west.

Photograph 14. Removal of north portion of UST01 at the north shoring wall location. 04/11/18. View facing northwest.

Photograph 15. Removing scrap metal remnant of decommissioned UST01. 06/28/18. View facing east-northeast.

Photograph 16. Scrap metal remnant of decommissioned UST01 following removal. 06/28/18. View facing southwest.

Photograph 17. Remedial excavation in progress on the western portion of Property. 07/18/18. View facing east-southeast.

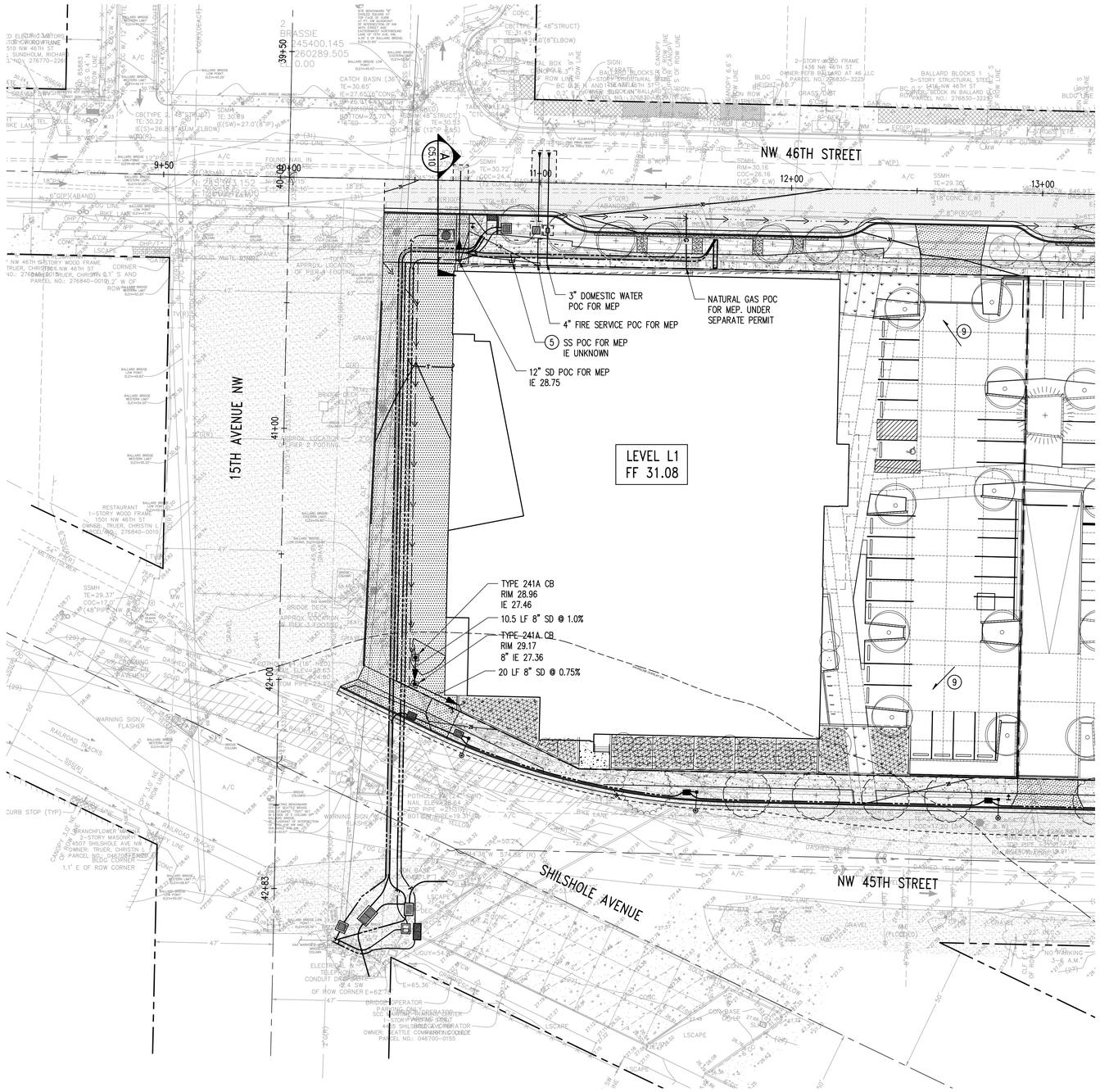


Photograph 18. View of the remedial excavation and new concrete foundation floor poured over final grade on the western portion of the Property in the photo foreground. 08/20/18. View facing east.

Photograph 19. Remedial excavation in progress on the northeastern portion of the Property. 08/20/18. View facing west.

Photograph 20. Loading-out of excavated contaminated soil. 01/07/19. View facing southeast.

APPENDIX A
PROJECT PLAN SET



NOTES

1. CONNECTIONS TO WATER MAIN, SERVICE LINES UP TO 2' FROM THE RIGHT OF WAY LINE, METER INSTALLATION EXCAVATION AND BACKFILL TO BE PERFORMED BY SPU AT OWNER'S EXPENSE. RESTORATION SHALL BE PERFORMED BY CONTRACTOR.
2. TRENCHING AND BEDDING FOR WATER SERVICES ON SITE SHALL BE PER COS STD PLAN 350. BEDDING MATERIAL SHALL BE CLASS B, TYPE 9 MINERAL AGGREGATE.
3. FINAL LOCATIONS OF POWER, GAS AND TELECOMMUNICATIONS POINTS OF CONNECTION ARE TO BE DESIGNED BY UTILITY OWNER AND COORDINATED BY PLUMBING, MECHANICAL AND ELECTRICAL CONSULTANTS. INSTALLATION OF UTILITIES SHALL BE PERFORMED BY UTILITY PURVEYOR AT OWNER'S EXPENSE.
4. PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE "STREET AND SIDEWALK PAVEMENT OPENING AND RESTORATION" DIRECTOR'S RULE 05-2009.
5. CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING SIDE SEWERS FOR POINT OF CONNECTION. EXISTING SIDE SEWERS SHALL BE RELINED AND CERTIFIED BY A CITY OF SEATTLE INSPECTOR PRIOR TO CONNECTION. CONTRACTOR SHALL CAP ANY SSS NOT USED FOR POINT OF CONNECTION.
6. FOR STATIONING CONTROL AND OFF-SITE IMPROVEMENTS, SEE SIP NO. 314530 AND UMP NO. 318982.
7. FINISHED FLOOR ELEVATIONS ARE SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS.
8. PROFESSIONAL ENGINEER'S EVALUATION AND CERTIFICATION OF EXISTING SIDE SEWERS REQUIRED FOR RE-USE. CONTRACTOR SHALL PROVIDE ENGINEER WITH VIDEO OF THE EXISTING SIDE SEWER FOR EVALUATION. CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING SIDE SEWERS FOR POINT OF CONNECTION. CONTRACTOR SHALL CAP ANY SSS NOT USED FOR POINT OF CONNECTION.
9. GRADE HARSCAPES TO DRAIN TO BIORETENTION PLANTERS PER LANDSCAPE PLANS.

LEGEND

- CATCH BASIN
- SURFACE SWALE
- WATER QUALITY BIO-RETENTION PLANTER
- ROOF TOP BIO-RETENTION PLANTER

N

0 10 20 40

1 inch = 20 feet

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

ACCEPTANCE OF THE ELECTRONIC FILE VERSION OF THIS DRAWING ACKNOWLEDGES THE RECEIPT AND CONSENT TO THE TERMS OF THE WEBER THOMPSON ELECTRONIC MEDIA RECEIPT AGREEMENT

LICENSED STRUCTURAL ENGINEER STATE OF WASHINGTON 39847 REGISTERED PROFESSIONAL ENGINEER

DRAFTED BY:	TAD
PROJECT MGR.:	JSF
PRINCIPAL I. C.:	MAV

SHEET NO.

PARCEL A
UTILITY PLAN

C5.00 A

PROJECT NO. 16-048

11.10.2017 - BUILDING PERMIT

Nov 15, 2017 - 12:03pm JoeM Z:\1600001 - 1603999\1603001 (Ballard Blocks 2)\Outgoing Weber Thompson\2017-11-15 Onsite Preconstruction Set\BB1 PH1 C5.00 UTIL.dwg

1451 NW 46TH STREET

PRE-CONTSTRUCTION SET

SEATTLE, WASHINGTON

NOVEMBER 15, 2017

SURVEY SITE NOTES:

SURVEY ON 9/12/2016 BY
BUSH, ROED & HITCHINGS, INC.
THOMAS E. CARNER, PLS
2009 MINOR AVE EAST
SEATTLE, WA 98102
(206) 323-4144

HORIZONTAL DATUM: NAD 83/91

HORIZONTAL BENCHMARKS:

OWNER:	CITY OF SEATTLE
ID#	NONE
DESCRIPTION:	NAIL IN CONC IN CASE DOWN 1.5'
LOCATION:	INTERSECTION OF CENTERLINES OF NW 46TH STREET & 15TH AVE NW
NORTHING:	245363.15'
EASTING:	1260242.10'
OWNER:	CITY OF SEATTLE
ID#	NONE
DESCRIPTION:	BRASSIE WITH PUNCH IN CONCRETE IN CASE DOWN 1.3'
LOCATION:	INTERSECTION OF CENTERLINES OF NW 46TH ST & 14TH AVE NW
NORTHING:	245349.12'
EASTING:	1260888.87'

VERTICAL DATUM: NAVD88

VERTICAL BENCHMARKS:

SOURCE:	CITY OF SEATTLE
ID#	SNV-7501
DESCRIPTION:	BRASS CAP STAMPED "7501"
LOCATION:	SET IN EAST SIDE OF EAST BRIDGE COLUMN OF BALLARD BRIDGE, LOCATED AT THE SOUTHEAST QUADRANT OF THE INTERSECTION OF 15TH AVE NORTHWEST AND SHILSHOLE AVENUE NORTHWEST.
ELEVATION:	30.67'
SOURCE:	SEATTLE MONORAIL PROJECT
ID#	CP 7-04
DESCRIPTION:	BRASSIE
LOCATION:	SET AT THE NORTHEAST CORNER OF INTERSECTION OF 15TH AVE NW AND NW BALLARD WAY.
ELEVATION:	40.49'

UTILITY PROVIDERS:

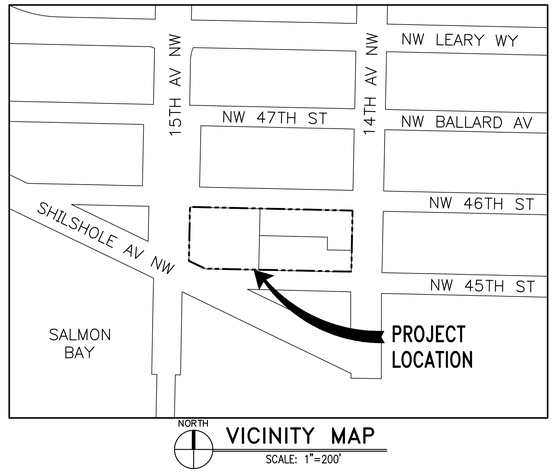
SANITARY SEWER AND STORM DRAINAGE:
SEATTLE PUBLIC UTILITIES
PROJECT MANAGEMENT AND
ENGINEERING
700 5TH AVENUE
PO BOX 34018
SEATTLE, WA 98124-4018
(206) 233-7900

WATER:
SEATTLE PUBLIC UTILITIES
700 5TH AVENUE, SUITE 4900
PO BOX 34018
SEATTLE, WA 98124-4018
(206) 684-3000

POWER:
SEATTLE CITY LIGHT
700 5TH AVENUE, SUITE 3200
SEATTLE, WA 98124-4023
(206) 684-3000

NATURAL GAS:
PUGET SOUND ENERGY
10885 NE 4TH STREET, SUITE 1200
PO BOX 97034
BELLEVUE, WA 98009-9734
(425) 454-6363
(888) 225-5773

TELEPHONE:
CENTURY LINK
1600 7TH AVENUE
SEATTLE, WA 98191
(800) 244-1111



VICINITY MAP
SCALE: 1"=200'

SURVEY LEGEND

(PER SURVEY BY BRH)

ABAN/RET	ABANDONED/RETIRED	H/C	HANDICAPPED
⊕	AREA DRAIN	IE	INVERT ELEVATION
AO	ACCEPTANCE ORDINANCE	IP/PE	IRON PIPE/POLYETHYLENE PIPE
A/C	ASPHALTIC CONCRETE	MIC	MONUMENT IN CASE
———	CHAIN LINK FENCE (CLF)	◎ ◎ MH	MANHOLE
BC	BUILDING CORNER	○ MW	MONITOR WELL
———	BUILDING LINE	O/H P	OVERHEAD POWER
BLRD	BOLLARD	PL/LSCAPE	PLANTER/LANDSCAPE
⊡ ⊡	CATCH BASIN	○ PP	POWER POLE
CATV	CABLE TELEVISION	○——○	POWER POLE W/ LIGHT
CC/XC	CONCRETE/EXTRUDED CURB	(P)	PAINTED UTILITY LOCATION
℄/M	CENTERLINE/MONUMENT LINE	⌓	PARKING METER
COL	COLUMN	P.S.	PARKING SPACES
CP/IP/CMP	CONCRETE/IRON PIPE/CORRUGATED METAL PIPE	PS/PSD	PIPE SEWER/PIPE STORM DRAIN
CRW/WRW	CONCRETE/WOOD RETAINING WALL	PS/PSS	COMBINED/SANITARY SEWER
CS/WS	CONCRETE/WOOD STAIR	⊗	POST INDICATOR VALVE
CW	CONCRETE WALK	ROW	RIGHT OF WAY
CRW	CONCRETE RETAINING WALL	(R)	RECORD UTILITY LOCATION
CO	CLEANOUT	SSS	SANITARY SIDE SEWER
COC	CENTER OF CHANNEL	SSMH ◎	SANITARY SEWER MANHOLE
CON/DEC	CONIFER/DECIDUOUS TREE (SIZE NOTED)	SD	STORM DRAIN
CONC.	CONCRETE	SLHH	STREET LIGHT HANDHOLE
CLF	CHAIN LINK FENCE	⊥	SIGN
DIP	DUCTILE IRON PIPE	TCHD	TRENCH DRAIN
DEA.	DEACTIVATED	TD	TELEPHONE DUCT
▥	DRAIN INLET	TCd	TELEPHONE CONDUIT
DWY	DRIVEWAY	TV/TMH	TELEPHONE VAULT/TELEPHONE MANHOLE
		TE	TOP ELEVATION
ED	ELECTRICAL DUCT	TMH	TELEPHONE MANHOLE
ECd	ELECTRICAL CONDUIT	TOB	TOP OF BANK
EV/EMH	ELECTRICAL VAULT/ELECTRICAL MANHOLE	TOE	TOE OF SLOPE
EM◯	ELECTRIC METER	➔	TRAFFIC FLOW ARROW
FOD	FIBER OPTIC DUCT	□WM	WATER METER
FOMH	FIBER OPTIC MANHOLE	Ⓦ ◍	WATER MANHOLES
FFE	FINISHED FLOOR ELEVATION	W/WV	WATER LINE/WATER VAULT
FDC	FIRE DEPARTMENT CONNECTION	⋈	WATER VALVE
FH	FIRE HYDRANT	———	WOOD FENCE (WF)
FO/FOMH	FIBER OPTICS/FOMH	✣	FOUND SURVEY MONUMENT (AS NOTED)
◫	GAS VALVE	▲	BRASS DISC
G/GV	GAS LINE/GV	×	TACK AND LEAD
GM◯	GAS METER	●	REBAR AND CAP
•	GUARD POST	⚡	TEMPORARY BENCHMARK
⟩—	GUY ANCHOR		
GW/GUY	GUY WIRE		

ABBREVIATIONS:

ABBREVIATIONS ARE AS DEFINED IN THE CITY OF SEATTLE STANDARD PLAN 002 AND AS NOTED BELOW:

@	AT
#	NUMBER
&	AND
AGG	AGGREGATE
AVE	AVENUE
BC	BOTTOM OF CURB
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL
CB	CATCH BASIN
CL	CENTER LINE, CLASS
CLR	CLEAR
CO	CLEAN OUT
COS	CITY OF SEATTLE
DIP	DUCTILE IRON PIPE
DWG	DRAWING
DWY	DRIVEWAY
E	EAST
EL/ELEV	ELEVATION
EX/EXIST	EXISTING
FL	FLOWLINE
FF	FINISHED FLOOR
FS	FIRE SERVICE
G	GAS
HMA	HOT MIX ASPHALT
KC	KING COUNTY
LS	LANDSCAPE
LT	LEFT
MH	MANHOLE
MIN	MINIMUM
MNRL	MINERAL
NO	NUMBER
N	NORTH
OC	ON CENTER
P	POLE
PCC	PORTLAND CEMENT CONCRETE
PL	PROPERTY LINE
PROP	PROPOSED
PSD	PIPED STORM DRAIN
PSS	PIPED SANITARY SEWER
ROW	RIGHT OF WAY
ROWM	RIGHT OF WAY IMPROVEMENT MANUAL
RT	RIGHT
S	SOUTH
SCL	SEATTLE CITY LIGHT
SD	SERVICE DRAIN (STORM)
SDOT	SEATTLE DEPARTMENT OF TRANSPORTATION
SHT	SHEET
SIP	STREET IMPROVEMENT PERMIT
SPU	SEATTLE PUBLIC UTILITIES
SSD	SUB-SURFACE DRAIN
SSS	SIDE SEWER SANITARY
ST	STREET
STA	STATION
STD	STANDARD
TBD	TO BE DETERMINED
TC/TOC	TOP OF CURB
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
W	WATER, WEST, WITH
WAC	WASHINGTON ADMINISTRATIVE CODE
UMP	UTILITY MAJOR PERMIT

PROPOSED LEGEND

50	CONTOUR
50.6	SPOT GRADE
	SLOPE ARROW
PSD	STORM DRAIN PIPE
PSS	SANITARY SEWER PIPE
W	WATER LINE
	CEMENT CONCRETE PAVEMENT
	CEMENT CONCRETE SIDEWALK
	ASPHALT CONCRETE PAVEMENT
	WOOD SURFACING (PER LANDSCAPE)
	GRADE BREAK
	CURB
	RIGHT OF WAY
	CENTERLINE
	EASEMENT LINE
	BUILDING OVERHANG
	CONCENTRATED FLOW LINE
	ELECTRICAL CONDUIT
	PROJECT LIMITS
	CHANNELIZATION STRIPING

SHEET INDEX

CONTRACTOR IS ALERTED TO THE FACT THAT WORK WILL BE ACCOMPLISHED AROUND ACTIVE PSE GAS AND ENERGIZED SEATTLE CITY LIGHT (SCL) FACILITIES THAT ARE SERVING EXISTING CUSTOMERS. CONTRACTOR SHALL COORDINATE WITH PSE AND SCL TO DETERMINE WHICH FACILITIES ARE ACTIVE AND ENERGIZED AND SHALL IMPLEMENT SAFETY PROCEDURES PER PSE AND SCL REQUIREMENTS. CONTRACTOR SHALL COORDINATE WITH PSE AND SCL TO ENSURE THAT FACILITIES ARE IN PLACE TO MAINTAIN SERVICE TO CUSTOMERS THROUGHOUT CONSTRUCTION.

811 Call 811 two business days before you dig

WEBER THOMPSON
225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507
www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:
BALLARD BLOCKS 2
14TH AVE W & 46TH AVE. N

CLIENT:
REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

ACCEPTANCE OF THE ELECTRONIC FILE VERSION OF THIS DRAWING ACKNOWLEDGES THE RECEIPT AND CONSENT TO THE TERMS OF THE WEBER THOMPSON ELECTRONIC MEDIA RECEIPT AGREEMENT

LICENSED STRUCTURAL ENGINEER STATE OF WASHINGTON 35847 REGISTERED PROFESSIONAL ENGINEER

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL I. C.: MAV

SHEET NO.
COVER SHEET
C1.00

PROJECT NO. 16-048

11.10.2017 - BUILDING PERMIT

Nov 15, 2017 - 12:02pm JoeM
Z:\16\16001-16099\16020\ (Ballard Blocks 2)\Outgoing\Weber Thompson\2017-11-15 Onsite Preconstruction Set\BB PH1 1.00 Cover.dwg

1451 NW 46TH STREET

BUILDING PERMIT - PHASE 1

SEATTLE, WASHINGTON

MARCH 30, 2018

SURVEY SITE NOTES:

SURVEY ON 9/12/2016 BY
BUSH, ROED & HITCHINGS, INC.
THOMAS E. CARNER, PLS
2009 MINOR AVE EAST
SEATTLE, WA 98102
(206) 323-4144

HORIZONTAL DATUM: NAD 83/91

HORIZONTAL BENCHMARKS:

OWNER:	CITY OF SEATTLE
ID#	NONE
DESCRIPTION:	NAIL IN CONC IN CASE DOWN 1.5'
LOCATION:	INTERSECTION OF CENTERLINES OF NW 46TH STREET & 15TH AVE NW
NORTHING:	245363.15'
EASTING:	1260242.10'
OWNER:	CITY OF SEATTLE
ID#	NONE
DESCRIPTION:	BRASSIE WITH PUNCH IN CONCRETE IN CASE DOWN 1.3'
LOCATION:	INTERSECTION OF CENTERLINES OF NW 46TH ST & 14TH AVE NW
NORTHING:	245349.12'
EASTING:	1260888.87'

VERTICAL DATUM: NAVD88

VERTICAL BENCHMARKS:

SOURCE:	CITY OF SEATTLE
ID#	SNV-7501
DESCRIPTION:	BRASS CAP STAMPED "7501"
LOCATION:	SET IN EAST SIDE OF EAST BRIDGE COLUMN OF BALLARD BRIDGE, LOCATED AT THE SOUTHEAST QUADRANT OF THE INTERSECTION OF 15TH AVE NORTHWEST AND SHILSHOLE AVENUE NORTHWEST.
ELEVATION:	30.67'
SOURCE:	SEATTLE MONORAIL PROJECT
ID#	CP 7-04
DESCRIPTION:	BRASSIE
LOCATION:	SET AT THE NORTHEAST CORNER OF INTERSECTION OF 15TH AVE NW AND NW BALLARD WAY.
ELEVATION:	40.49'

UTILITY PROVIDERS:

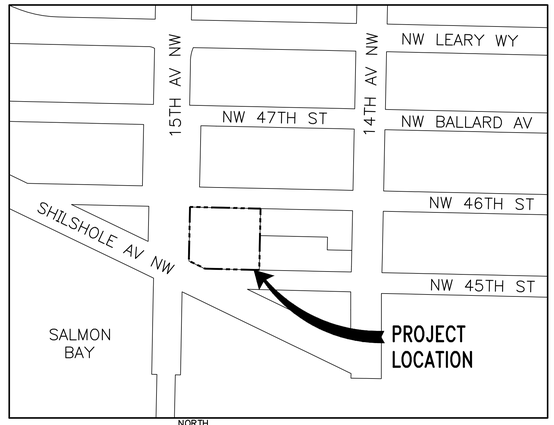
SANITARY SEWER AND STORM DRAINAGE:
SEATTLE PUBLIC UTILITIES
PROJECT MANAGEMENT AND
ENGINEERING
700 5TH AVENUE
PO BOX 34018
SEATTLE, WA 98124-4018
(206) 233-7900

WATER:
SEATTLE PUBLIC UTILITIES
700 5TH AVENUE, SUITE 4900
PO BOX 34018
SEATTLE, WA 98124-4018
(206) 684-3000

POWER:
SEATTLE CITY LIGHT
700 5TH AVENUE, SUITE 3200
SEATTLE, WA 98124-4023
(206) 684-3000

NATURAL GAS:
PUGET SOUND ENERGY
10885 NE 4TH STREET, SUITE 1200
PO BOX 97034
BELLEVUE, WA 98009-9734
(425) 454-6363
(888) 225-5773

TELEPHONE:
CENTURY LINK
1600 7TH AVENUE
SEATTLE, WA 98191
(800) 244-1111



NORTH

VICINITY MAP
SCALE: 1"=200'

SURVEY LEGEND

(PER SURVEY BY BRH)

ABAN/RET	ABANDONED/RETIRED	H/C	HANDICAPPED
⊕	AREA DRAIN	IE	INVERT ELEVATION
AO	ACCEPTANCE ORDINANCE	IP/PE	IRON PIPE/POLYETHYLENE PIPE
A/C	ASPHALTIC CONCRETE	MIC	MONUMENT IN CASE
———	CHAIN LINK FENCE (CLF)	◎ MH	MANHOLE
BC	BUILDING CORNER	○ MW	MONITOR WELL
———	BUILDING LINE	O/H P	OVERHEAD POWER
BLRD	BOLLARD	PL/LSCAPE	PLANTER/LANDSCAPE
⊡	CATCH BASIN	○ PP	POWER POLE
CATV	CABLE TELEVISION	○——○	POWER POLE W/ LIGHT
CC/XC	CONCRETE/EXTRUDED CURB	(P)	PAINTED UTILITY LOCATION
℄/M	CENTERLINE/MONUMENT LINE	⌓	PARKING METER
COL	COLUMN	P.S.	PARKING SPACES
CP/IP/CMP	CONCRETE/IRON PIPE/CORRUGATED METAL PIPE	PS/PSD	PIPE SEWER/PIPE STORM DRAIN
CRW/WRW	CONCRETE/WOOD RETAINING WALL	PS/PSS	COMBINED/SANITARY SEWER
CS/WS	CONCRETE/WOOD STAIR	⊠	POST INDICATOR VALVE
CW	CONCRETE WALK	ROW	RIGHT OF WAY
CRW	CONCRETE RETAINING WALL	(R)	RECORD UTILITY LOCATION
CO	CLEANOUT	SSS	SANITARY SIDE SEWER
COC	CENTER OF CHANNEL	SSMH ◎	SANITARY SEWER MANHOLE
CON/DEC	CONIFER/DECIDUOUS TREE (SIZE NOTED)	SD	STORM DRAIN
CONC.	CONCRETE	SLHH	STREET LIGHT HANDHOLE
CLF	CHAIN LINK FENCE	⊥	SIGN
DIP	DUCTILE IRON PIPE	TCHD	TRENCH DRAIN
DEA.	DEACTIVATED	TD	TELEPHONE DUCT
▥	DRAIN INLET	TCd	TELEPHONE CONDUIT
DWY	DRIVEWAY	TV/TMH	TELEPHONE VAULT/TELEPHONE MANHOLE
ED	ELECTRICAL DUCT	TE	TOP ELEVATION
ECd	ELECTRICAL CONDUIT	TMH	TELEPHONE MANHOLE
EV/EMH	ELECTRICAL VAULT/ELECTRICAL MANHOLE	TOB	TOP OF BANK
EM◯	ELECTRIC METER	TOE	TOE OF SLOPE
FOD	FIBER OPTIC DUCT	➔	TRAFFIC FLOW ARROW
FOMH	FIBER OPTIC MANHOLE	□WM	WATER METER
FFE	FINISHED FLOOR ELEVATION	Ⓦ ◐	WATER MANHOLES
FDC ⊰	FIRE DEPARTMENT CONNECTION	W/WV	WATER LINE/WATER VAULT
FH	FIRE HYDRANT	⋈	WATER VALVE
FO/FOMH	FIBER OPTICS/FOMH	———	WOOD FENCE (WF)
◫	GAS VALVE	✣	FOUND SURVEY MONUMENT (AS NOTED)
G/GV	GAS LINE/GV	▲	BRASS DISC
GM◯	GAS METER	×	TACK AND LEAD
●	GUARD POST	●	REBAR AND CAP
⟩—	GUY ANCHOR	⚡	TEMPORARY BENCHMARK
GW/GUY	GUY WIRE		

ABBREVIATIONS:

ABBREVIATIONS ARE AS DEFINED IN THE CITY OF SEATTLE STANDARD PLAN 002 AND AS NOTED BELOW:

@	AT
#	NUMBER
&	AND
AGG	AGGREGATE
AVE	AVENUE
BC	BOTTOM OF CURB
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL
CB	CATCH BASIN
CL	CENTER LINE, CLASS
CLR	CLEAR
CO	CLEAN OUT
COS	CITY OF SEATTLE
DIP	DUCTILE IRON PIPE
DWG	DRAWING
DWY	DRIVEWAY
E	EAST
EL/ELEV	ELEVATION
EX/EXIST	EXISTING
FL	FLOWLINE
FF	FINISHED FLOOR
FS	FIRE SERVICE
G	GAS
HMA	HOT MIX ASPHALT
KC	KING COUNTY
LS	LANDSCAPE
LT	LEFT
MH	MANHOLE
MIN	MINIMUM
MNRL	MINERAL
NO	NUMBER
N	NORTH
OC	ON CENTER
P	POLE
PCC	PORTLAND CEMENT CONCRETE
PL	PROPERTY LINE
PROP	PROPOSED
PSD	PIPED STORM DRAIN
PSS	PIPED SANITARY SEWER
ROW	RIGHT OF WAY
ROWIM	RIGHT OF WAY IMPROVEMENT MANUAL
RT	RIGHT
S	SOUTH
SCL	SEATTLE CITY LIGHT
SD	SERVICE DRAIN (STORM)
SDOT	SEATTLE DEPARTMENT OF TRANSPORTATION
SHT	SHEET
SIP	STREET IMPROVEMENT PERMIT
SPU	SEATTLE PUBLIC UTILITIES
SSD	SUB-SURFACE DRAIN
SSS	SIDE SEWER SANITARY
ST	STREET
STA	STATION
STD	STANDARD
TBD	TO BE DETERMINED
TC/TOC	TOP OF CURB
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
W	WATER, WEST, WITH
WAC	WASHINGTON ADMINISTRATIVE CODE
UMP	UTILITY MAJOR PERMIT

PROPOSED LEGEND

50	CONTOUR
50.6 •	SPOT GRADE
——►	SLOPE ARROW
PSD	STORM DRAIN PIPE
PSS	SANITARY SEWER PIPE
W	WATER LINE
	CEMENT CONCRETE PAVEMENT
	CEMENT CONCRETE SIDEWALK
	ASPHALT CONCRETE PAVEMENT
	WOOD SURFACING (PER LANDSCAPE)
	GRADE BREAK
	CURB
	RIGHT OF WAY
	CENTERLINE
	EASEMENT LINE
	BUILDING OVERHANG
	CONCENTRATED FLOW LINE
	ELECTRICAL CONDUIT
	PROJECT LIMITS
	CHANNELIZATION STRIPING

SHEET INDEX

CONTRACTOR IS ALERTED TO THE FACT THAT WORK WILL BE ACCOMPLISHED AROUND ACTIVE PSE GAS AND ENERGIZED SEATTLE CITY LIGHT (SCL) FACILITIES THAT ARE SERVING EXISTING CUSTOMERS. CONTRACTOR SHALL COORDINATE WITH PSE AND SCL TO DETERMINE WHICH FACILITIES ARE ACTIVE AND ENERGIZED AND SHALL IMPLEMENT SAFETY PROCEDURES PER PSE AND SCL REQUIREMENTS. CONTRACTOR SHALL COORDINATE WITH PSE AND SCL TO ENSURE THAT FACILITIES ARE IN PLACE TO MAINTAIN SERVICE TO CUSTOMERS THROUGHOUT CONSTRUCTION.

811 Call 811 two business days before you dig

WEBER THOMPSON
225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507
www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:
BALLARD BLOCKS 2
14TH AVE W & 46TH AVE. N

CLIENT:
REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017
IFC SET	3/30/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

JEREMY S. FRIESEN
STATE OF WASHINGTON
39847
REGISTERED
PROFESSIONAL ENGINEER

DRAFTED BY:	TAD
PROJECT MGR.:	JSF
PRINCIPAL I. C.:	MAV
SHEET NO.	

PARCEL A
COVER SHEET

C1.00A

PROJECT NO. 16-048

IFC SET - 3/30/2018

Mar 30, 2018 - 2:04pm JoeW Z:\160001-160999\160201 (Ballard Blocks 2)\CAD\Design\On Site\Phase 1\BB1 PH1 1.00 Cover.dwg

1451 NW 46TH STREET

BUILDING PERMIT - PHASE 1

SEATTLE, WASHINGTON

MARCH 22, 2018

SURVEY SITE NOTES:

SURVEY ON 9/12/2016 BY
BUSH, ROED & HITCHINGS, INC.
THOMAS E. CARNER, PLS
2009 MINOR AVE EAST
SEATTLE, WA 98102
(206) 323-4144

HORIZONTAL DATUM: NAD 83/91

HORIZONTAL BENCHMARKS:

OWNER:	CITY OF SEATTLE
ID#	NONE
DESCRIPTION:	NAIL IN CONC IN CASE DOWN 1.5'
LOCATION:	INTERSECTION OF CENTERLINES OF NW 46TH STREET & 15TH AVE NW
NORTHING:	245363.15'
EASTING:	1260242.10'
OWNER:	CITY OF SEATTLE
ID#	NONE
DESCRIPTION:	BRASSIE WITH PUNCH IN CONCRETE IN CASE DOWN 1.3'
LOCATION:	INTERSECTION OF CENTERLINES OF NW 46TH ST & 14TH AVE NW
NORTHING:	245349.12'
EASTING:	1260888.87'

VERTICAL DATUM: NAVD88

VERTICAL BENCHMARKS:

SOURCE:	CITY OF SEATTLE
ID#	SNV-7501
DESCRIPTION:	BRASS CAP STAMPED "7501"
LOCATION:	SET IN EAST SIDE OF EAST BRIDGE COLUMN OF BALLARD BRIDGE, LOCATED AT THE SOUTHEAST QUADRANT OF THE INTERSECTION OF 15TH AVE NORTHWEST AND SHILSHOLE AVENUE NORTHWEST.
ELEVATION:	30.67'
SOURCE:	SEATTLE MONORAIL PROJECT
ID#	CP 7-04
DESCRIPTION:	BRASSIE
LOCATION:	SET AT THE NORTHEAST CORNER OF INTERSECTION OF 15TH AVE NW AND NW BALLARD WAY.
ELEVATION:	40.49'

UTILITY PROVIDERS:

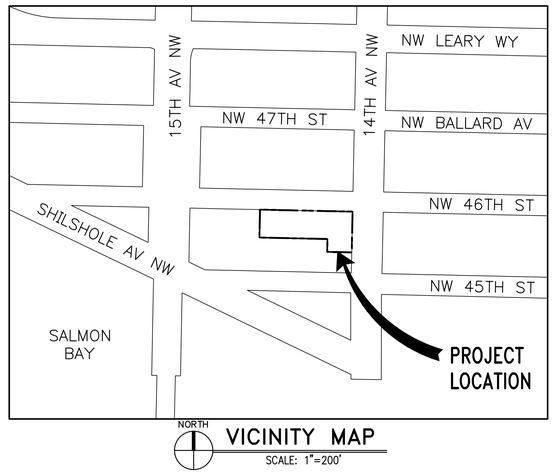
SANITARY SEWER AND STORM DRAINAGE:
SEATTLE PUBLIC UTILITIES
PROJECT MANAGEMENT AND
ENGINEERING
700 5TH AVENUE
PO BOX 34018
SEATTLE, WA 98124-4018
(206) 233-7900

WATER:
SEATTLE PUBLIC UTILITIES
700 5TH AVENUE, SUITE 4900
PO BOX 34018
SEATTLE, WA 98124-4018
(206) 684-3000

POWER:
SEATTLE CITY LIGHT
700 5TH AVENUE, SUITE 3200
SEATTLE, WA 98124-4023
(206) 684-3000

NATURAL GAS:
PUGET SOUND ENERGY
10885 NE 4TH STREET, SUITE 1200
PO BOX 97034
BELLEVUE, WA 98009-9734
(425) 454-6363
(888) 225-5773

TELEPHONE:
CENTURY LINK
1600 7TH AVENUE
SEATTLE, WA 98191
(800) 244-1111



VICINITY MAP
SCALE: 1"=200'

SURVEY LEGEND

(PER SURVEY BY BRH)

ABAN/RET	ABANDONED/RETIRED	H/C	HANDICAPPED
⊕	AREA DRAIN	IE	INVERT ELEVATION
AO	ACCEPTANCE ORDINANCE	IP/PE	IRON PIPE/POLYETHYLENE PIPE
A/C	ASPHALTIC CONCRETE	MIC	MONUMENT IN CASE
———	CHAIN LINK FENCE (CLF)	◎ MH	MANHOLE
BC	BUILDING CORNER	○ MW	MONITOR WELL
———	BUILDING LINE	O/H P	OVERHEAD POWER
BLRD	BOLLARD	PL/LSCAPE	PLANTER/LANDSCAPE
⊡ ⊡	CATCH BASIN	○ PP	POWER POLE
CATV	CABLE TELEVISION	○——○	POWER POLE W/ LIGHT
CC/XC	CONCRETE/EXTRUDED CURB	(P)	PAINTED UTILITY LOCATION
℄/M	CENTERLINE/MONUMENT LINE	⬡	PARKING METER
COL	COLUMN	P.S.	PARKING SPACES
CP/IP/CMP	CONCRETE/IRON PIPE/CORRUGATED METAL PIPE	PS/PSD	PIPE SEWER/PIPE STORM DRAIN
CRW/WRW	CONCRETE/WOOD RETAINING WALL	PS/PSS	COMBINED/SANITARY SEWER
CS/WS	CONCRETE/WOOD STAIR	⊠	POST INDICATOR VALVE
CW	CONCRETE WALK	ROW	RIGHT OF WAY
CRW	CONCRETE RETAINING WALL	(R)	RECORD UTILITY LOCATION
CO	CLEANOUT	SSS	SANITARY SIDE SEWER
COC	CENTER OF CHANNEL	SSMH ◎	SANITARY SEWER MANHOLE
CON/DEC	CONIFER/DECIDUOUS TREE (SIZE NOTED)	SD	STORM DRAIN
CONC.	CONCRETE	SLHH	STREET LIGHT HANDHOLE
CLF	CHAIN LINK FENCE	⊥	SIGN
DIP	DUCTILE IRON PIPE	TCHD	TRENCH DRAIN
DEA.	DEACTIVATED	TD	TELEPHONE DUCT
▥	DRAIN INLET	TCd	TELEPHONE CONDUIT
DWY	DRIVEWAY	TV/TMH	TELEPHONE VAULT/TELEPHONE MANHOLE
ED	ELECTRICAL DUCT	TE	TOP ELEVATION
ECd	ELECTRICAL CONDUIT	TMH	TELEPHONE MANHOLE
EV/EMH	ELECTRICAL VAULT/ELECTRICAL MANHOLE	TOB	TOP OF BANK
EM◯	ELECTRIC METER	TOE	TOE OF SLOPE
FOD	FIBER OPTIC DUCT	→	TRAFFIC FLOW ARROW
FOMH	FIBER OPTIC MANHOLE	□ WM	WATER METER
FFE	FINISHED FLOOR ELEVATION	Ⓦ ◐	WATER MANHOLES
FDC ⊰	FIRE DEPARTMENT CONNECTION	W/WV	WATER LINE/WATER VAULT
FH	FIRE HYDRANT	⋈	WATER VALVE
FO/FOMH	FIBER OPTICS/FOMH	———	WOOD FENCE (WF)
⬡	GAS VALVE	✣	FOUND SURVEY MONUMENT (AS NOTED)
G/GV	GAS LINE/GV	▲	BRASS DISC
GM◯	GAS METER	×	TACK AND LEAD
●	GUARD POST	●	REBAR AND CAP
⊱	GUY ANCHOR	✣	TEMPORARY BENCHMARK
GW/GUY	GUY WIRE		

ABBREVIATIONS:

ABBREVIATIONS ARE AS DEFINED IN THE CITY OF SEATTLE STANDARD PLAN 002 AND AS NOTED BELOW:

@	AT
#	NUMBER
&	AND
AGG	AGGREGATE
AVE	AVENUE
BC	BOTTOM OF CURB
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL
CB	CATCH BASIN
CL	CENTER LINE, CLASS
CLR	CLEAR
CO	CLEAN OUT
COS	CITY OF SEATTLE
DIP	DUCTILE IRON PIPE
DWG	DRAWING
DWY	DRIVEWAY
E	EAST
EL/ELEV	ELEVATION
EX/EXIST	EXISTING
FL	FLOWLINE
FF	FINISHED FLOOR
FS	FIRE SERVICE
G	GAS
HMA	HOT MIX ASPHALT
KC	KING COUNTY
LS	LANDSCAPE
LT	LEFT
MH	MANHOLE
MIN	MINIMUM
MNRL	MINERAL
NO	NUMBER
N	NORTH
OC	ON CENTER
P	POLE
PCC	PORTLAND CEMENT CONCRETE
PL	PROPERTY LINE
PROP	PROPOSED
PSD	PIPED STORM DRAIN
PSS	PIPED SANITARY SEWER
ROW	RIGHT OF WAY
ROWIM	RIGHT OF WAY IMPROVEMENT MANUAL
RT	RIGHT
S	SOUTH
SCL	SEATTLE CITY LIGHT
SD	SERVICE DRAIN (STORM)
SDOT	SEATTLE DEPARTMENT OF TRANSPORTATION
SHT	SHEET
SIP	STREET IMPROVEMENT PERMIT
SPU	SEATTLE PUBLIC UTILITIES
SSD	SUB-SURFACE DRAIN
SSS	SIDE SEWER SANITARY
ST	STREET
STA	STATION
STD	STANDARD
TBD	TO BE DETERMINED
TC/TOC	TOP OF CURB
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
W	WATER, WEST, WITH
WAC	WASHINGTON ADMINISTRATIVE CODE
UMP	UTILITY MAJOR PERMIT

PROPOSED LEGEND

50	CONTOUR
50.6	SPOT GRADE
	SLOPE ARROW
PSD	STORM DRAIN PIPE
PSS	SANITARY SEWER PIPE
W	WATER LINE
	CEMENT CONCRETE PAVEMENT
	CEMENT CONCRETE SIDEWALK
	ASPHALT CONCRETE PAVEMENT
	WOOD SURFACING (PER LANDSCAPE)
	GRADE BREAK
	CURB
	RIGHT OF WAY
	CENTERLINE
	EASEMENT LINE
	BUILDING OVERHANG
	CONCENTRATED FLOW LINE
	ELECTRICAL CONDUIT
	PROJECT LIMITS
	CHANNELIZATION STRIPING

SHEET INDEX

CONTRACTOR IS ALERTED TO THE FACT THAT WORK WILL BE ACCOMPLISHED AROUND ACTIVE PSE GAS AND ENERGIZED SEATTLE CITY LIGHT (SCL) FACILITIES THAT ARE SERVING EXISTING CUSTOMERS. CONTRACTOR SHALL COORDINATE WITH PSE AND SCL TO DETERMINE WHICH FACILITIES ARE ACTIVE AND ENERGIZED AND SHALL IMPLEMENT SAFETY PROCEDURES PER PSE AND SCL REQUIREMENTS. CONTRACTOR SHALL COORDINATE WITH PSE AND SCL TO ENSURE THAT FACILITIES ARE IN PLACE TO MAINTAIN SERVICE TO CUSTOMERS THROUGHOUT CONSTRUCTION.

811 Call 811 two business days before you dig

WEBER THOMPSON
225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507
www.weberthompson.com

PROJECT:
BALLARD BLOCKS 2
14TH AVE W & 46TH AVE. N

CLIENT:
REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
BUILDING PERMIT	8/16/2017
BUILDING PERMIT	11/15/2017
PRE-CONSTRUCTION SET	11/15/2017
DRAINAGE PERMIT COMMENT RESPONSE	1/3/2018
DRAINAGE PERMIT COMMENT RESPONSE	3/22/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

ACCEPTANCE OF THE ELECTRONIC FILE VERSION OF THIS DRAWING ACKNOWLEDGES THE RECIPIENT AND CONSENT TO THE TERMS OF THE WEBER THOMPSON ELECTRONIC MEDIA RECEIPT AGREEMENT

JEREMY S. FERRIS · STATE OF WASHINGTON · 35842 · REGISTERED PROFESSIONAL ENGINEER

DRAFTED BY:: TAD
PROJECT MGR.: JSF
PRINCIPAL I, C.: MAV

SHEET NO.

PARCEL B
COVER SHEET

C1.00B

PROJECT NO. 16-048

DRAINAGE PERMIT - 3/22/2018

Z:\1600001-1609999\1600201 (Ballard Blocks 2)\CADD\Design\Dr. Sets\Phase 2\BBII PH2 1.00 Cover.dwg
Mar 30, 2018 - 2:07pm JoeM

1451 NW 46TH STREET

BUILDING PERMIT - PHASE 1

SEATTLE, WASHINGTON

MARCH 30, 2018

SURVEY SITE NOTES:

SURVEY ON 9/12/2016 BY
BUSH, ROED & HITCHINGS, INC.
THOMAS E. CARNER, PLS
2009 MINOR AVE EAST
SEATTLE, WA 98102
(206) 323-4144

HORIZONTAL DATUM: NAD 83/91

HORIZONTAL BENCHMARKS:

OWNER:	CITY OF SEATTLE
ID#	NONE
DESCRIPTION:	NAIL IN CONC IN CASE DOWN 1.5'
LOCATION:	INTERSECTION OF CENTERLINES OF NW 46TH STREET & 15TH AVE NW
NORTHING:	245363.15'
EASTING:	1260242.10'
OWNER:	CITY OF SEATTLE
ID#	NONE
DESCRIPTION:	BRASSIE WITH PUNCH IN CONCRETE IN CASE DOWN 1.3'
LOCATION:	INTERSECTION OF CENTERLINES OF NW 46TH ST & 14TH AVE NW
NORTHING:	245349.12'
EASTING:	1260888.87'

VERTICAL DATUM: NAVD88

VERTICAL BENCHMARKS:

SOURCE:	CITY OF SEATTLE
ID#	SNV-7501
DESCRIPTION:	BRASS CAP STAMPED "7501"
LOCATION:	SET IN EAST SIDE OF EAST BRIDGE COLUMN OF BALLARD BRIDGE, LOCATED AT THE SOUTHEAST QUADRANT OF THE INTERSECTION OF 15TH AVE NORTHWEST AND SHILSHOLE AVENUE NORTHWEST.
ELEVATION:	30.67'
SOURCE:	SEATTLE MONORAIL PROJECT
ID#	CP 7-04
DESCRIPTION:	BRASSIE
LOCATION:	SET AT THE NORTHEAST CORNER OF INTERSECTION OF 15TH AVE NW AND NW BALLARD WAY.
ELEVATION:	40.49'

UTILITY PROVIDERS:

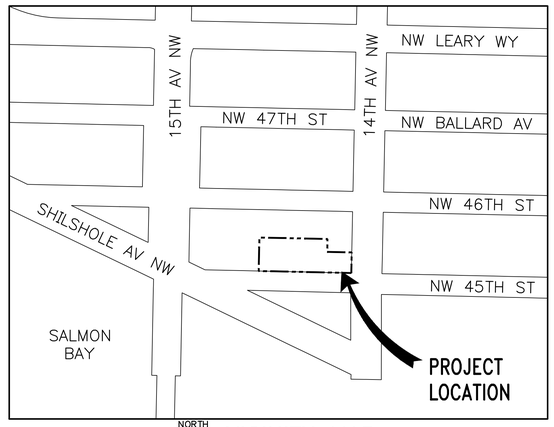
SANITARY SEWER AND STORM DRAINAGE:
SEATTLE PUBLIC UTILITIES
PROJECT MANAGEMENT AND
ENGINEERING
700 5TH AVENUE
PO BOX 34018
SEATTLE, WA 98124-4018
(206) 233-7900

WATER:
SEATTLE PUBLIC UTILITIES
700 5TH AVENUE, SUITE 4900
PO BOX 34018
SEATTLE, WA 98124-4018
(206) 684-3000

POWER:
SEATTLE CITY LIGHT
700 5TH AVENUE, SUITE 3200
SEATTLE, WA 98124-4023
(206) 684-3000

NATURAL GAS:
PUGET SOUND ENERGY
10885 NE 4TH STREET, SUITE 1200
PO BOX 97034
BELLEVUE, WA 98009-9734
(425) 454-6363
(888) 225-5773

TELEPHONE:
CENTURY LINK
1600 7TH AVENUE
SEATTLE, WA 98191
(800) 244-1111



VICINITY MAP
SCALE: 1"=200'

SURVEY LEGEND

(PER SURVEY BY BRH)

ABAN/RET	ABANDONED/RETIRED	H/C	HANDICAPPED
⊕	AREA DRAIN	IE	INVERT ELEVATION
AO	ACCEPTANCE ORDINANCE	IP/PE	IRON PIPE/POLYETHYLENE PIPE
A/C	ASPHALTIC CONCRETE	MIC	MONUMENT IN CASE
———	CHAIN LINK FENCE (CLF)	◎	MANHOLE
BC	BUILDING CORNER	○ MW	MONITOR WELL
———	BUILDING LINE	O/H P	OVERHEAD POWER
BLRD	BOLLARD	PL/LSCAPE	PLANTER/LANDSCAPE
⊡	CATCH BASIN	○ PP	POWER POLE
CATV	CABLE TELEVISION	○——○	POWER POLE W/ LIGHT
CC/XC	CONCRETE/EXTRUDED CURB	(P)	PAINTED UTILITY LOCATION
℄/M	CENTERLINE/MONUMENT LINE	⬡	PARKING METER
COL	COLUMN	P.S.	PARKING SPACES
CP/IP/CMP	CONCRETE/IRON PIPE/CORRUGATED METAL PIPE	PS/PSD	PIPE SEWER/PIPE STORM DRAIN
CRW/WRW	CONCRETE/WOOD RETAINING WALL	PS/PSS	COMBINED/SANITARY SEWER
CS/WS	CONCRETE/WOOD STAIR	⊠	POST INDICATOR VALVE
CW	CONCRETE WALK	ROW	RIGHT OF WAY
CRW	CONCRETE RETAINING WALL	(R)	RECORD UTILITY LOCATION
CO	CLEANOUT	SSS	SANITARY SIDE SEWER
COC	CENTER OF CHANNEL	SSMH ◎	SANITARY SEWER MANHOLE
CON/DEC	CONIFER/DECIDUOUS TREE (SIZE NOTED)	SD	STORM DRAIN
CONC.	CONCRETE	SLHH	STREET LIGHT HANDHOLE
CLF	CHAIN LINK FENCE	⚐	SIGN
DIP	DUCTILE IRON PIPE	TCHD	TRENCH DRAIN
DEA.	DEACTIVATED	TD	TELEPHONE DUCT
▥	DRAIN INLET	TCd	TELEPHONE CONDUIT
DWY	DRIVEWAY	TV/TMH	TELEPHONE VAULT/TELEPHONE MANHOLE
ED	ELECTRICAL DUCT	TE	TOP ELEVATION
ECd	ELECTRICAL CONDUIT	TMH	TELEPHONE MANHOLE
EV/EMH	ELECTRICAL VAULT/ELECTRICAL MANHOLE	TOB	TOP OF BANK
EM◯	ELECTRIC METER	TOE	TOE OF SLOPE
FOD	FIBER OPTIC DUCT	➔	TRAFFIC FLOW ARROW
FOMH	FIBER OPTIC MANHOLE	□WM	WATER METER
FFE	FINISHED FLOOR ELEVATION	Ⓦ ◐	WATER MANHOLES
FDC ⊰	FIRE DEPARTMENT CONNECTION	W/WV	WATER LINE/WATER VAULT
FH	FIRE HYDRANT	⋈	WATER VALVE
FO/FOMH	FIBER OPTICS/FOMH	———	WOOD FENCE (WF)
⌷	GAS VALVE	✣	FOUND SURVEY MONUMENT (AS NOTED)
G/GV	GAS LINE/GV	▲	BRASS DISC
GM◯	GAS METER	×	TACK AND LEAD
●	GUARD POST	●	REBAR AND CAP
⊱	GUY ANCHOR	⌖	TEMPORARY BENCHMARK
GW/GUY	GUY WIRE		

ABBREVIATIONS:

ABBREVIATIONS ARE AS DEFINED IN THE CITY OF SEATTLE STANDARD PLAN 002 AND AS NOTED BELOW:

@	AT
#	NUMBER
&	AND
AGG	AGGREGATE
AVE	AVENUE
BC	BOTTOM OF CURB
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL
CB	CATCH BASIN
CL	CENTER LINE, CLASS
CLR	CLEAR
CO	CLEAN OUT
COS	CITY OF SEATTLE
DIP	DUCTILE IRON PIPE
DWG	DRAWING
DWY	DRIVEWAY
E	EAST
EL/ELEV	ELEVATION
EX/EXIST	EXISTING
FL	FLOWLINE
FF	FINISHED FLOOR
FS	FIRE SERVICE
G	GAS
HMA	HOT MIX ASPHALT
KC	KING COUNTY
LS	LANDSCAPE
LT	LEFT
MH	MANHOLE
MIN	MINIMUM
MNRL	MINERAL
NO	NUMBER
N	NORTH
OC	ON CENTER
P	POLE
PCC	PORTLAND CEMENT CONCRETE
PL	PROPERTY LINE
PROP	PROPOSED
PSD	PIPED STORM DRAIN
PSS	PIPED SANITARY SEWER
ROW	RIGHT OF WAY
ROWIM	RIGHT OF WAY IMPROVEMENT MANUAL
RT	RIGHT
S	SOUTH
SCL	SEATTLE CITY LIGHT
SD	SERVICE DRAIN (STORM)
SDOT	SEATTLE DEPARTMENT OF TRANSPORTATION
SHT	SHEET
SIP	STREET IMPROVEMENT PERMIT
SPU	SEATTLE PUBLIC UTILITIES
SSD	SUB-SURFACE DRAIN
SSS	SIDE SEWER SANITARY
ST	STREET
STA	STATION
STD	STANDARD
TBD	TO BE DETERMINED
TC/TOC	TOP OF CURB
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
W	WATER, WEST, WITH
WAC	WASHINGTON ADMINISTRATIVE CODE
UMP	UTILITY MAJOR PERMIT

PROPOSED LEGEND

50	CONTOUR
50.6	SPOT GRADE
	SLOPE ARROW
PSD	STORM DRAIN PIPE
PSS	SANITARY SEWER PIPE
W	WATER LINE
	CEMENT CONCRETE PAVEMENT
	CEMENT CONCRETE SIDEWALK
	ASPHALT CONCRETE PAVEMENT
	WOOD SURFACING (PER LANDSCAPE)
	GRADE BREAK
	CURB
	RIGHT OF WAY
	CENTERLINE
	EASEMENT LINE
	BUILDING OVERHANG
	CONCENTRATED FLOW LINE
	ELECTRICAL CONDUIT
	PROJECT LIMITS
	CHANNELIZATION STRIPING

SHEET INDEX

CONTRACTOR IS ALERTED TO THE FACT THAT WORK WILL BE ACCOMPLISHED AROUND ACTIVE PSE GAS AND ENERGIZED SEATTLE CITY LIGHT (SCL) FACILITIES THAT ARE SERVING EXISTING CUSTOMERS. CONTRACTOR SHALL COORDINATE WITH PSE AND SCL TO DETERMINE WHICH FACILITIES ARE ACTIVE AND ENERGIZED AND SHALL IMPLEMENT SAFETY PROCEDURES PER PSE AND SCL REQUIREMENTS. CONTRACTOR SHALL COORDINATE WITH PSE AND SCL TO ENSURE THAT FACILITIES ARE IN PLACE TO MAINTAIN SERVICE TO CUSTOMERS THROUGHOUT CONSTRUCTION.

811 Call 811 two business days before you dig

WEBER THOMPSON
225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507
www.weberthompson.com

PROJECT:
BALLARD BLOCKS 2
14TH AVE W & 46TH AVE. N

CLIENT:
REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
BUILDING PERMIT	8/16/2017
BUILDING PERMIT	11/15/2017
PRE-CONSTRUCTION SET	11/15/2017
DRAINAGE PERMIT COMMENT RESPONSE	2/9/2018
IFC SET	3/30/18

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

ACCEPTANCE OF THE ELECTRONIC FILE VERSION OF THIS DRAWING ACKNOWLEDGES THE RECIPIENT AND CONSENT TO THE TERMS OF THE WEBER THOMPSON ELECTRONIC MEDIA RECEIPT AGREEMENT

JEREMY S. FRIES · STATE OF WASHINGTON · 39842 · REGISTERED PROFESSIONAL ENGINEER

DRAFTED BY:: TAD
PROJECT MGR.: JSF
PRINCIPAL I, C.: MAV

SHEET NO.

PARCEL C
COVER SHEET

C1.00C

PROJECT NO. 16-048

IFC SET - 3/30/2018

Z:\1600001-1609999\1600201 (Ballard Blocks 2)\CADD\Design\Dr. Sets\Phase 3\BBI PH3 1.00 Cover.dwg
Mar 30, 2018 - 2:10pm JoeM

CITY OF SEATTLE GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE 2017 EDITION OF CITY OF SEATTLE STANDARD SPECIFICATIONS, THE 2017 EDITION OF THE CITY OF SEATTLE STANDARD PLANS; AND SEATTLE DEPARTMENT OF TRANSPORTATION DIRECTOR'S RULE 05-2009 FOR STREET AND SIDEWALK PAVEMENT OPENING AND RESTORATION. A COPY OF THESE DOCUMENTS SHALL BE ON SITE DURING CONSTRUCTION.
2. A COPY OF THE APPROVED PLAN MUST BE ON SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
3. ERRORS AND OMISSIONS ON THE PERMITTED PLANS MUST BE CORRECTED BY THE ENGINEER AND APPROVED BY THE CITY OF SEATTLE.
4. ALL PERMITS REQUIRED FOR WORK WITHIN THE PUBLIC RIGHT OF WAY MUST BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
5. PRIOR TO THE START OF CONSTRUCTION WITHIN THE RIGHT OF WAY, THE PERMITTEE SHALL SCHEDULE AND ATTEND A PRECONSTRUCTION MEETING WITH THE CITY OF SEATTLE DEPARTMENT OF TRANSPORTATION.
6. PERMITTEE SHALL CONTACT SEATTLE DEPARTMENT OF TRANSPORTATION, STREET USE INSPECTOR A MINIMUM OF 2 BUSINESS DAYS PRIOR TO NEEDING AN INSPECTION.
7. ALL DAMAGE TO CITY INFRASTRUCTURE CAUSED BY THE CONSTRUCTION SHALL BE REPAIRED AS REQUIRED BY THE SEATTLE DEPARTMENT OF TRANSPORTATION.
8. THE APPROVED PLANS SHOW THE APPROXIMATE AREA OF PAVEMENT RESTORATION BASED ON THE DEPTH OF UTILITY CUTS AND/OR THE AREA OF CURB AND/OR PAVEMENT TO BE REMOVED AND REPLACED. THE ACTUAL LIMITS OF THE PAVEMENT RESTORATION SHALL BE PER THE STREET AND SIDEWALK PAVEMENT OPENING AND RESTORATION DIRECTOR'S RULE 05-2009 AND WILL BE DETERMINED IN THE FIELD BY THE SEATTLE DEPARTMENT OF TRANSPORTATION STREET USE INSPECTOR PRIOR TO THE PAVEMENT RESTORATION.
9. DATUM: NAVD 88 AND NAD83 (1991).
10. SURVEYING AND STAKING OF ALL IMPROVEMENTS IN THE PUBLIC RIGHT OF WAY SHALL BE COMPLETED PRIOR TO CONSTRUCTION. SURVEY CUT SHEETS MUST BE SUBMITTED AND APPROVED BY THE SEATTLE DEPARTMENT OF TRANSPORTATION AT LEAST 5 DAYS PRIOR TO CONSTRUCTION.
11. IF AN EXISTING CURB IS TO BE REMOVED AND REPLACED IN THE SAME LOCATION THE PERMITTEE SHALL PROVIDE THE STREET USE INSPECTOR A PLAN WITH EXISTING FLOW LINE AND TOP OF CURB ELEVATIONS IDENTIFIED. PERMITTEE TO STAKE THE LOCATION OF THE EXISTING CURB PRIOR TO DEMOLITION.
12. THE PERMITTEE SHALL BE RESPONSIBLE FOR REFERENCING AND REPLACING ALL MONUMENTS THAT MAY BE DISTURBED, DESTROYED OR REMOVED BY THE PROJECT AND SHALL FILE AN APPLICATION FOR PERMIT TO REMOVE OR DESTROY A SURVEY MONUMENT WITH THE WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES, PURSUANT TO RCW 58.24.040(6).
13. THE PERMITTEE SHALL SUBMIT ALL APPLICABLE DOCUMENTS REQUIRED UNDER SECTION 1-05.3 OF THE STANDARD SPECIFICATIONS PRIOR TO CONSTRUCTION. A MATERIAL SOURCE FORM FOR ALL MATERIALS TO BE PLACED IN THE RIGHT OF WAY AND MIX DESIGNS FOR ALL ASPHALT, CONCRETE AND AGGREGATES TO BE PLACED IN THE RIGHT OF WAY MUST BE SUBMITTED TO THE SEATTLE DEPARTMENT OF TRANSPORTATION FOR REVIEW AND APPROVAL PRIOR TO BEGINNING CONSTRUCTION. A REVISED MATERIAL SOURCE FORM AND MIX DESIGNS MUST BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF ANY SUBSTITUTE MATERIALS.
14. THE PERMITTEE SHALL NOTIFY THE SEATTLE FIRE DEPARTMENT DISPATCHER (206-386-1495) AT LEAST TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL WATER SERVICE INTERRUPTIONS, HYDRANT SHUTOFFS, AND STREET CLOSURES OR OTHER ACCESS BLOCKAGE. THE PERMITTEE SHALL ALSO NOTIFY THE DISPATCHER OF ALL NEW, RELOCATED, OR ELIMINATED HYDRANTS RESULTING FROM THIS WORK.
15. THE PERMITTEE SHALL LOCATE AND PROTECT ALL CASTINGS AND UTILITIES DURING CONSTRUCTION.
16. THE PERMITTEE SHALL CONTACT THE UNDERGROUND UTILITIES LOCATOR SERVICE (1-800-424-5555) AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
17. IT IS THE SOLE RESPONSIBILITY OF THE PERMITTEE TO VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.
18. THE PERMITTEE SHALL ADJUST ALL EXISTING MANHOLE RIMS, DRAINAGE STRUCTURE LIDS, VALVE BOXES, AND UTILITY ACCESS STRUCTURES TO FINISH GRADE WITHIN AREAS AFFECTED BY THE PROPOSED IMPROVEMENTS.
19. SPU-DWW MUST PERFORM ALL CORE DRILL OPERATIONS INTO EXISTING MAINS OR STRUCTURES. CONTRACTORS ARE NOT ALLOWED TO CORE INTO MAINS OR STRUCTURES WITHOUT PRIOR APPROVAL FROM SPU-DWW. TO SCHEDULE CORE CUTS CONTACT SPU-DWW AT 206-615-0511 A MINIMUM OF 48 HOURS IN ADVANCE.
20. UTILITY SERVICE CONNECTIONS SHOWN ON THIS PLAN REQUIRE SEPARATE PERMITS AND ARE TO BE MAINTAINED PRIVATELY AND NOT BY THE CITY OF SEATTLE.
21. THE PERMITTEE SHALL PROVIDE FOR ALL TESTING AS REQUIRED BY THE STREET USE INSPECTOR.
22. BACKFILL MATERIAL USED IN PUBLIC RIGHT-OF-WAY SHALL MEET STANDARD SPECIFICATIONS AND SHALL BE APPROVED BY SEATTLE DEPARTMENT OF TRANSPORTATION.
23. INSPECTION AND ACCEPTANCE OF ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL BE DONE BY REPRESENTATIVES OF THE CITY OF SEATTLE. IT SHALL BE THE PERMITTEE'S RESPONSIBILITY TO COORDINATE AND SCHEDULE APPROPRIATE INSPECTIONS ALLOWING FOR PROPER ADVANCE NOTICE. THE SEATTLE DEPARTMENT OF TRANSPORTATION STREET USE INSPECTOR MAY REQUIRE REMOVAL AND RECONSTRUCTION OF ANY ITEMS PLACED IN THE RIGHT OF WAY THAT DO NOT MEET CITY STANDARDS OR THAT WERE CONSTRUCTED WITHOUT APPROPRIATE INSPECTIONS.
24. THE PERMITTEE SHALL PROVIDE AND MAINTAIN TEMPORARY EROSION CONTROL AND SEDIMENTATION COLLECTION FACILITIES TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE NATURAL OR PUBLIC DRAINAGE SYSTEM PER SECTION 8-01. AS CONSTRUCTION PROGRESSES AND UNEXPECTED (SEASONAL) CONDITIONS DICTATE, ADDITIONAL CONTROL FACILITIES MAY BE REQUIRED. DURING THE COURSE OF CONSTRUCTION IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITTEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY THE PERMITTEE'S ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES THAT MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES.
25. THE PERMITTEE SHALL KEEP ALL PAVED SURFACES IN THE RIGHT OF WAY CLEAN BY SWEEPING PER SECTION 8-01.3(16).
26. ALL DISTURBED SOILS MUST BE AMENDED PER STANDARD PLAN 142 AND SECTION 8-02 OF THE STANDARD SPECIFICATIONS UNLESS WITHIN ONE FOOT OF A CURB OR SIDEWALK, THREE FEET OF A UTILITY STRUCTURE (E.G. WATER METER, UTILITY POLE, HAND HOLE, ETC.), OR THE DRIPLINE OF AN EXISTING TREE.
27. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CITY OF SEATTLE TRAFFIC CONTROL MANUAL FOR IN-STREET WORK. AN APPROVED TRAFFIC CONTROL PLAN WILL BE REQUIRED FOR ALL ARTERIAL STREETS PRIOR TO BEGINNING CONSTRUCTION.
28. PERMITTEE SHALL NOTIFY KING COUNTY METRO AT 684-2732 FOURTEEN DAYS IN ADVANCE OF ANY IMPACT TO TRANSIT OPERATIONS.
29. COORDINATE SIGN AND PAY STATION AND/OR PARKING METER HEAD REMOVAL AND INSTALLATION WITH SEATTLE DEPARTMENT OF TRANSPORTATION AT 684-5370. SIGNPOSTS ARE TO BE INSTALLED IN ACCORDANCE WITH STANDARD PLANS 616, 620, 621A, 621B, 625, & 626.
30. ALL STREET NAME SIGNS MUST BE INSTALLED BY SEATTLE DEPARTMENT OF TRANSPORTATION AT THE PERMITTEE'S EXPENSE.
31. ALL WORK PERFORMED BY SEATTLE CITY LIGHT, SEATTLE PUBLIC UTILITIES, AND OTHER UTILITIES TO REMOVE OR RELOCATE EXISTING UTILITIES SHALL BE DONE AT THE PERMITTEE'S EXPENSE.
32. PERMITTEE MUST CONTACT THE SEATTLE DEPARTMENT OF PARKS AND RECREATION TO APPLY FOR A SEPARATE PERMIT IF WORKING WITHIN A DESIGNATED PARK BOULEVARD.
33. CARE SHALL BE EXERCISED WHEN EXCAVATING NEAR EXISTING CHARGED WATER MAINS.
34. PERMITTEE SHALL CONTACT SEATTLE DEPARTMENT OF TRANSPORTATION, STREET USE INSPECTOR A MINIMUM OF 2 BUSINESS DAYS PRIOR TO PLANTING FOR INSPECTION OF STREET TREES AND LANDSCAPING.
35. ANY CONSTRUCTION OR INSTALLATION ACTIVITIES AFFECTING TRANSIT OPERATIONS OR FACILITIES MUST BE COORDINATED THROUGH METRO TRANSIT CONSTRUCTION INFORMATION CENTER. FOR NOTIFICATION INFORMATION AND GUIDELINES, CONTACT CONSTRUCTION COORDINATORS AT 206-684-2732 OR 206-684-2785.

CITY OF SEATTLE GENERAL ESC NOTES:

1. THE IMPLEMENTATION, CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
2. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE, ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS.
3. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED (E.G. ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) BY THE CONTRACTOR AS NEEDED FOR UNEXPECTED STORM EVENTS.
4. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY OR AS DIRECTED BY THE CITY OF SEATTLE TO ENSURE THEIR CONTINUED FUNCTIONING.
5. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
6. WATER FROM DISTURBED AREAS SHALL BE DIRECTED VIA SHEET FLOW OR TEMPORARY DRAINAGE DITCHES CONSTRUCTED AS NEEDED OR AS DIRECTED BY THE CITY OF SEATTLE INSPECTOR.
7. SETTLING TANKS SHALL BE "BAKER TANK", "RAIN FOR RENT", OR APPROVED EQUIVALENT.
8. DISCHARGE TO THE PUBLIC COMBINED SEWER SHALL BE MONITORED PER CITY OF SEATTLE AND KING COUNTY WASTEWATER STANDARDS.
9. CONTRACTOR SHALL PROVIDE CONSTRUCTION FENCING AS REQUIRED FOR SAFETY AND AS DIRECTED BY THE CITY INSPECTOR.
10. APPROVAL OF THE DRAINAGE AND TEMPORARY EROSION CONTROL PLANS DOES NOT INCLUDE APPROVAL OF THE GRADING SHOWN HEREIN. GRADING ACTIVITIES WITHIN THE RIGHT-OF-WAY REQUIRE A STREET USE PERMIT FROM THE STREET USE SECTION. GRADING ACTIVITIES ON ADJACENT PROPERTIES REQUIRE WRITTEN APPROVAL FROM THE ADJACENT PROPERTY OWNERS.
11. CATCH BASINS IN THE STREET SHALL BE INSPECTED DAILY BY THE CONTRACTOR. WATER LEAVING THE SITE DURING CONSTRUCTION, INCLUDING WATER CARRIED BY THE TRUCK TIRES, SHALL BE CLEAN. THE CONTRACTOR SHALL CLEAN CITY CATCH BASINS AND IMPLEMENT EXTRA SEDIMENTATION CONTROL METHODS IF NECESSARY AND AS DIRECTED BY THE STREET USE SECTION INSPECTOR.
12. EXCAVATION SITE DEWATERING THAT INCLUDES DISCHARGE TO THE CITY STREET, CATCH BASIN, OR SEWER SHALL BE IMPLEMENTED ONLY AFTER APPROVAL BY THE STREET USE SECTION INSPECTOR.
13. CONSTRUCTION EROSION CONTROL MEASURES MUST BE IN PLACE AND APPROVED BY DPD PRIOR TO ANY EARTH DISTURBANCE. CALL (206) 684-8860 TO SCHEDULE AN INSPECTION APPOINTMENT FOR THIS ITEM.
14. NO SEDIMENT SHALL BE TRACKED ONTO PAVED STREETS OR ROADWAYS. SEDIMENT SHALL BE REMOVED FROM TRUCKS AND EQUIPMENT PRIOR TO LEAVING THE CONSTRUCTION SITE. IN THE EVENT OF FAILURE OF THE ESC SYSTEM RESULTING IN SEDIMENT TRACKING ONTO PAVEMENT, THE CONTRACTOR SHALL IMPLEMENT MEASURES IMMEDIATELY TO CORRECT THE SITUATION.
15. THE CONTRACTOR SHALL EMPLOY EMERGENCY MEASURES TO REMOVE SEDIMENT FROM PAVED SURFACES, AS NEEDED. STREET SWEEPING SHALL BE CONSIDERED AN EMERGENCY MEASURE AND NOT A BASIC COMPONENT OF THE ESC SYSTEM. SEDIMENT TRACKED ONTO PAVED SURFACES SHALL NOT BE WASHED INTO STORM DRAINS OR OTHER UTILITY INLETS.
16. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED.
17. UPON FINAL COMPLETION OF THE PROJECT, ALL ESC MEASURES SHALL BE REMOVED BY THE CONTRACTOR. CARE SHALL BE TAKEN TO AVOID SEDIMENT FROM ENTERING THE DRAINAGE SYSTEM DURING THE REMOVAL PROCESS.
18. GRADING SHALL BE STABILIZED BY OCTOBER 31st, AND NO EXCAVATION OR FILL PLACEMENT SHALL BE PERFORMED BETWEEN OCTOBER 31st AND APRIL 1st WITHOUT AN APPROVED DRY SEASON GRADING EXTENSION LETTER FROM DPD.
19. A PRECONSTRUCTION MEETING IS REQUIRED BETWEEN THE OWNER'S REPRESENTATIVES AND A DPD SITE INSPECTOR. MEETING MAY BE ARRANGED BY CALLING 206-684-8860.

CITY OF SEATTLE SIDE SEWER NOTES:

UNLESS OTHERWISE NOTED:

1. ALL WORK SHALL CONFORM TO THE DEPARTMENT OF PLANNING AND DEVELOPMENT (DPD) DIRECTOR'S RULE 4-2011, REQUIREMENTS FOR DESIGN AND CONSTRUCTION OF SIDE SEWERS.
2. THE PERMITTEE SHALL MAINTAIN DRAINAGE AND SEWER SERVICE TO PRIVATE PROPERTY DURING CONSTRUCTION.
3. RELAY OR REPAIR OF SERVICE DRAINS/SIDE SEWERS NOT SHOWN FOR CONSTRUCTION ON THE APPROVED PLAN SHALL BE UNDER SEPARATE PERMIT FROM DPD.
4. WHEN SHOWN ON THE APPROVED PLAN, RELAY EXISTING SERVICE DRAINS/SIDE SEWERS TO CLEAR OVER OR UNDER THE NEW UTILITY AND RECONNECT WITH SHIELDED FLEXIBLE REPAIR COUPLINGS PER SPECIFICATION 7-17.3(2)F AND AS APPROVED BY A REPRESENTATIVE OF THE CITY OF SEATTLE.
5. SERVICE DRAIN/SIDE SEWER PIPE SHALL BE OF A MATERIAL APPROVED BY A REPRESENTATIVE OF THE CITY OF SEATTLE, FROM THE FOLLOWING, IN ORDER OF PRECEDENCE:
   A) DIP WHEN MINIMUM CLEARANCES REQUIRED IN SPECIFICATION 1-07.17(2) ARE NOT MET. DIP SHALL BE CEMENT MORTAR LINED DUCTILE IRON PIPE PER SPECIFICATION 9-05.2. JOINTS SHALL BE RUBBER GASKET, PUSH-ON OR MECHANICAL. BEDDING SHALL BE CLASS D PER SPECIFICATION 7-17.3(1)B5.
   B) MATCH EXISTING PIPE MATERIAL AND BEDDING SHALL BE PER SPECIFICATION 7-17.3(1)B FOR EACH PIPE MATERIAL.
   C) PVC PIPE AND FITTINGS SHALL BE PER ASTM D 3034, SDR35 (MIN), WITH RUBBER GASKET JOINTS OR SCHEDULE 40 PER ASTM D1785 WITH SOLVENT WELDED JOINTS. BEDDING SHALL BE CLASS B PER SPECIFICATION 7-17.3(1)B3.
6. BEDDING SHALL BE CLASS B, EXCEPT DIP, WHICH MAY BE CLASS D. BEDDING MATERIAL SHALL BE MINERAL AGGREGATE TYPE 22, EXCEPT MINERAL AGGREGATE TYPE 9 MAY BE USED TO BED CONCRETE OR DIP AND SELECT NATIVE MAY BE USED TO BED DIP.
7. SERVICE DRAINS/SIDE SEWERS SHALL NOT BE BACKFILLED UNTIL THE PIPE HAS BEEN INSPECTED AND APPROVED AND THE SLOPE, LOCATION AND DEPTH IS RECORDED.
8. THE PERMITTEE IS RESPONSIBLE FOR AS-BUILT RECORD INFORMATION FOR ALL WORK ON SERVICE DRAINS/SIDE SEWERS.

CITY OF SEATTLE WATER SERVICE NOTES

1. APPLICATION FOR NEW METERED WATER SERVICE AND ALL FEES PAID IS REQUIRED 60 TO 90 DAYS BEFORE SERVICE WILL BE AVAILABLE. OWNER WILL NEED WATER AVAILABILITY CERTIFICATE AND LEGAL DESCRIPTION OF PROPERTY WHEN MAKING APPLICATION.
2. ALL WATER SERVICES PIPING ON PRIVATE PROPERTY MUST BE INSPECTED PRIOR TO BACKFILLING TRENCH.
3. FOR ALL WATER SERVICE INFORMATION AND INSPECTION, CONTACT SPU AT (206) 684-5800.

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017
IFC SET	3/30/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

ACCEPTANCE OF THE ELECTRONIC FILE VERSION OF THIS DRAWING ACKNOWLEDGES THE RECEIPT AND CONSENT TO THE TERMS OF THE WEBER THOMPSON ELECTRONIC MEDIA RECEIPT AGREEMENT

JEREMY S. FEIST
STATE OF WASHINGTON
39647
REGISTERED
PROFESSIONAL ENGINEER

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPALS I.C.: MAV

SHEET NO.

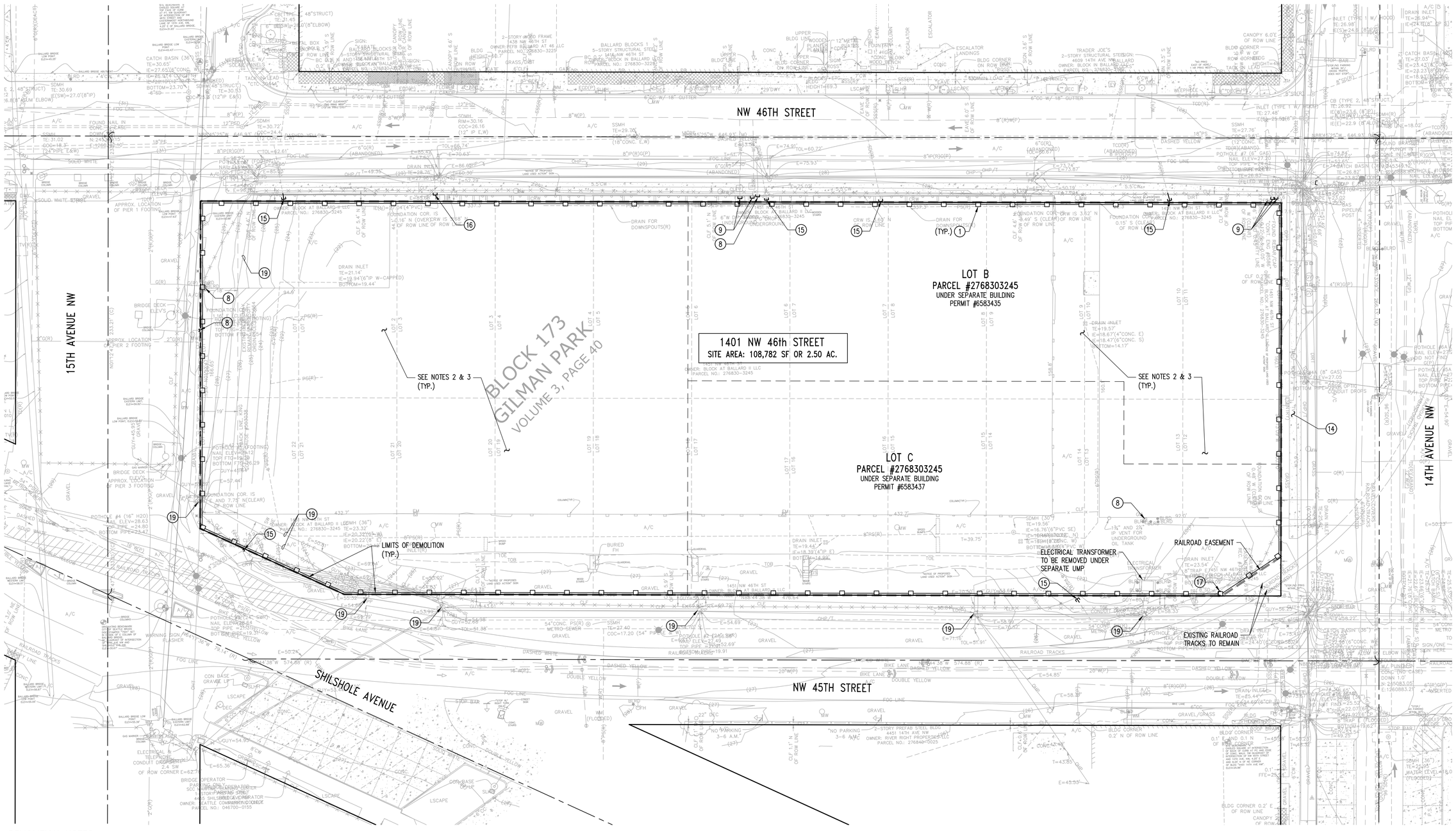
PARCEL A
NOTES

C1.10

PROJECT NO. 16-048

IFC SET - 3/30/2018

Mar 30, 2018 - 2:04pm JoeM Z:\160001-160999\160201 (Ballard Blocks 2)\CAD\Design\On Site\Phase 1\BBI PH1 1.00 Cover.dwg



DEMOLITION NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND FIELD LOCATING CONSTRUCTION FENCING, SIGNAGE, AND BARRIERS AS REQUIRED TO PREVENT UNAUTHORIZED ACCESS INTO DEMOLITION AREA.
2. ALL EXISTING SURFACE IMPROVEMENTS AND UNDERGROUND STRUCTURES/UTILITIES WITHIN THE LIMITS OF DEMOLITION SHALL BE DEMOLISHED, UNLESS OTHERWISE NOTED, AND DISPOSED OF OFF SITE IN A LEGAL MANNER.
3. BUILDING ABATEMENT AND DEMOLITION UNDER SEPARATE PERMIT, BY OTHERS.
4. CONTRACTOR SHALL COORDINATE WITH PROJECT ENVIRONMENTAL CONSULTANT FOR CLEAN-UP AND/OR REMOVAL IF CONTAMINATED GROUNDWATER OR SOIL IS ENCOUNTERED.
5. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO DEMOLITION OR CONSTRUCTION ACTIVITIES.
6. CONTRACTOR SHALL OBTAIN AND PAY FOR NECESSARY PERMITS TO EXECUTE DEMOLITION, INCLUDING PERMIT TO USE PUBLIC WATER SUPPLY FOR DUST SUPPRESSION AND STREET USE PERMIT FOR AREAS WITHIN THE RIGHT OF WAY.
7. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL AND TELECOMMUNICATIONS UTILITY OWNERS TO REMOVE EXISTING SERVICES TO THE BUILDING PRIOR TO DEMOLITION.
8. CAP EXISTING GAS SERVICE AND REMOVE EXISTING GAS METERS. CONTRACTOR SHALL COORDINATE WITH PSE FOR ALL ABANDONING, CAPPING AND REMOVAL/RELOCATION OF PSE'S GAS SERVICES AS INDICATED. PSE TO CAP AND ABANDON SERVICES AT CONTRACTOR'S EXPENSE. CONTACT: 1-888-321-7779.
9. CAP EXISTING WATER SERVICES. CONTRACTOR SHALL COORDINATE WITH SPU FOR ALL ABANDONING, CAPPING AND REMOVAL OF SPU'S WATER SERVICES AS INDICATED. SPU TO PERFORM THE WORK AT CONTRACTOR'S EXPENSE. CONTACT: STEVE RESNICK, 206-233-7234.
10. CONTRACTOR SHALL PROTECT AND MAINTAIN UNINTERRUPTED UTILITY SERVICE TO EXISTING NEIGHBORING BUILDINGS DURING DEMOLITION AND CONSTRUCTION.
11. SURFACE AND BELOW GRADE IMPROVEMENTS INTENDED TO REMAIN SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE IF DAMAGED DURING DEMOLITION OR CONSTRUCTION ACTIVITIES.
12. ALL EXISTING UTILITIES AND IMPROVEMENTS IN THE PUBLIC R.O.W., ABOVE AND BELOW GRADE, SHALL BE PROTECTED UNLESS NOTED OTHERWISE.
13. CONTRACTOR SHALL PROTECT EXISTING MONUMENTS/PROPERTY CORNER STAKES ON ADJACENT PROPERTIES AND REPLACE IF DISTURBED, SHALL PROTECT ADJACENT BUILDINGS AND UTILITIES, AND SHALL MAINTAIN PEDESTRIAN AND VEHICULAR ACCESS FOR ADJACENT PROPERTIES THROUGHOUT CONSTRUCTION.
14. CONTRACTOR SHALL PROTECT EXISTING SIDEWALK AND SIDEWALK AREA THROUGHOUT CONSTRUCTION AND SHALL REPAIR/REPLACE PER COS STD. PLANS IF DAMAGED.
15. PROTECT EXISTING SIDE SEWER FOR RE-USE. PROVIDE TEMPORARY CAP.
16. CAP EXISTING SIDE SEWER AND ABANDON.
17. CAP STORM DRAIN FOR RE-USE, PROVIDE TEMPORARY CAP.
18. CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN.
19. EXISTING POWER POLES AND OVERHEAD UTILITIES ON NW 45TH STREET AND 15TH AVE NW TO BE RELOCATED UNDERGROUND, UNDER SEPARATE UMP NO. 335190.
20. SHORING AND EXCAVATION BEING REVIEWED UNDER SEPARATE PERMIT NO. 6583434. SHORING AND EXCAVATION MUST BE APPROVED PRIOR TO APPROVAL OF THIS PERMIT.
21. CONTRACTOR SHALL PERFORM PRE-CONSTRUCTION AND POST-CONSTRUCTION TELEVISION INSPECTION OR MAINLINE SEWER AND STORM DRAINAGE PIPE LOCATED WITHIN TEN FEET (OR WITHIN TWENTY FEET IF MAINLINES ARE THIRTY FEET OR MORE FROM THE SITE PROPERTY LINE) OR ANY PROPOSED SHORING ELEMENT. TELEVISION INSPECTION SHALL CONFORM TO COS STANDARD SPECIFICATION 7-17.3(3)C. COPIES OF THE TELEVISION INSPECTION SHALL BE PROVIDED TO SPU (ATTN: JEFF WILLIAMS, PO BOX 34018, SEATTLE, WA 98124-4018) PRIOR TO THE PRECONSTRUCTION MEETING.

LEGEND

- LIMITS OF DEMOLITION
- CONSTRUCTION FENCE
- RIGHT OF WAY LINE
- CENTERLINE

N

0 10 20 40

1 inch = 20 feet

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017
IFC SET	3/30/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

ACCEPTANCE OF THE ELECTRONIC FILE VERSION OF THIS DRAWING ACKNOWLEDGES THE RECEIPT AND CONSENT TO THE TERMS OF THE WEBER THOMPSON ELECTRONIC MEDIA RECEIPT AGREEMENT

JEREMY S. PERRY
STATE OF WASHINGTON
39843
REGISTERED
PROFESSIONAL ENGINEER

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL'S C.: MAV

SHEET NO.

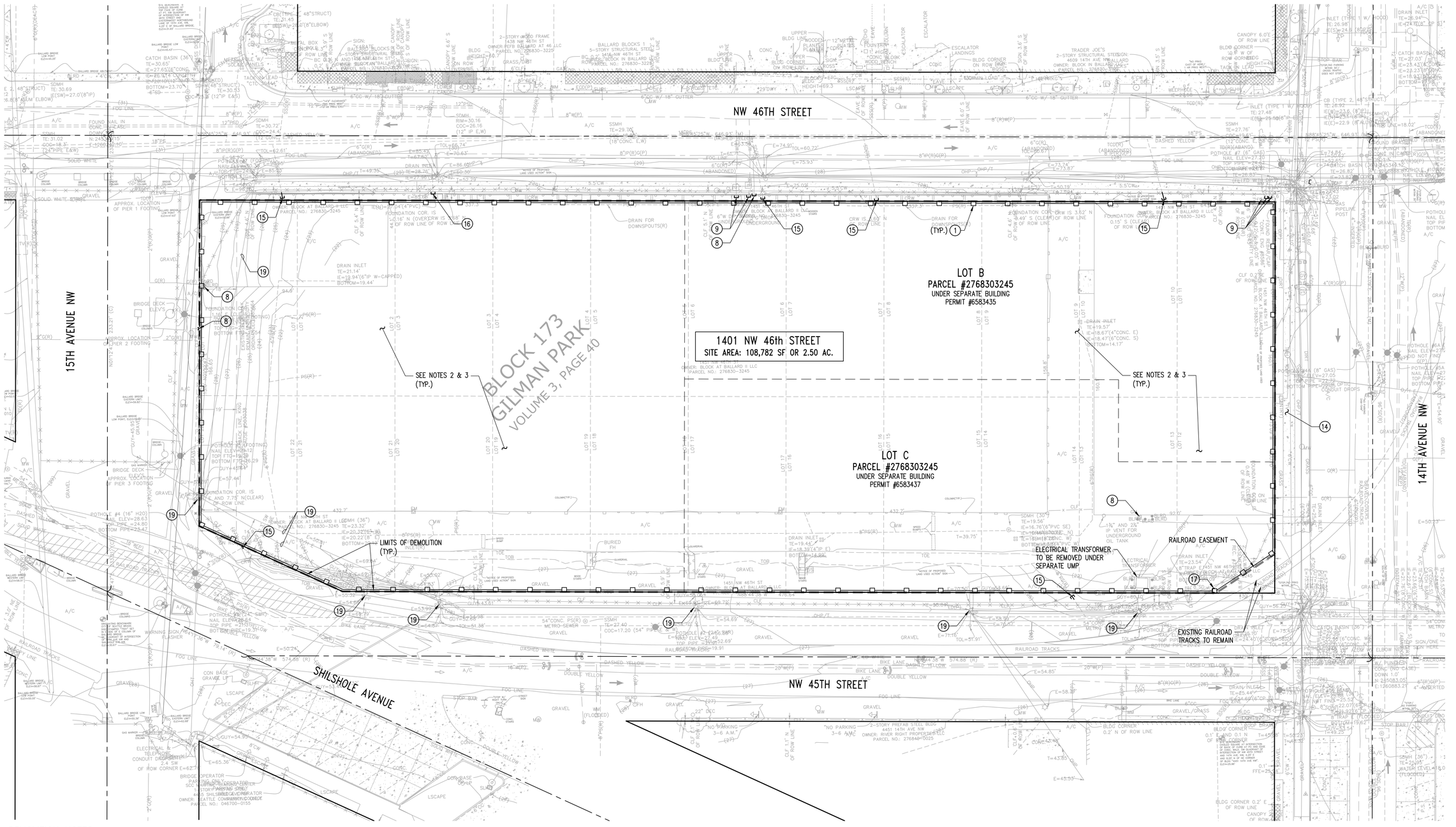
DEMOLITION PLAN

C2.00

PROJECT NO. 16-048

IFC SET - 3/30/2018

Mar 30, 2018 - 2:04pm JoeH Z:\16\16000\1-16099\16000201 (Ballard Blocks 2)\CADD\Design\Ph 1(Site Phase 1)\BB1 PH1 2.00 Demo.dwg



DEMOLITION NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND FIELD LOCATING CONSTRUCTION FENCING, SIGNAGE, AND BARRIERS AS REQUIRED TO PREVENT UNAUTHORIZED ACCESS INTO DEMOLITION AREA.
2. ALL EXISTING SURFACE IMPROVEMENTS AND UNDERGROUND STRUCTURES/UTILITIES WITHIN THE LIMITS OF DEMOLITION SHALL BE DEMOLISHED, UNLESS OTHERWISE NOTED, AND DISPOSED OF OFF SITE IN A LEGAL MANNER.
3. BUILDING ABATEMENT AND DEMOLITION UNDER SEPARATE PERMIT, BY OTHERS.
4. CONTRACTOR SHALL COORDINATE WITH PROJECT ENVIRONMENTAL CONSULTANT FOR CLEAN-UP AND/OR REMOVAL IF CONTAMINATED GROUNDWATER OR SOIL IS ENCOUNTERED.
5. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO DEMOLITION OR CONSTRUCTION ACTIVITIES.
6. CONTRACTOR SHALL OBTAIN AND PAY FOR NECESSARY PERMITS TO EXECUTE DEMOLITION, INCLUDING PERMIT TO USE PUBLIC WATER SUPPLY FOR DUST SUPPRESSION AND STREET USE PERMIT FOR AREAS WITHIN THE RIGHT OF WAY.
7. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL AND TELECOMMUNICATIONS UTILITY OWNERS TO REMOVE EXISTING SERVICES TO THE BUILDING PRIOR TO DEMOLITION.
8. CAP EXISTING GAS SERVICE AND REMOVE EXISTING GAS METERS. CONTRACTOR SHALL COORDINATE WITH PSE FOR ALL ABANDONING, CAPPING AND REMOVAL/RELOCATION OF PSE'S GAS SERVICES AS INDICATED. PSE TO CAP AND ABANDON SERVICES AT CONTRACTOR'S EXPENSE. CONTACT: 1-888-321-7779.
9. CAP EXISTING WATER SERVICES. CONTRACTOR SHALL COORDINATE WITH SPU FOR ALL ABANDONING, CAPPING AND REMOVAL OF SPU'S WATER SERVICES AS INDICATED. SPU TO PERFORM THE WORK AT CONTRACTOR'S EXPENSE. CONTACT: STEVE RESNICK, 206-233-7234.
10. CONTRACTOR SHALL PROTECT AND MAINTAIN UNINTERRUPTED UTILITY SERVICE TO EXISTING NEIGHBORING BUILDINGS DURING DEMOLITION AND CONSTRUCTION.
11. SURFACE AND BELOW GRADE IMPROVEMENTS INTENDED TO REMAIN SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE IF DAMAGED DURING DEMOLITION OR CONSTRUCTION ACTIVITIES.
12. ALL EXISTING UTILITIES AND IMPROVEMENTS IN THE PUBLIC R.O.W., ABOVE AND BELOW GRADE, SHALL BE PROTECTED UNLESS NOTED OTHERWISE.
13. CONTRACTOR SHALL PROTECT EXISTING MONUMENTS/PROPERTY CORNER STAKES ON ADJACENT PROPERTIES AND REPLACE IF DISTURBED, SHALL PROTECT ADJACENT BUILDINGS AND UTILITIES, AND SHALL MAINTAIN PEDESTRIAN AND VEHICULAR ACCESS FOR ADJACENT PROPERTIES THROUGHOUT CONSTRUCTION.
14. CONTRACTOR SHALL PROTECT EXISTING SIDEWALK AND SIDEWALK AREA THROUGHOUT CONSTRUCTION AND SHALL REPAIR/REPLACE PER COS STD. PLANS IF DAMAGED.
15. PROTECT EXISTING SIDE SEWER FOR RE-USE. PROVIDE TEMPORARY CAP.
16. CAP EXISTING SIDE SEWER AND ABANDON.
17. CAP STORM DRAIN FOR RE-USE, PROVIDE TEMPORARY CAP.
18. CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN.
19. EXISTING POWER POLES AND OVERHEAD UTILITIES ON NW 45TH STREET AND 15TH AVE NW TO BE RELOCATED UNDERGROUND, UNDER SEPARATE UMP NO. 335190.
20. SHORING AND EXCAVATION BEING REVIEWED UNDER SEPARATE PERMIT NO. 6583434. SHORING AND EXCAVATION MUST BE APPROVED PRIOR TO APPROVAL OF THIS PERMIT.
21. CONTRACTOR SHALL PERFORM PRE-CONSTRUCTION AND POST-CONSTRUCTION TELEVISION INSPECTION OR MAINLINE SEWER AND STORM DRAINAGE PIPE LOCATED WITHIN TEN FEET (OR WITHIN TWENTY FEET IF MAINLINES ARE THIRTY FEET OR MORE FROM THE SITE PROPERTY LINE) OR ANY PROPOSED SHORING ELEMENT. TELEVISION INSPECTION SHALL CONFORM TO COS STANDARD SPECIFICATION 7-17.3(3)G. COPIES OF THE TELEVISION INSPECTION SHALL BE PROVIDED TO SPU (ATTN: JEFF WILLIAMS, PO BOX 34018, SEATTLE, WA 98124-4018) PRIOR TO THE PRECONSTRUCTION MEETING.

LEGEND

- LIMITS OF DEMOLITION
- CONSTRUCTION FENCE
- RIGHT OF WAY LINE
- CENTERLINE

N

0 10 20 40

1 inch = 20 feet

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

JEREMY S. PERRY
STATE OF WASHINGTON
38642
REGISTERED
PROFESSIONAL ENGINEER

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL'S C.: MAV

SHEET NO.

DEMOLITION PLAN

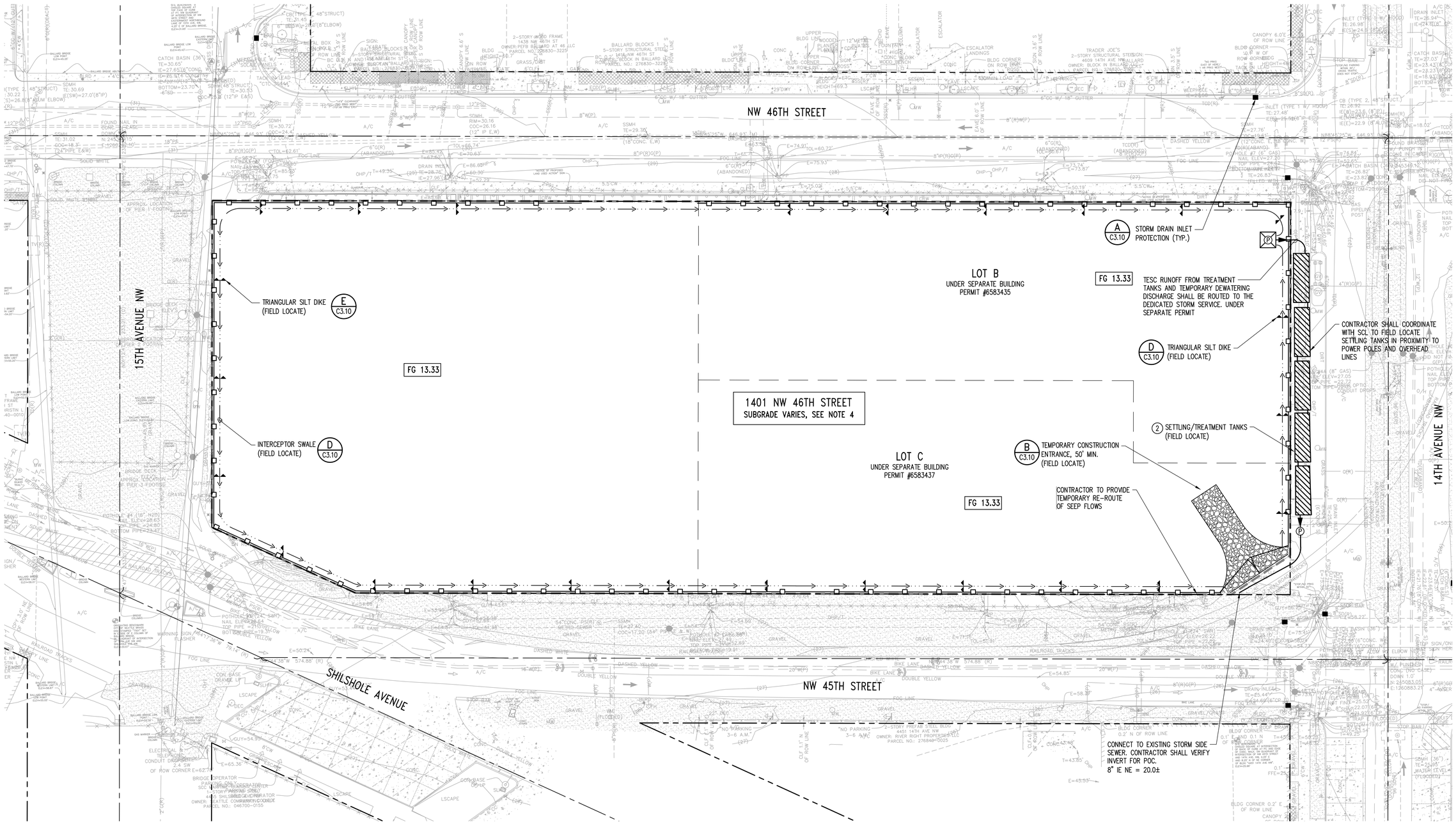
C2.00 A

PROJECT NO. 15-048

11.10.2017 - BUILDING PERMIT

Z:\1650001-1650999\1650201 (Ballard Blocks 2)\Outgoing\Weber Thompson\2017-11-15 Onsite Preconstruction Set\BB PHI 2.00 Demo.dwg

Nov 15, 2017 - 12:02pm JoeH



CONSTRUCTION NOTES:

1. CONTRACTOR SHALL COORDINATE WITH CITY OF SEATTLE INSPECTOR PRIOR TO DISCHARGING CONSTRUCTION WATER FROM THIS SITE. CONTRACTOR IS RESPONSIBLE FOR OBTAINING SIDE SEWER PERMIT FOR TEMPORARY DEWATERING (SSPTD), AS REQUIRED BY CITY OF SEATTLE.

2. THE SETTLING/TREATMENT TANKS SHALL HAVE A MINIMUM TOTAL CAPACITY OF 97,219 GALLONS. THIS VOLUME IS BASED ON THE 2-YEAR, 24-HOUR DESIGN STORM PEAK VOLUME FOR ON-SITE DISTURBED AREA EQUIVALENT TO THE AREA WITHIN CONSTRUCTION LIMITS (FLOW RATE =1.81 CFS). CONTRACTOR SHALL MONITOR DISCHARGE FLOW AND WATER QUALITY OF DISCHARGE INTO DEDICATED STORM SYSTEM. CONTRACTOR SHALL NOT DISCHARGE ANY CONTAMINATED STORMWATER OR GROUNDWATER OFFSITE. A TEMPORARY WATER QUALITY SYSTEM SHALL BE UTILIZED TO TREAT STORMWATER AND GROUNDWATER DISCHARGED OFFSITE TO SURFACE WATER QUALITY STANDARDS. INCLUDE SAND FILTERS WITHIN THE BAKER TANKS, AS REQUIRED, TO MEET THE CITY OF SEATTLE AND DEPARTMENT OF ECOLOGY TURBIDITY AND pH REQUIREMENTS. ADDITIONAL STORAGE VOLUME MAY BE REQUIRED TO MEET MAXIMUM RATES OF 230 GPM DURING TEMPORARY DEWATERING.

   TURBIDITY: SHALL NOT EXCEED 5 NEPHELOMETRIC TURBIDITY UNITS (NTU) OVER BACKGROUND TURBIDITY WHEN THE BACKGROUND TURBIDITY IS 50 NTU OR LESS, OR HAVE MORE THAN A 10 PERCENT INCREASE IN TURBIDITY WHEN THE BACKGROUND TURBIDITY IS MORE THAN 50 NTU.

   pH: SHALL BE WITHIN THE RANGE OF 6.5 TO 8.5 (FRESHWATER) OR 7.0 TO 8.5 (MARINE WATER) WITH A HUMAN-CAUSED VARIATION WITHIN A RANGE OF LESS THAN 0.2 UNITS. FOR CLASS A AND LOWER WATER CLASSIFICATIONS, THE PERMISSIBLE INDUCED INCREASE IS 0.5 UNITS.

3. PUMP SYSTEM SHOWN FOR COORDINATION ONLY. PUMP SHALL BE DESIGNED BY CONTRACTOR AND FIELD LOCATED AS NEEDED TO ACCOMMODATE CONSTRUCTION ACTIVITIES. ADDITIONAL SUMPS AND PUMPS MAY BE REQUIRED FOR TEMPORARY DEWATERING OF GROUNDWATER.

4. SUBGRADE ELEVATION TRANSITIONS AND FINISHED GRADE (FG) ELEVATIONS ARE APPROXIMATE. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS.

5. IF CONTAMINATED SOILS OR GROUNDWATER IS ENCOUNTERED, CONTRACTOR SHALL COORDINATE WITH ENVIRONMENTAL CONSULTANT TO LEGALLY DISPOSE OFFSITE.

6. REFER TO STATE OF WASHINGTON DEPARTMENT OF ECOLOGY ADMINISTRATIVE ORDER, ORDER DOCKET NUMBER 15341 FOR STORMWATER TREATMENT REQUIREMENTS.

LEGEND

- LIMITS OF CONSTRUCTION
- SUBGRADE ELEVATION TRANSITION
- INTERCEPTOR SWALE
- CONSTRUCTION FENCE
- CONSTRUCTION ENTRANCE
- TRIANGULAR SILT DIKE
- STORM DRAIN INLET PROTECTION
- RIGHT OF WAY/PROPERTY LINE
- CENTERLINE

CERTIFIED EROSION & SEDIMENT CONTROL LEAD:

MARK BORCHARDT
(206) 295-9835
ID #3-5271516

N

0 10 20 40
1 inch = 20 feet

WEBER THOMPSON
CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS
225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507
www.weberthompson.com

PROJECT:
BALLARD BLOCKS 2
14TH AVE W & 46TH AVE. N

CLIENT:
REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017
IFC SET	3/30/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

LARRY S. EBERE — STATE OF WASHINGTON — 39647 — REGISTERED PROFESSIONAL ENGINEER

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL I. C.: MAV

SHEET NO.

TESC PLAN

C3.00

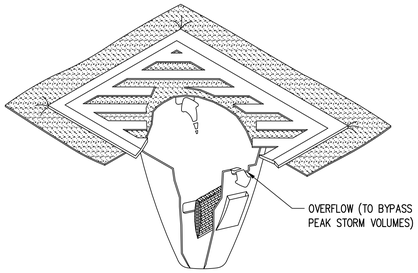
PROJECT NO. 16-048

IFC SET - 3/30/2018

Mar 30, 2018 - 2:05pm JoeW Z:\1600001-1600999\1600201 (Ballard Blocks 2)\CAD\Design\On Site\Phase 1\BBI PH1 3.00 TESC.dwg

CITY OF SEATTLE EROSION/SEDIMENT CONTROL (ESC) NOTES:

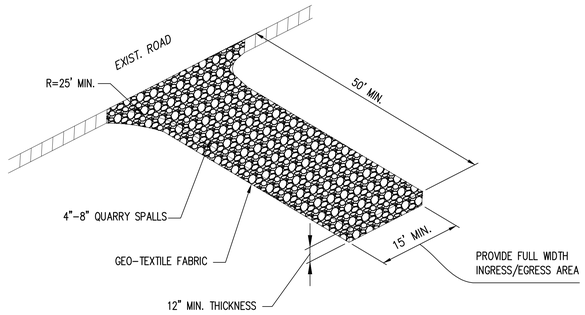
1. THE IMPLEMENTATION, CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
2. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE, ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS.
3. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED (E.G. ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) BY THE CONTRACTOR AS NEEDED FOR UNEXPECTED STORM EVENTS.
4. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY OR AS DIRECTED BY THE CITY OF SEATTLE TO ENSURE THEIR CONTINUED FUNCTIONING.
5. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
6. WATER FROM DISTURBED AREAS SHALL BE DIRECTED VIA SHEET FLOW TO THE TEMPORARY INTERCEPTOR SWALES AND SUMP PUMP, AND CONVEYED TO THE BAKER TANKS FOR DISCHARGE TO THE STREET LEVEL COMBINED SEWER SYSTEM. THE TEMPORARY DRAINAGE DITCHES SHALL BE CONSTRUCTED AS NEEDED OR AS DIRECTED BY THE CITY OF SEATTLE INSPECTOR.
7. THE CONTRACTOR SHALL FIELD LOCATE THE BAKER TANKS TO ACCOMMODATE SHORING AND FOOTING CONSTRUCTION.
8. THE LOCATION OF THE BAKER TANKS MAY VARY, AS NEEDED, TO FACILITATE CONSTRUCTION EQUIPMENT MOVEMENT ABOUT THE SITE, BUT THE TANKS SHALL PROVIDE A VOLUME OF NO LESS THAN THAT NOTED ON SHEET C02-00.
9. CONTRACTOR SHALL PROVIDE BACKUP PUMPS WITH SUFFICIENT HORSE POWER TO DELIVER TREATED WATER INTO THE COMBINED SEWER SYSTEM ADJACENT TO THE SITE. LOCATION TO BE APPROVED BY CITY INSPECTOR.
10. CONTRACTOR SHALL PROVIDE CHAIN LINK CONSTRUCTION FENCING AS REQUIRED FOR SAFETY AND AS DIRECTED BY THE CITY INSPECTOR.
11. APPROVAL OF THE DRAINAGE AND TEMPORARY EROSION CONTROL PLANS DOES NOT INCLUDE APPROVAL OF THE GRADING SHOWN HEREIN. GRADING ACTIVITIES WITHIN THE RIGHT-OF-WAY REQUIRE A STREET USE PERMIT FROM THE STREET USE SECTION. GRADING ACTIVITIES ON ADJACENT PROPERTIES REQUIRE WRITTEN APPROVAL FROM THE ADJACENT PROPERTY OWNERS.
12. CATCH BASINS IN THE STREET SHALL BE INSPECTED DAILY BY THE CONTRACTOR. WATER LEAVING THE SITE DURING CONSTRUCTION, INCLUDING WATER CARRIED BY THE TRUCK TIRES, SHALL BE CLEAN. THE CONTRACTOR SHALL CLEAN CITY CATCH BASINS AND IMPLEMENT EXTRA SEDIMENTATION CONTROL METHODS IF NECESSARY AND AS DIRECTED BY THE STREET USE SECTION INSPECTOR.
13. EXCAVATION SITE DEWATERING THAT INCLUDES DISCHARGE TO THE CITY STREET, CATCH BASIN, OR SEWER SHALL BE IMPLEMENTED ONLY AFTER APPROVAL BY THE STREET USE SECTION INSPECTOR.
14. CONSTRUCTION EROSION CONTROL MEASURES MUST BE IN PLACE AND APPROVED BY DPD PRIOR TO ANY EARTH DISTURBANCE. CALL (206) 684-8860 TO SCHEDULE AN INSPECTION APPOINTMENT FOR THIS ITEM.
15. GRADING SHALL BE STABILIZED BY OCTOBER 31st. NO EXCAVATION OR FILL PLACEMENT CAN BE PERFORMED BETWEEN OCTOBER 31st AND APRIL 1st, EXCEPT WITH WRITTEN APPROVAL FROM DPD.
16. NO SEDIMENT SHALL BE TRACKED INTO THE STREET OR ONTO PAVED SURFACES. SEDIMENT SHALL BE REMOVED FROM TRUCKS AND EQUIPMENT PRIOR TO LEAVING THE SITE. IN THE EVENT OF FAILURE OF THE EROSION CONTROL SYSTEM RESULTING IN SEDIMENT BEING TRACKED ONTO PAVED SURFACES, THE CONTRACTOR SHALL IMMEDIATELY IMPLEMENT MEASURES TO CORRECT THE SITUATION, AND STREET SWEEPING SHALL BE EMPLOYED ON AN EMERGENCY BASIS. IF STREET SWEEPING VEHICLES ARE UTILIZED, THEY SHALL BE OF THE TYPE THAT REMOVES THE SEDIMENT FROM THE PAVEMENT.



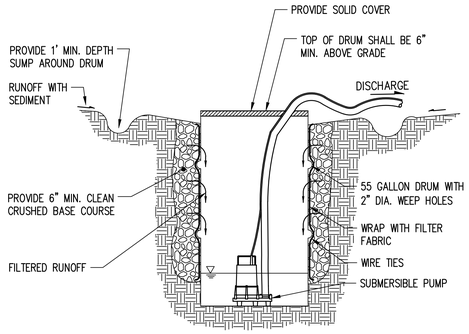
NOTES:

1. STORM DRAIN INLETS NEED TO BE REMOVED AT THE END OF THE JOB.
2. STORM DRAIN INLETS ARE ONLY TO BE INSTALLED IN DRAINAGE DEVICES PER THE MANUFACTURER'S RECOMMENDATIONS. CATCH BASIN INSERTS ARE NOT TO BE INSTALLED IN CURB INLETS.
3. INSERTS SHALL BE INSPECTED AND MAINTAINED WHEN A 1/2 INCH RAIN ACCUMULATES WITHIN A 24 HOUR PERIOD. CLEAN AND/OR REPLACE INSERT WHEN HALF OF THE TRAP IS FILLED WITH SEDIMENTS.

STORM DRAIN INLET INSERT (A, C02-00)
CITY OF SEATTLE BMP E3.25
NTS

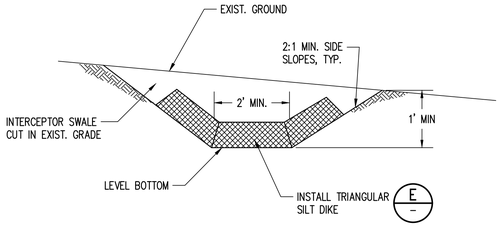


STABILIZED CONSTRUCTION ENTRANCE (B, C02-00)
CITY OF SEATTLE BMP E2.10
NTS



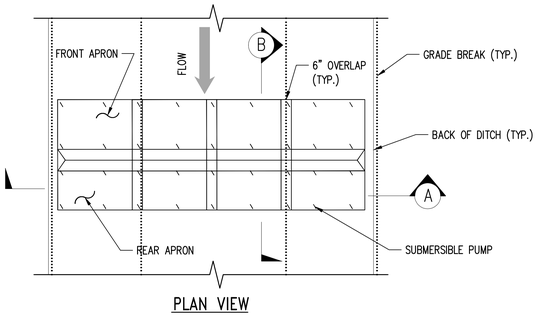
NOTE
PUMPS SHALL BE SUBMERSIBLE, CONTRACTOR IS RESPONSIBLE FOR SIZING PUMP BASED ON FIELD CONDITIONS.

MOBILE 55 GALLON DRUM WITH PUMP DETAIL (C, C02-00)
NTS



NOTE:
DAMAGE RESULTING FROM RUNOFF OR CONSTRUCTION ACTIVITY SHALL BE REPAIRED IMMEDIATELY.

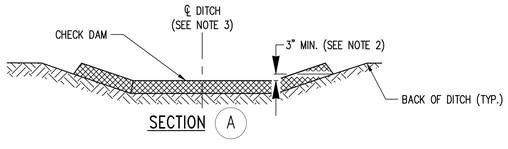
TEMPORARY INTERCEPTOR SWALE (D, C02-00)
NTS



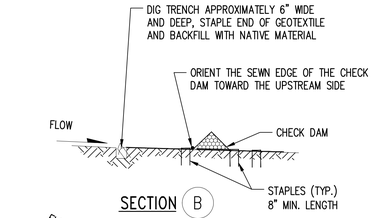
PLAN VIEW

NOTES:

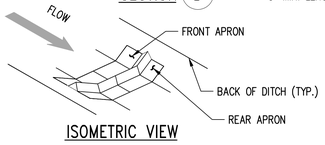
1. GEOTEXTILE ENCASED CHECK DAMS SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATIONS 8-01.3(5)A AND 9-14.5(4).
2. INSTALL THE SLOPED ENDS OF THE CHECK DAM A MINIMUM OF 3" HIGHER THAN THE TOP OF THE CHECK DAM IN THE CHANNEL TO ENSURE THAT WATER FLOWS OVER THE DAM AND NOT AROUND IT.
3. FLAT BOTTOM DITCH DESIGN SHOWN, CHECK DAM INSTALLATION DETAILS ARE SIMILAR FOR "V" BOTTOM DITCHES.
4. PERFORM MAINTENANCE IN ACCORDANCE WITH STANDARD SPECIFICATION 8-01.3(15).



SECTION A

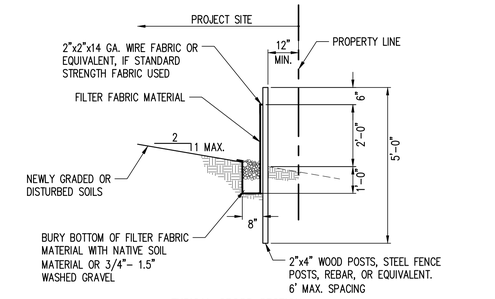


SECTION B



ISOMETRIC VIEW

TRIANGULAR SILT DIKE (E, -)
CITY OF SEATTLE DPD STANDARD DRAWING E2.60



TYPICAL CROSS SECTION

NOTE:

1. SILT FENCES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE.
2. ANGLE SILT FENCE BACK UP THE SLOPE AT THE END OF THE RUN.
3. SILT FENCE SHALL BE REMOVED AT THE END OF THE JOB
4. WHERE THE FENCE IS INSTALLED, THE SLOPE SHALL BE NO STEEPER THAN 2H:1V.
5. JOINTS IN FILTER FABRIC SHALL BE SPLICED AT POSTS. USE STAPLES, WIRE RINGS, OR EQUIVALENT TO ATTACH FABRIC TO POSTS.

MAINTENANCE STANDARDS

1. ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY.
2. IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEY MUST BE INTERCEPTED AND CONVEYED TO A SEDIMENT TRAP OR POND.
3. IT IS IMPORTANT TO CHECK THE UPHILL SIDE OF THE FENCE FOR SIGNS OF THE FENCE CLOGGING AND ACTING AS A BARRIER TO FLOW AND THEN CAUSING CHANNELIZATION OF FLOWS PARALLEL TO THE FENCE. IF THIS OCCURS, REPLACE THE FENCE OR REMOVE THE TRAPPED SEDIMENT.
4. SEDIMENT MUST BE REMOVED WHEN THE SEDIMENT IS 6" HIGH.
5. IF THE FILTER FABRIC HAS DETERIORATED, IT SHALL BE REPLACED.

SILT FENCE (F, C02-00)
CITY OF SEATTLE BMP E3.10

WEBER THOMPSON
225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507
www.weberthompson.com

PROJECT:
BALLARD BLOCKS 2
14TH AVE W & 46TH AVE. N

CLIENT:
REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017
IFC SET	3/30/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

ACCEPTANCE OF THE ELECTRONIC FILE VERSION OF THIS DRAWING ACKNOWLEDGES THE RECEIPT AND CONSENT TO THE TERMS OF THE WEBER THOMPSON ELECTRONIC MEDIA RECEIPT AGREEMENT

JEREMY S. EDDIS — STATE OF WASHINGTON — 19847 — REGISTERED PROFESSIONAL ENGINEER

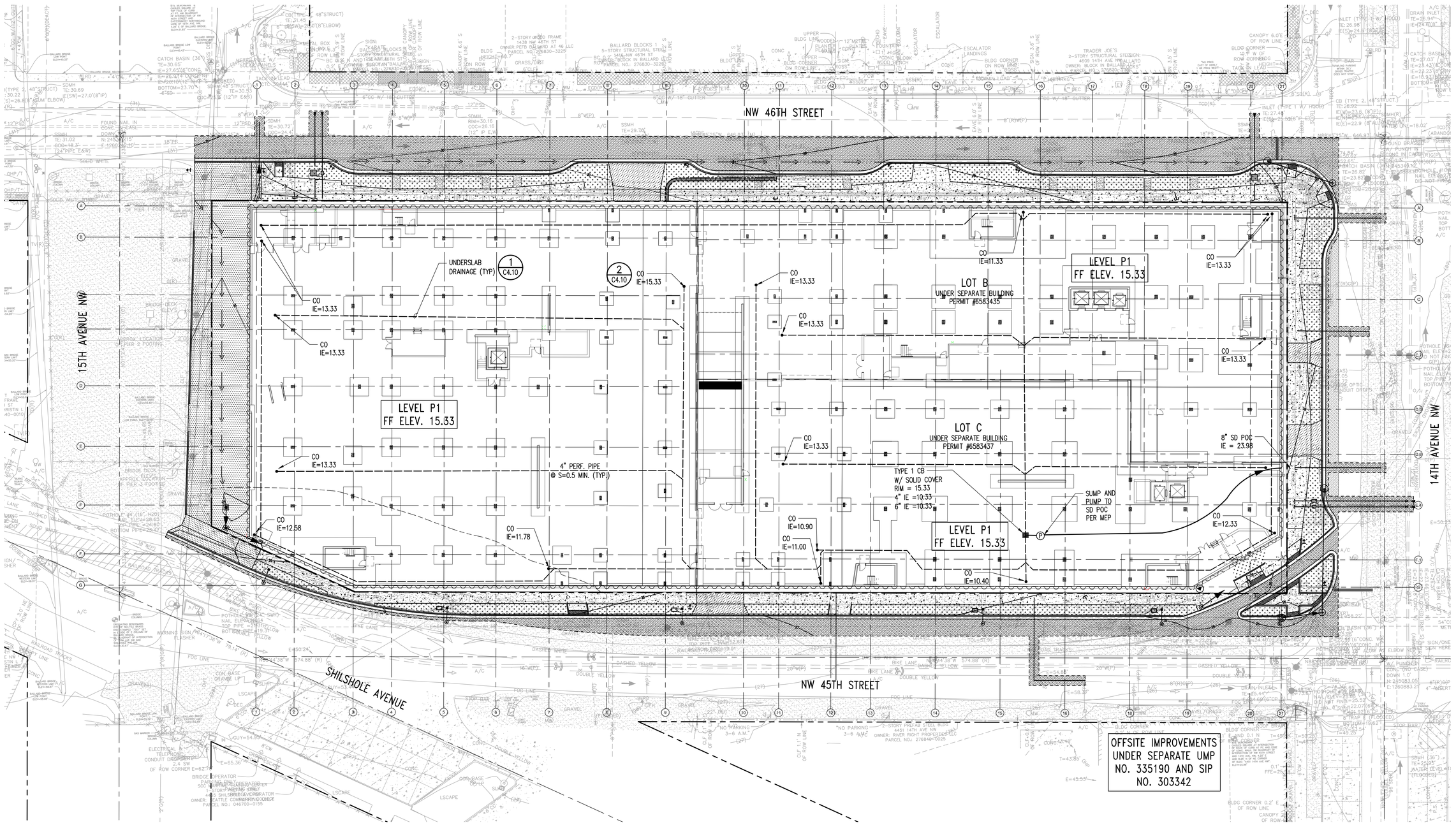
DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL I. C.: MAV

SHEET NO.:
TESC DETAILS
C3.10

PROJECT NO. 16-048

IFC SET - 3/30/2018

Mar 30, 2018 - 2:05pm JoeM Z:\16000001-16099999\16000201 (Ballard Blocks 2)\CADD\Design\On Site\Phase 1\BBII PH1 3.10 TESC Det.dwg



NOTES:

1. COLLECTOR PIPE SHALL DISCHARGE TO 8" SD PIPES IN NW 45TH STREET AND NW 46TH STREET. SEE PLUMBING PLANS FOR COLLECTOR PIPE PLANS AND DETAILS.
2. FINISHED FLOOR ELEVATIONS ARE SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS.
3. SEE SHORING PLANS FOR SHORING DESIGN.
4. SHORING CONTRACTOR SHALL COORDINATE WITH PLUMBER TO VERIFY WALL DRAIN LOCATIONS, SIZE AND INVERT ELEVATIONS AT CONNECTION TO COLLECTOR PIPE, PRIOR TO CONSTRUCTION.
5. OFFSITE IMPROVEMENTS UNDER SEPARATE PERMIT.

0 10 20 40
1 inch = 20 feet

IFC SET - 3/30/2018

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017
IFC SET	3/30/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

ACCEPTANCE OF THE ELECTRONIC FILE VERSION OF THIS DRAWING ACKNOWLEDGES THE RECEIPT AND CONSENT TO THE TERMS OF THE WEBER THOMPSON ELECTRONIC MEDIA RECEIPT AGREEMENT

DRAFTED BY: TAD
PROJECT MGR.: JSP
PRINCIPAL I. C.: MBV

SHEET NO.

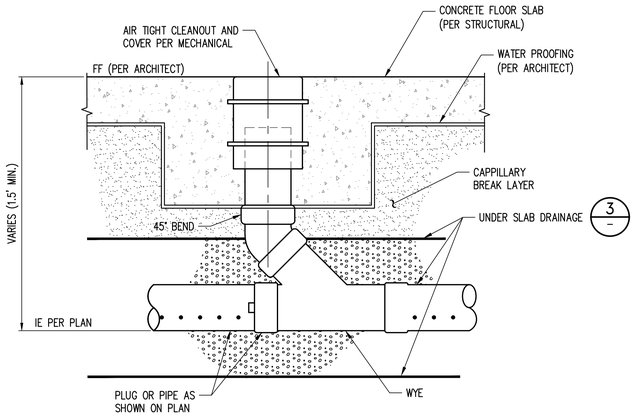
SHORING/EVAVATION

C4.00

PROJECT NO. 16-048

Z:\1600001-1600999\1602001 (Ballard Blocks 2)\CADD\Design\On Site\Phase 1\BBB PH1 4.00 Fnd Shor.dwg

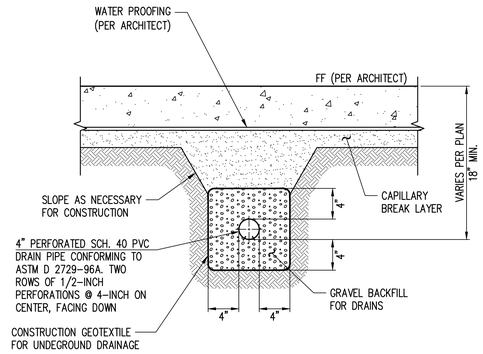
Mar 30, 2018 - 2:05pm JoelV



FOUNDATION DRAINAGE CLEANOUT

NTS

1 / C4.10



UNDER SLAB DRAINAGE

NTS

2 / C4.10

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017
IFC SET	3/30/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.,		
Permit Doc.		
Bid Doc.		
Const. Doc.		

DRAFTED BY:	TAD
PROJECT MGR.:	JSF
PRINCIPAL I. C.:	MAV

SHEET NO.

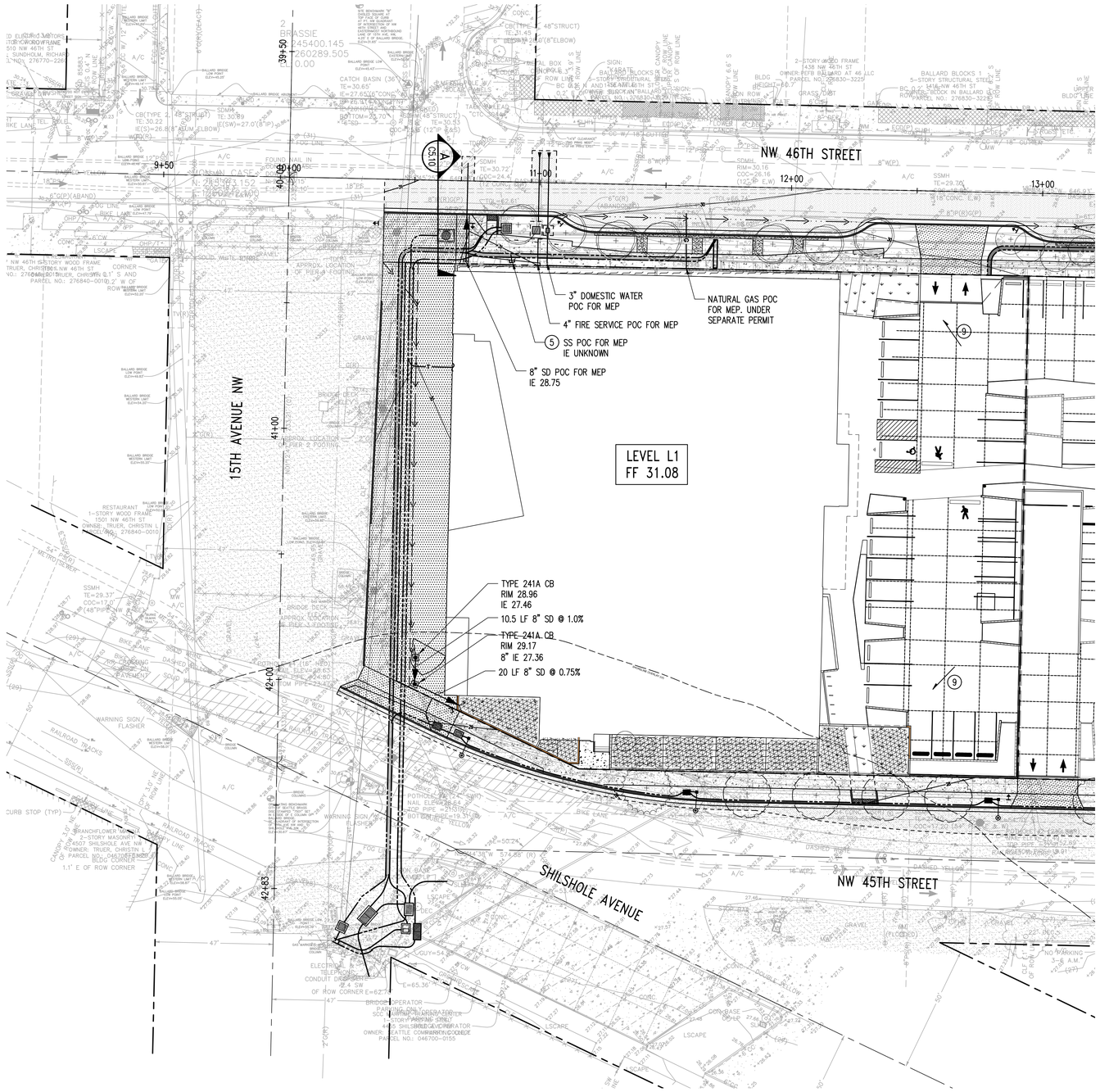
SHORING DETAILS

C4.10

PROJECT NO. 16-048

IFC SET - 3/30/2018

Mar 30, 2018 - 2:05pm JoeM Z:\16\00001-16\00999\16\00201 (Ballard Blocks 2)\CAD\Design\On Site\Phase 1\BB1 PH1 4.00 Fnd Shor.dwg



NOTES

1. CONNECTIONS TO WATER MAIN, SERVICE LINES UP TO 2' FROM THE RIGHT OF WAY LINE, METER INSTALLATION EXCAVATION AND BACKFILL TO BE PERFORMED BY SPU AT OWNER'S EXPENSE. RESTORATION SHALL BE PERFORMED BY CONTRACTOR.
2. TRENCHING AND BEDDING FOR WATER SERVICES ON SITE SHALL BE PER COS STD PLAN 350. BEDDING MATERIAL SHALL BE CLASS B, TYPE 9 MINERAL AGGREGATE.
3. FINAL LOCATIONS OF POWER, GAS AND TELECOMMUNICATIONS POINTS OF CONNECTION ARE TO BE DESIGNED BY UTILITY OWNER AND COORDINATED BY PLUMBING, MECHANICAL AND ELECTRICAL CONSULTANTS. INSTALLATION OF UTILITIES SHALL BE PERFORMED BY UTILITY PURVEYOR AT OWNER'S EXPENSE.
4. PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE "STREET AND SIDEWALK PAVEMENT OPENING AND RESTORATION" DIRECTOR'S RULE 05-2009.
5. CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING SIDE SEWERS FOR POINT OF CONNECTION. EXISTING SIDE SEWERS SHALL BE RELINED AND CERTIFIED BY A CITY OF SEATTLE INSPECTOR PRIOR TO CONNECTION. CONTRACTOR SHALL CAP ANY SSS NOT USED FOR POINT OF CONNECTION.
6. FOR STATIONING CONTROL AND OFF-SITE IMPROVEMENTS, SEE SIP NO. 314530 AND UMP NO. 318982.
7. FINISHED FLOOR ELEVATIONS ARE SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS.
8. PROFESSIONAL ENGINEER'S EVALUATION AND CERTIFICATION OF EXISTING SIDE SEWERS REQUIRED FOR RE-USE. CONTRACTOR SHALL PROVIDE ENGINEER WITH VIDEO OF THE EXISTING SIDE SEWER FOR EVALUATION. CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING SIDE SEWERS FOR POINT OF CONNECTION. CONTRACTOR SHALL CAP ANY SSS NOT USED FOR POINT OF CONNECTION.
9. GRADE HARSCAPES TO DRAIN TO BIORETENTION PLANTERS PER LANDSCAPE PLANS.

LEGEND

- CATCH BASIN
- SURFACE SWALE
- WATER QUALITY BIO-RETENTION PLANTER
- ROOF TOP BIO-RETENTION PLANTER

N

0 10 20 40

1 inch = 20 feet

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017
IFC SET	3/30/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

ACCEPTANCE OF THE ELECTRONIC FILE VERSION OF THIS DRAWING ACKNOWLEDGES THE RECEIPT AND CONSENT TO THE TERMS OF THE WEBER THOMPSON ELECTRONIC MEDIA RECEIPT AGREEMENT

LICENSED STATE OF WASHINGTON 39847 REGISTERED PROFESSIONAL ENGINEER

DRAFTED BY: TAD
PROJECT MGR.: JSP
PRINCIPAL I. C.: MAV

SHEET NO.

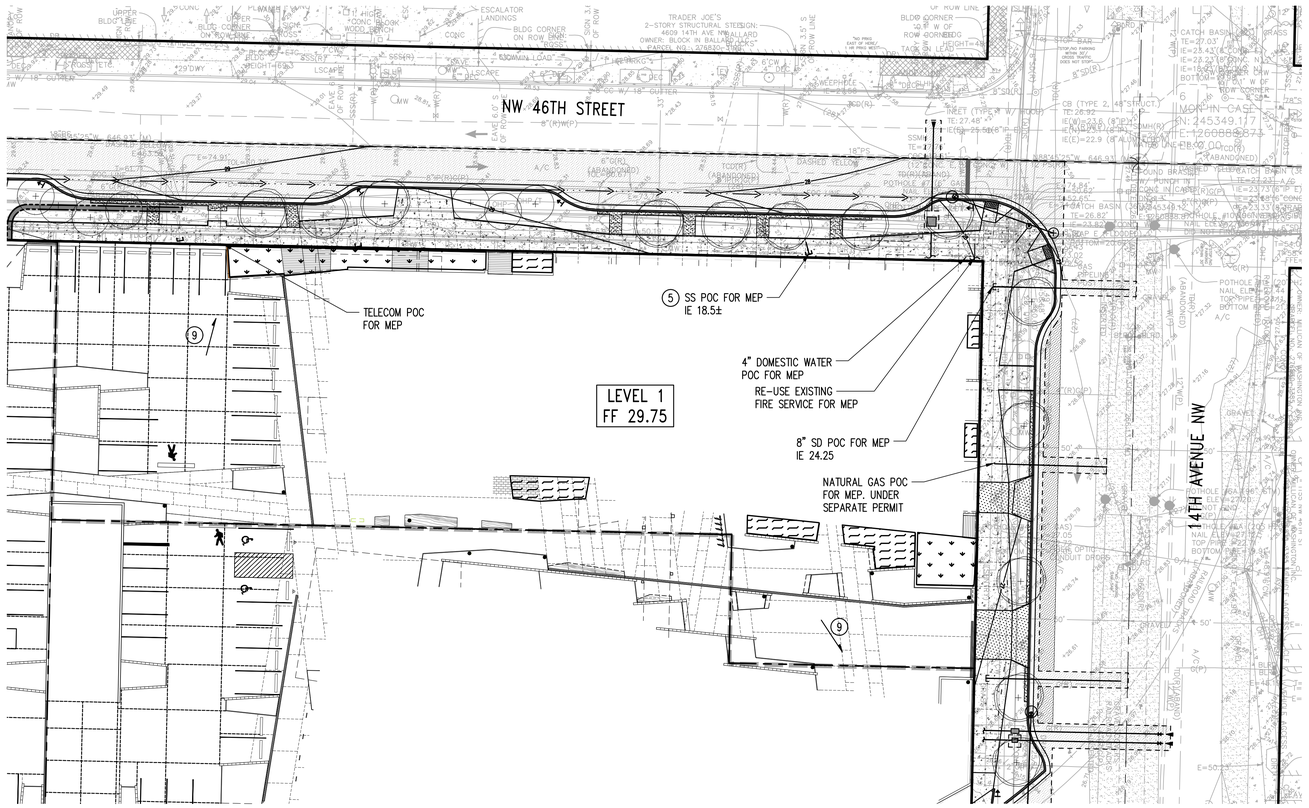
PARCEL A
UTILITY PLAN

C5.00A

PROJECT NO. 16-048

IFC SET - 3/30/2018

Mar 30, 2018 - 2:05pm JoeM Z:\1600001-1603999\1603201 (Ballard Blocks 2)\CAD\Design\On Site\Phase 1\BB1 PH1 C5.00 UTIL.dwg



NOTES

1. CONNECTIONS TO WATER MAIN, SERVICE LINES UP TO 2' FROM THE RIGHT OF WAY LINE, METER INSTALLATION EXCAVATION AND BACKFILL TO BE PERFORMED BY SPU AT OWNER'S EXPENSE. RESTORATION SHALL BE PERFORMED BY CONTRACTOR.

2. TRENCHING AND BEDDING FOR WATER SERVICES ON SITE SHALL BE PER COS STD PLAN 350. BEDDING MATERIAL SHALL BE CLASS B, TYPE 9 MINERAL AGGREGATE.

3. FINAL LOCATIONS OF POWER, GAS AND TELECOMMUNICATIONS POINTS OF CONNECTION ARE TO BE DESIGNED BY UTILITY OWNER AND COORDINATED BY PLUMBING, MECHANICAL AND ELECTRICAL CONSULTANTS. INSTALLATION OF UTILITIES SHALL BE PERFORMED BY UTILITY PURVEYOR AT OWNER'S EXPENSE.

4. PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE "STREET AND SIDEWALK PAVEMENT OPENING AND RESTORATION" DIRECTOR'S RULE 05-2009.

(5.) CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING SIDE SEWERS FOR POINT OF CONNECTION. EXISTING SIDE SEWERS SHALL BE RELINED AND CERTIFIED BY A CITY OF SEATTLE INSPECTOR PRIOR TO CONNECTION. CONTRACTOR SHALL CAP ANY SSS NOT USED FOR POINT OF CONNECTION.

6. FOR STATIONING CONTROL AND OFF-SITE IMPROVEMENTS, SEE SIP NO. 314530 AND UMP NO. 318982.

7. FINISHED FLOOR ELEVATIONS ARE SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS.

8. PROFESSIONAL ENGINEER'S EVALUATION AND CERTIFICATION OF EXISTING SIDE SEWERS REQUIRED FOR RE-USE. CONTRACTOR SHALL PROVIDE ENGINEER WITH VIDEO OF THE EXISTING SIDE SEWER FOR EVALUATION. CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING SIDE SEWERS FOR POINT OF CONNECTION. CONTRACTOR SHALL CAP ANY SSS NOT USED FOR POINT OF CONNECTION.

(9.) GRADE HARSCAPES TO DRAIN TO BIORETENTION PLANTERS PER LANDSCAPE PLANS.

LEGEND

- CATCH BASIN
- SURFACE SWALE
- WATER QUALITY BIO-RETENTION PLANTER
- ROOF TOP BIO-RETENTION PLANTER

N

0 10 20 40

1 inch = 20 feet

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
BUILDING PERMIT	8/16/2017
BUILDING PERMIT	11/15/2017
PRE-CONSTRUCTION SET	11/15/2017
DRAINAGE PERMIT COMMENT RESPONSE	1/3/2018
DRAINAGE PERMIT COMMENT RESPONSE	3/22/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

ACCEPTANCE OF THE ELECTRONIC FILE VERSION OF THIS DRAWING ACKNOWLEDGES THE RECEIPT AND CONSENT TO THE TERMS OF THE WEBER THOMPSON ELECTRONIC MEDIA RECEIPT AGREEMENT

JEREMY S. FERRIS
STATE OF WASHINGTON
39847
REGISTERED
PROFESSIONAL ENGINEER

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL I.C.: MAV

SHEET NO.:

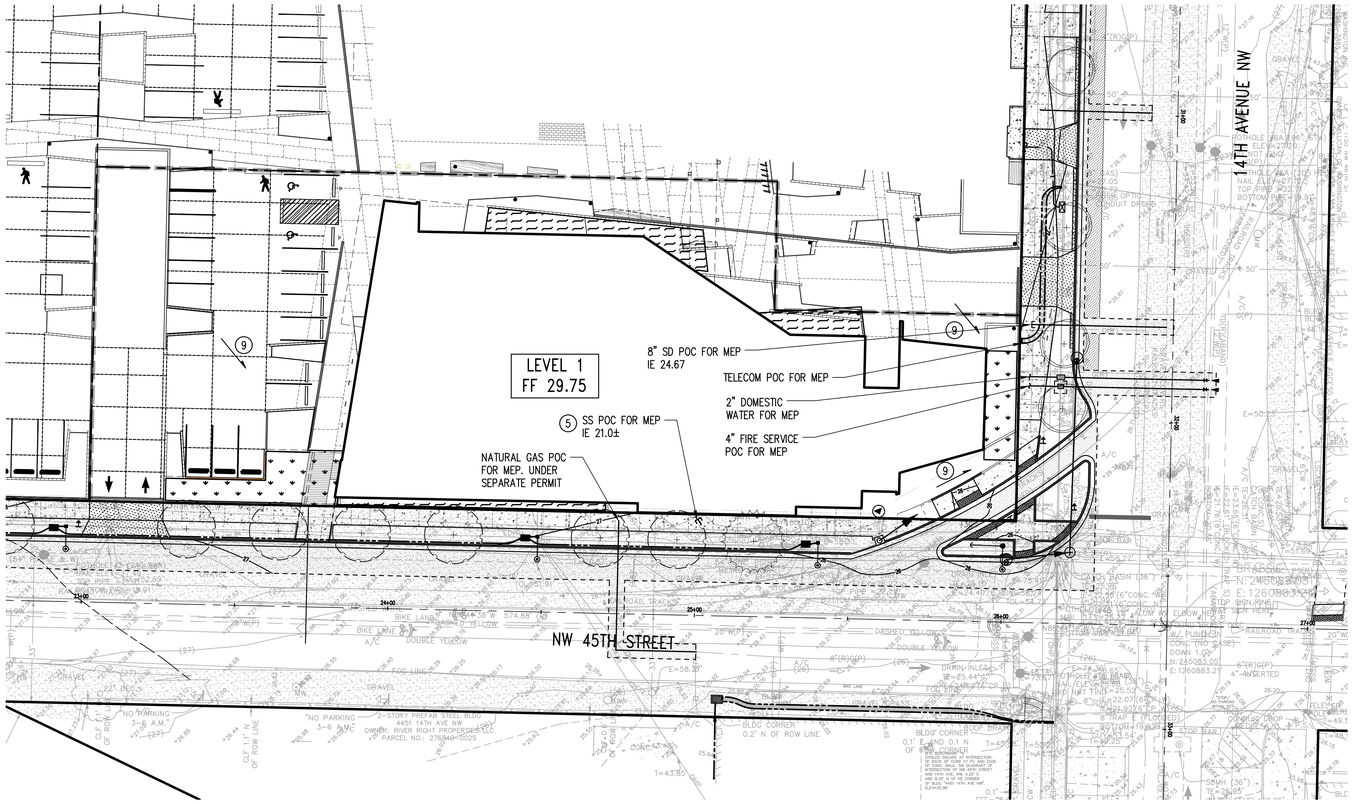
PARCEL B
UTILITY PLAN

C5.00B

PROJECT NO. 16-048

DRAINAGE PERMIT - 3/22/2018

Mar 30, 2018 - 2:09pm JoelV Z:\1600001 - 1600999\1600201 (Ballard Blocks 2)\CAD\Design\On Site\Phase 2\BB Ph2 C5.00 UTILT.dwg



NOTES

1. CONNECTIONS TO WATER MAIN, SERVICE LINES UP TO 2' FROM THE RIGHT OF WAY LINE, METER INSTALLATION EXCAVATION AND BACKFILL TO BE PERFORMED BY SPU AT OWNER'S EXPENSE. RESTORATION SHALL BE PERFORMED BY CONTRACTOR.

2. TRENCHING AND BEDDING FOR WATER SERVICES ON SITE SHALL BE PER COS STD PLAN 350. BEDDING MATERIAL SHALL BE CLASS B, TYPE 9 MINERAL AGGREGATE.

3. FINAL LOCATIONS OF POWER, GAS AND TELECOMMUNICATIONS POINTS OF CONNECTION ARE TO BE DESIGNED BY UTILITY OWNER AND COORDINATED BY PLUMBING, MECHANICAL AND ELECTRICAL CONSULTANTS. INSTALLATION OF UTILITIES SHALL BE PERFORMED BY UTILITY PURVEYOR AT OWNER'S EXPENSE.

4. PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE "STREET AND SIDEWALK PAVEMENT OPENING AND RESTORATION" DIRECTOR'S RULE 05-2009.

(5). CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING SIDE SEWERS FOR POINT OF CONNECTION. EXISTING SIDE SEWERS SHALL BE RELINED AND CERTIFIED BY A CITY OF SEATTLE INSPECTOR PRIOR TO CONNECTION. CONTRACTOR SHALL CAP ANY SSS NOT USED FOR POINT OF CONNECTION.

6. FOR STATIONING CONTROL AND OFF-SITE IMPROVEMENTS, SEE SIP NO. 314530 AND UMP NO. 318982.

7. FINISHED FLOOR ELEVATIONS ARE SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS.

8. PROFESSIONAL ENGINEER'S EVALUATION AND CERTIFICATION OF EXISTING SIDE SEWERS REQUIRED FOR RE-USE. CONTRACTOR SHALL PROVIDE ENGINEER WITH VIDEO OF THE EXISTING SIDE SEWER FOR EVALUATION. CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING SIDE SEWERS FOR POINT OF CONNECTION. CONTRACTOR SHALL CAP ANY SSS NOT USED FOR POINT OF CONNECTION.

(9). GRADE HARSCAPES TO DRAIN TO BIORETENTION PLANTERS PER LANDSCAPE PLANS.

0 10 20 40
1 inch = 20 feet

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
BUILDING PERMIT	8/16/2017
BUILDING PERMIT	11/15/2017
PRE-CONSTRUCTION SET	11/15/2017
DRAINAGE PERMIT COMMENT RESPONSE	1/3/2018
DRAINAGE PERMIT COMMENT RESPONSE	3/22/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

JEREMY S. PERRY
STATE OF WASHINGTON
39847
REGISTERED
PROFESSIONAL ENGINEER

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL I. C.: MAV

SHEET NO.

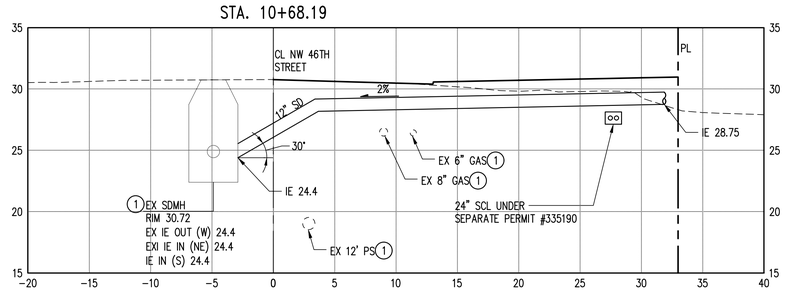
PARCEL C
UTILITY PLAN

C5.00C

PROJECT NO. 16-048

DRAINAGE PERMIT - 3/22/2018

Mar 30, 2018 - 2:17pm JoeH Z:\1600001-1609999\1600201 (Ballard Blocks 2)\CADD\Design\Ph 5Bs\Phase 3\BB Ph2 C5.00 UTIL.dwg



SD CONNECTION SECTION
SCALE: 1" = 5'

A
C5.00

On-site Stormwater Management - List Approach Calculator
Site and Drainage Control Summary

Version 06-07-2016

To use the On-Site List Calculator you must select "Enable Content" when the Security Warning appears.

Project Information

Site Address	1451 NW 46th Street (Parcel A)	DPD Project Number	3026674
Primary Contact	Jon O'Hare	SDOT Project Number	303342
Project Type	Parcel-Based	Primary Contact E-mail or Phone	jon@permitcnw.com

Total Site Area	50,195	sf
Total New plus Replaced Hard Surface Area	50,195	sf
Existing Hard Surface Area to Remain	0	sf
Total New and/or Replaced Lawn and Landscaping	0	sf
Undisturbed and protected site area	0	sf
Was the project lot created after Jan 1, 2016?	Yes	
Project Engineer	Jeremy Febus	
Engineer E-mail	jeremy.febus@kpff.com	

On-site Stormwater Management is required for ≥ 750 sf of new plus replaced area.

On-site Performance Standard will be used (professional engineer required)? No

Site Information

Note: If required for your project, reference the Preliminary Assessment Report (PAR) to complete this section. If the total areas proposed are different form those provided in the PAR, requirements may change.

Approved Point of Stormwater Discharge	Public Storm Drain Main
Drainage Basin	Designated Receiving Water
Is the downstream drainage system considered Capacity Constrained by SPU?	No
Approved Point of Wastewater Discharge	Public Sanitary Sewer Main
Approved Point of Sub-Surface Discharge	Public Storm Drain Main
Flow Control is required	No
Flow Control Standard	None Required/Exempt
Water Treatment for pollution-generating surfaces is required	Yes

Select required treatment: ☐ Oil Control ☐ Phosphorus ☐ Enhanced ☑ Basic

Total Pollution Generating Hard Surface Area	20,480 sf
Total Pollution Generating Pervious Surface Area	0 sf
Source Control is required	No
Environmentally Critical Areas	Yes

☐ Steep Slope ☐ Potential Slide ☐ Riparian Corridor ☐ Wetland ☐ Liquefaction ☐ Flood Prone
☐ Landfill ☐ Known Landslide ☐ Fish / Wildlife ☐ Peat / Groundwater Management ☑ Shoreline Habitat

Temporary dewatering required: Yes — Permanent dewatering required: No

A licensed professional recommends dispersion not be used anywhere within the project site due to reasonable concerns of erosion, slope failure, or flooding.

Infiltration Information

Is infiltration investigation required?	No	Why?	Other
Is infiltration on the site feasible?	No	Why?	Site cannot meet required horizontal setbacks
Site Measured Infiltration Rate		Infiltration Rate Correction Factor	0.5 = 0 Site Design Infiltration Rate

On-site Stormwater Management

Number of roof areas	2
Number of other surface areas	3

Surface	Surfaces Description	On-site BMP	Contrib. Area (sf)	Facility Size (sf)	Facility Configuration
1	Roof:Building Rooftop	Non-Infiltrating Bioretention #1	23,618	1,323 sf	Vertical sides 6 inch
2	Surface:West Traffic Area	Non-Infiltrating Bioretention #2	5,097	285 sf	Vertical sides 6 inch
3	Surface:East Traffic Area	Non-Infiltrating Bioretention #3	14,972	838 sf	Vertical sides 6 inch
4	Surface:Miscellaneous Sr	None Feasible	411		
5	Roof:Green Roof	Vegetated Roof System	6,097	6,097 sf	4 inch Single-Course

Total New/Replaced Roof Area	29,715	Total Roof Area Managed	29,715
Total New/Replaced Other Surface Area	20,480	Total Other Surface Managed	20,480
Total Area Managed	50,195	Total Volume Managed On Site	359,557 gal
Estimated compost required for soil amendment	0 cy	*Volume of compost required for soil amendment will be verified by the DPD Site Inspector for DPD permitted projects.*	

seattle.gov

NOTES:

(1) CONTRACTOR SHALL VERIFY SIZE, LOCATION AND ELEVATION OF UTILITIES PRIOR TO CONSTRUCTION.

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

STATE OF WASHINGTON · JEREMY S. FEBUS · 39847 · REGISTERED PROFESSIONAL ENGINEER

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL I. C.: MAV

SHEET NO.

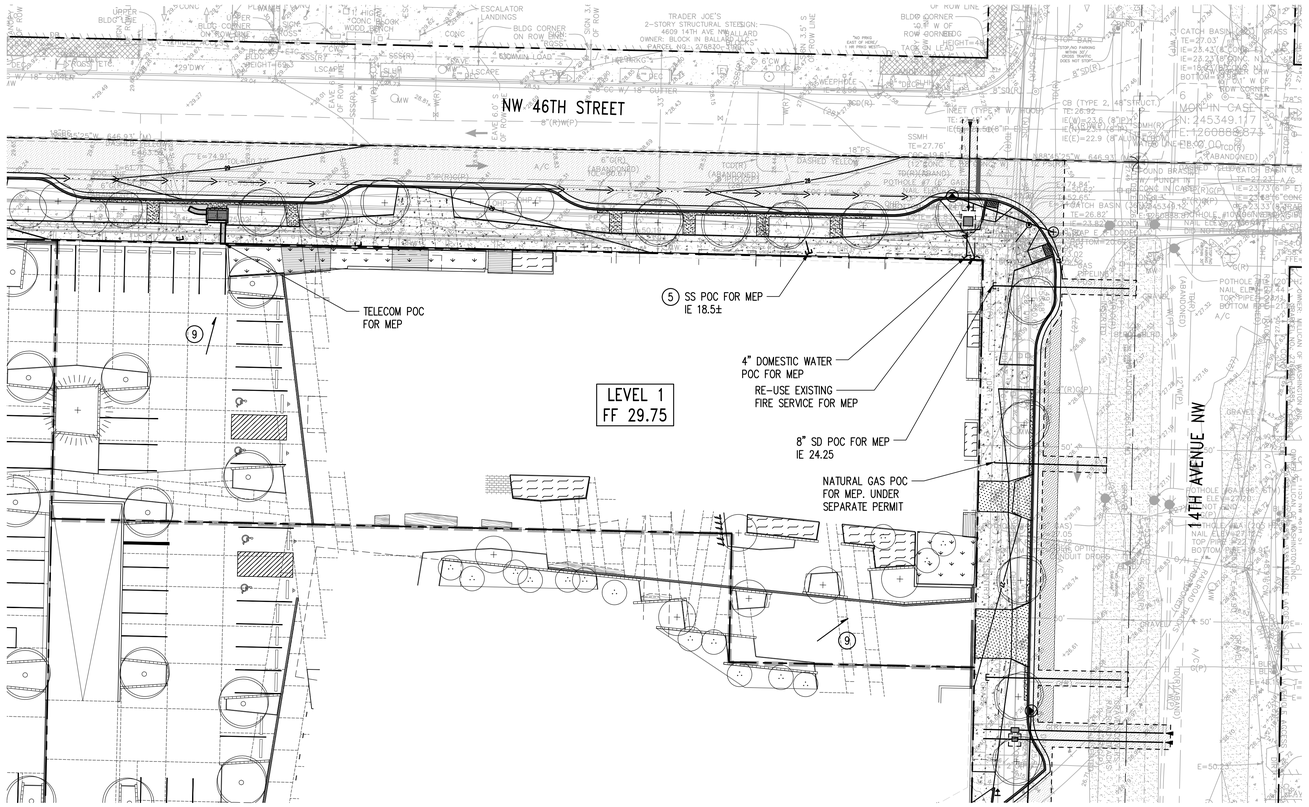
UTILITY CONNECTION SECTION

C5.10 A

PROJECT NO. 16-048

11.10.2017 - BUILDING PERMIT

Nov 15, 2017 - 12:03pm JoeW Z:\16-0001 - 16-0999\16-0201 [Ballard Blocks 2]\Outgoing\Weber Thompson\2017-11-15 Onsite Preconstruction Set\BB1 PH1 C5.00 UTLT.dwg



NOTES

1. CONNECTIONS TO WATER MAIN, SERVICE LINES UP TO 2' FROM THE RIGHT OF WAY LINE, METER INSTALLATION EXCAVATION AND BACKFILL TO BE PERFORMED BY SPU AT OWNER'S EXPENSE. RESTORATION SHALL BE PERFORMED BY CONTRACTOR.
2. TRENCHING AND BEDDING FOR WATER SERVICES ON SITE SHALL BE PER COS STD PLAN 350. BEDDING MATERIAL SHALL BE CLASS B, TYPE 9 MINERAL AGGREGATE.
3. FINAL LOCATIONS OF POWER, GAS AND TELECOMMUNICATIONS POINTS OF CONNECTION ARE TO BE DESIGNED BY UTILITY OWNER AND COORDINATED BY PLUMBING, MECHANICAL AND ELECTRICAL CONSULTANTS. INSTALLATION OF UTILITIES SHALL BE PERFORMED BY UTILITY PURVEYOR AT OWNER'S EXPENSE.
4. PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE "STREET AND SIDEWALK PAVEMENT OPENING AND RESTORATION" DIRECTOR'S RULE 05-2009.

(5.) CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING SIDE SEWERS FOR POINT OF CONNECTION. EXISTING SIDE SEWERS SHALL BE RELINED AND CERTIFIED BY A CITY OF SEATTLE INSPECTOR PRIOR TO CONNECTION. CONTRACTOR SHALL CAP ANY SSS NOT USED FOR POINT OF CONNECTION.

6. FOR STATIONING CONTROL AND OFF-SITE IMPROVEMENTS, SEE SIP NO. 314530 AND UMP NO. 318982.
7. FINISHED FLOOR ELEVATIONS ARE SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS.
8. PROFESSIONAL ENGINEER'S EVALUATION AND CERTIFICATION OF EXISTING SIDE SEWERS REQUIRED FOR RE-USE. CONTRACTOR SHALL PROVIDE ENGINEER WITH VIDEO OF THE EXISTING SIDE SEWER FOR EVALUATION. CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING SIDE SEWERS FOR POINT OF CONNECTION. CONTRACTOR SHALL CAP ANY SSS NOT USED FOR POINT OF CONNECTION.

(9.) GRADE HARSCAPES TO DRAIN TO BIORETENTION PLANTERS PER LANDSCAPE PLANS.

LEGEND

- CATCH BASIN
- SURFACE SWALE
- WATER QUALITY BIO-RETENTION PLANTER
- ROOF TOP BIO-RETENTION PLANTER

N

0 10 20 40

1 inch = 20 feet

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
BUILDING PERMIT	8/16/2017
BUILDING PERMIT	11/15/2017
PRE-CONSTRUCTION SET	11/15/2017

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

STATE OF WASHINGTON
JOSEPH S. FREEMAN
38647
REGISTERED
PROFESSIONAL ENGINEER

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL I. C.: MAV

SHEET NO.

PARCEL B
UTILITY PLAN

C5.00 B

PROJECT NO. 16-048

11.15.2017 - BUILDING PERMIT

Nov 15, 2017 - 12:53pm JoeW Z:\160001-160099\160201 (Ballard Blocks 2)\Outgoing\Weber Thompson\2017-11-15 Onsite Preconstruction Set\BB PH2 C5.00 UTLY.dwg

On-site Stormwater Management - List Approach Calculator
Site and Drainage Control Summary

Version 06-07-2016

To use the On-Site List Calculator you must select "Enable Content" when the Security Warning appears.

Project Information

Site Address	1401 NW 46th Street (Parcel B)	DPD Project Number	3023879
Primary Contact	Jon O'Hare	SDOT Project Number	6583437
Project Type	Parcel-Based	Primary Contact E-mail or Phone	jon@permitcnw.com

Total Site Area	30,856	sf
Total New plus Replaced Hard Surface Area	30,856	sf
Existing Hard Surface Area to Remain	0	sf
Total New and/or Replaced Lawn and Landscaping	0	sf
Undisturbed and protected site area	0	sf
Was the project lot created after Jan 1, 2016?	Yes	

Project Engineer: Jeremy Febus — Engineer E-mail: jeremy.febus@kpff.com

On-site Stormwater Management is required for ≥ 750 sf of new plus replaced area.

On-site Performance Standard will be used (professional engineer required)? No

Site Information

Note: If required for your project, reference the Preliminary Assessment Report (PAR) to complete this section. If the total areas proposed are different form those provided in the PAR, requirements may change.

Approved Point of Stormwater Discharge	Public Storm Drain Main
Drainage Basin	Designated Receiving Water
Is the downstream drainage system considered Capacity Constrained by SPU?	No
Approved Point of Wastewater Discharge	Public Sanitary Sewer Main
Approved Point of Sub-Surface Discharge	Public Storm Drain Main
Flow Control is required	No
Treat Stormwater?	Not required. Standard
Water Treatment for pollution-generating surfaces is required	Yes

Select required treatment: ☐ Oil Control ☐ Phosphorus ☐ Enhanced ☑ Basic

Total Pollution Generating Hard Surface Area	8,232	sf
Total Pollution Generating Pervious Surface Area	0	sf
Source Control is required	No	
Environmentally Critical Areas	Yes	

☐ Steep Slope ☐ Potential Slide ☐ Riparian Corridor ☐ Wetland ☐ Liquefaction ☐ Flood Prone
☐ Landfill ☐ Known Landslide ☐ Fish / Wildlife ☐ Peat / Groundwater Management ☑ Shoreline Habitat

Temporary dewatering required: Yes — Permanent dewatering required: No

A licensed professional recommends dispersion not be used anywhere within the project site due to reasonable concerns of erosion, slope failure, or flooding.

Infiltration Information

Is infiltration investigation required? No — Why? ☐ Other

Is infiltration on the site feasible? No — Why? Site cannot meet required horizontal setbacks

Site Measured Infiltration Rate: 0 in/hr — Infiltration Rate Correction Factor: 0.5 — = 0 — Site Design Infiltration Rate

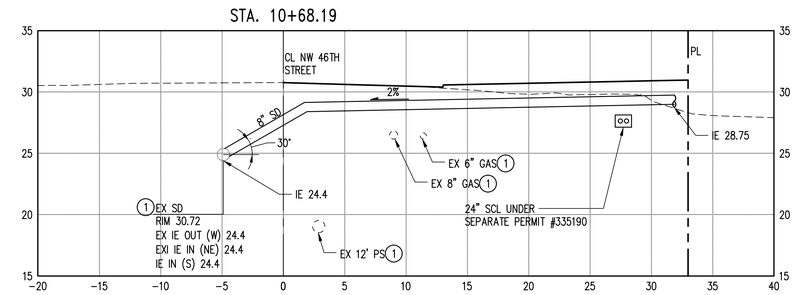
On-site Stormwater Management

Number of roof areas	5
Number of other surface areas	2

Surface	Surfaces Description	On-site BMP	Contrib. Area (sf)	Facility Size (sf)	Facility Configuration
1	Roof:Building Rooftop - h	Non-Infiltrating Bioretention #1	4,425	248 sf	Vertical sides 6 inch
2	Surface:Traffic Area	Non-Infiltrating Bioretention #2	8,234	463 sf	Vertical sides 6 inch
3	Surface:Courtyard	Non-Infiltrating Bioretention #3	6,910	387 sf	Vertical sides 6 inch
4	Roof:Building Rooftop	Vegetated Roof System	2,132	2,132 sf	4 inch Single-Course
5	Roof:Building Rooftop - h	Non-Infiltrating Bioretention #4	2,089	117 sf	Vertical sides 6 inch
6	Roof:Building Rooftop - h	Non-Infiltrating Bioretention #5	4,425	248 sf	Vertical sides 6 inch
7	Roof:Building Rooftop - h	Non-Infiltrating Bioretention #6	2,641	148 sf	Vertical sides 6 inch

Total New/Replaced Roof Area	15,712	Total Roof Area Managed	15,712
Total New/Replaced Other Surface Area	15,144	Total Other Surface Managed	15,144
Total Area Managed	30,856	Total Volume Managed On Site	222,904 gal
Estimated compost required for soil amendment	0 cy	*Volume of compost required for soil amendment will be verified by the DPD Site Inspector for DPD permitted projects.*	

seattle.gov



SD CONNECTION SECTION — A / C5.00
SCALE: 1" = 5'

NOTES:

1. CONTRACTOR SHALL VERIFY SIZE, LOCATION AND ELEVATION OF UTILITIES PRIOR TO CONSTRUCTION.

WEBER THOMPSON
225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507
www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:
BALLARD BLOCKS 2
14TH AVE W & 46TH AVE. N

CLIENT:
REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
SHORING PERMIT COMMENT RESPONSE	8/1/2017
SHORING PERMIT COMMENT RESPONSE	10/10/2017
DRAINAGE PERMIT COMMENT RESPONSE	11/10/2017
PRE-CONSTRUCTION SET	11/15/2017
IFC SET	3/30/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL I. C.: MAV

SHEET NO.

UTILITY CONNECTION SECTION

C5.10A

PROJECT NO. 16-048

IFC SET - 3/30/2018

Mar 30, 2018 - 2:05pm JoeM Z:\16\0001 - 16\0999\160201 (Ballard Blocks 2)\CAD\Design\On Site\Phase 1\BB1 PH1 C5.00 UTIL.dwg

On-site Stormwater Management - List Approach Calculator
Site and Drainage Control Summary

Version 06-07-2016

To use the On-Site List Calculator you must select "Enable Content" when the Security Warning appears.

Project Information

Site Address	1401 NW 46th Street (Parcel B)	DPD Project Number	3023879
Primary Contact	Jon O'Hare	SDOT Project Number	6583437
Project Type	Parcel-Based	Primary Contact E-mail or Phone	jon@permitcnw.com

Total Site Area	30,856	sf
Total New plus Replaced Hard Surface Area	30,856	sf
Existing Hard Surface Area to Remain	0	sf
Total New and/or Replaced Lawn and Landscaping	0	sf
Undisturbed and protected site area	0	sf
Was the project lot created after Jan 1, 2016?	Yes	
Project Engineer	Jeremy Febus	
Engineer E-mail	jeremy.febus@kpff.com	

On-site Stormwater Management is required for ≥ 750 sf of new plus replaced area.

On-site Performance Standard will be used (professional engineer required)? No

Site Information

Note: If required for your project, reference the Preliminary Assessment Report (PAR) to complete this section. If the total areas proposed are different form those provided in the PAR, requirements may change.

Approved Point of Stormwater Discharge	Public Storm Drain Main
Drainage Basin	Designated Receiving Water
Is the downstream drainage system considered Capacity Constrained by SPU?	No
Approved Point of Wastewater Discharge	Public Sanitary Sewer Main
Approved Point of Sub-Surface Discharge	Public Storm Drain Main
Flow Control is required	No
Flow Control Standard	(Peak Control Standard)
Water Treatment for pollution-generating surfaces is required	Yes

Select required treatment: ☐ Oil Control ☐ Phosphorus ☐ Enhanced ☑ Basic

Total Pollution Generating Hard Surface Area	8,232 sf
Total Pollution Generating Pervious Surface Area	0 sf
Source Control is required	No
Environmentally Critical Areas	Yes

☐ Steep Slope ☐ Potential Slide ☐ Riparian Corridor ☐ Wetland ☐ Liquefaction ☐ Flood Prone
☐ Landfill ☐ Known Landslide ☐ Fish / Wildlife ☐ Peat / Groundwater Management ☑ Shoreline Habitat

Temporary dewatering required	Yes	Permanent dewatering required	No

A licensed professional recommends dispersion not be used anywhere within the project site due to reasonable concerns of erosion, slope failure, or flooding.

Infiltration Information

Is infiltration investigation required?	No	Why?	Other
Is infiltration on the site feasible?	No	Why?	Site cannot meet required horizontal setbacks

Infiltration Value Recommendation Note: 0 Infiltration Rate Correction Factor; 12.5 0 Site Design Oil Kahl

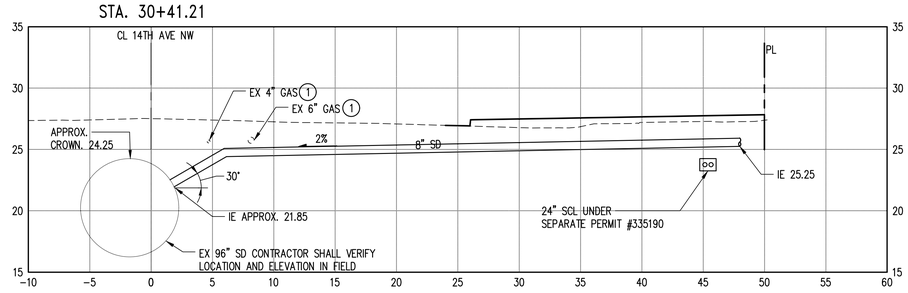
On-site Stormwater Management

Number of roof areas	5
Number of other surface areas	2

Surface	Surfaces Description	On-site BMP	Contrib. Area (sf)	Facility Size (sf)	Facility Configuration
1	Roof:Building Rooftop - N	Non-Infiltrating Bioretention #1	4,425	248 sf	Vertical sides 6 inch
2	Surface:Traffic Area	Non-Infiltrating Bioretention #2	8,234	461 sf	Vertical sides 6 inch
3	Surface:Courtyard	Non-Infiltrating Bioretention #3	6,910	387 sf	Vertical sides 6 inch
4	Roof:Building Rooftop	Vegetated Roof System	2,132	2,132 sf	4 inch Single-Course
5	Roof:Building Rooftop - N	Non-Infiltrating Bioretention #4	2,089	117 sf	Vertical sides 6 inch
6	Roof:Building Rooftop - Se	Non-Infiltrating Bioretention #5	4,425	248 sf	Vertical sides 6 inch
7	Roof:Building Rooftop - S	Non-Infiltrating Bioretention #6	2,641	148 sf	Vertical sides 6 inch

Total New/Replaced Roof Area	15,712	Total Roof Area Managed	15,712
Total New/Replaced Other Surface Area	15,144	Total Other Surface Managed	15,144
Total Area Managed	30,856	Total Volume Managed On Site	222,904 gal
Estimated compost required for soil amendment	0 cy	*Volume of compost required for soil amendment will be verified by the DPD Site Inspector for DPD permitted projects.*	

seattle.gov



SD CONNECTION SECTION (A / C5.00)
SCALE: 1" = 5'

NOTES:

(1) CONTRACTOR SHALL VERIFY SIZE, LOCATION AND ELEVATION OF UTILITIES PRIOR TO CONSTRUCTION.

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:

BALLARD BLOCKS 2
14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
BUILDING PERMIT	8/16/2017
BUILDING PERMIT	11/15/2017
PRE-CONSTRUCTION SET	11/15/2017
DRAINAGE PERMIT COMMENT RESPONSE	1/3/2018
DRAINAGE PERMIT COMMENT RESPONSE	3/22/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

STATE OF WASHINGTON · JOSEPH S. FEBUS · 36847 · REGISTERED PROFESSIONAL ENGINEER

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL I. C.: MAV

SHEET NO.

PARCEL B
UTILITY PLAN

C5.10B

PROJECT NO. 16-048

DRAINAGE PERMIT - 3/22/2018

Mar 30, 2018 - 2:09pm JoeW Z:\160001-160099\160201 (Ballard Blocks 2)\CAD\Design\On Site\Phase 2\BB PH2 C5.10 UTL.dwg

On-site Stormwater Management - List Approach Calculator
Site and Drainage Control Summary

Version 06-07-2016

To use the On-Site List Calculator you must select "Enable Content" when the Security Warning appears.

Project Information

Site Address	1400 NW 46th Street (Parcel C)	DPD Project Number	3023877
Primary Contact	Jon O'Hare	SDOT Project Number	6583435
Project Type	Parcel-Based	Primary Contact E-mail or Phone	jon@permitcnw.com

Total Site Area	29,538	sf
Total New plus Replaced Hard Surface Area	29,538	sf
Existing Hard Surface Area to Remain	0	sf
Total New and/or Replaced Lawn and Landscaping	0	sf
Undisturbed and protected site area	0	sf
Was the project lot created after Jan 1, 2016?	Yes	
Project Engineer	Jeremy Febus	Engineer E-mail: jeremy.febus@kpff.com

On-site Stormwater Management is required for ≥ 750 sf of new plus replaced area.

On-site Performance Standard will be used (professional engineer required)? No

Site Information

Note: If required for your project, reference the Preliminary Assessment Report (PAR) to complete this section. If the total areas proposed are different form those provided in the PAR, requirements may change.

Approved Point of Stormwater Discharge	Public Storm Drain Main
Drainage Basin	Designated Receiving Water
Is the downstream drainage system considered Capacity Constrained by SPU?	No
Approved Point of Wastewater Discharge	Public Sanitary Sewer Main
Approved Point of Sub-Surface Discharge	Public Storm Drain Main
Flow Control is required	No
Flow Control Standard	(Note Control Standard)

Water Treatment for pollution-generating surfaces is required: Yes

Select required treatment: ☐ Oil Control ☐ Phosphorus ☐ Enhanced ☑ Basic

Total Pollution Generating Hard Surface Area	7,793	sf
Total Pollution Generating Pervious Surface Area	0	sf

Source Control is required	No		
Environmentally Critical Areas	Yes		

☐ Steep Slope ☐ Potential Slide ☐ Riparian Corridor ☐ Wetland ☐ Liquefaction ☐ Flood Prone

☐ Landfill ☐ Known Landslide ☐ Fish / Wildlife ☐ Peat / Groundwater Management ☑ Shoreline Habitat

Temporary dewatering required	Yes	Permanent dewatering required	No

A licensed professional recommends dispersion not be used anywhere within the project site due to reasonable concerns of erosion, slope failure, or flooding. No

Infiltration Information

Is infiltration investigation required?	No	Why?	Other
Is infiltration on the site feasible?	No	Why?	Site cannot meet required horizontal setbacks
Best Management Infiltration Rate	0	Infiltration Rate Correction Factor	0.5	Design Infiltration Rate	0

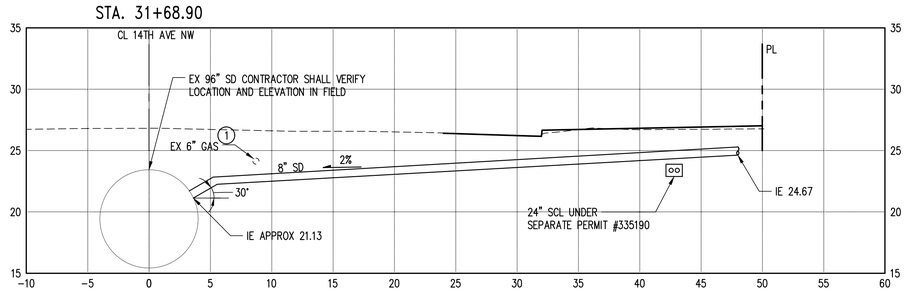
On-site Stormwater Management

Number of roof areas	3
Number of other surface areas	3

Surface	Surfaces Description	On-site BMP	Contrib. Area (sf)	Facility Size (sf)	Facility Configuration
1	Roof:Building Rooftop - h	Non-Infiltrating Bioretention #1	4,070	228 sf	Vertical sides 6 inch
2	Surface:Traffic Area	Non-Infiltrating Bioretention #2	7,793	436 sf	Vertical sides 6 inch
3	Surface:Courtyard	Non-Infiltrating Bioretention #3	3,940	221 sf	Vertical sides 6 inch
4	Surface:Miscellaneous Pi	None Feasible	2,364	-	-
5	Roof:Building Rooftop - E	Non-Infiltrating Bioretention #4	3,871	217 sf	Vertical sides 6 inch
6	Roof:Building Rooftop - h	Non-Infiltrating Bioretention #5	7,500	420 sf	Vertical sides 6 inch

Total New/Replaced Roof Area	15,441	Total Roof Area Managed	15,441
Total New/Replaced Other Surface Area	14,097	Total Other Surface Managed	14,097
Total Area Managed	29,538	Total Volume Managed On Site	196,364 gal
Estimated compost required for soil amendment	0 cy	*Volume of compost required for soil amendment will be verified by the DPD Site Inspector for DPD permitted projects.*	

seattle.gov



SD CONNECTION SECTION
SCALE: 1" = 5'

A
C5.00

NOTES:

1. CONTRACTOR SHALL VERIFY SIZE, LOCATION AND ELEVATION OF UTILITIES PRIOR TO CONSTRUCTION.

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
BUILDING PERMIT	8/16/2017
BUILDING PERMIT	11/15/2017
PRE-CONSTRUCTION SET	11/15/2017
DRAINAGE PERMIT COMMENT RESPONSE	1/3/2018
DRAINAGE PERMIT COMMENT RESPONSE	3/22/2018

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

JEREMY S. FEBUS
STATE OF WASHINGTON
38647
REGISTERED
PROFESSIONAL ENGINEER

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL I. C.: MAV

SHEET NO.:

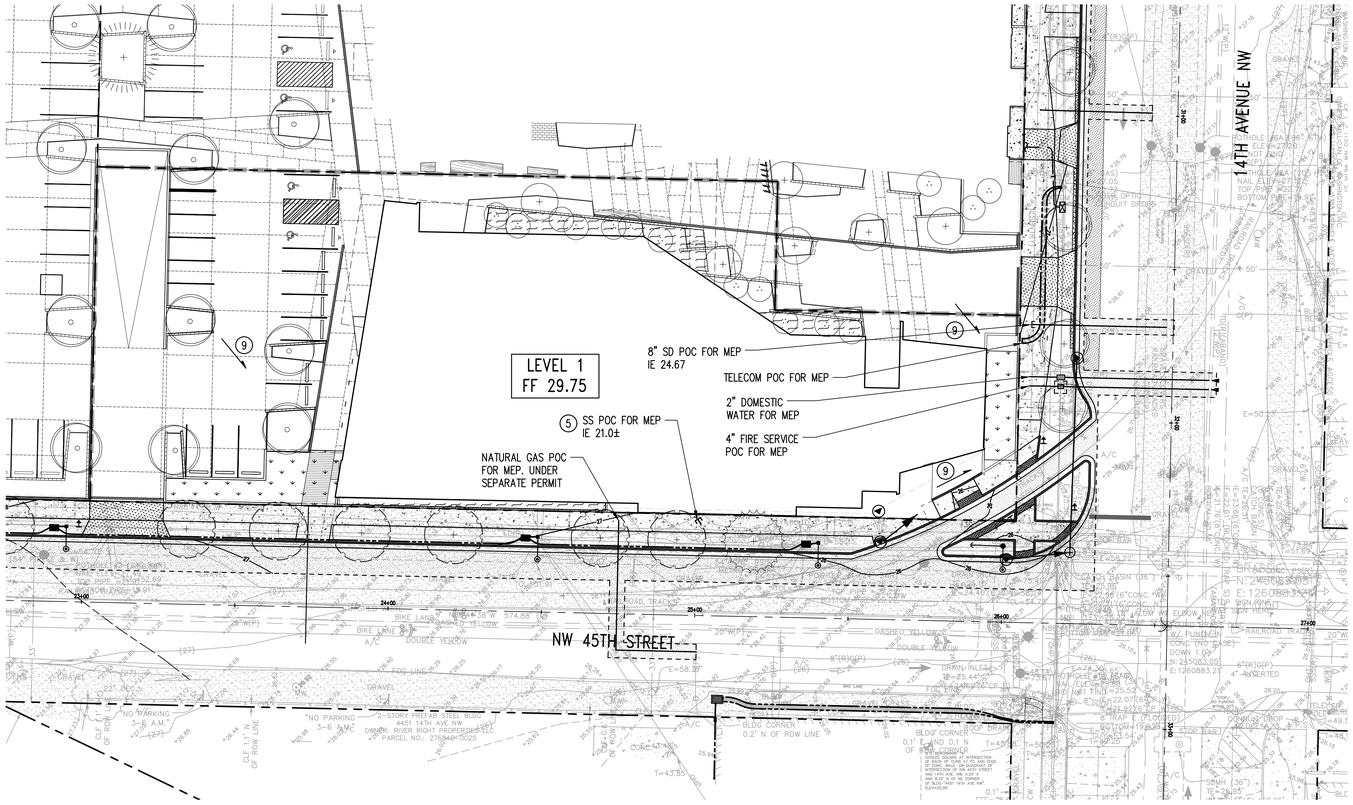
PARCEL C
UTILITY PLAN

C5.10C

PROJECT NO. 16-048

DRAINAGE PERMIT - 3/22/2018

Mar 30, 2018 - 2:17pm JoeH Z:\1600001 - 1600999\1600201 (Ballard Blocks 2)\CAD\Design\On Site\Phase 3\BB3 PH3 C5.00 UTLT.dwg



NOTES

1. CONNECTIONS TO WATER MAIN, SERVICE LINES UP TO 2' FROM THE RIGHT OF WAY LINE, METER INSTALLATION EXCAVATION AND BACKFILL TO BE PERFORMED BY SPU AT OWNER'S EXPENSE. RESTORATION SHALL BE PERFORMED BY CONTRACTOR.

2. TRENCHING AND BEDDING FOR WATER SERVICES ON SITE SHALL BE PER COS STD PLAN 350. BEDDING MATERIAL SHALL BE CLASS B, TYPE 9 MINERAL AGGREGATE.

3. FINAL LOCATIONS OF POWER, GAS AND TELECOMMUNICATIONS POINTS OF CONNECTION ARE TO BE DESIGNED BY UTILITY OWNER AND COORDINATED BY PLUMBING, MECHANICAL AND ELECTRICAL CONSULTANTS. INSTALLATION OF UTILITIES SHALL BE PERFORMED BY UTILITY PURVEYOR AT OWNER'S EXPENSE.

4. PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE "STREET AND SIDEWALK PAVEMENT OPENING AND RESTORATION" DIRECTOR'S RULE 05-2009.

(5.) CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING SIDE SEWERS FOR POINT OF CONNECTION. EXISTING SIDE SEWERS SHALL BE RELINED AND CERTIFIED BY A CITY OF SEATTLE INSPECTOR PRIOR TO CONNECTION. CONTRACTOR SHALL CAP ANY SSS NOT USED FOR POINT OF CONNECTION.

6. FOR STATIONING CONTROL AND OFF-SITE IMPROVEMENTS, SEE SIP NO. 314530 AND UMP NO. 318982.

7. FINISHED FLOOR ELEVATIONS ARE SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS.

8. PROFESSIONAL ENGINEER'S EVALUATION AND CERTIFICATION OF EXISTING SIDE SEWERS REQUIRED FOR RE-USE. CONTRACTOR SHALL PROVIDE ENGINEER WITH VIDEO OF THE EXISTING SIDE SEWER FOR EVALUATION. CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING SIDE SEWERS FOR POINT OF CONNECTION. CONTRACTOR SHALL CAP ANY SSS NOT USED FOR POINT OF CONNECTION.

(9.) GRADE HARSCAPES TO DRAIN TO BIORETENTION PLANTERS PER LANDSCAPE PLANS.

LEGEND

- CATCH BASIN
- SURFACE SWALE
- WATER QUALITY BIO-RETENTION PLANTER
- ROOF TOP BIO-RETENTION PLANTER

N

0 10 20 40
1 inch = 20 feet

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
BUILDING PERMIT	8/16/2017
BUILDING PERMIT	11/15/2017
PRE-CONSTRUCTION SET	11/15/2017

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

LICENSED PROFESSIONAL ENGINEER
STATE OF WASHINGTON
35847
REGISTERED
PROFESSIONAL ENGINEER

DRAFTED BY:	TAD
PROJECT MGR.:	JSF
PRINCIPAL I. C.:	MAV

SHEET NO.

PARCEL C
UTILITY PLAN

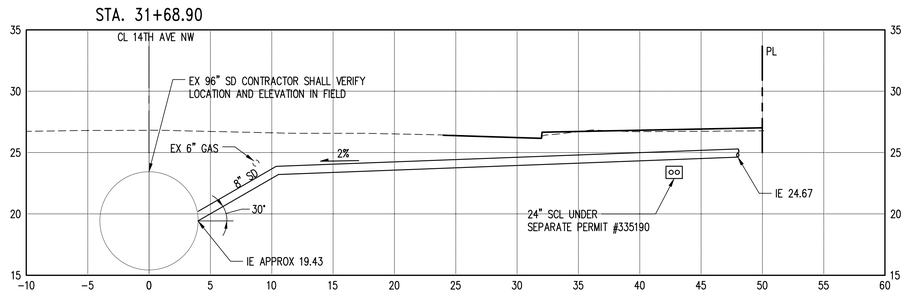
C5.00 C

PROJECT NO. 16-048

11.15.2017 - BUILDING PERMIT

Nov 15, 2017 - 12:03pm JoeW

Z:\1600001-1600999\1600201 (Ballard Blocks 2)\Outgoing\Weber Thompson\2017-11-15 Onsite Preconstruction Set\BBI PH2 C5.00 UTIL.dwg



SD CONNECTION SECTION

SCALE: 1" = 5'

A
C5.00

NOTES:

1. CONTRACTOR SHALL VERIFY SIZE, LOCATION AND ELEVATION OF UTILITIES PRIOR TO CONSTRUCTION.

On-site Stormwater Management - List Approach Calculator
Site and Drainage Control Summary

Version 06-07-2016

To use the On-Site List Calculator you must select "Enable Content" when the Security Warning appears.

Project Information

Site Address	1451 NW 46th Street (Parcel C)	DPD Project Number	3023877
Primary Contact	Jon O'Hare	SDOT Project Number	303342
Project Type	Parcel-Based	Primary Contact E-mail or Phone	jon@permitcnw.com

Total Site Area	29,538	sf
Total New plus Replaced Hard Surface Area	29,538	sf
Existing Hard Surface Area to Remain	0	sf
Total New and/or Replaced Lawn and Landscaping	0	sf
Undisturbed and protected site area	0	sf
Was the project lot created after Jan 1, 2016?	Yes	
Project Engineer	Jeremy Febus	Engineer E-mail: jeremy.febus@kpff.com

On-site Stormwater Management is required for ≥ 750 sf of new plus replaced area.

On-site Performance Standard will be used (professional engineer required)? No

Site Information

Note: If required for your project, reference the Preliminary Assessment Report (PAR) to complete this section. If the tota areas proposed are different form those provided in the PAR, requirements may change.

Approved Point of Stormwater Discharge	Public Storm Drain Main
Drainage Basin	Designated Receiving Water
Is the downstream drainage system considered Capacity Constrained by SPU?	No
Approved Point of Wastewater Discharge	Public Sanitary Sewer Main
Approved Point of Sub-Surface Discharge	Public Storm Drain Main
Flow Control is required	No
Flow Control Basin	Peak Control-NSQUIM
Water Treatment for pollution-generating surfaces is required	Yes
Select required treatment	☐ Oil Control ☐ Phosphorus ☐ Enhanced ☑ Basic
Total Pollution Generating Hard Surface Area	7,793 sf
Total Pollution Generating Pervious Surface Area	0 sf
Source Control is required	No
Environmentally Critical Areas	Yes

☐ Steep Slope ☐ Potential Slide ☐ Riparian Corridor ☐ Wetland ☐ Liquefaction ☐ Flood Prone
☐ Landfill ☐ Known Landslide ☐ Fish / Wildlife ☐ Peat / Groundwater Management ☑ Shoreline Habitat

Temporary dewatering required: Yes — Permanent dewatering required: No

A licensed professional recommends dispersion not be used anywhere within the project site due to reasonable concerns of erosion, slope failure, or flooding: No

Infiltration Information

Is infiltration investigation required?	No	Why?	Other
Is Infiltration on Parcel Feasible?	no	Why?	Site cannot meet required horizontal setbacks
Site Measured Infiltration Rate	x Infiltration Rate Correction Factor 0.3 = 0		Site Design Inf Rate

On-site Stormwater Management

Number of roof areas	1
Number of other surface areas	3

Surface	Surfaces Description	On-site BMP	Contrib. Area (sf)	Facility Size (sf)	Facility Configuration
1	Roof:Building Rooftop	Non-Infiltrating Bioretention #1	15,441	865 sf	Vertical sides 6 inch
2	Surface:Traffic Area	Non-Infiltrating Bioretention #2	7,793	436 sf	Vertical sides 6 inch
3	Surface:Courtyard	Non-Infiltrating Bioretention #3	3,940	221 sf	Vertical sides 6 inch
4	Surface:Miscellaneous Pa	None Feasible	2,364	-	

Total New/Replaced Roof Area	15,441	Total Roof Area Managed	15,441
Total New/Replaced Other Surface Area	14,097	Total Other Surface Managed	14,097
Total Area Managed	29,538	Total Volume Managed On Site	196,364 gal
Estimated compost required for soil amendment	0 cy	*Volume of compost required for soil amendment will be verified by the DPD Site Inspector for DPD permitted projects.*	

seattle.gov

WEBER THOMPSON

225 Terry Ave N, Suite 200
Seattle WA 98109
p 206 344 5700
f 206 508 3507

www.weberthompson.com

CORPORATE MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

PROJECT:

BALLARD BLOCKS 2

14TH AVE W & 46TH AVE. N

CLIENT:

REGENCY CENTERS
5335 SW MEADOWS RD, STE. 295
LAKE OSWEGO, OR 97035

ISSUE:

SCHEMATIC PRICING SET	11/23/2016
100% SD SET	2/17/2017
SHORING & EX. PERMIT SUB.	4/03/2017
BUILDING PERMIT	8/16/2017
BUILDING PERMIT	11/15/2017
PRE-CONSTRUCTION SET	11/15/2017

Phase:	Client Approval:	Quality Assurance:
Schematics		
Design Dev.		
Permit Doc.		
Bid Doc.		
Const. Doc.		

ACCEPTANCE OF THE ELECTRONIC FILE VERSION OF THIS DRAWING ACKNOWLEDGES THE RECEIPT AND CONSENT TO THE TERMS OF THE WEBER THOMPSON ELECTRONIC MEDIA RECEIPT AGREEMENT

DRAFTED BY: TAD
PROJECT MGR.: JSF
PRINCIPAL I. C.: MAV

SHEET NO.

PARCEL C
UTILITY CONNECTION
SECTION

C5.10 C

PROJECT NO. 16-048

11.15.2017 - BUILDING PERMIT

Nov 15, 2017 - 12:53pm JoeW Z:\1600001-1609999\1600201 (Ballard Blocks 2)\Outpost\Weber Thompson\2017-11-15 Onsite Preconstruction Set\BBB PhLS C5.00 UTLY.dwg

APPENDIX B

MONITORING WELL DECOMMISSIONING RECORDS

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT
Notice of Intent No. AE 46579

Construction/Decommission

☐ Construction

☒ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* RE 59068

Consulting Firm Sound Earth

Unique Ecology Well ID Tag No. BGW 831

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards Materials used and the information reported above are true to my best knowledge and belief

☒ Driller ☐ Trainee Name (Print) Michael Runnels

Driller/Trainee Signature

Driller/Trainee License No. 3205

If trainee, licesned drillers' Signature and License No.

Type of Well

☒ Resource Protection

☐ Geotechnical Soil Boring

Property Owner

Site Address 1451 NW 46th St

City Ballard Seattle County King

Location 1/4 SW 1/4 SW Sec 12 Twn 25N R 3E EWM or WWM

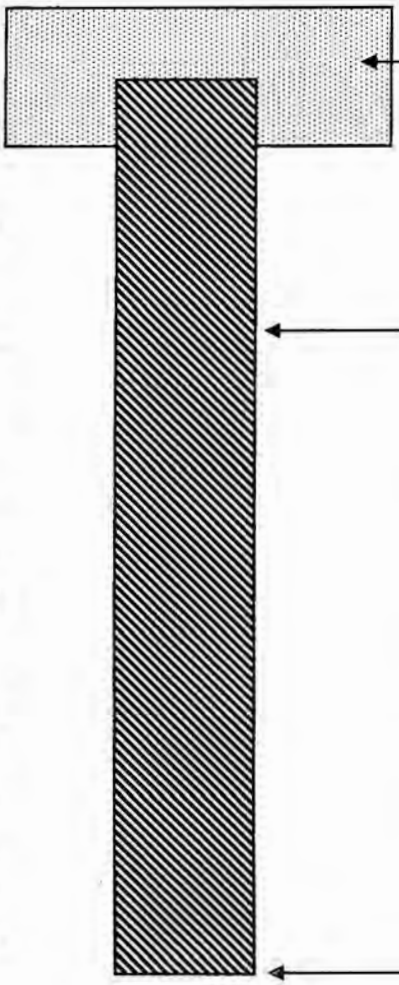
Lat/Long (s,t,r still Required) Lat Deg ____ Lat Min/Sec ____ Long Deg ____ Long Min/Sec ____

Tax Parcel No.

Cased or Uncased Diameter 2" Static Level 7'

Work/Decommision Start Date 12/21/17

Work/Decommision Completed Date 12/21/17

Construction/Design	Well Data	Formation Description
	CONCRETE SURFACE SEAL 2 FT	0 - FT
	BACKFILL 43 FT	0 - FT
	Medium Bentonite Chips	
		0 - FT
	DEPTH OF BORING 45 FT	

RECEIVED
DEPT OF ECOLOGY
FEB 06 2018
WATER RESOURCES PROGRAM
NORTHWEST REGIONAL OFFICE

cale 1" = ____ Page ____ of ____

ECY 050-12 (Rev 2/01)

Please print, sign and return by mail to Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE49745

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *(select one)*

☐ Construction

☒ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* _____

Consulting Firm _____

Unique Ecology Well ID Tag No. BAB-628

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee Name (Print) Art Cardenas

Driller/Engineer /Trainee Signature [signature]

Driller or Trainee License No. 2861

If trainee, licensed driller's Signature and License No. _____

Type of Well *(select one)*

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner Ballard Blocks

Site Address 1401 NW 45th St.

City Ballard County King

Location SW 1/4-1/4 SW 1/4 Sec 1 Twn 25 R 3 Select One ☒ EWM ☐ WWM

Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

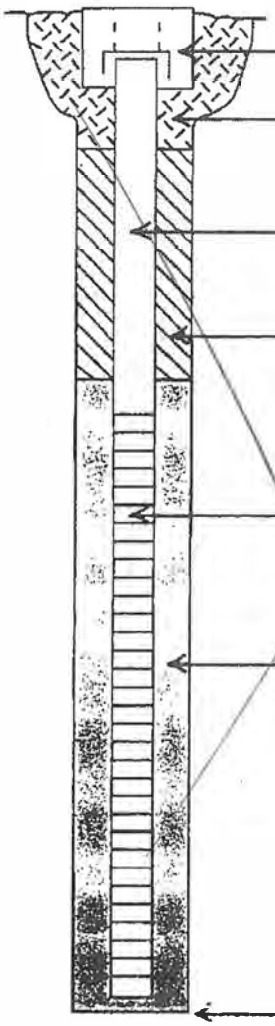
Tax Parcel No. _____

Cased or Uncased Diameter _____ Static Level _____

Work/Decommission Start Date 7-30-18

Work/Decommission Completed Date 7-30-18

Construction/Design



Well Data

MONUMENT TYPE: _____

CONCRETE SURFACE SEAL _____ ft.

PVC BLANK _____ "x _____ '

BACKFILL _____ ft.

TYPE: _____

PVC SCREEN _____ "x _____ '

SLOT SIZE: _____

TYPE: _____

GRAVEL PACK _____ ft.

MATERIAL: _____

WELL DEPTH _____ ' _____ "

Formation Description

0 - _____ ft.

_____ - _____ ft.

_____ - _____ ft.

_____ - _____ ft.

_____ - _____ ft.

REMARKS Tagged Bottom of PVC well @ 39'

- Back Fill with 3/8" chips

Please print, sign and return by mail to Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE49745

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *(select one)*

☐ Construction

☒ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* _____

Consulting Firm Sound Earth

Unique Ecology Well ID Tag No. BAB-029

Type of Well *(select one)*

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner Ballard Blocks

Site Address 1401 NW 45th St.

City Ballard County King

Location SW 1/4-1/4 SW/4 · Sec 1 Twn 25 R 3 Select One ☒ EWM ☐ WWM

Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No. _____

Cased or Uncased Diameter _____ Static Level _____

Work/Decommission Start Date 7-30-18

Work/Decommission Completed Date 7-30-18

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

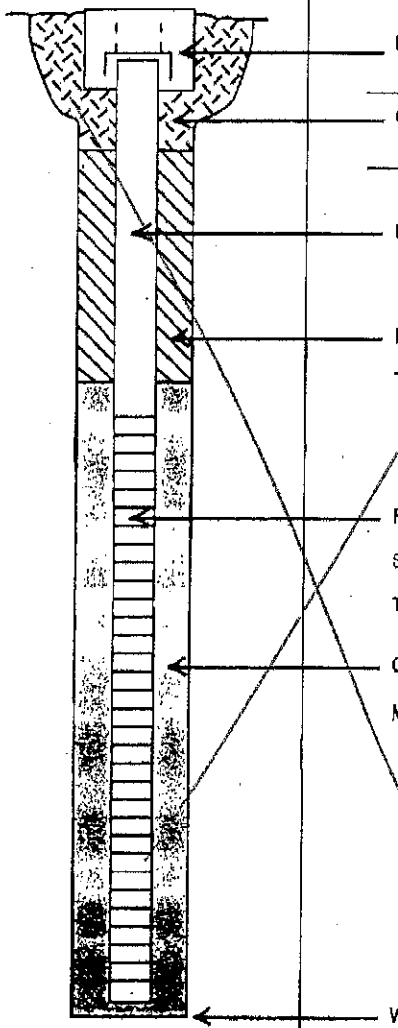
☒ Driller ☐ Engineer ☐ Trainee Name (Print): Art Cardenas

Driller/Engineer /Trainee Signature Art Cardenas

Driller or Trainee License No. 2364

If trainee, licensed driller's Signature and License No. _____

Construction/Design



Well Data

Formation Description

0 - ft.

- ft.

- ft.

- ft.

- ft.

REMARKS Tagged bottom of PVC well @ 10'

- Back Fill with 3/8" chips

Was excavated down To the Bottom 10'

Please print, sign and return by mail to Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE49745

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *(select one)*

☐ Construction

☒ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* _____

Consulting Firm Sound Earth

Unique Ecology Well ID Tag No. BAB-029

Type of Well *(select one)*

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner Ballard Blocks

Site Address 1401 NW 45th St.

City Ballard County King

Location SW 1/4-1/4 SW/4 · Sec 1 Twn 25 R 3 Select One ☒ EWM ☐ WWM

Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No. _____

Cased or Uncased Diameter _____ Static Level _____

Work/Decommission Start Date 7-30-18

Work/Decommission Completed Date 7-30-18

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

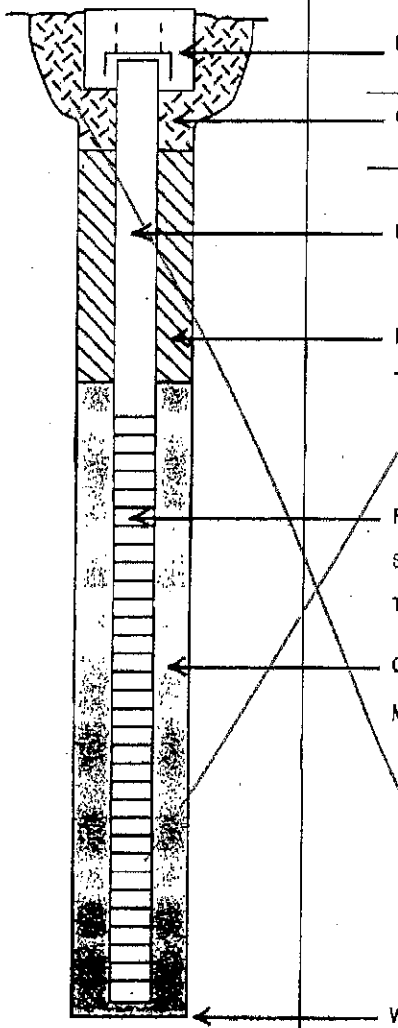
☒ Driller ☐ Engineer ☐ Trainee Name (Print): Art Cardenas

Driller/Engineer /Trainee Signature Art Cardenas

Driller or Trainee License No. 2364

If trainee, licensed driller's Signature and License No. _____

Construction/Design



Well Data

Formation Description

0 - ft.

- ft.

- ft.

- ft.

- ft.

REMARKS Tagged bottom of PVC well @ 10'

- Back Fill with 3/8" chips

Was excavated down To the Bottom 10'

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT
Notice of Intent No. AE46579

Construction/Decommission

☐ Construction

☒ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* RE01576

Type of Well

☒ Resource Protection

☐ Geotechnical Soil Boring

Consulting Firm Sound Earth

Property Owner

Site Address 1451 NW 46th St

City Ballard Seattle County King

Unique Ecology Well ID
Tag No. Boring #1 APN - 094

Location 1/4 SW 1/4 SW Sec 12 Twn 25N R 3E EWM or WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Lat/Long (s,t,r still Required) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No. _____

☒ Driller ☐ Trainee Name (Print) Michael Runnels

Driller/Trainee Signature _____

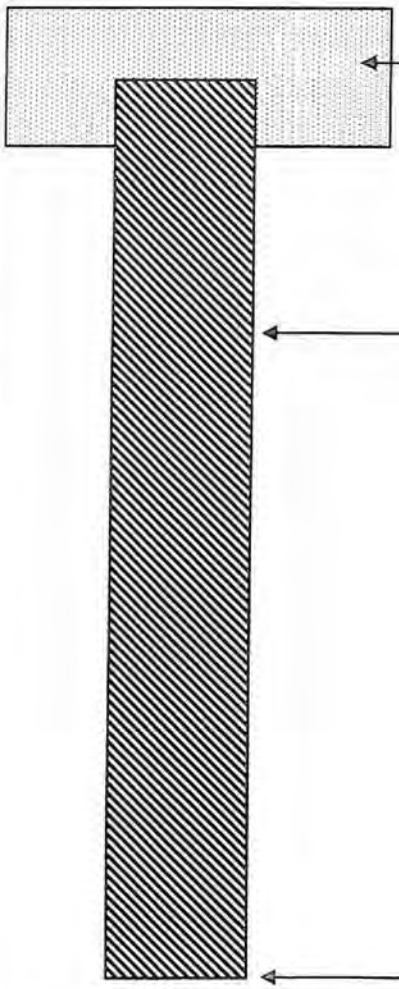
Driller/Trainee License No. 3205

Cased or Uncased Diameter 2" Static Level 7'

Work/Decommision Start Date 12/21/17

If trainee, licesned drillers' Signature and License No. _____

Work/Decommision Completed Date 12/21/17

Construction/Design	Well Data	Formation Description
	CONCRETE SURFACE SEAL 2 FT	0 - FT
	BACKFILL 28 FT (Medium Bentonite Chips)	0 - FT
		0 - FT
	DEPTH OF BORING 30 FT	

RECEIVED
DEPT OF ECOLOGY
FEB 05 2018
WATER RESOURCES PROGRAM
NORTHWEST REGIONAL OFFICE

Scale 1" = _____

Page _____ of _____

ECY 050-12 (Rev 2/01)

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report

Please print, sign and return by mail to Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE49745

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *(select one)*

☐ Construction

☒ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* _____

Consulting Firm Sound Earth

Unique Ecology Well ID Tag No. BAB-029

Type of Well *(select one)*

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner Ballard Blocks

Site Address 1401 NW 45th St.

City Ballard County King

Location SW 1/4-1/4 SW/4 · Sec 1 Twn 25 R 3 Select One ☒ EWM ☐ WWM

Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No. _____

Cased or Uncased Diameter _____ Static Level _____

Work/Decommission Start Date 7-30-18

Work/Decommission Completed Date 7-30-18

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

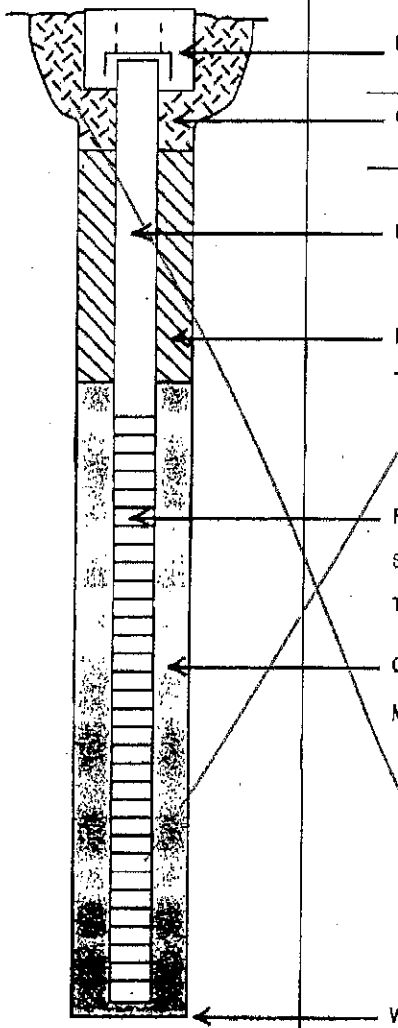
☒ Driller ☐ Engineer ☐ Trainee Name (Print): Art Cardenas

Driller/Engineer /Trainee Signature Art Cardenas

Driller or Trainee License No. 2364

If trainee, licensed driller's Signature and License No. _____

Construction/Design



Well Data

Formation Description

0 - ft.

- ft.

- ft.

- ft.

- ft.

REMARKS Tagged bottom of PVC well @ 10'

- Back Fill with 3/8" chips

Was excavated down To the Bottom 10'

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT Notice of Intent No. AE47394

Construction/Decommission

☐ Construction

☒ Decommission ORIGINAL INSTALLATION Notice of Intent Number _____

Type of Well

☒ Resource Protection

☐ Geotechnical Soil Boring

Property Owner Ballard Blocks

Site Address 1401 NW 46th st

Consulting Firm Sound Earth

City Seattle County King

Unique Ecology Well ID

Tag No. APN-095

Location 1/4 SW 1/4 SW Sec 12 Twn 25N R 3E EWM or WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Lat/Long (s,t,r still Required) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No. _____

☒ Driller ☐ Trainee Name (Print) Michael Running

Driller/Trainee Signature _____

Driller/Trainee License No. 3205

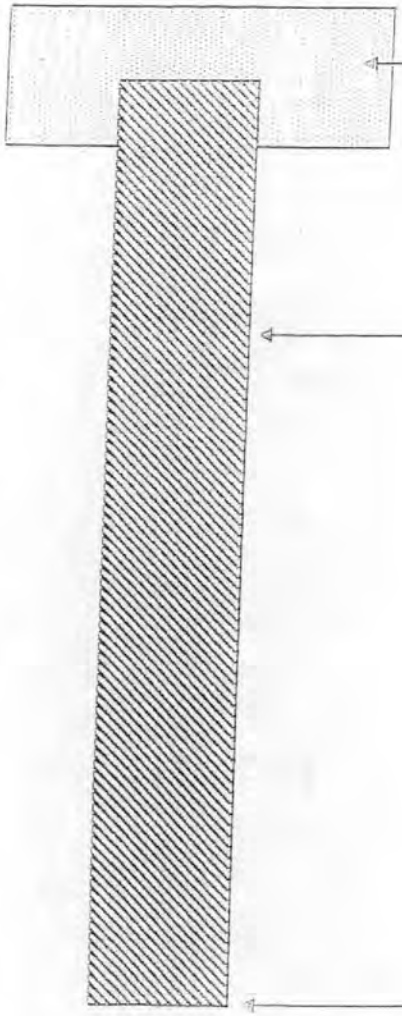
Cased or Uncased Diameter 2" Static Level _____

Work/Decommision Start Date 2/23/18

If trainee, licesned drillers' Signature and License No. _____

Work/Decommision Completed Date 2/23/18

Construction/Design



Well Data

CONCRETE SURFACE SEAL 2 FT

BACKFILL 18 FT

medium Bentonite Chips

DEPTH OF BORING 20 FT

Formation Description

0 - _____ FT

0 - _____ FT

0 - _____ FT

RECEIVED
DEPT OF ECOLOGY
MAY 14 2018
WATER RESOURCES PROGRAM
NORTHWEST REGIONAL OFFICE

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT Notice of Intent No. AE47394

Construction/Decommission

☐ Construction

☒ Decommission ORIGINAL INSTALLATION Notice of Intent Number _____

Type of Well

☒ Resource Protection

☐ Geotechnical Soil Boring

Property Owner Ballard Blocks

Site Address 1401 NW 46th st

Consulting Firm Sound Earth

City Seattle County King

Unique Ecology Well ID Tag No. APN-098

Location ¼ SW ¼ SW Sec 12 Twn 25N R 3E EWM or WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Lat/Long (s,t,r still Required) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No. _____

☒ Driller ☐ Trainee Name (Print) Michael Running

Driller/Trainee Signature _____

Driller/Trainee License No. 3205

Cased or Uncased Diameter 2" Static Level _____

Work/Decommision Start Date 2/23/18

If trainee, licesned drillers' Signature and License No. _____

Work/Decommision Completed Date 2/23/18

Construction/Design	Well Data	Formation Description
CONCRETE SURFACE SEAL	2 FT	0 - FT
BACKFILL	18 FT	0 - FT
	Medium Bentonite Chips	
		0 - FT
DEPTH OF BORING	20 FT	

RECEIVED
DEPT OF ECOLOGY
MAY 14 2018
WATER RESOURCES PROGRAM
NORTHWEST REGIONAL OFFICE

RESOURCE PROTECTION WELL REPORT

SUBMIT ONE WELL REPORT PER WELL INSTALLED

CURRENT
Notice of Intent No. AE49745

Construction/Decommission
- [ ] Construction
- [x] Decommission ORIGINAL INSTALLATION Notice of Intent Number AE49745

Type of Well
- [x] Resource Protection
- [ ] Geotechnical Soil Boring

Property Owner: Block @ Ballard LLC
Site Address: 1401 NW 45TH ST. SEATTLE
Consulting Firm: SOUND EARTH
City: SEATTLE County: KING
Unique Ecology Well ID
Tag No: N/A
Location: 1/4 SW 1/4 SW Sec 1 Twn 25N R 3E EWM WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Lat Long (s,t,r still Required) Lat Deg: ____ Lat Min Sec: ____ Long Deg: ____ Long Min/Sec: ____

Tax Parcel No: ____

[X] Driller [ ] Trainee Name (Print): JOSH MARSH
Driller/Trainee Signature: Josh Marsh
Driller/Trainee License No: 10650

Cased or Uncased Diameter: 1.5 INCH. Static Level: ____

If trainee, licesned drillers' Signature and License No: ____

Work/Decommision Start Date: 6-26-18

Work/Decomnission Completed Date: 6-26-18

Construction/Design	Well Data	Formation Description
CONCRETE SURFACE SEAL	SURFACE - 3 FT BACKFILL	0 - 3 FT BACK FILL
BACKFILL	3 FT	3 - 17 FT BENTONITE CHIPS
BENTONITE CHIPS		0 - FT
DEPTH OF BORING	17 FT	

Scale 1" = ____ Page ____ of ____

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT
Notice of Intent No. AE46579

Construction/Decommission

☐ Construction

☒ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* _____

Type of Well

☒ Resource Protection

☐ Geotechnical Soil Boring

Consulting Firm Sound Earth

Property Owner _____

Site Address 1451 NW 46th St

City Ballard Seattle County King

Unique Ecology Well ID Tag No. Sound Earth APJ805

Location 1/4 SW 1/4 SW Sec 12 Twn 25N R 3E EWM or WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards

Materials used and the information reported above are true to my best knowledge and belief

Lat/Long (s,t,r still Required) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No. _____

☒ Driller ☐ Trainee Name (Print) Michael Runnels

Driller/Trainee Signature _____

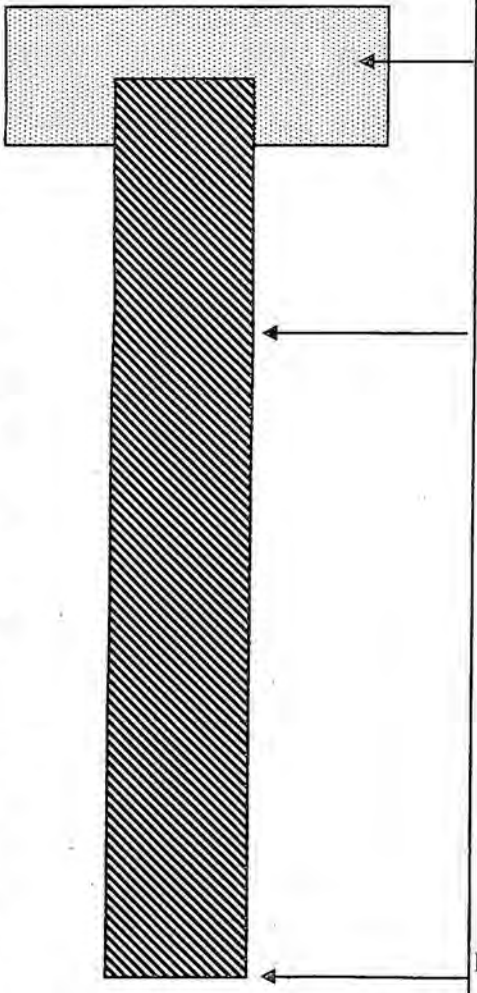
Driller/Trainee License No. 3205

Cased or Uncased Diameter 2" Static Level 7'

Work/Decommision Start Date 12/21/17

If trainee, licesned drillers' Signature and License No. _____

Work/Decommision Completed Date 12/21/17

Construction/Design	Well Data	Formation Description
	CONCRETE SURFACE SEAL 2 FT	0 - FT
	BACKFILL 14 FT (Medium Bentonite chips)	0 - FT
		0 - FT
	DEPTH OF BORING 16 FT	

RECEIVED
DEPT OF ECOLOGY
FEB 06 2018
WATER RESOURCES PROGRAM
NORTHWEST REGIONAL OFFICE

cale 1" = _____ Page _____ of _____

ECY 050-13 (Rev. 2/01)

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

25-3E-12N

CURRENT Notice of Intent No. R72501

Construction/Decommission

[X] Construction 285349

[ ] Decommission *ORIGINAL INSTALLATION Notice of Intent Number* _____

Type of Well

[x] Resource Protection

[ ] Geotechnical Soil Boring

Property Owner WESMAR

Site Address 1451 NW 46th St

Consulting Firm **Sound Env. Strat.**

City **Ballard** County **King**

EWM

Unique Ecology Well ID Tag No. BAB 855

Location 1/4 **SW** 1/4 **SW** Sec **12** TWN **25N** Range **3E** or WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards

Materials used and the information reported above are true to my best knowledge and belief

Lat/Long (s,t,r still Required) Lat Deg x Lat Min/Sec x Long Deg x Long Min/Sec x

Tax Parcel No. N/A

[ ] Driller [X] Trainee Name (Print) Curtis Askew

Driller/Trainee Signature

Driller/Trainee License No. 2867T

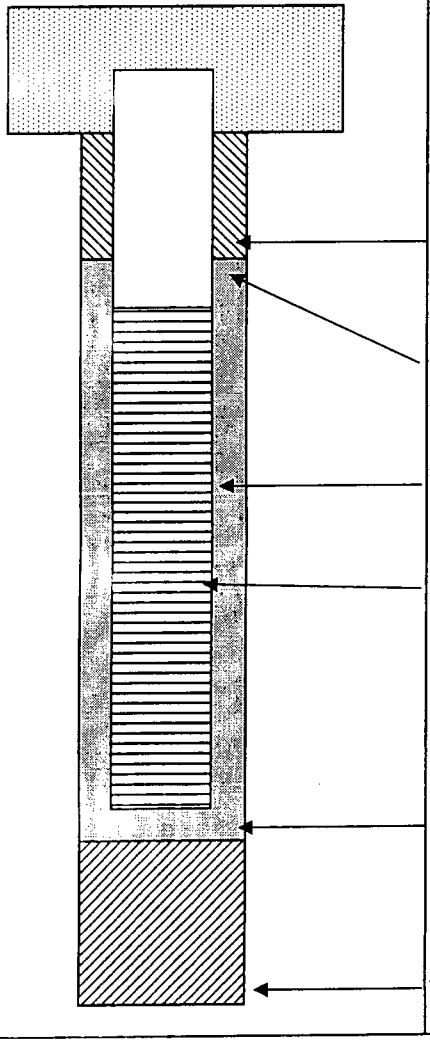
Cased or Uncased Diameter 8"/4 Static Level

If trainee, licensed driller's Signature and License No. 2330

Work/Decommision Start Date 11/27/2007

Work/Decommision End Date 11/28/07

Construction/Design



Well Data **W07-818**

Concrete Surface Seal Depth	1	FT
Blank Casing (dia x dep)	~~2~~ 2" x 2"	
Material	PVC	
Backfill		FT
Type		
Seal	.5	
Material	Bent Chip	
Gravel Pack	10.5	FT
Material	2-12 sand	
Screen (dia x dep)	10' x 2"	
Slot Size	.010	
Material	PVC	
Well Depth	12	FT
Backfill	~~2~~ 2'	
Material	Bent Chips	
Total Hole Depth	15	FT

Formation Description

0 - ~~5~~ 1~~2~~ FT

~~silt~~ sands

0 5 - 15 FT

silts

0 - FT

RECEIVED

JAN 16 2008

DEPT. OF ECOLOGY

Scale 1" = _____ Page _____ of _____

ECY 050-12 (Rev 2/01)

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT
Notice of Intent No. AE46579

Construction/Decommission

☐ Construction

☒ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* R72501

Type of Well

☒ Resource Protection

☐ Geotechnical Soil Boring

Consulting Firm Sound Earth

Property Owner

Site Address 1451 NW 46th St

City Ballard Seattle County King

Unique Ecology Well ID Tag No. Sound Earth BAB856

Location 1/4 SW 1/4 SW Sec 12 Twn 25N R 3E EWM or WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Lat/Long (s,t,r still Required) Lat Deg ____ Lat Min/Sec ____ Long Deg ____ Long Min/Sec ____

Tax Parcel No. ____

☒ Driller ☐ Trainee Name (Print) Michael Runnels

Driller/Trainee Signature ____

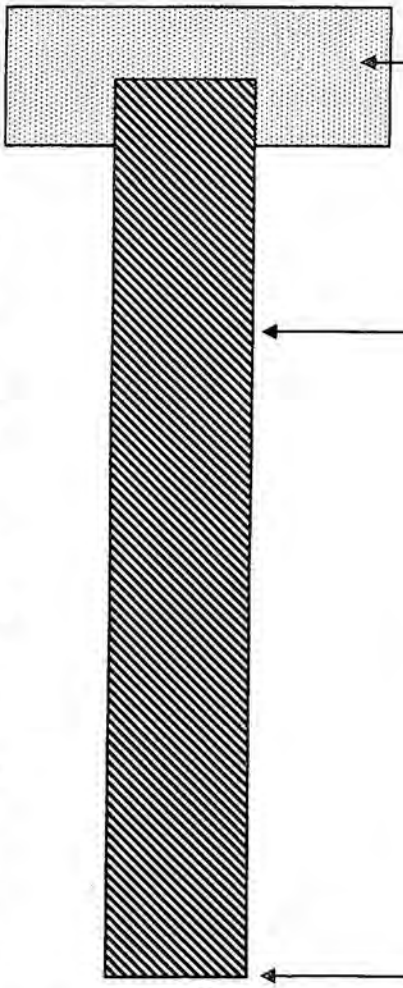
Driller/Trainee License No. 3205

Cased or Uncased Diameter 2" Static Level 7'

Work/Decommision Start Date 12/21/17

If trainee, licesned drillers' Signature and License No. ____

Work/Decommision Completed Date 12/21/17

Construction/Design	Well Data	Formation Description
	CONCRETE SURFACE SEAL 2 FT	0 - FT
	BACKFILL 14 FT (Medium Bentonite Chips)	0 - FT
		0 - FT
	DEPTH OF BORING 16 FT	

RECEIVED
DEPT OF ECOLOGY
FEB 06 2018
WATER RESOURCES PROGRAM
NORTHWEST REGIONAL OFFICE

cale 1" = ____ Page ____ of ____

ECY 050-12 (Rev 2/01)

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT
Notice of Intent No. AE46579

Construction/Decommission

☐ Construction

☒ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* R72501

Type of Well

☒ Resource Protection

☐ Geotechnical Soil Boring

Consulting Firm Sound Earth

Property Owner

Site Address 1451 NW 46th St

City Ballard Seattle County Kings

Unique Ecology Well ID Tag No. BAG 857

Location 1/4 SW 1/4 SW Sec 12 Twn 25N R 3E EWM or WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards

Materials used and the information reported above are true to my best knowledge and belief

Lat/Long (s,t,r still Required) Lat Deg ____ Lat Min/Sec ____ Long Deg ____ Long Min/Sec ____

Tax Parcel No. ____

☒ Driller ☐ Trainee Name (Print) Michael Runnels

Driller/Trainee Signature

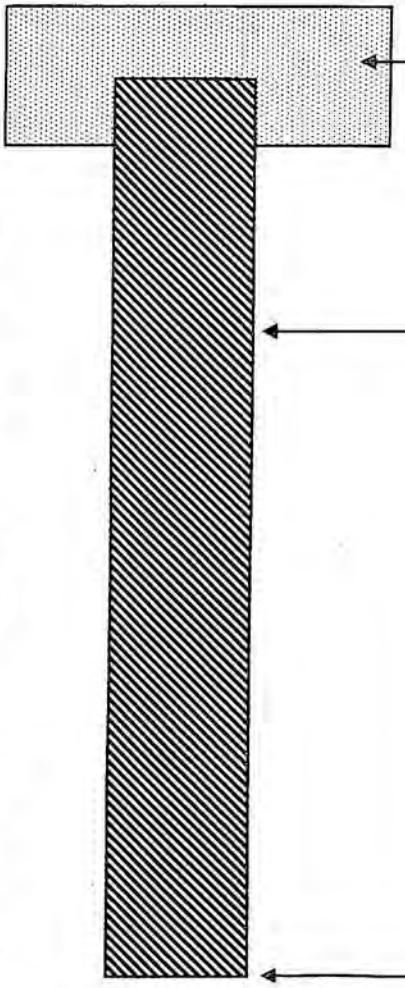
Cased or Uncased Diameter 2" Static Level 7'

Driller/Trainee License No. 3205

Work/Decommision Start Date 12/21/17

If trainee, licesned drillers' Signature and License No.

Work/Decommision Completed Date 12/21/17

Construction/Design	Well Data	Formation Description
	CONCRETE SURFACE SEAL 2 FT	0 - FT
	BACKFILL 14 FT (Medium Bentonite chips)	0 - FT
		0 - FT
	DEPTH OF BORING 16 FT	

RECEIVED
DEPT OF ECOLOGY
FEB 06 2018
WATER RESOURCES PROGRAM
NORTHWEST REGIONAL OFFICE

cale 1" = ____ Page ____ of ____

ECY 050-12 (Rev 2/01)

7

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT
Notice of Intent No. AE46579

Construction/Decommission

☐ Construction

☒ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* _____

Consulting Firm Sound Earth

Unique Ecology Well ID Tag No. Sound Earth APH 875

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards

Materials used and the information reported above are true to my best knowledge and belief

☒ Driller ☐ Trainee Name (Print) Michael Runnels

Driller/Trainee Signature _____

Driller/Trainee License No. 3205

If trainee, licesned drillers' Signature and License No. _____

Type of Well

☒ Resource Protection

☐ Geotechnical Soil Boring

Property Owner _____

Site Address 1451 NW 46th St

City Ballard Seattle County King

Location 1/4 SW 1/4 SW Sec 12 Twn 25N R 3E EWM or WWM

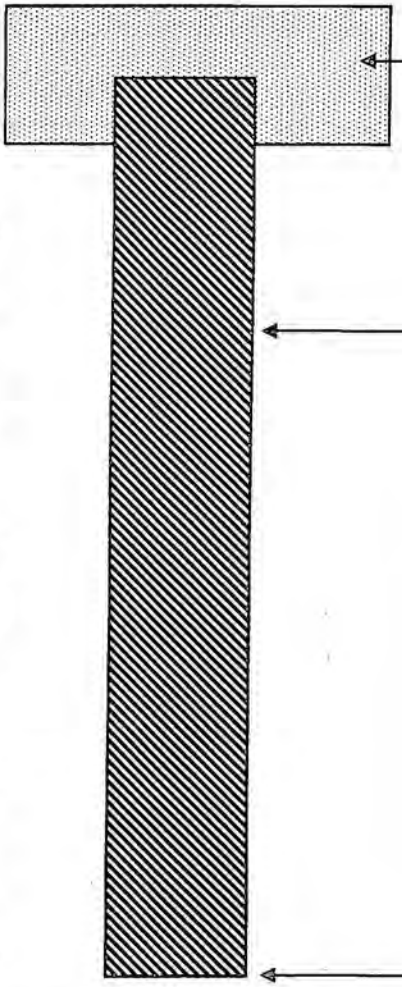
Lat/Long (s,t,r still Required) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No. _____

Cased or Uncased Diameter 12" Static Level 7'

Work/Decommision Start Date 12/21/17

Work/Decommision Completed Date 12/21/17

Construction/Design	Well Data	Formation Description
	CONCRETE SURFACE SEAL 2 FT	0 - FT
	BACKFILL 16 FT (Medium Bentonite Chips)	0 - FT
		0 - FT
	DEPTH OF BORING 18 FT	

RECEIVED
DEPT OF ECOLOGY
FEB 05 2018
WATER RESOURCES PROGRAM
NORTHWEST REGIONAL OFFICE

cale 1" = _____ Page _____ of _____

ECY 050-12 (Rev=v 2/01)

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report

APPENDIX C

LABORATORY ANALYTICAL REPORTS FOR FORMER SOIL BORING B16 AREA SOIL EVALUATION-JUNE 2018

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 7, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on June 1, 2018 from the SOU_1249-001_ 20180601, F&BI 806024 project. There are 16 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0607R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 1, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001_20180601, F&BI 806024 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806024 -01	TempBlank01-20180601
806024 -02	TripBlank01-20180601
806024 -03	B62A-1
806024 -04	B21A-1
806024 -05	B16A-2.5
806024 -06	B16A-4.5
806024 -07	B16A-5.5
806024 -08	B15A-1

An 8270D internal standard failed the acceptance criteria for sample B62A-1 due to matrix interferences. The data were flagged accordingly. The sample was diluted and reanalyzed.

Sample B62A-1 was extracted from a 4 ounce jar. The data were flagged accordingly.

All other quality control requirements were acceptable.

Date of Report: 06/07/18
Date Received: 06/01/18
Project: SOU_ 1249-001_ 20180601, F&BI 806024
Date Extracted: 06/05/18
Date Analyzed: 06/05/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR pH USING EPA METHOD 9045D

Sample ID Laboratory ID	pH
B62A-1 806024-03	11
B21A-1 806024-04	12
B16A-2.5 806024-05	8.3
B16A-4.5 806024-06	8.6
B16A-5.5 806024-07	8.9
B15A-1 806024-08	9.2

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B62A-1	Client:	SoundEarth Strategies
Date Received:	06/01/18	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/04/18	Lab ID:	806024-03 1/5
Date Analyzed:	06/04/18	Data File:	060421.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	99	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.70
2-Methylnaphthalene	0.24
1-Methylnaphthalene	0.26
Benz(a)anthracene	0.52
Chrysene	0.54
Benzo(a)pyrene	0.62 J
Benzo(b)fluoranthene	0.70 J
Benzo(k)fluoranthene	0.29 J
Indeno(1,2,3-cd)pyrene	0.23 J
Dibenz(a,h)anthracene	0.054 J

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B62A-1	Client:	SoundEarth Strategies
Date Received:	06/01/18	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/04/18	Lab ID:	806024-03 1/50
Date Analyzed:	06/04/18	Data File:	060419.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	117 d	31	163
Benzo(a)anthracene-d12	103 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.78
2-Methylnaphthalene	0.26
1-Methylnaphthalene	0.29
Benz(a)anthracene	0.50
Chrysene	0.57
Benzo(a)pyrene	0.62
Benzo(b)fluoranthene	0.62
Benzo(k)fluoranthene	0.22
Indeno(1,2,3-cd)pyrene	0.33
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/04/18	Lab ID:	08-1191 mb 1/5
Date Analyzed:	06/04/18	Data File:	060411.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B62A-1 pc	Client:	SoundEarth Strategies
Date Received:	06/01/18	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/04/18	Lab ID:	806024-03
Date Analyzed:	06/04/18	Data File:	060412.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	102	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	0.087
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	0.13
Tetrachloroethene	<0.025
Ethylbenzene	0.21
m,p-Xylene	0.84
o-Xylene	0.29

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B16A-2.5	Client:	SoundEarth Strategies
Date Received:	06/01/18	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/01/18	Lab ID:	806024-05
Date Analyzed:	06/01/18	Data File:	060125.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	89	113
Toluene-d8	102	64	137
4-Bromofluorobenzene	99	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B16A-4.5	Client:	SoundEarth Strategies
Date Received:	06/01/18	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/01/18	Lab ID:	806024-06
Date Analyzed:	06/01/18	Data File:	060126.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	89	113
Toluene-d8	104	64	137
4-Bromofluorobenzene	101	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B16A-5.5	Client:	SoundEarth Strategies
Date Received:	06/01/18	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/01/18	Lab ID:	806024-07
Date Analyzed:	06/01/18	Data File:	060127.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	89	113
Toluene-d8	102	64	137
4-Bromofluorobenzene	98	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/01/18	Lab ID:	08-1163 mb2
Date Analyzed:	06/01/18	Data File:	060109.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	102	55	145
4-Bromofluorobenzene	102	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/04/18	Lab ID:	08-1198 mb
Date Analyzed:	06/04/18	Data File:	060406.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	101	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Date of Report: 06/07/18
Date Received: 06/01/18
Project: SOU_ 1249-001_ 20180601, F&BI 806024

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR pH BY METHOD 9045D

Laboratory Code: 806024-07 (Duplicate)

Analyte	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
pH	8.9	8.9	0	0-20

Date of Report: 06/07/18
Date Received: 06/01/18
Project: SOU_ 1249-001_ 20180601, F&BI 806024

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806030-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	81	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	80	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	79	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	76	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	81	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	77	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	84	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	72	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	75	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	78	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	87	88	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	87	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	86	87	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	84	86	51-115	2
Chrysene	mg/kg (ppm)	0.17	90	91	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	87	86	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	95	92	54-131	3
Benzo(a)pyrene	mg/kg (ppm)	0.17	80	77	51-118	4
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	83	83	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	85	87	50-141	2

Date of Report: 06/07/18
Date Received: 06/01/18
Project: SOU_ 1249-001_ 20180601, F&BI 806024

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 805524-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	33	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	42	10-101
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	48	22-107
Methylene chloride	mg/kg (ppm)	2.5	<0.5	67	14-128
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	59	13-112
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	65	23-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	71	25-120
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	67	22-124
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	59	27-112
Benzene	mg/kg (ppm)	2.5	0.055	60	26-114
Trichloroethene	mg/kg (ppm)	2.5	<0.02	56	30-112
Toluene	mg/kg (ppm)	2.5	0.26	55	34-112
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	39	25-114
Ethylbenzene	mg/kg (ppm)	2.5	2.6	42 b	34-115
m,p-Xylene	mg/kg (ppm)	5	9.2	40 b	25-125
o-Xylene	mg/kg (ppm)	2.5	5.0	49 b	27-126

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	78	73	42-107	7
Chloroethane	mg/kg (ppm)	2.5	80	78	47-115	3
1,1-Dichloroethene	mg/kg (ppm)	2.5	90	89	65-110	1
Methylene chloride	mg/kg (ppm)	2.5	96	95	50-127	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	97	71-113	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	98	98	74-109	0
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	102	101	73-110	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	99	97	73-111	2
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	106	103	72-116	3
Benzene	mg/kg (ppm)	2.5	101	100	72-106	1
Trichloroethene	mg/kg (ppm)	2.5	102	100	72-107	2
Toluene	mg/kg (ppm)	2.5	101	100	74-111	1
Tetrachloroethene	mg/kg (ppm)	2.5	106	103	73-111	3
Ethylbenzene	mg/kg (ppm)	2.5	102	102	75-112	0
m,p-Xylene	mg/kg (ppm)	5	103	102	77-115	1
o-Xylene	mg/kg (ppm)	2.5	104	103	76-115	1

Date of Report: 06/07/18
Date Received: 06/01/18
Project: SOU_ 1249-001_ 20180601, F&BI 806024

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 806024-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	37	36	10-138	3
Chloroethane	mg/kg (ppm)	2.5	<0.5	44	42	10-176	5
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	50	49	10-160	2
Methylene chloride	mg/kg (ppm)	2.5	<0.5	68	68	10-156	0
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	60	61	14-137	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	0.069	66	67	19-140	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	68	69	25-135	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	69	69	12-160	0
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	63	62	10-156	2
Benzene	mg/kg (ppm)	2.5	<0.03	67	67	29-129	0
Trichloroethene	mg/kg (ppm)	2.5	<0.02	98	100	21-139	2
Toluene	mg/kg (ppm)	2.5	0.10	66	67	35-130	2
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	65	65	20-133	0
Ethylbenzene	mg/kg (ppm)	2.5	0.17	69	71	32-137	3
m,p-Xylene	mg/kg (ppm)	5	0.66	70	71	34-136	1
o-Xylene	mg/kg (ppm)	2.5	0.23	72	73	33-134	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	85	22-139
Chloroethane	mg/kg (ppm)	2.5	83	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	98	47-128
Methylene chloride	mg/kg (ppm)	2.5	108	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	104	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	106	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	105	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	103	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	104	62-131
Benzene	mg/kg (ppm)	2.5	105	68-114
Trichloroethene	mg/kg (ppm)	2.5	103	64-117
Toluene	mg/kg (ppm)	2.5	101	66-126
Tetrachloroethene	mg/kg (ppm)	2.5	102	72-114
Ethylbenzene	mg/kg (ppm)	2.5	105	64-123
m,p-Xylene	mg/kg (ppm)	5	106	78-122
o-Xylene	mg/kg (ppm)	2.5	105	77-124

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

806024

SAMPLE CHAIN OF CUSTODY

ME 06-01-18, VSI /VW4/CI3

Page # 1 of 1

Send Report to Chris Cass

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

PO #: 1249-001

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH ~~3 day~~ 2 days per CC
Rush charges authorized by: 6/1/18 ME

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: NWTPH-Dx	NWTPH-Gx	8260C BTEX by ~~8021B~~	cVOCs by 8260C	SVOCs by 8270	PH	cPAHs	Naphthalenes	Notes
TempBlankO1-20180601			01	6/1/18	0925	W	1									⊗ per CC
TripBlankO1-20180601			02		0925	W	1									6/1/18
B62A-1 ~~20180601~~		1'	03		0950	S	1			⊗	⊗		X	⊗	⊗	ME
B21A-1 ~~20180601~~		1'	04A-E		1015	S	5						X			
B16A-2.5 ~~20180601~~		2.5'	05		1100	S	5			X	X		X			
B16A-4.5 ~~20180601~~		4.5'	06		1130	S	5			X	X		X			
B16A-5.5 ~~20180601~~		5.5'	07		1205	S	5			X	X		X			
B15A-1 ~~20180601~~		1'	08		1230	S	1						X			
								GRM								Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Glenn McKenney	SES	6/1/18	1325
Received by:	Liz UB	FTBI	6/1/18	1325
Relinquished by:				
Received by:				

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

APPENDIX D

LABORATORY ANALYTICAL REPORTS FOR CONCRETE

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 11, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on June 7, 2018 from the SOU_1249-001_ 20180607, F&BI 806130 project. There are 14 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0611R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 7, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001_ 20180607, F&BI 806130 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806130 -01	Conc-Slab01-20180607
806130 -02	Conc-Slab02-20180607
806130 -03	Conc-Pile01-20180607
806130 -04	Conc-Pile02-20180607

The Conc-Pile samples are included in this report. The Conc-Slab results will be issued in a separate report per your request.

All quality control requirements were acceptable.

Date of Report: 06/11/18
Date Received: 06/07/18
Project: SOU_1249-001_ 20180607, F&BI 806130
Date Extracted: 06/08/18
Date Analyzed: 06/08/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
Conc-Pile01-20180607 806130-03	<0.02	<0.02	<0.02	<0.06	<5	83
Conc-Pile02-20180607 806130-04	<0.02	<0.02	<0.02	<0.06	<5	82
Method Blank 08-1146 MB2	<0.02	<0.02	<0.02	<0.06	<5	81

Date of Report: 06/11/18
Date Received: 06/07/18
Project: SOU_1249-001_ 20180607, F&BI 806130
Date Extracted: 06/08/18
Date Analyzed: 06/08/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
Conc-Pile01-20180607 806130-03	<50	<250	94
Conc-Pile02-20180607 806130-04	<50	<250	99
Method Blank 08-1234 MB2	<50	<250	88

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Conc-Pile01-20180607	Client:	SoundEarth Strategies
Date Received:	06/07/18	Project:	SOU_1249-001_ 20180607
Date Extracted:	06/08/18	Lab ID:	806130-03 1/5
Date Analyzed:	06/08/18	Data File:	060813.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	105	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	0.013
Benzo(a)pyrene	0.011
Benzo(b)fluoranthene	0.012
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Conc-Pile02-20180607	Client:	SoundEarth Strategies
Date Received:	06/07/18	Project:	SOU_1249-001_ 20180607
Date Extracted:	06/08/18	Lab ID:	806130-04 1/5
Date Analyzed:	06/08/18	Data File:	060814.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	31	163
Benzo(a)anthracene-d12	105	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
Benz(a)anthracene	0.019
Chrysene	0.021
Benzo(a)pyrene	0.018
Benzo(b)fluoranthene	0.019
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	0.010
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001_ 20180607
Date Extracted:	06/08/18	Lab ID:	08-1236 mb 1/5
Date Analyzed:	06/08/18	Data File:	060810.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	31	163
Benzo(a)anthracene-d12	103	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 6020B

Client ID:	Conc-Pile01-20180607	Client:	SoundEarth Strategies
Date Received:	06/07/18	Project:	SOU_1249-001_ 20180607
Date Extracted:	06/08/18	Lab ID:	806130-03
Date Analyzed:	06/08/18	Data File:	806130-03.057
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.20

Analysis For Total Metals By EPA Method 6020B

Client ID:	Conc-Pile02-20180607	Client:	SoundEarth Strategies
Date Received:	06/07/18	Project:	SOU_1249-001_ 20180607
Date Extracted:	06/08/18	Lab ID:	806130-04
Date Analyzed:	06/08/18	Data File:	806130-04.058
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.80

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_1249-001_ 20180607
Date Extracted:	06/08/18	Lab ID:	I8-364 mb2
Date Analyzed:	06/08/18	Data File:	I8-364 mb2.054
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

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

Date of Report: 06/11/18
Date Received: 06/07/18
Project: SOU_1249-001_ 20180607, F&BI 806130

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 806111-22 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	73	69-120
Toluene	mg/kg (ppm)	0.5	88	70-117
Ethylbenzene	mg/kg (ppm)	0.5	91	65-123
Xylenes	mg/kg (ppm)	1.5	92	66-120
Gasoline	mg/kg (ppm)	20	95	71-131

Date of Report: 06/11/18
Date Received: 06/07/18
Project: SOU_1249-001_ 20180607, F&BI 806130

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806121-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	98	88	63-146	11

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	104	79-144

Date of Report: 06/11/18
Date Received: 06/07/18
Project: SOU_1249-001_ 20180607, F&BI 806130

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806130-04 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	82	44-129
Benz(a)anthracene	mg/kg (ppm)	0.17	0.019	89	23-144
Chrysene	mg/kg (ppm)	0.17	0.021	84	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.019	91	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	88	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.018	91	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.010	74	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	72	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	86	85	58-121	1
Benz(a)anthracene	mg/kg (ppm)	0.17	87	88	51-115	1
Chrysene	mg/kg (ppm)	0.17	88	90	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	94	92	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	92	90	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	85	83	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	77	79	49-148	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	75	78	50-141	4

Date of Report: 06/11/18
Date Received: 06/07/18
Project: SOU_1249-001_ 20180607, F&BI 806130

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

Laboratory Code: 806100-21 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	25.2	129 b	128 b	75-125	1 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	97	80-120

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

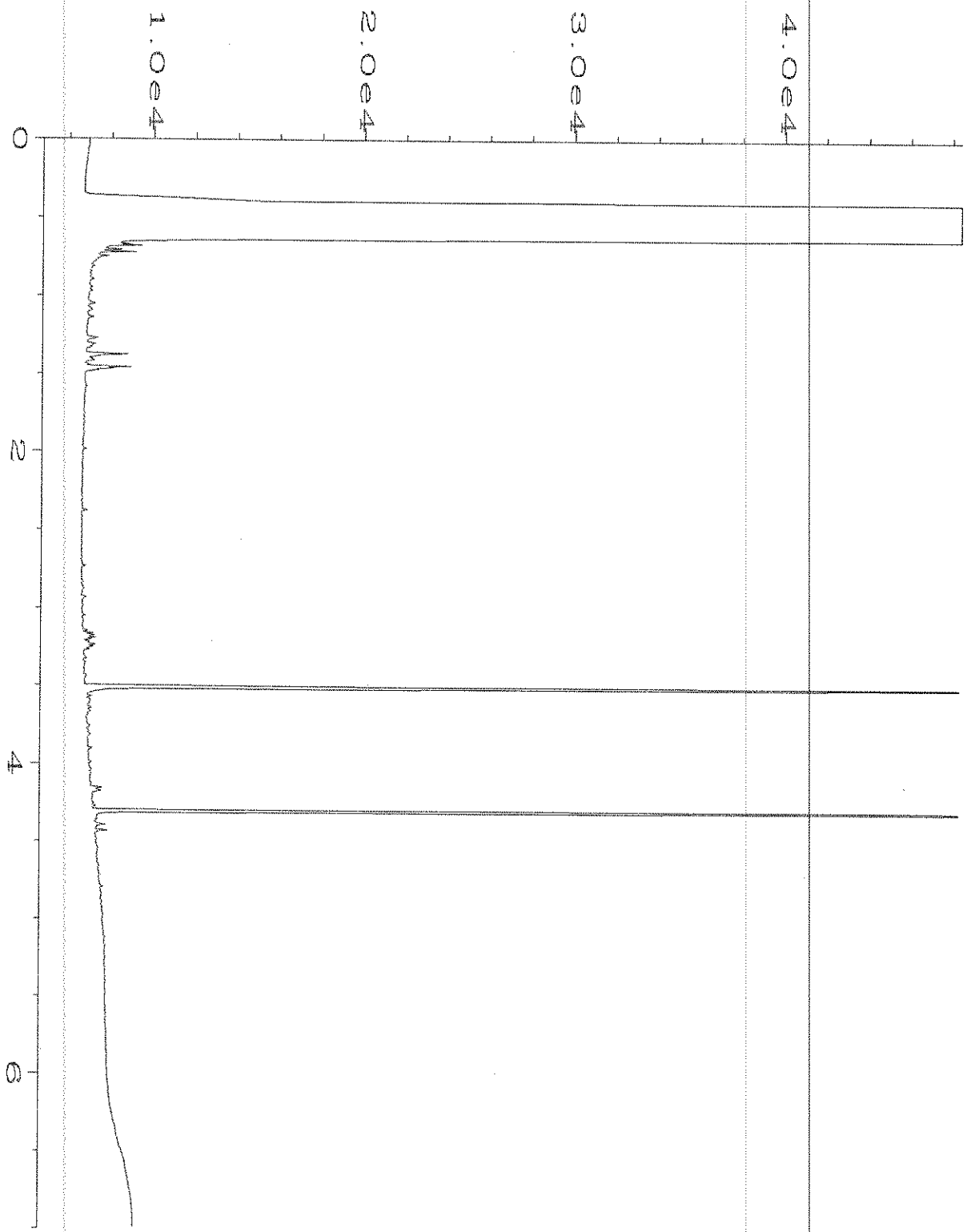
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

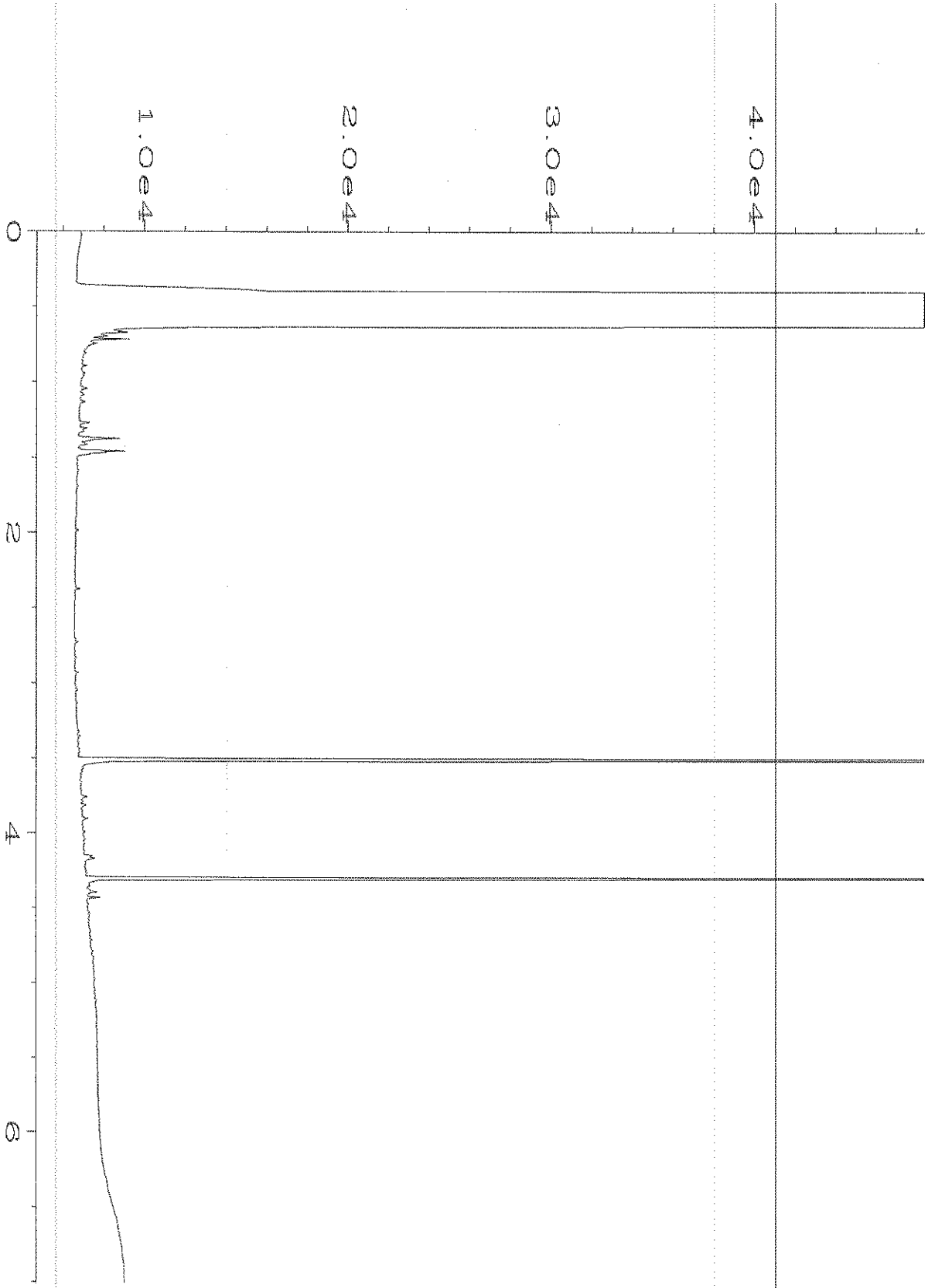
vo - The value reported fell outside the control limits established for this analyte.

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



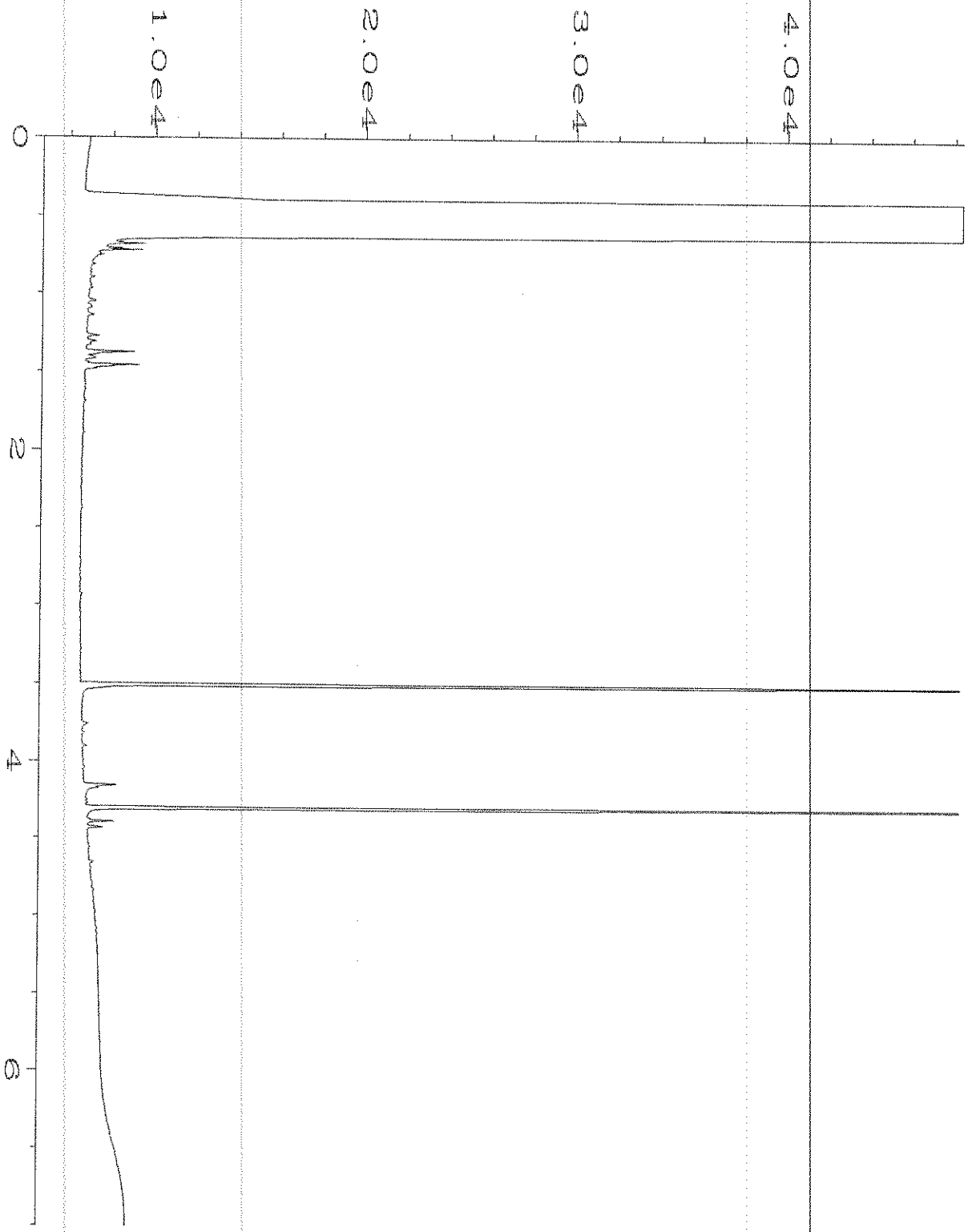
Data File Name : C:\HPCHEM\6\DATA\06-08-18\009F0301.D
Operator : TL
Instrument : GC6
Sample Name : 806130-01
Run Time Bar Code:
Acquired on : 08 Jun 18 09:44 AM
Report Created on: 08 Jun 18 01:02 PM

Page Number : 1
Vial Number : 9
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



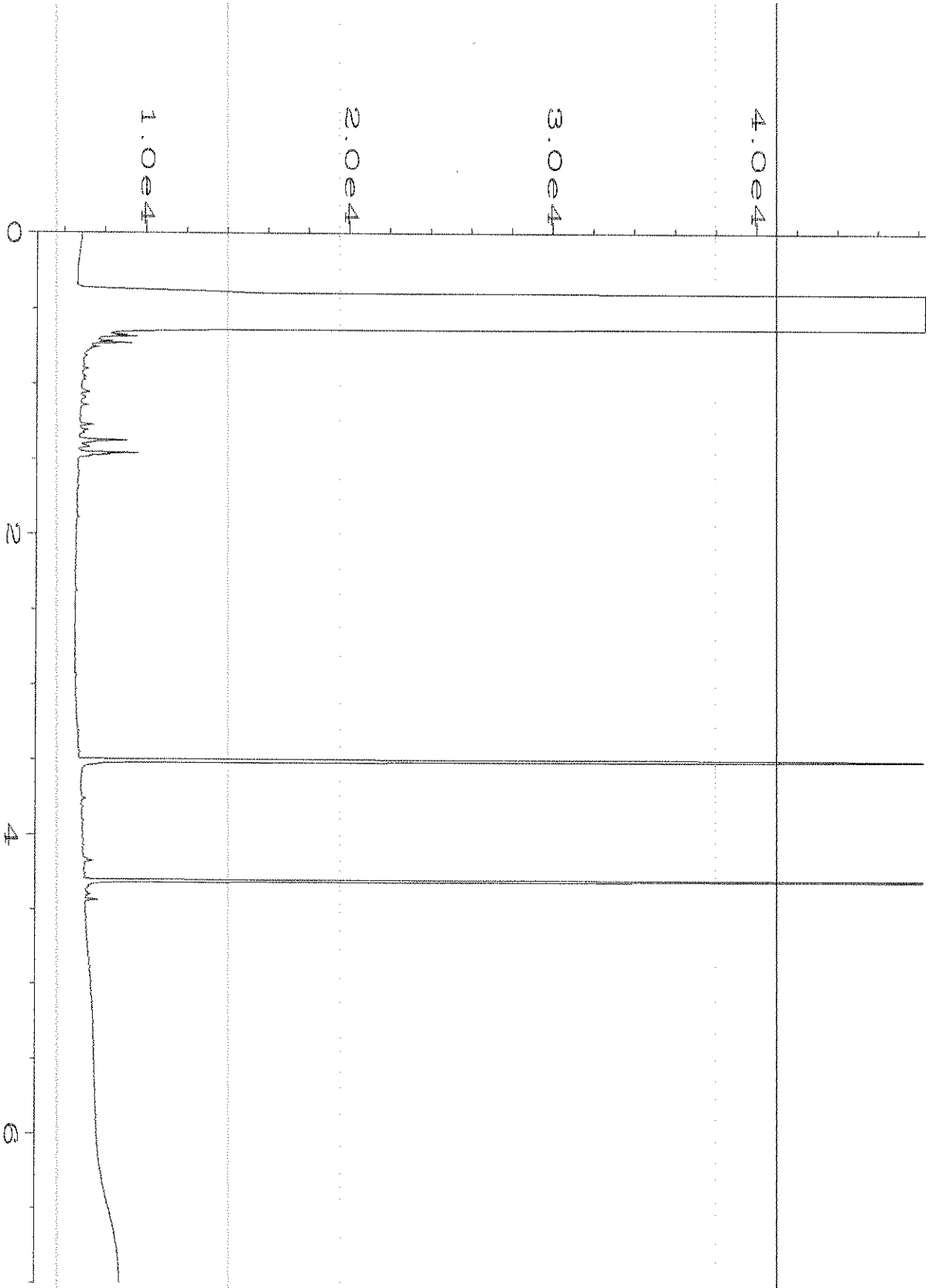
Data File Name : C:\HPCHEM\6\DATA\06-08-18\010F0301.D
Operator : TL
Instrument : GC6
Sample Name : 806130-02
Run Time Bar Code:
Acquired on : 08 Jun 18 09:55 AM
Report Created on: 08 Jun 18 01:02 PM

Page Number : 1
Vial Number : 10
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



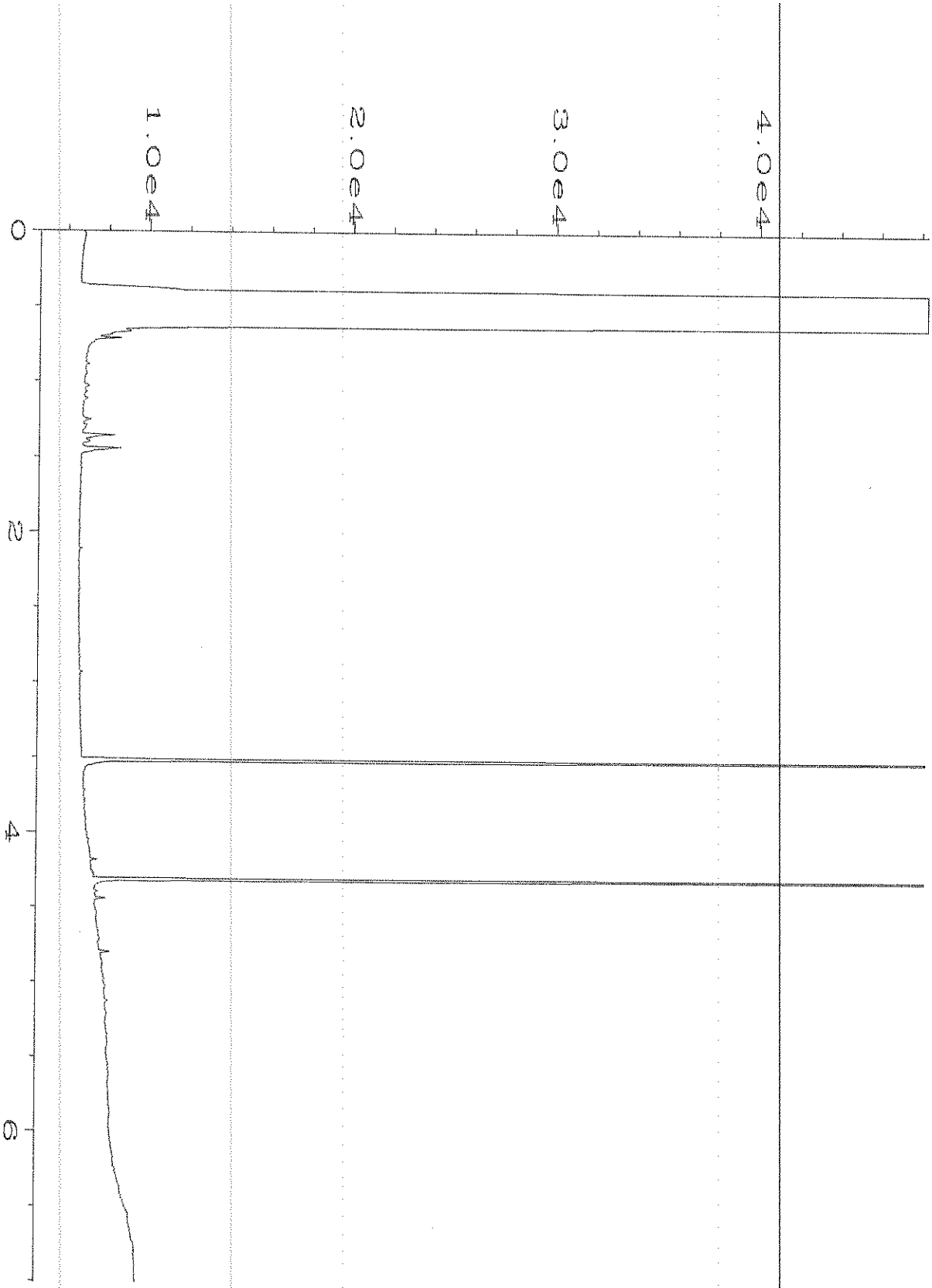
Data File Name : C:\HPCHEM\6\DATA\06-08-18\011F0301.D
Operator : TL
Instrument : GC6
Sample Name : 806130-03
Run Time Bar Code:
Acquired on : 08 Jun 18 10:06 AM
Report Created on: 08 Jun 18 01:03 PM

Page Number : 1
Vial Number : 11
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



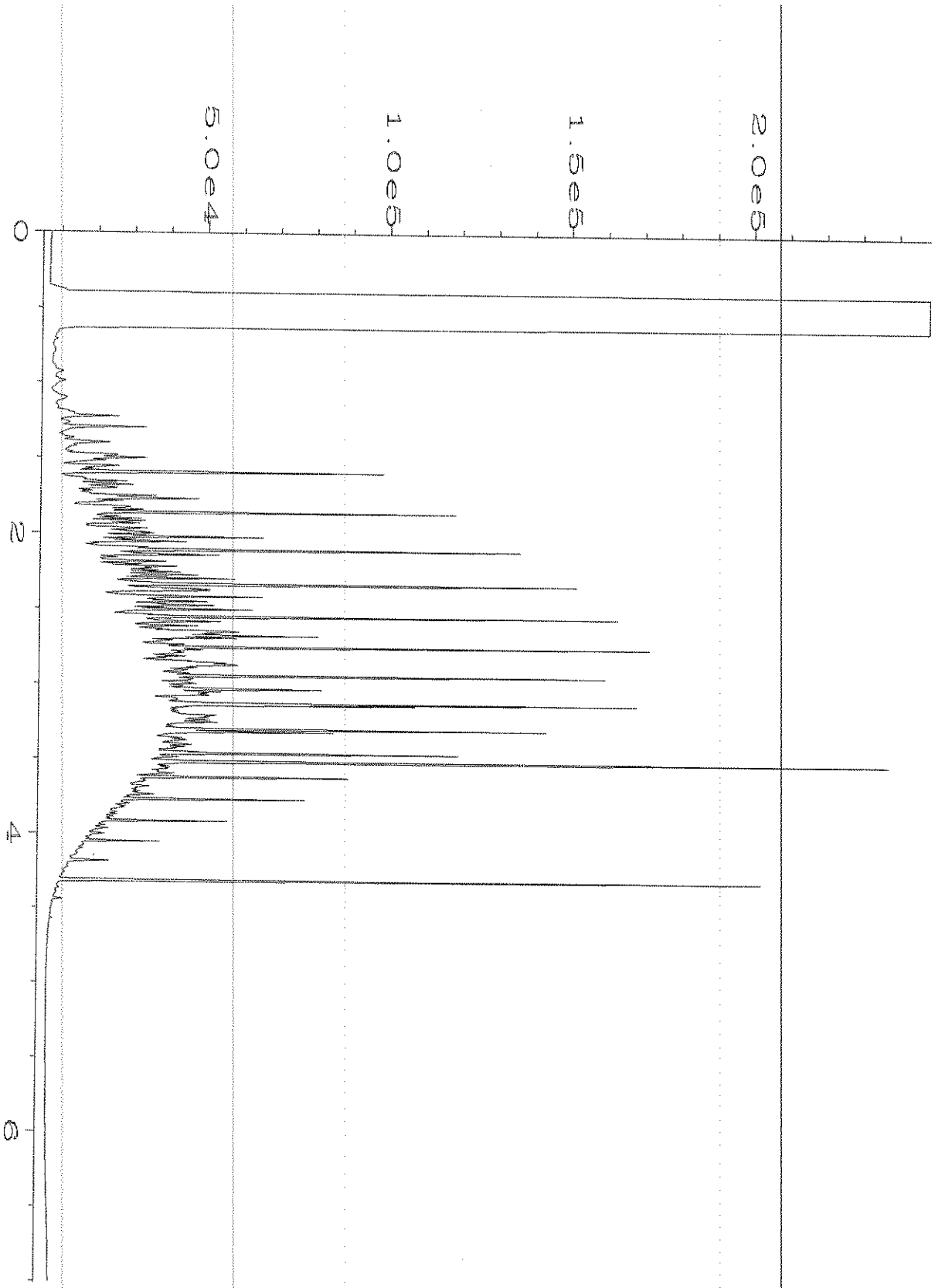
Data File Name : C:\HPCHEM\6\DATA\06-08-18\012F0301.D
Operator : TL
Instrument : GC6
Sample Name : 806130-04
Run Time Bar Code:
Acquired on : 08 Jun 18 10:16 AM
Report Created on: 08 Jun 18 01:03 PM

Page Number : 1
Vial Number : 12
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-08-18\008F0301.D
Operator : TL
Instrument : GC6
Sample Name : 08-1234 mb2
Run Time Bar Code:
Acquired on : 08 Jun 18 09:36 AM
Report Created on: 08 Jun 18 01:03 PM

Page Number : 1
Vial Number : 8
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-08-18\003F0201.D
Operator : TL
Instrument : GC6
Sample Name : 500 Dx 52-71D
Run Time Bar Code:
Acquired on : 08 Jun 18 06:46 AM
Report Created on: 08 Jun 18 01:05 PM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 2
Instrument Method: DX.MTH
Analysis Method : DX.MTH

806130

SAMPLE CHAIN OF CUSTODY ME 6-7-18

BI2

Page # 1 of 1

Report To Chris Cass
Company Sound Earth Strategies
Address 2811 Fairview Ave E Suite 2000
City, State, ZIP Seattle WA
Phone 206 306 1900 Email —

SAMPLERS (signature) Sarah Welter
PROJECT NAME Ballard Blocks II
PO # 1249-001
REMARKS
INVOICE TO

TURNAROUND TIME
☐ Standard Turnaround
RUSH 24hr
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Archive Samples
☐ Other

Sample ID	Lab ID (JME)	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	As	Naphthalene			Notes
						ANALYSES REQUESTED											
Conc-Slab01-20180607	144001 A-B	6/7/18	1440	C	-		X	X	X			X	X	X			
Conc-Slab02-20180607	1450 02 A-B	6/7/18	1450	C	-		X	X	X			X	X	X			
Conc-Pile01-20180607	1540 03 A-B	6/7/18	1540	C	-		X	X	X			X	X	X			
Conc-Pile02-20180607	1545 04 A-B	6/7/18	1545	C	-		X	X	X			X	X	X			

Shiv

Samples received at 23 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	6/7/18	16:34
Received by:	VINH	FBI	6/7/18	16:30
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 13, 2018

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

Dear Mr Cass:

Included are the additional results from the testing of material submitted on June 7, 2018 from the SOU_ 1249-001_ 20180607, F&BI 806130 project. There are 14 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
SOU0613R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 7, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001_ 20180607, F&BI 806130 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806130 -01	Conc-Slab01-20180607
806130 -02	Conc-Slab02-20180607
806130 -03	Conc-Pile01-20180607
806130 -04	Conc-Pile02-20180607

The Conc-Slab results were included in this report. The Conc-Pile results were issued in a separate report per client request.

All quality control requirements were acceptable.

Date of Report: 06/13/18
Date Received: 06/07/18
Project: SOU_ 1249-001_ 20180607, F&BI 806130
Date Extracted: 06/08/18
Date Analyzed: 06/08/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
Conc-Slab01 -20180607 806130-01	<0.02	<0.02	<0.02	<0.06	<5	83
Conc-Slab02 -20180607 806130-02	<0.02	<0.02	<0.02	<0.06	<5	83
Method Blank 08-1146 MB2	<0.02	<0.02	<0.02	<0.06	<5	81

Date of Report: 06/13/18
Date Received: 06/07/18
Project: SOU_ 1249-001_ 20180607, F&BI 806130
Date Extracted: 06/08/18
Date Analyzed: 06/08/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
Conc-Slab01-20180607 806130-01	<50	<250	82
Conc-Slab02-20180607 806130-02	<50	<250	92
Method Blank 08-1234 MB2	<50	<250	88

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Conc-Slab01-20180607	Client:	SoundEarth Strategies
Date Received:	06/07/18	Project:	SOU_ 1249-001_ 20180607
Date Extracted:	06/08/18	Lab ID:	806130-01 1/5
Date Analyzed:	06/08/18	Data File:	060811.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	101	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
Benz(a)anthracene	0.033
Chrysene	0.040
Benzo(a)pyrene	0.036
Benzo(b)fluoranthene	0.041
Benzo(k)fluoranthene	0.013
Indeno(1,2,3-cd)pyrene	0.020
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Conc-Slab02-20180607	Client:	SoundEarth Strategies
Date Received:	06/07/18	Project:	SOU_ 1249-001_ 20180607
Date Extracted:	06/08/18	Lab ID:	806130-02 1/5
Date Analyzed:	06/08/18	Data File:	060812.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	31	163
Benzo(a)anthracene-d12	105	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.013
Benz(a)anthracene	0.040
Chrysene	0.052
Benzo(a)pyrene	0.052
Benzo(b)fluoranthene	0.061
Benzo(k)fluoranthene	0.018
Indeno(1,2,3-cd)pyrene	0.030
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001_ 20180607
Date Extracted:	06/08/18	Lab ID:	08-1236 mb 1/5
Date Analyzed:	06/08/18	Data File:	060810.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	31	163
Benzo(a)anthracene-d12	103	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 6020B

Client ID:	Conc-Slab01-20180607	Client:	SoundEarth Strategies
Date Received:	06/07/18	Project:	SOU_ 1249-001_ 20180607
Date Extracted:	06/08/18	Lab ID:	806130-01
Date Analyzed:	06/08/18	Data File:	806130-01.055
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	53.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	Conc-Slab02-20180607	Client:	SoundEarth Strategies
Date Received:	06/07/18	Project:	SOU_ 1249-001_ 20180607
Date Extracted:	06/08/18	Lab ID:	806130-02
Date Analyzed:	06/08/18	Data File:	806130-02.056
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.98

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_ 1249-001_ 20180607
Date Extracted:	06/08/18	Lab ID:	I8-364 mb2
Date Analyzed:	06/08/18	Data File:	I8-364 mb2.054
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

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

Date of Report: 06/13/18
Date Received: 06/07/18
Project: SOU_ 1249-001_ 20180607, F&BI 806130

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 806111-22 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	73	69-120
Toluene	mg/kg (ppm)	0.5	88	70-117
Ethylbenzene	mg/kg (ppm)	0.5	91	65-123
Xylenes	mg/kg (ppm)	1.5	92	66-120
Gasoline	mg/kg (ppm)	20	95	71-131

Date of Report: 06/13/18
Date Received: 06/07/18
Project: SOU_ 1249-001_ 20180607, F&BI 806130

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806121-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	98	88	63-146	11

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	104	79-144

Date of Report: 06/13/18
Date Received: 06/07/18
Project: SOU_ 1249-001_ 20180607, F&BI 806130

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806130-04 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	82	44-129
Benz(a)anthracene	mg/kg (ppm)	0.17	0.019	89	23-144
Chrysene	mg/kg (ppm)	0.17	0.021	84	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.019	91	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	88	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.018	91	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.010	74	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	72	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	86	85	58-121	1
Benz(a)anthracene	mg/kg (ppm)	0.17	87	88	51-115	1
Chrysene	mg/kg (ppm)	0.17	88	90	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	94	92	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	92	90	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	85	83	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	77	79	49-148	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	75	78	50-141	4

Date of Report: 06/13/18
Date Received: 06/07/18
Project: SOU_ 1249-001_ 20180607, F&BI 806130

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

Laboratory Code: 806100-21 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	25.2	129 b	128 b	75-125	1 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	97	80-120

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

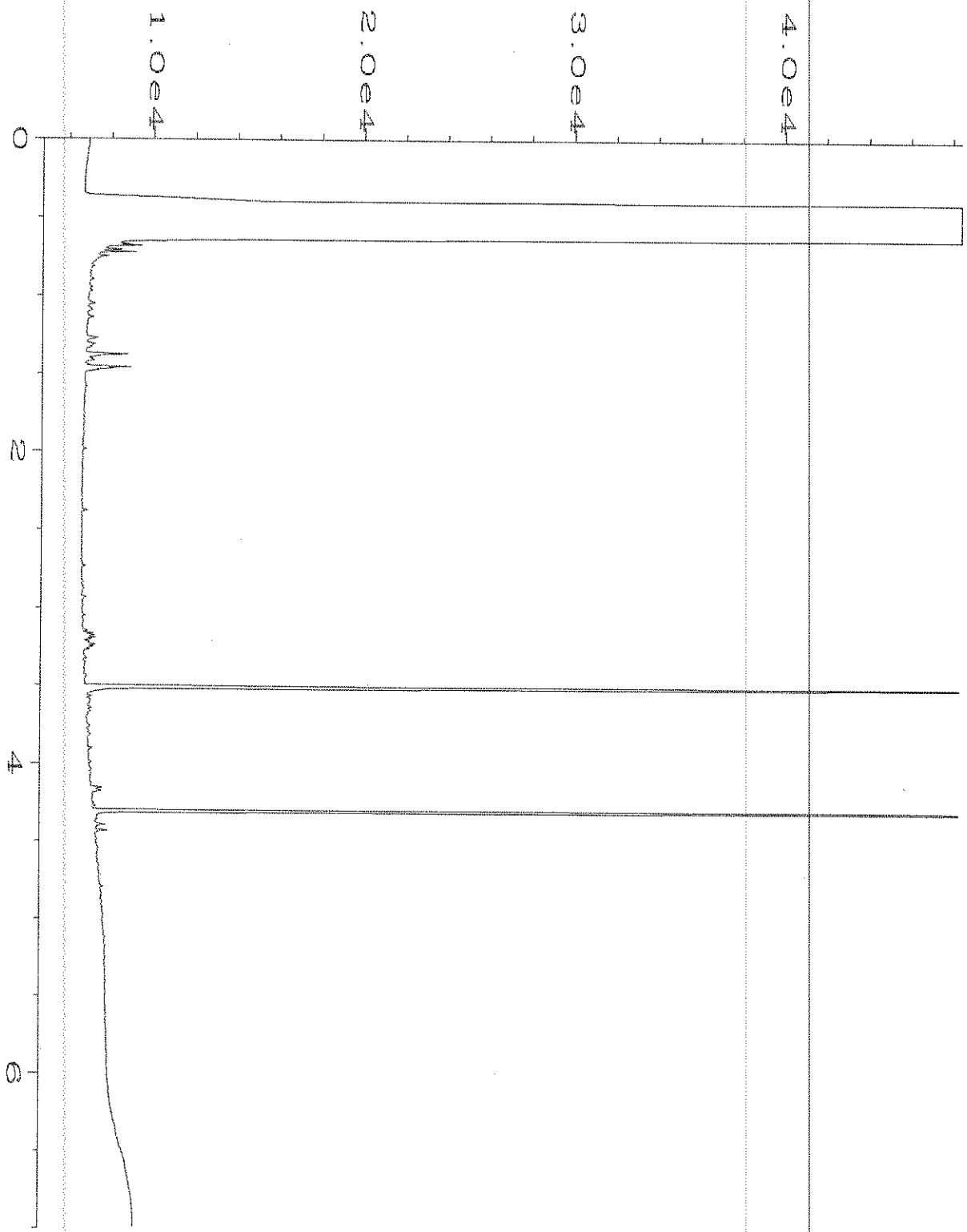
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

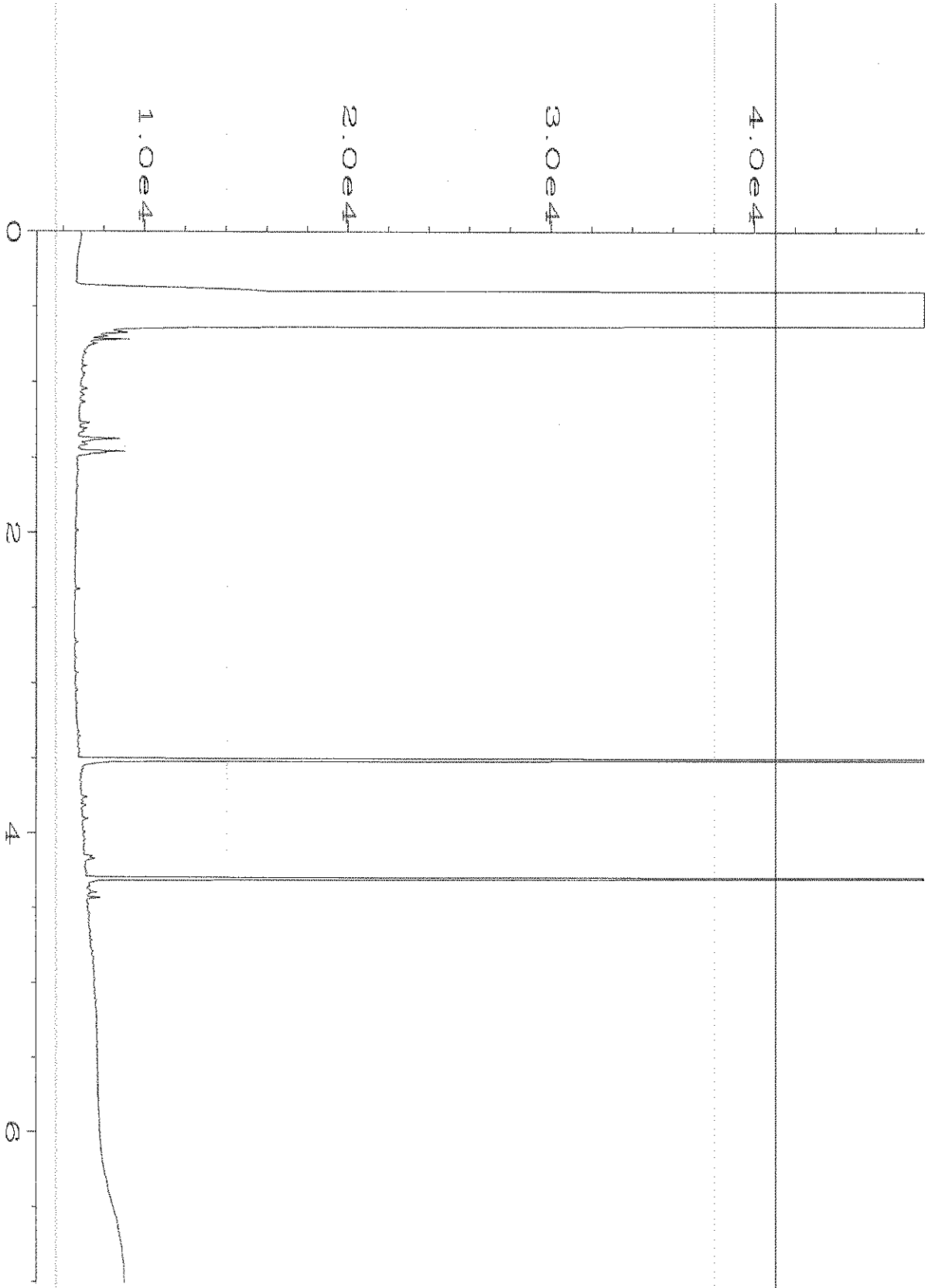
vo - The value reported fell outside the control limits established for this analyte.

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



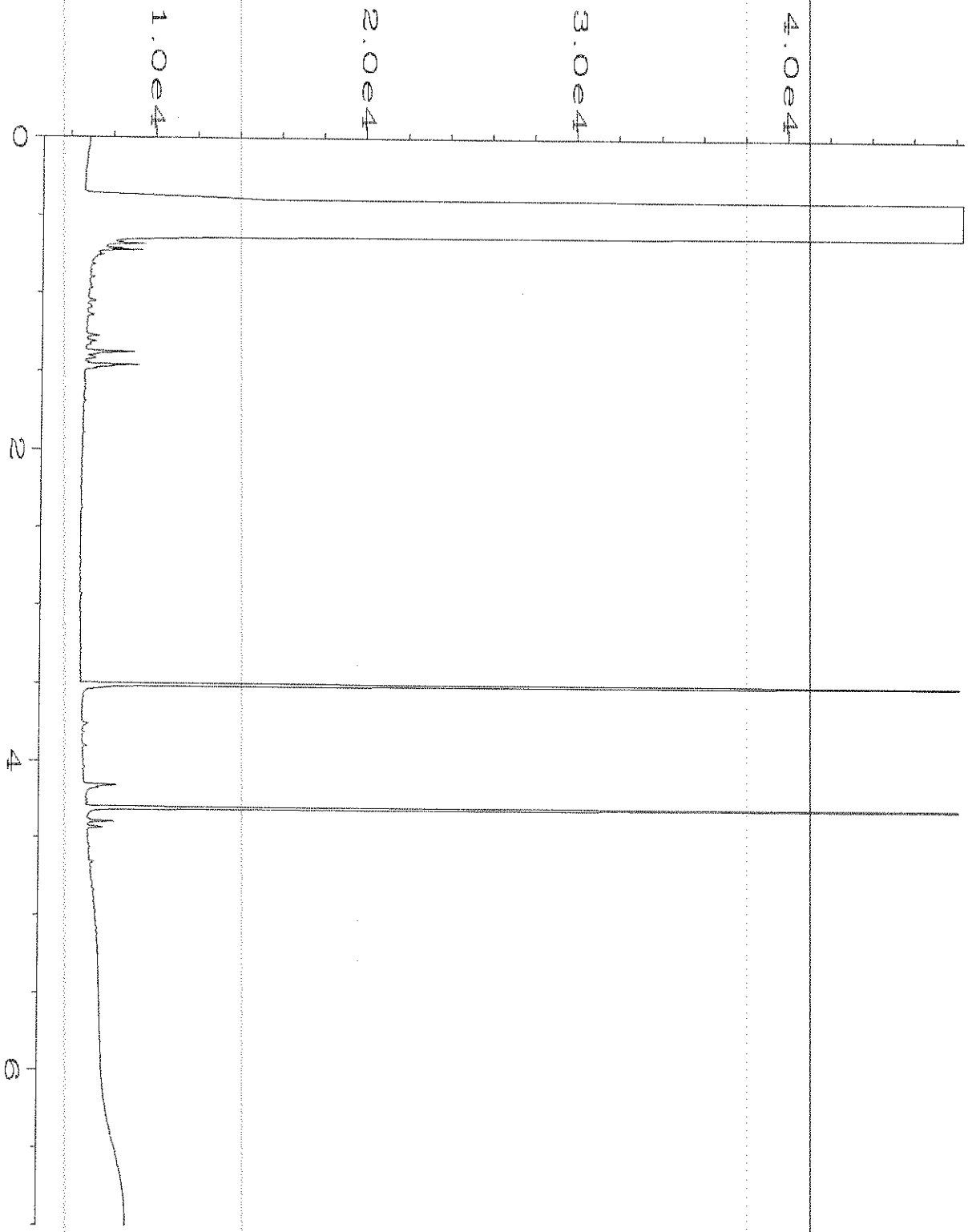
Data File Name : C:\HPCHEM\6\DATA\06-08-18\009F0301.D
Operator : TL
Instrument : GC6
Sample Name : 806130-01
Run Time Bar Code:
Acquired on : 08 Jun 18 09:44 AM
Report Created on: 08 Jun 18 01:02 PM

Page Number : 1
Vial Number : 9
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



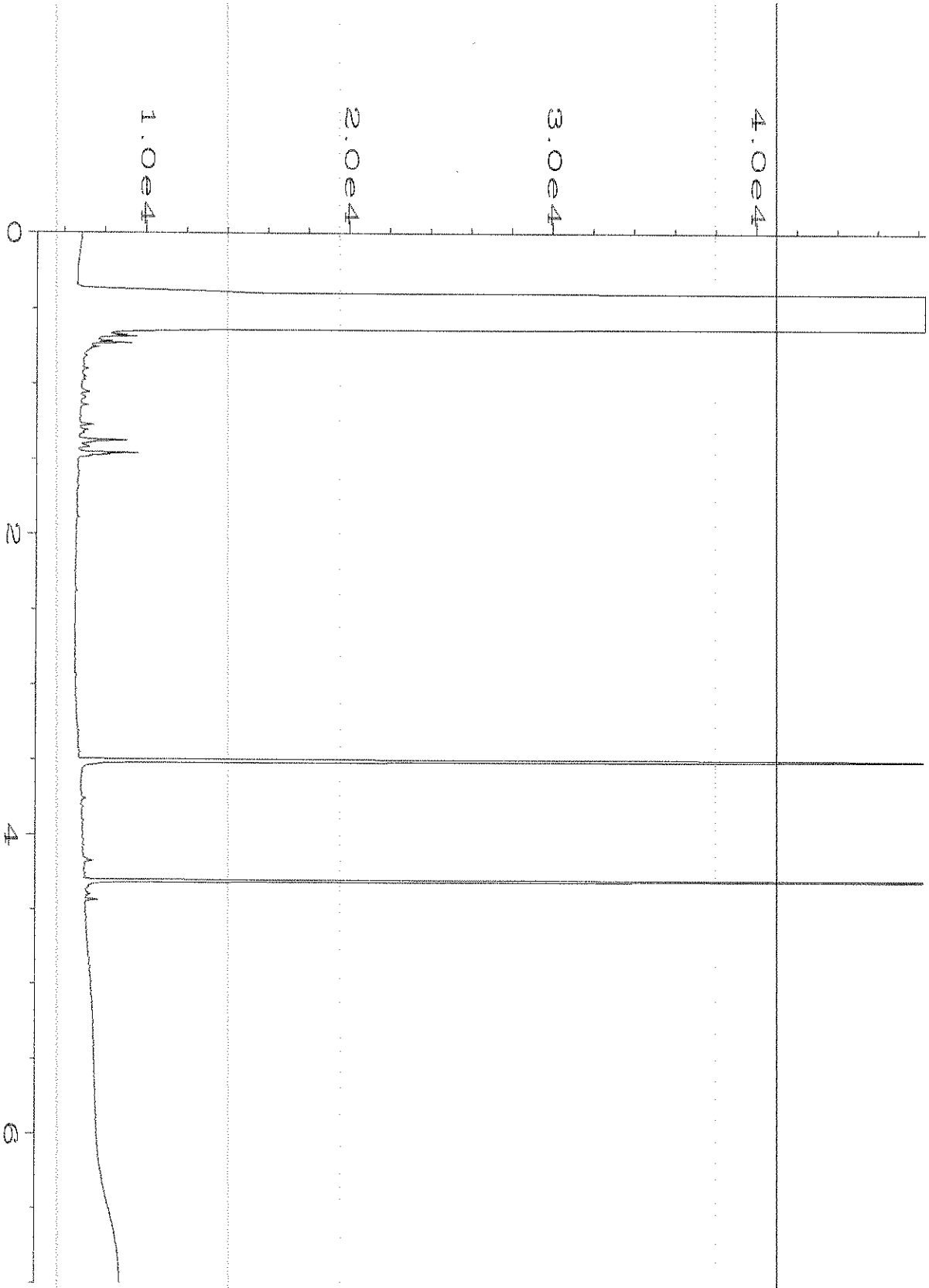
Data File Name : C:\HPCHEM\6\DATA\06-08-18\010F0301.D
Operator : TL
Instrument : GC6
Sample Name : 806130-02
Run Time Bar Code:
Acquired on : 08 Jun 18 09:55 AM
Report Created on: 08 Jun 18 01:02 PM

Page Number : 1
Vial Number : 10
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



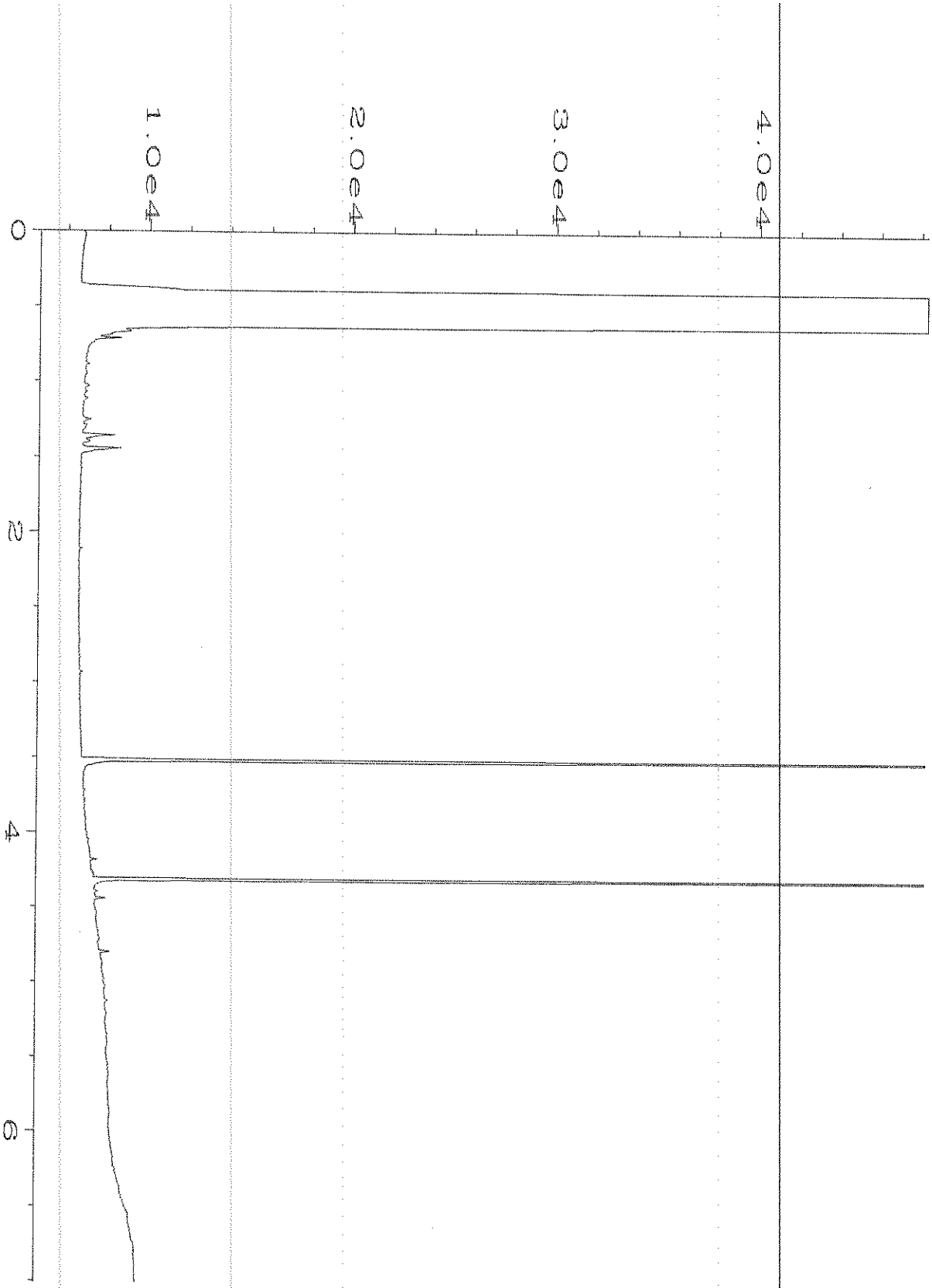
Data File Name : C:\HPCHEM\6\DATA\06-08-18\011F0301.D
Operator : TL
Instrument : GC6
Sample Name : 806130-03
Run Time Bar Code:
Acquired on : 08 Jun 18 10:06 AM
Report Created on: 08 Jun 18 01:03 PM

Page Number : 1
Vial Number : 11
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



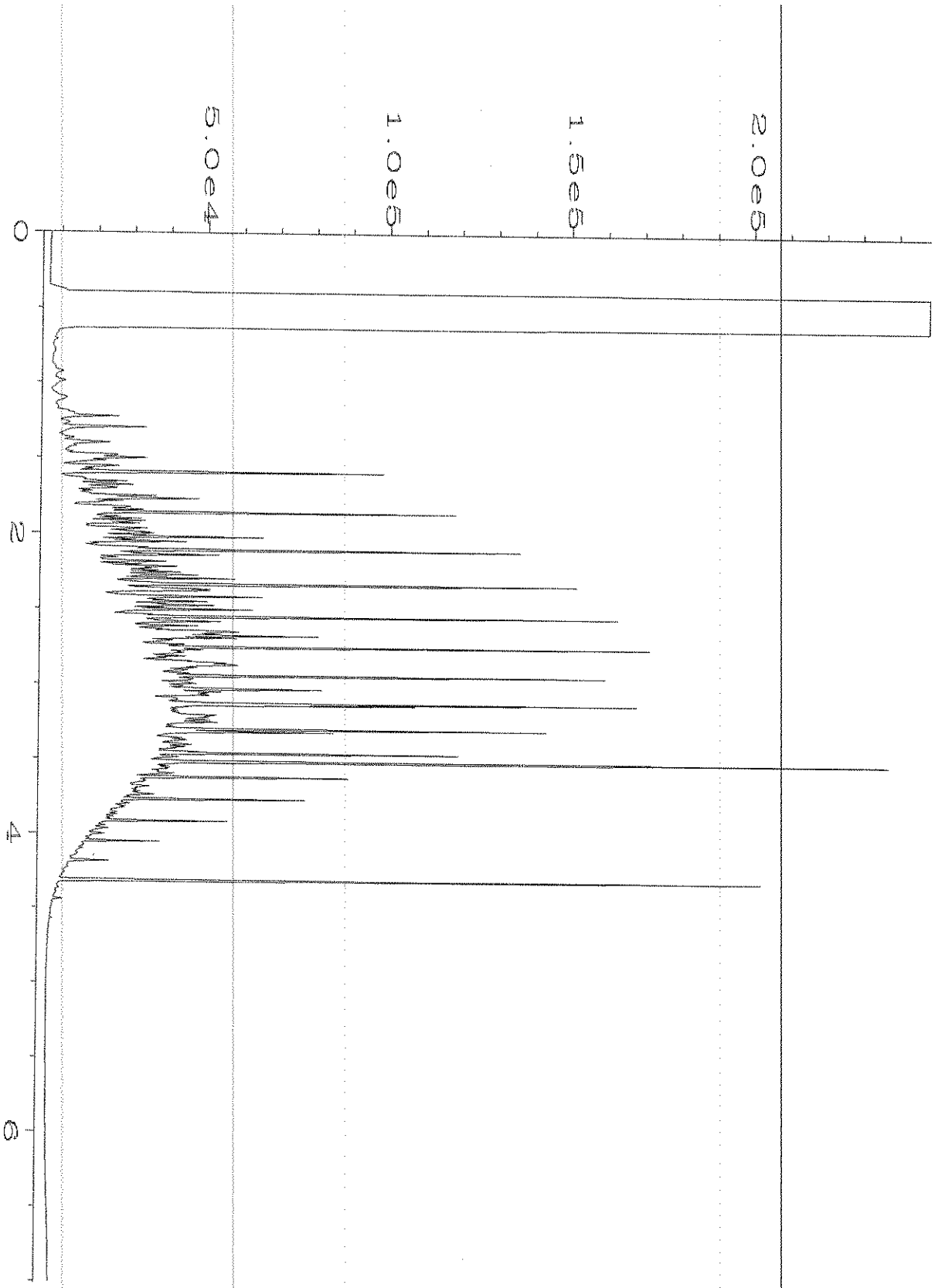
Data File Name : C:\HPCHEM\6\DATA\06-08-18\012F0301.D
Operator : TL
Instrument : GC6
Sample Name : 806130-04
Run Time Bar Code:
Acquired on : 08 Jun 18 10:16 AM
Report Created on: 08 Jun 18 01:03 PM

Page Number : 1
Vial Number : 12
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-08-18\008F0301.D
Operator : TL
Instrument : GC6
Sample Name : 08-1234 mb2
Run Time Bar Code:
Acquired on : 08 Jun 18 09:36 AM
Report Created on: 08 Jun 18 01:03 PM

Page Number : 1
Vial Number : 8
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-08-18\003F0201.D
Operator : TL
Instrument : GC6
Sample Name : 500 Dx 52-71D
Run Time Bar Code:
Acquired on : 08 Jun 18 06:46 AM
Report Created on: 08 Jun 18 01:05 PM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 2
Instrument Method: DX.MTH
Analysis Method : DX.MTH

806130

SAMPLE CHAIN OF CUSTODY ME 6-7-18

BI2

Page # 1 of 1

Report To Chris Cass
Company Sound Earth Strategies
Address 2811 Fairview Ave E Suite 2000
City, State, ZIP Seattle WA
Phone 206 306 1900 Email —

SAMPLERS (signature) Sarah Welter
PROJECT NAME Ballard Blocks II
PO # 1249-001
REMARKS
INVOICE TO

TURNAROUND TIME
☐ Standard Turnaround
RUSH 24hr
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Archive Samples
☐ Other

Sample ID	Lab ID (JME)	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	As	Naphthalene			Notes
						ANALYSES REQUESTED											
Conc-Slab01-20180607	144001 A-B	6/7/18	1440	C	-		X	X	X			X	X	X			
Conc-Slab02-20180607	1450 02 A-B	6/7/18	1450	C	-		X	X	X			X	X	X			
Conc-Pile01-20180607	1540 03 A-B	6/7/18	1540	C	-		X	X	X			X	X	X			
Conc-Pile02-20180607	1545 04 A-B	6/7/18	1545	C	-		X	X	X			X	X	X			

Shiv

Samples received at 23 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	6/7/18	16:34
Received by:	VINH	FBI	6/7/18	16:30
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 15, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on June 11, 2018 from the SOU_ 1249-001-05_ 20180611, F&BI 806171 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0615R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 11, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180611, F&BI 806171 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806171 -01	Conc-Pile01A-20180611
806171 -02	Conc-Pile01B-20180611
806171 -03	Conc-Pile01C-20180611

The samples were crushed and composited per your request and labeled as Conc-Pile01 COMP.

All quality control requirements were acceptable.

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001-05_ 20180611, F&BI 806171
Date Extracted: 06/12/18
Date Analyzed: 06/12/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
Conc-Pile01 COMP 806171-01,,03	<0.02	<0.02	<0.02	<0.06	<5	81
Method Blank 08-1149 MB2	<0.02	<0.02	<0.02	<0.06	<5	83

Note: The sample was pulverized and composited prior to analysis, therefore the results should be considered estimates.

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001-05_ 20180611, F&BI 806171
Date Extracted: 06/12/18
Date Analyzed: 06/12/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 56-165)
Conc-Pile01 COMP 806171-01/02/03	<50	<250	103
Method Blank 08-1245 MB	<50	<250	110

Analysis For Total Metals By EPA Method 200.8

Client ID:	Conc-Pile01 COMP	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_ 1249-001-05_ 20180611
Date Extracted:	06/12/18	Lab ID:	806171-01,,03
Date Analyzed:	06/12/18	Data File:	806171-01,,03.114
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.57

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_ 1249-001-05_ 20180611
Date Extracted:	06/12/18	Lab ID:	I8-376 mb
Date Analyzed:	06/12/18	Data File:	I8-376 mb.109
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Conc-Pile01 COMP	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_ 1249-001-05_ 20180611
Date Extracted:	06/11/18	Lab ID:	806171-01,,03 1/5
Date Analyzed:	06/12/18	Data File:	061204.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	90	31	163
Benzo(a)anthracene-d12	116	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.011
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.022
Chrysene	0.028
Benzo(a)pyrene	0.025
Benzo(b)fluoranthene	0.031
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	0.012
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180611
Date Extracted:	06/11/18	Lab ID:	08-1244 mb 1/5
Date Analyzed:	06/11/18	Data File:	061114.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	90	31	163
Benzo(a)anthracene-d12	106	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001-05_ 20180611, F&BI 806171

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 806172-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	10	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	91	69-120
Toluene	mg/kg (ppm)	0.5	92	70-117
Ethylbenzene	mg/kg (ppm)	0.5	94	65-123
Xylenes	mg/kg (ppm)	1.5	94	66-120
Gasoline	mg/kg (ppm)	20	95	71-131

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001-05_ 20180611, F&BI 806171

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806152-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	96	94	73-135	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	100	74-139

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001-05_ 20180611, F&BI 806171

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID 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	mg/kg (ppm)	10	97	98	85-115	1

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001-05_ 20180611, F&BI 806171

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806148-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.012	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	86	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.0083	86	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	86	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	83	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	105	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	104	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	93	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	37	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	39	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	92	92	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	94	94	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	94	94	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	96	94	51-115	2
Chrysene	mg/kg (ppm)	0.17	100	100	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	99	99	56-123	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	98	98	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	90	90	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	91	91	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	93	50-141	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

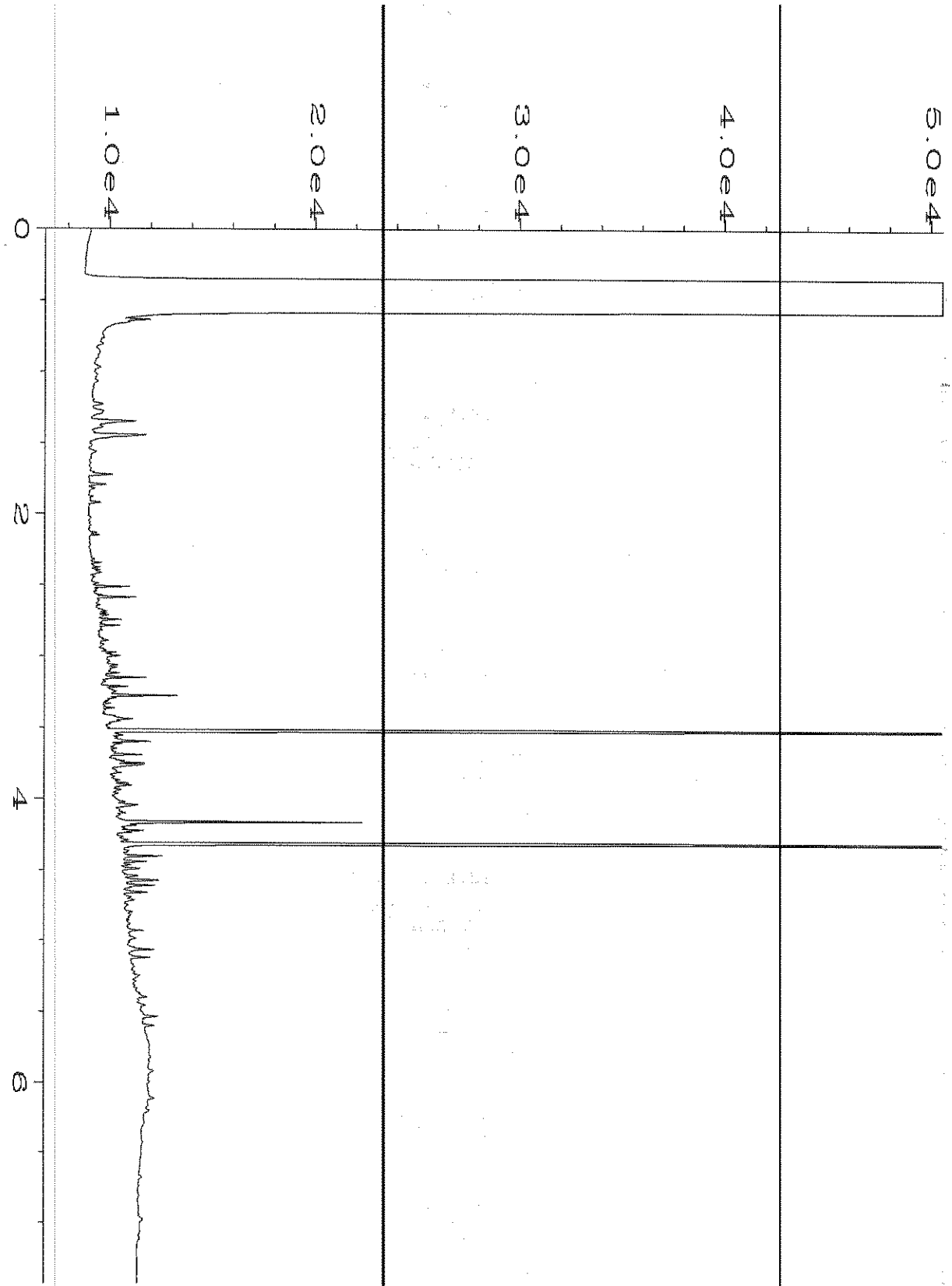
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

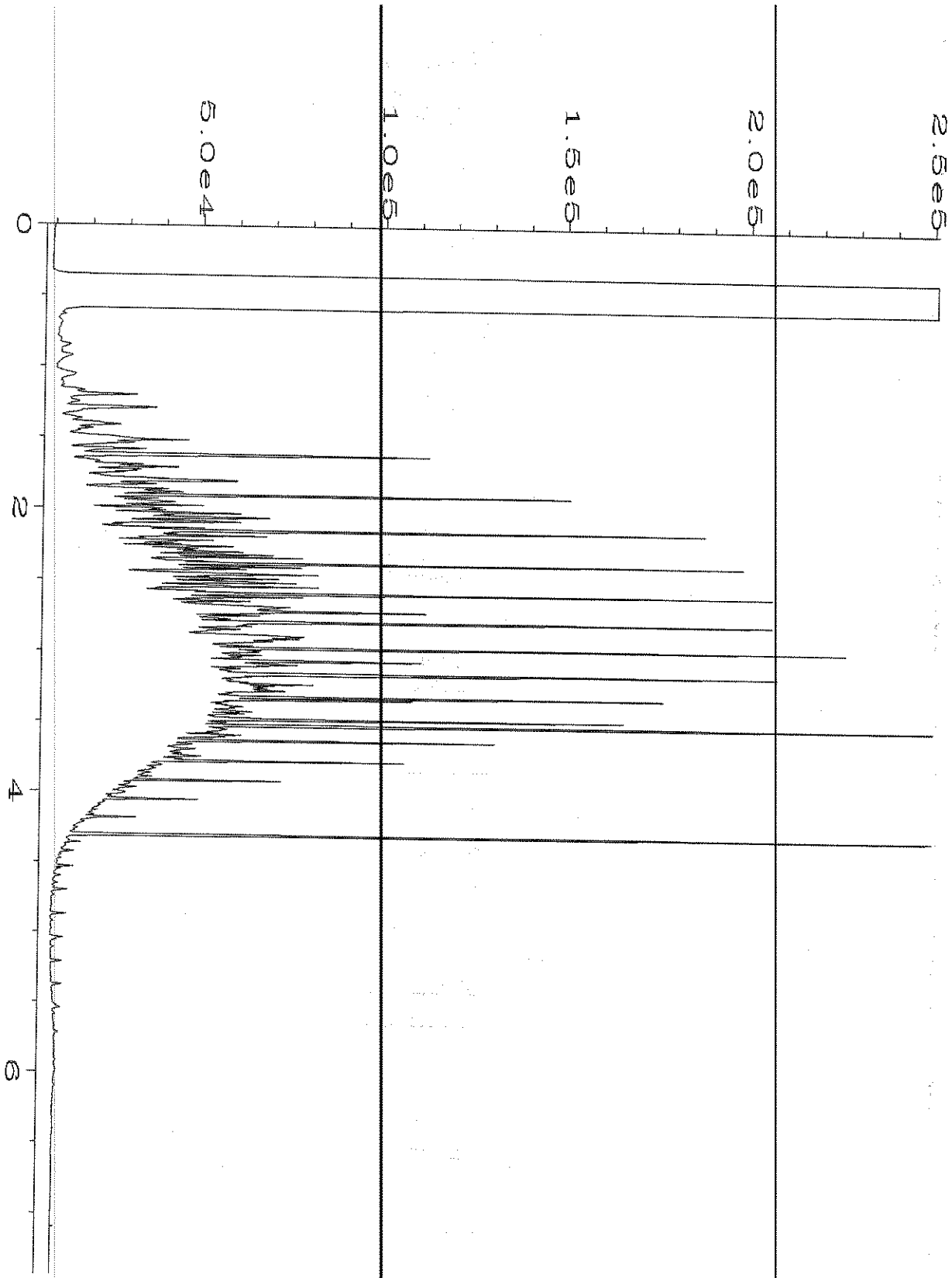
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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

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



Data File Name	: C:\HPCHEM\1\DATA\06-12-18\006F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 6
Sample Name	: 806171-01/02/03	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 12 Jun 18 09:39 AM	Instrument Method	: DX.MTH
Report Created on	: 12 Jun 18 12:53 PM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\1\DATA\06-12-18\003F0201.D
Operator : TL
Instrument : GC1
Sample Name : 500 Dx 52-71D
Run Time Bar Code:
Acquired on : 12 Jun 18 06:12 AM
Report Created on: 12 Jun 18 12:53 PM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 2
Instrument Method: DX.MTH
Analysis Method : DX.MTH

806171

SAMPLE CHAIN OF CUSTODY MC 06/11/18

BTY

Page # 1 of 1

Send Report to Chris Cass / Chris Carter

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

PO # 1249-001-05

REMARKS Composite listed samples for analysis as composite ID: "Conc-pile01-comp-20180611"

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24-hr TAT
Rush charges authorized by: C. Cass

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: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	cPAHs by 8270	Naphthalene, 1-methylnaphthalene, 2-methylnaphthalene	Arsenic 200.8	Notes
Conc-Pile 01A-20180611		—	01	06/11/18	1145	Solid	1	X	X	X			X	X	X	
Conc-Pile 01B-20180611		—	02	↓	1140	↓	1	X	X	X			X	X	X	
Conc-Pile 01C-20180611		—	03	↓	1200	↓	1	X	X	X			X	X	X	

GC 6/11/18

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Chris Cass	SoundEarth	6/11/18	1250
Received by:	Nhan Phan	FEBI	6/11/18	1250
Relinquished by:				
Received by:		Samples received at	24 °C	

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 15, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on June 11, 2018 from the SOU_ 1249-001_ 20180613, F&BI 806175 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0615R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 11, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001_ 20180613, F&BI 806175 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806175 -01	Slab-Comp04-A
806175 -02	Slab-Comp04-B
806175 -03	Slab-Comp04-C
806175 -04	Slab-Comp04-D
806175 -05	Slab-Comp04-E
806175- 06	Slab-Comp04

The samples were crushed and composited per your request and labeled as Slab-Comp04.

All quality control requirements were acceptable.

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180613, F&BI 806175
Date Extracted: 06/13/18
Date Analyzed: 06/13/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-132)
Slab-Comp04 806175-01 comp	<0.02	<0.02	<0.02	<0.06	<5	89
Method Blank 08-1268 MB	<0.02	<0.02	<0.02	<0.06	<5	87

Note: The sample was pulverized and composited prior to analysis, therefore the results should be considered estimates.

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180613, F&BI 806175
Date Extracted: 06/13/18
Date Analyzed: 06/13/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
Slab-Comp04 806175-01 comp	<50	<250	103
Method Blank 08-1291 MB	<50	<250	88

Analysis For Total Metals By EPA Method 200.8

Client ID:	Slab-Comp04	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_ 1249-001_ 20180613, F&BI 806175
Date Extracted:	06/13/18	Lab ID:	806175-01
Date Analyzed:	06/13/18	Data File:	806175-01.089
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	42.2

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_ 1249-001_ 20180613, F&BI 806175
Date Extracted:	06/13/18	Lab ID:	I8-381 mb
Date Analyzed:	06/13/18	Data File:	I8-381 mb.086
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Slab-Comp04	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_ 1249-001_ 20180613, F&BI 806175
Date Extracted:	06/13/18	Lab ID:	806175-01 1/5
Date Analyzed:	06/13/18	Data File:	061307.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	99	31	163
Benzo(a)anthracene-d12	123	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.061
Chrysene	0.068
Benzo(a)pyrene	0.064
Benzo(b)fluoranthene	0.073
Benzo(k)fluoranthene	0.027
Indeno(1,2,3-cd)pyrene	0.022
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001_ 20180613, F&BI 806175
Date Extracted:	06/13/18	Lab ID:	08-1292 mb 1/5
Date Analyzed:	06/13/18	Data File:	061306.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	92	31	163
Benzo(a)anthracene-d12	108	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180613, F&BI 806175

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 806208-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	91	66-121
Toluene	mg/kg (ppm)	0.5	95	72-128
Ethylbenzene	mg/kg (ppm)	0.5	95	69-132
Xylenes	mg/kg (ppm)	1.5	96	69-131
Gasoline	mg/kg (ppm)	20	100	61-153

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180613, F&BI 806175

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806210-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	102	98	64-133	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	100	58-147

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180613, F&BI 806175

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID 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	mg/kg (ppm)	10	103	101	85-115	2

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180613, F&BI 806175

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806175-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	86	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	106	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	101	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.061	118 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.068	116 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.073	144 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.027	116	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.064	127 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.022	45	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	44	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	90	90	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	91	91	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	92	92	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	93	93	51-115	0
Chrysene	mg/kg (ppm)	0.17	96	96	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	95	95	56-123	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	96	96	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	90	90	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	93	93	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	95	95	50-141	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

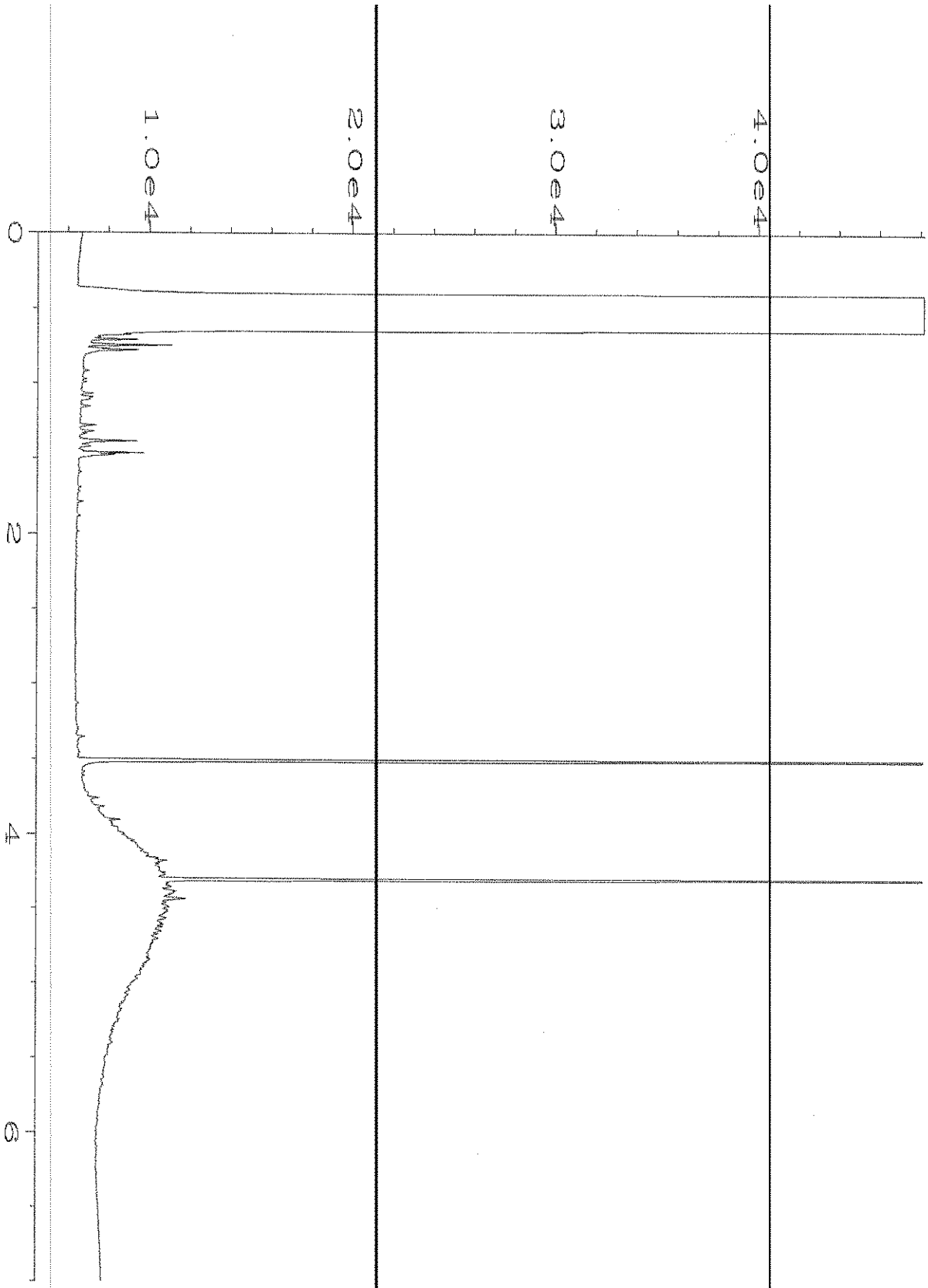
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

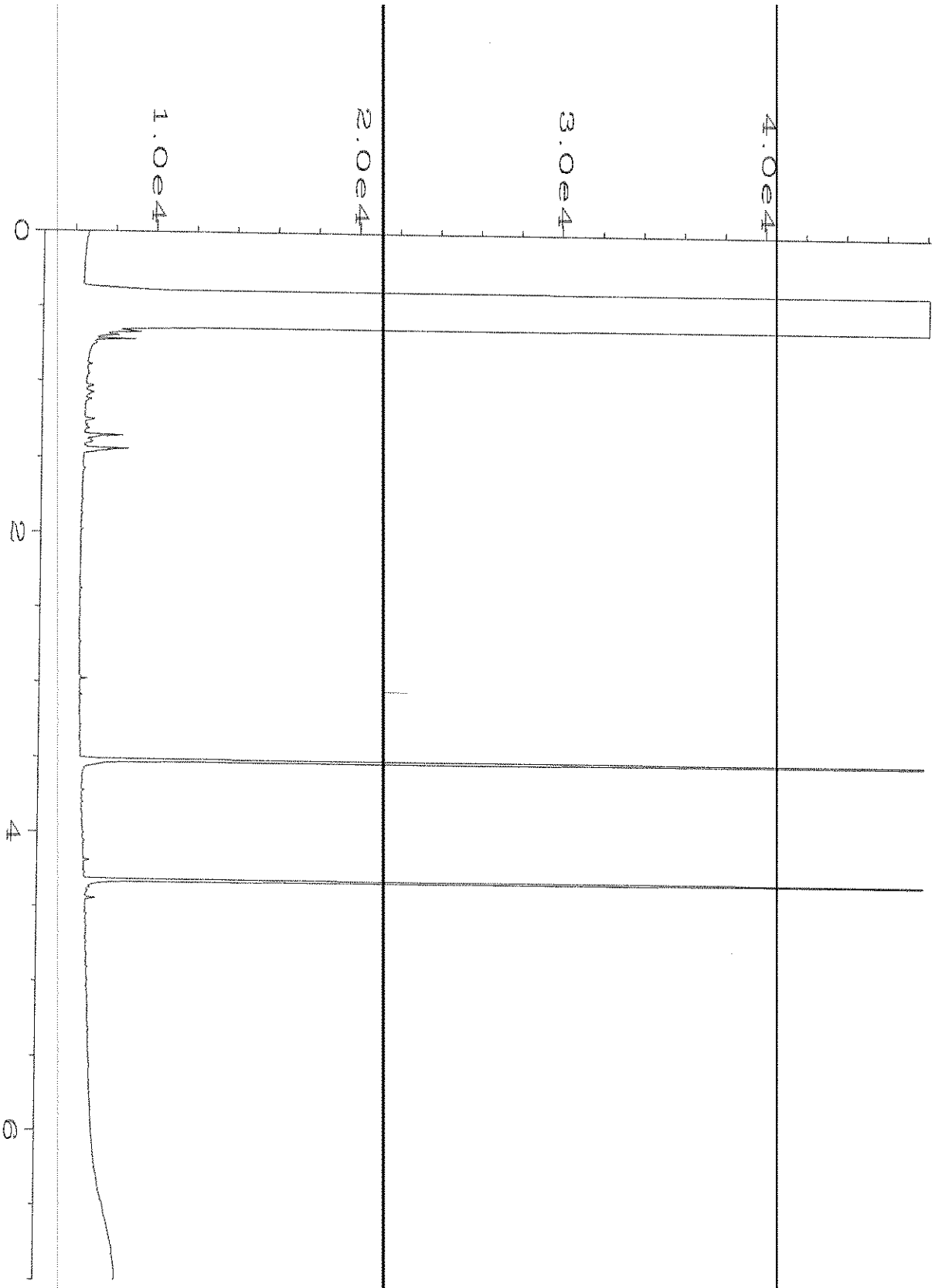
vo - The value reported fell outside the control limits established for this analyte.

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



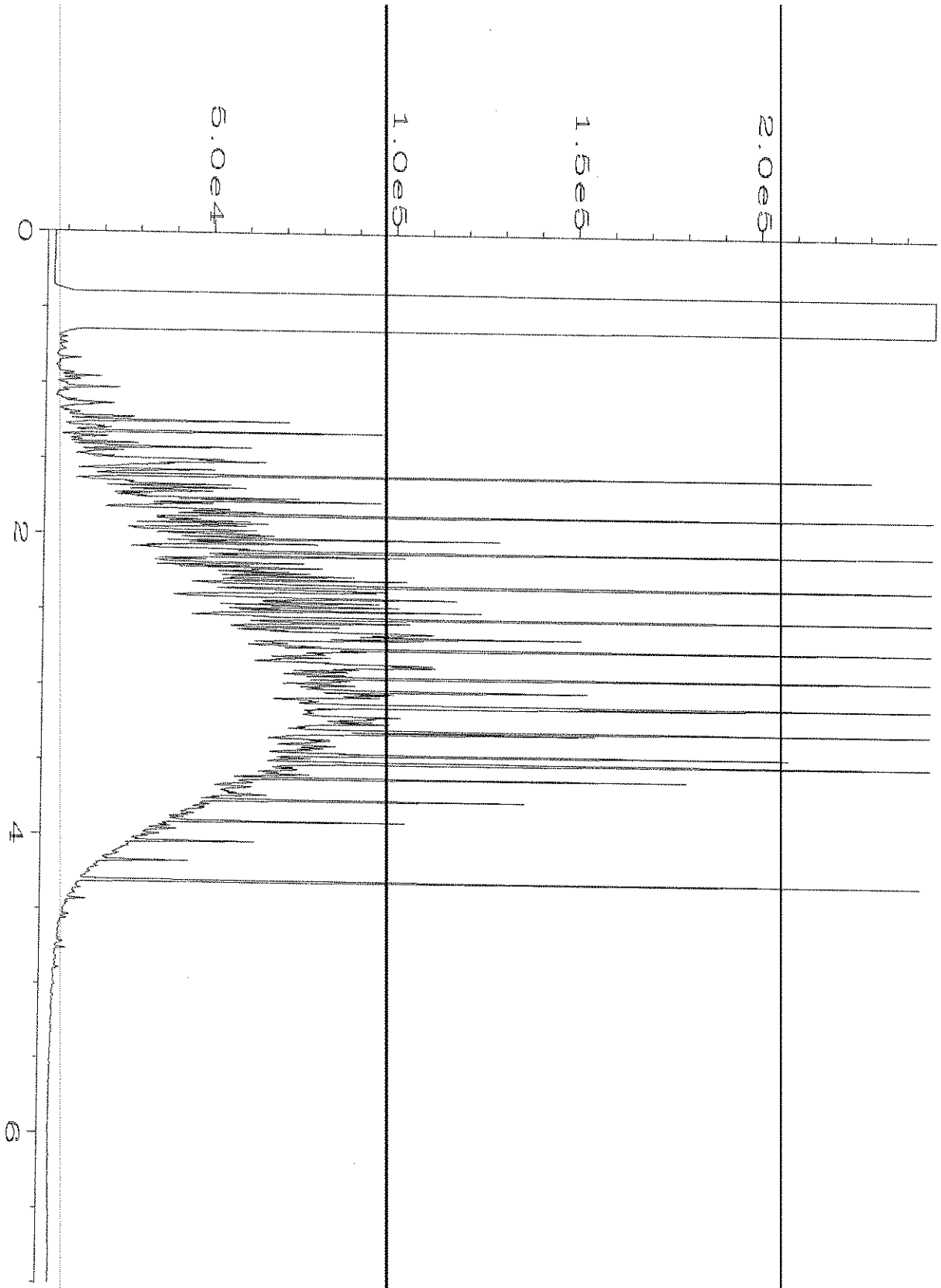
Data File Name : C:\HPCHEM\6\DATA\06-13-18\018F0601.D
Operator : TL
Instrument : GC6
Sample Name : 806175-01 comp
Run Time Bar Code:
Acquired on : 13 Jun 18 02:00 PM
Report Created on: 14 Jun 18 08:30 AM

Page Number : 1
Vial Number : 18
Injection Number : 1
Sequence Line : 6
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-13-18\006F0401.D
Operator : TL
Instrument : GC6
Sample Name : 08-1291 mb
Run Time Bar Code:
Acquired on : 13 Jun 18 11:09 AM
Report Created on: 14 Jun 18 08:30 AM

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 4
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-13-18\005F0901.D
Operator : TL
Instrument : GC6
Sample Name : 1000 Dx 52-185B
Run Time Bar Code:
Acquired on : 13 Jun 18 05:46 PM
Report Created on: 14 Jun 18 08:31 AM

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DX.MTH

806175

SAMPLE CHAIN OF CUSTODY

ME 06-11-18

BTEX

Send Report to Chris Cass & Chris Carter

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) Sarah Welter

PROJECT NAME/NO. Blue Heron II

PO # 1744-001

REMARKS project quote for CRA list as Comp04

Page # 1 of 1

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24 hr TAT
Rush charges authorized by: C. Cass

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: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	Comp04	Arsenic 200.8	CRA HAPs Shipyard 13 metals w/ Hg	Notes
Slab-Comp04-A	Comp4-A		A	6/11/18	1312	Solid	1									~~Hold~~ Analyze per COC
Slab-Comp04-B	Comp4-B		B	6/11/18	1317		1									
Slab-Comp04-C	Comp4-C		C		1321											
Slab-Comp04-D	Comp4-D		D		1330											
Slab-Comp04-E	Comp4-E		E		1340											

Samples received at 20 °C

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

FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	6/11/18	1640
Received by: Jan Shimazu	Jan Shimazu	FBI	6/11/18	16:40
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 15, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on June 11, 2018 from the SOU_ 1249-001_ 20180611, F&BI 806176 project. There are 13 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0615R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 11, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001_ 20180611, F&BI 806176 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806176 -01	Slab-Comp01-A
806176 -02	Slab-Comp01-B
806176- 03	Slab-Comp01

An 8270D internal standard failed the acceptance criteria for sample Slab-Comp01 due to matrix interferences. The data were flagged accordingly. The sample was diluted and reanalyzed.

All other quality control requirements were acceptable.

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806176
Date Extracted: 06/13/18
Date Analyzed: 06/13/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-132)
Slab-Comp01 806176-01 comp	<0.02	<0.02	<0.02	<0.06	<5	88
Method Blank 08-1268 MB	<0.02	<0.02	<0.02	<0.06	<5	87

Note: The sample was pulverized and composited prior to analysis, therefore the results should be considered estimates.

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806176
Date Extracted: 06/13/18
Date Analyzed: 06/13/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
Slab-Comp01 806176-01 comp	<50	270	98
Method Blank 08-1291 MB	<50	<250	88

Analysis For Total Metals By EPA Method 200.8

Client ID:	Slab-Comp01	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_ 1249-001_ 20180611, F&BI 806176
Date Extracted:	06/13/18	Lab ID:	806176-01
Date Analyzed:	06/13/18	Data File:	806176-01.090
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	22.1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_ 1249-001_ 20180611, F&BI 806176
Date Extracted:	06/13/18	Lab ID:	I8-381 mb
Date Analyzed:	06/13/18	Data File:	I8-381 mb.086
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Slab-Comp01	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_ 1249-001_ 20180611, F&BI 806176
Date Extracted:	06/14/18	Lab ID:	806176-01 1/5
Date Analyzed:	06/14/18	Data File:	061405.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	98	31	163
Benzo(a)anthracene-d12	125	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	0.027
Benzo(a)pyrene	<0.01 J
Benzo(b)fluoranthene	0.013 J
Benzo(k)fluoranthene	<0.01 J
Indeno(1,2,3-cd)pyrene	<0.01 J
Dibenz(a,h)anthracene	<0.01 J

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Slab-Comp01-A	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_ 1249-001_ 20180611, F&BI 806176
Date Extracted:	06/13/18	Lab ID:	806176-01 1/50
Date Analyzed:	06/13/18	Data File:	061312.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	139 d	31	163
Benzo(a)anthracene-d12	124 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.1
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001_ 20180611, F&BI 806176
Date Extracted:	06/13/18	Lab ID:	08-1292 mb 1/5
Date Analyzed:	06/13/18	Data File:	061306.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	92	31	163
Benzo(a)anthracene-d12	108	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806176

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 806208-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	91	66-121
Toluene	mg/kg (ppm)	0.5	95	72-128
Ethylbenzene	mg/kg (ppm)	0.5	95	69-132
Xylenes	mg/kg (ppm)	1.5	96	69-131
Gasoline	mg/kg (ppm)	20	100	61-153

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806176

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806210-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	102	98	64-133	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	100	58-147

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806176

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID 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	mg/kg (ppm)	10	103	101	85-115	2

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806176

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806175-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	86	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	106	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	101	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.061	118 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.068	116 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.073	144 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.027	116	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.064	127 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.022	45	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	44	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	90	90	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	91	91	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	92	92	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	93	93	51-115	0
Chrysene	mg/kg (ppm)	0.17	96	96	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	95	95	56-123	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	96	96	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	90	90	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	93	93	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	95	95	50-141	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

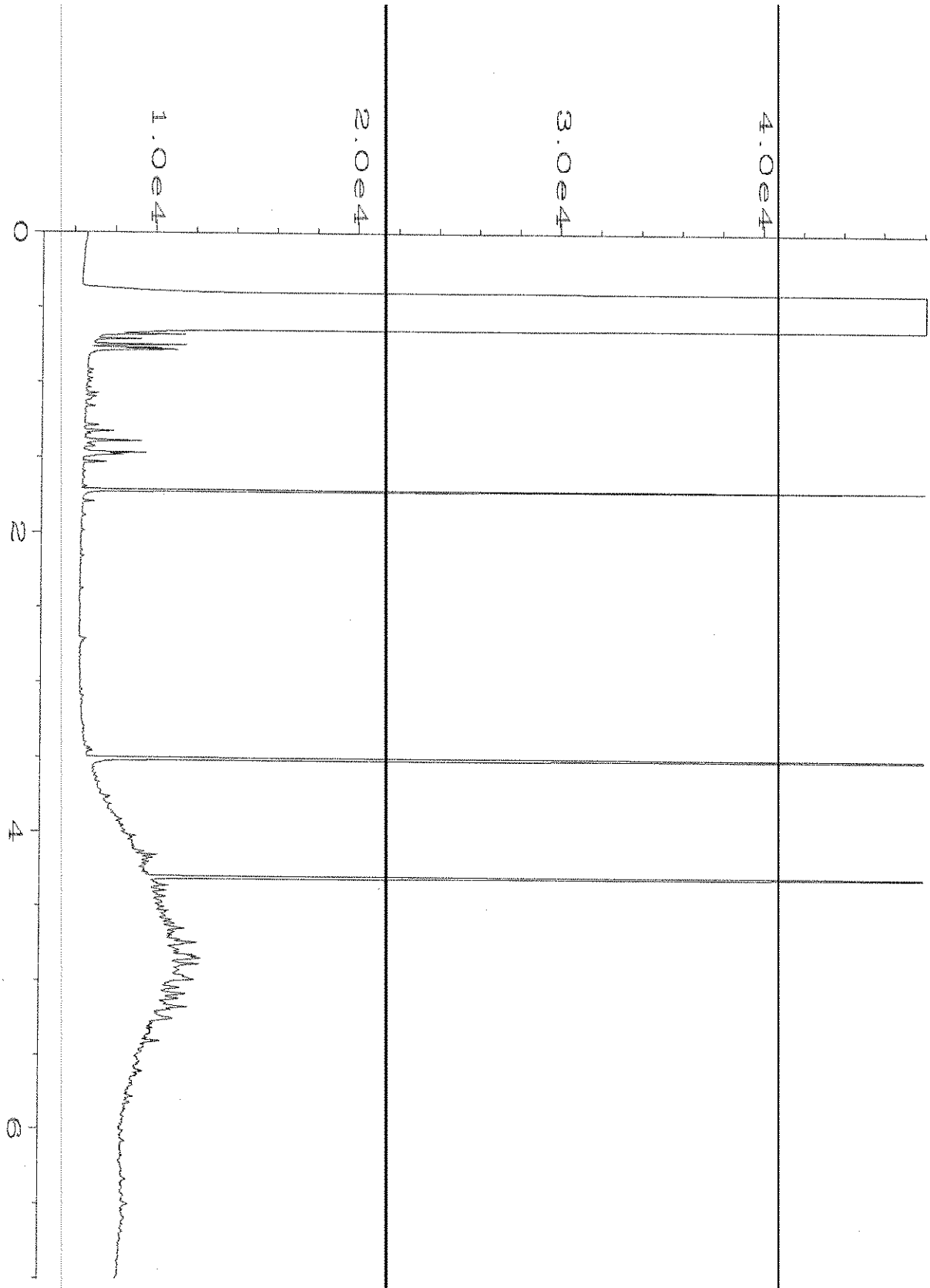
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

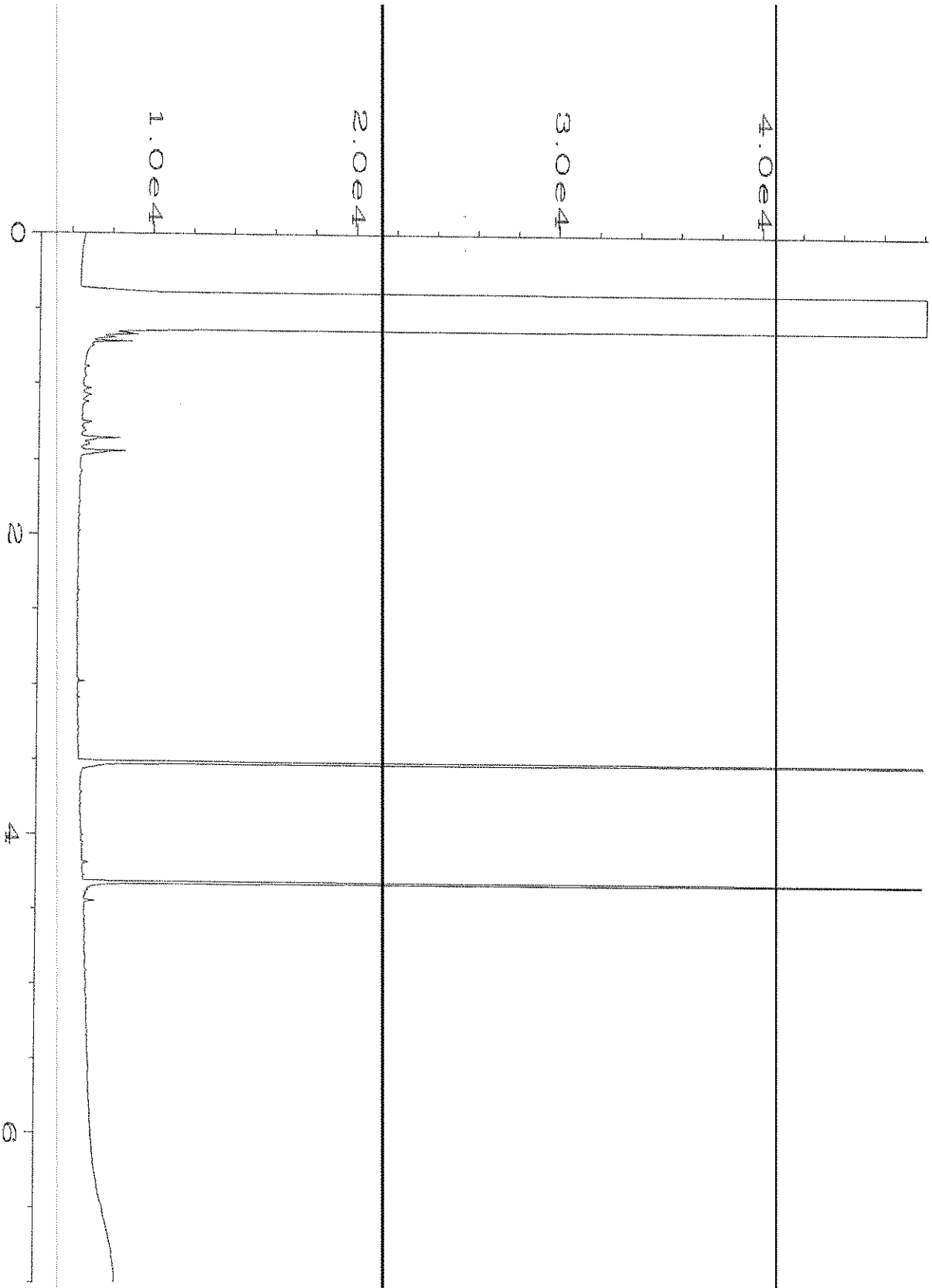
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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

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

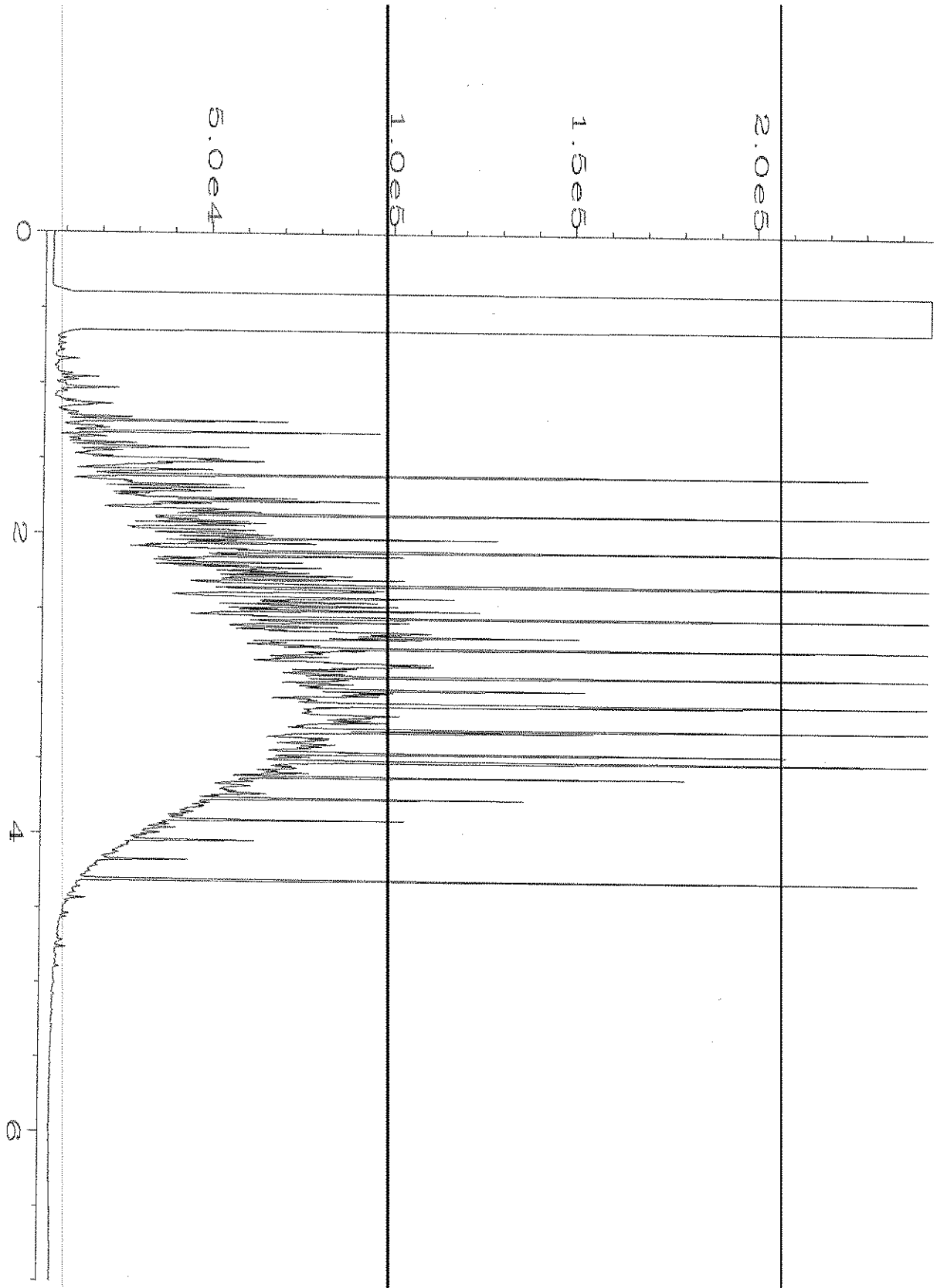


Data File Name	: C:\HPCHEM\6\DATA\06-13-18\019F0601.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 19
Sample Name	: 806176-01 comp	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 6
Acquired on	: 13 Jun 18 02:11 PM	Instrument Method	: DX.MTH
Report Created on	: 14 Jun 18 08:30 AM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-13-18\006F0401.D
Operator : TL
Instrument : GC6
Sample Name : 08-1291 mb
Run Time Bar Code:
Acquired on : 13 Jun 18 11:09 AM
Report Created on: 14 Jun 18 08:30 AM

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 4
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-13-18\005F0901.D
Operator : TL
Instrument : GC6
Sample Name : 1000 Dx 52-185B
Run Time Bar Code:
Acquired on : 13 Jun 18 05:46 PM
Report Created on: 14 Jun 18 08:31 AM

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DX.MTH

806176

SAMPLE CHAIN OF CUSTODY

ME 06-11-18 BTG

Page 1 of 1

Send Report to: Chris Cass & Chris Cork

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): Sarah Walter

PROJECT NAME/NO.: Bullard Block II

PO #: 1049-001

REMARKS: project quote for COA HS & AS

TURNAROUND TIME: Standard (2 Weeks) RUSH 24-hr TAT

Rush charges authorized by: C. Cass

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: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HCID Complete	Arsenic 200.8	cPAHs (Add for 163 and Hydrocarbon ID)	Notes
Slab-Comp01-A	A	1	01A	6/11/18	1500	Soil	1	X	X	X			X	X	X	Analyze per COC
Slab-Comp01-B	B	1	B	6/11/18	1505	Soil	1	X	X	X			X	X	X	
									Stop							

Samples received at 20 °C

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

FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Walter	Sarah Walter	SES	6/11/18	1640
Received by: Jon Shimara	Jon Shimara	FBI	6/11/18	16:40
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 15, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on June 11, 2018 from the SOU_1249-001_ 20180611, F&BI 806177 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0615R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 11, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001_ 20180611, F&BI 806177 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806177 -01	Slab-Comp02-A
806177 -02	Slab-Comp02-B
806177 -03	Slab-Comp02-C
806177 -04	Slab-Comp02-D
806177 -05	Slab-Comp02-E
806177- 06	Slab-Comp02

All quality control requirements were acceptable.

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_1249-001_ 20180611, F&BI 806177
Date Extracted: 06/13/18
Date Analyzed: 06/13/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-132)
Slab-Comp02 806177-01 comp	<0.02	<0.02	<0.02	<0.06	<5	88
Method Blank 08-1268 MB	<0.02	<0.02	<0.02	<0.06	<5	87

Note: The sample was pulverized and composited prior to analysis, therefore the results should be considered estimates.

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_1249-001_ 20180611, F&BI 806177
Date Extracted: 06/13/18
Date Analyzed: 06/13/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
Slab-Comp02 806177-01 comp	<50	<250	88
Method Blank 08-1291 MB	<50	<250	88

Analysis For Total Metals By EPA Method 200.8

Client ID:	Slab-Comp02	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_1249-001_ 20180611, F&BI 806177
Date Extracted:	06/13/18	Lab ID:	806177-01
Date Analyzed:	06/13/18	Data File:	806177-01.091
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	25.0

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_1249-001_ 20180611, F&BI 806177
Date Extracted:	06/13/18	Lab ID:	I8-381 mb
Date Analyzed:	06/13/18	Data File:	I8-381 mb.086
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Slab-Comp02	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_1249-001_ 20180611, F&BI 806177
Date Extracted:	06/13/18	Lab ID:	806177-01 1/5
Date Analyzed:	06/13/18	Data File:	061309.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	125	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.059
Chrysene	0.072
Benzo(a)pyrene	0.070
Benzo(b)fluoranthene	0.086
Benzo(k)fluoranthene	0.031
Indeno(1,2,3-cd)pyrene	0.019
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001_ 20180611, F&BI 806177
Date Extracted:	06/13/18	Lab ID:	08-1292 mb 1/5
Date Analyzed:	06/13/18	Data File:	061306.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	92	31	163
Benzo(a)anthracene-d12	108	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_1249-001_ 20180611, F&BI 806177

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 806208-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	91	66-121
Toluene	mg/kg (ppm)	0.5	95	72-128
Ethylbenzene	mg/kg (ppm)	0.5	95	69-132
Xylenes	mg/kg (ppm)	1.5	96	69-131
Gasoline	mg/kg (ppm)	20	100	61-153

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_1249-001_ 20180611, F&BI 806177

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806210-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	102	98	64-133	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	100	58-147

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_1249-001_ 20180611, F&BI 806177

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID 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	mg/kg (ppm)	10	103	101	85-115	2

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_1249-001_ 20180611, F&BI 806177

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806175-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	86	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	106	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	101	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.061	118 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.068	116 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.073	144 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.027	116	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.064	127 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.022	45	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	44	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	90	90	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	91	91	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	92	92	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	93	93	51-115	0
Chrysene	mg/kg (ppm)	0.17	96	96	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	95	95	56-123	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	96	96	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	90	90	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	93	93	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	95	95	50-141	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

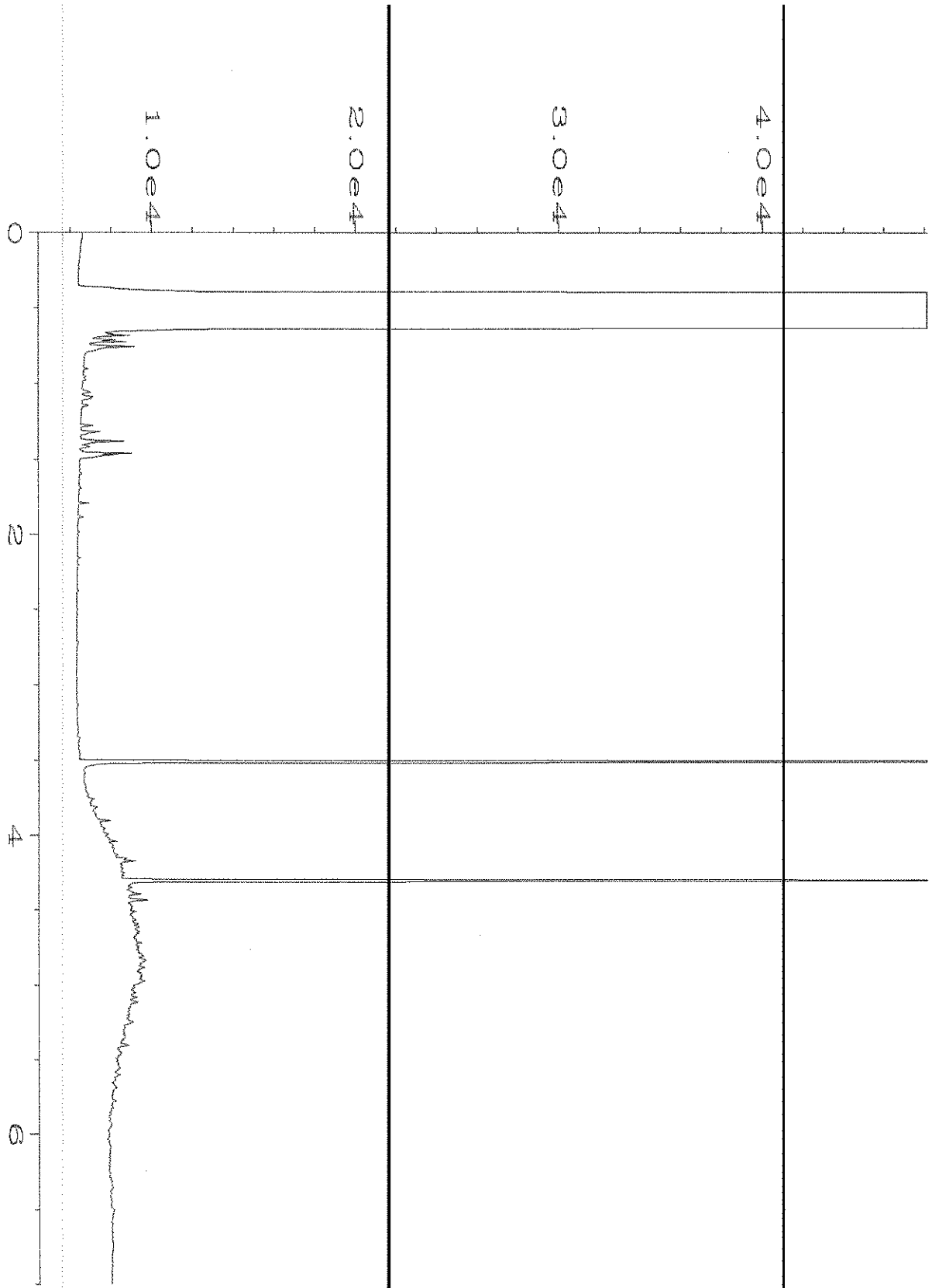
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

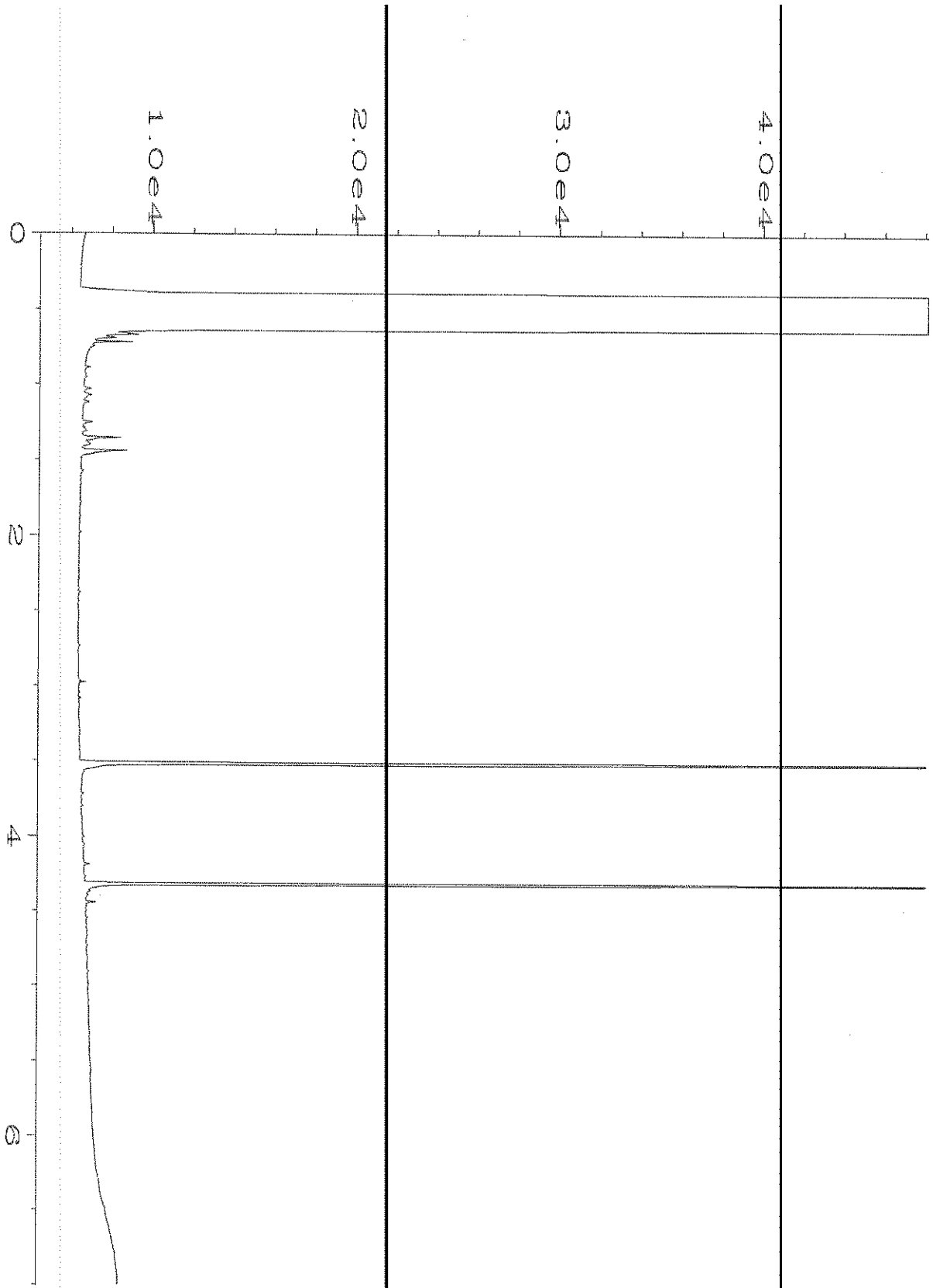
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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

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

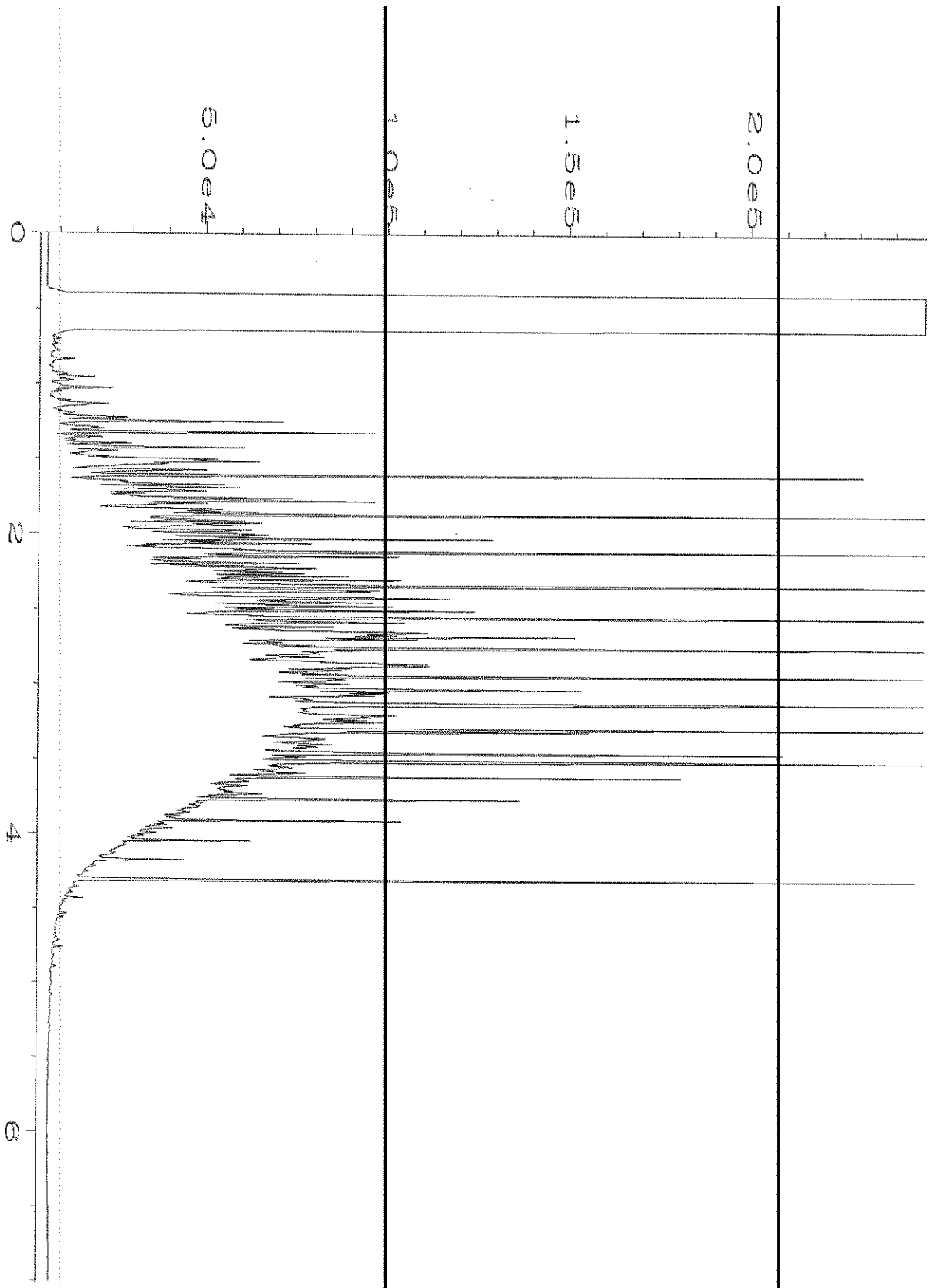


Data File Name	: C:\HPCHEM\6\DATA\06-13-18\020F0601.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 20
Sample Name	: 806177-01 comp	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 6
Acquired on	: 13 Jun 18 02:21 PM	Instrument Method	: DX.MTH
Report Created on	: 14 Jun 18 08:30 AM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-13-18\006F0401.D
Operator : TL
Instrument : GC6
Sample Name : 08-1291 mb
Run Time Bar Code:
Acquired on : 13 Jun 18 11:09 AM
Report Created on: 14 Jun 18 08:30 AM

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 4
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-13-18\005F0901.D
Operator : TL
Instrument : GC6
Sample Name : 1000 Dx 52-185B
Run Time Bar Code:
Acquired on : 13 Jun 18 05:46 PM
Report Created on: 14 Jun 18 08:31 AM

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DX.MTH

806177

SAMPLE CHAIN OF CUSTODY

ME 06-11-18

BT4

Page # 1 of 1

Send Report to Chris Cass & Chris Carter

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) Sarah Walter

PROJECT NAME/NO. Ballard Blocks I

PO # 1249.001

REMARKS project quote for AS & CCAMLs

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24 hr MT
Rush charges authorized by: C Cass

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: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HAHs by 8082 (cPAHs)	Arsenic 200.8	cPAHs 8270 NWTPH-Dx/Gx (MTCA Method A)	Notes
Slab-Comp02-A	A		01A	6/11/18	1430	Soil	1									Analyze per COC
Slab-Comp02-B	B		B		1440											
Slab-Comp02-C	C		C		1445											
Slab-Comp02-D	D		d		1450											
Slab-Comp02-E	E		E		1455											

Samples received at 20 °C

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

FORMS\CCC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Sarah Walter	Sarah Walter	SES	6/11/18	1640
Received by:		Jen Shimm	FBI	6/11/18	16:40
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 15, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on June 11, 2018 from the SOU_ 1249-001_ 20180611, F&BI 806178 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0615R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 11, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001_ 20180611, F&BI 806178 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806178 -01	Slab-Comp03-A
806178 -02	Slab-Comp03-B
806178 -03	Slab-Comp03-C
806178 -04	Slab-Comp03-D
806178 -05	Slab-Comp03-E
806178 -06	Slab-Comp03

All quality control requirements were acceptable.

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806178
Date Extracted: 06/13/18
Date Analyzed: 06/13/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-132)
Slab-Comp03 806178-01 comp	<0.02	<0.02	<0.02	<0.06	<5	89
Method Blank 08-1268 MB	<0.02	<0.02	<0.02	<0.06	<5	87

Note: The sample was pulverized and composited prior to analysis, therefore the results should be considered estimates.

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806178
Date Extracted: 06/13/18
Date Analyzed: 06/13/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
Slab-Comp03 806178-01 comp	<50	<250	93
Method Blank 08-1291 MB	<50	<250	88

Analysis For Total Metals By EPA Method 200.8

Client ID:	Slab-Comp03	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_ 1249-001_ 20180611, F&BI 806178
Date Extracted:	06/13/18	Lab ID:	806178-01
Date Analyzed:	06/13/18	Data File:	806178-01.092
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	30.0

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_ 1249-001_ 20180611, F&BI 806178
Date Extracted:	06/13/18	Lab ID:	I8-381 mb
Date Analyzed:	06/13/18	Data File:	I8-381 mb.086
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Slab-Comp03	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_ 1249-001_ 20180611, F&BI 806178
Date Extracted:	06/13/18	Lab ID:	806178-01 1/5
Date Analyzed:	06/13/18	Data File:	061313.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	31	163
Benzo(a)anthracene-d12	118	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.023
Chrysene	0.028
Benzo(a)pyrene	0.024
Benzo(b)fluoranthene	0.030
Benzo(k)fluoranthene	0.010
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001_ 20180611, F&BI 806178
Date Extracted:	06/13/18	Lab ID:	08-1292 mb 1/5
Date Analyzed:	06/13/18	Data File:	061306.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	92	31	163
Benzo(a)anthracene-d12	108	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806178

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 806208-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	91	66-121
Toluene	mg/kg (ppm)	0.5	95	72-128
Ethylbenzene	mg/kg (ppm)	0.5	95	69-132
Xylenes	mg/kg (ppm)	1.5	96	69-131
Gasoline	mg/kg (ppm)	20	100	61-153

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806178

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806210-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	102	98	64-133	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	100	58-147

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806178

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID 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	mg/kg (ppm)	10	103	101	85-115	2

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806178

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806175-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	86	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	106	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	101	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.061	118 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.068	116 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.073	144 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.027	116	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.064	127 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.022	45	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	44	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	90	90	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	91	91	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	92	92	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	93	93	51-115	0
Chrysene	mg/kg (ppm)	0.17	96	96	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	95	95	56-123	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	96	96	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	90	90	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	93	93	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	95	95	50-141	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

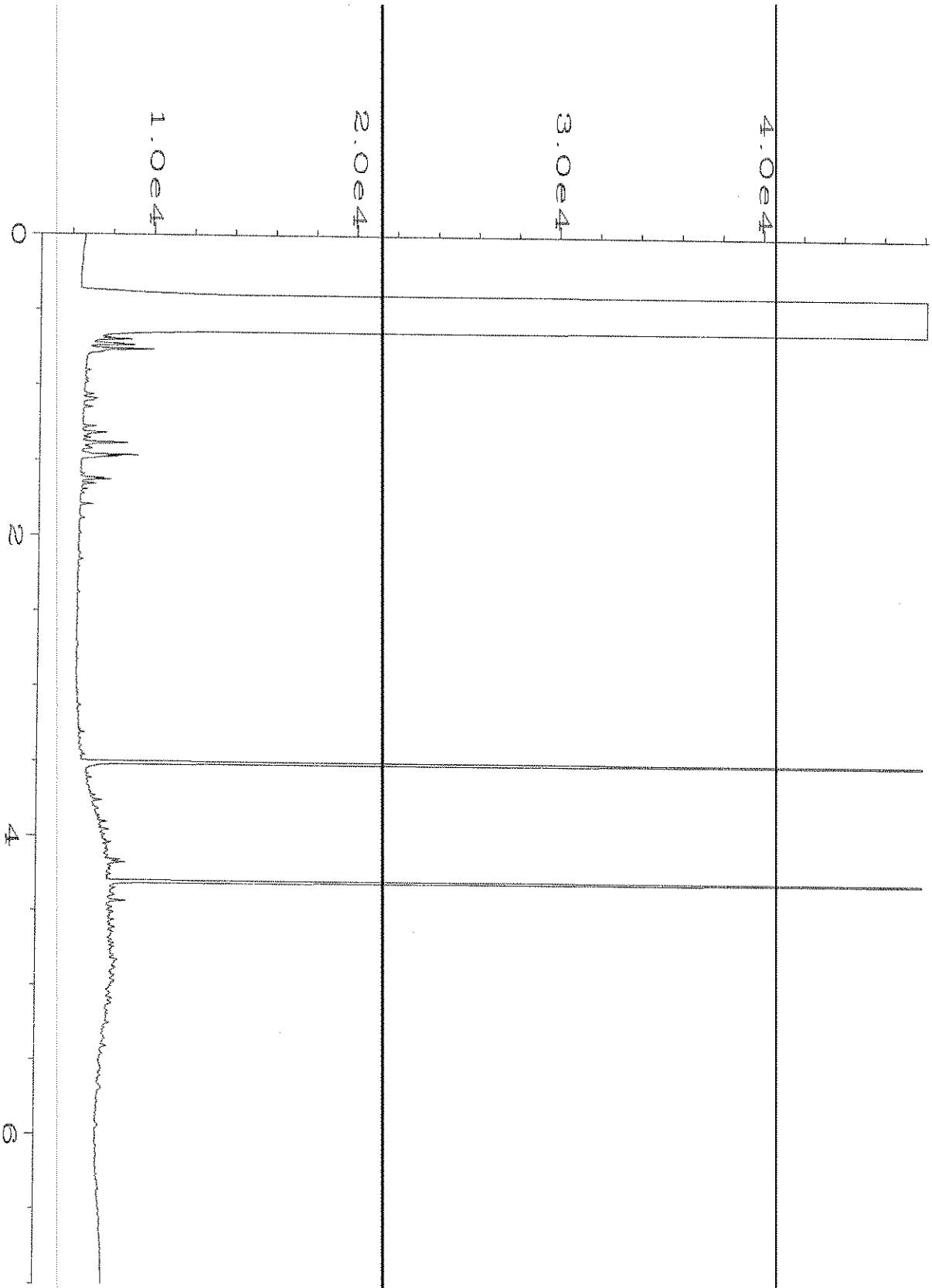
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

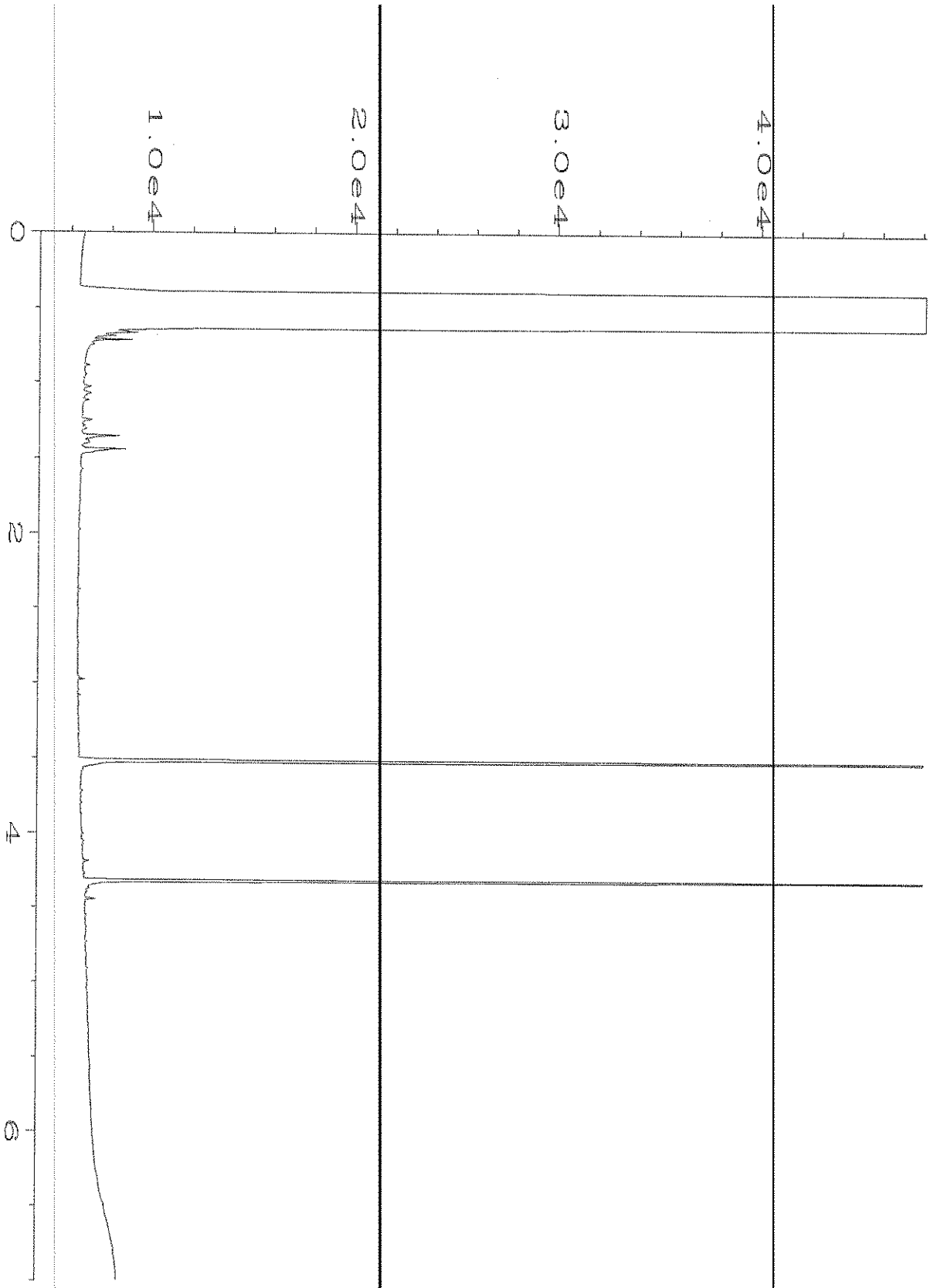
vo - The value reported fell outside the control limits established for this analyte.

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



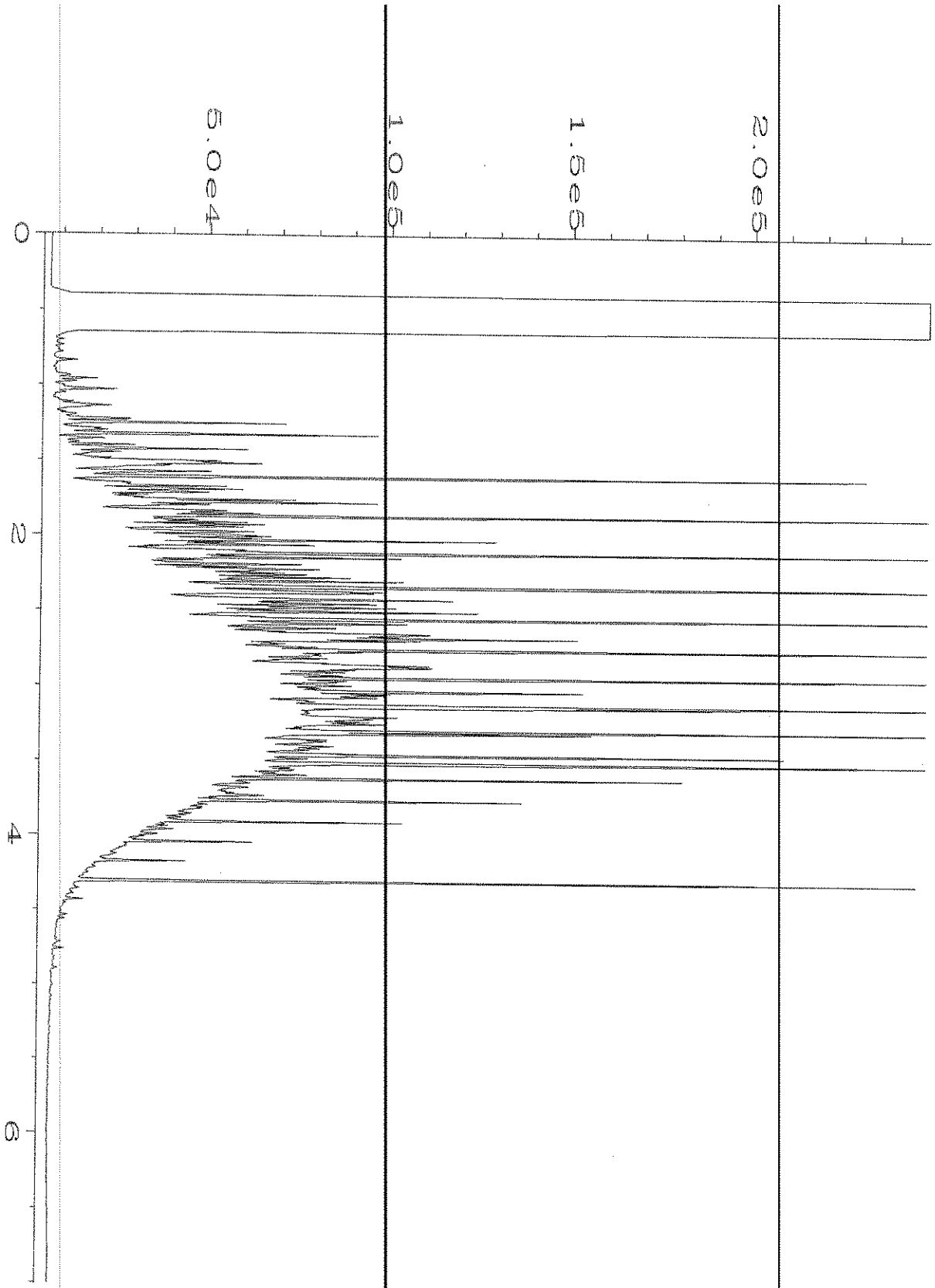
Data File Name : C:\HPCHEM\6\DATA\06-13-18\021F0601.D
Operator : TL
Instrument : GC6
Sample Name : 806178-01 comp
Run Time Bar Code:
Acquired on : 13 Jun 18 02:32 PM
Report Created on: 14 Jun 18 08:30 AM

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 6
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-13-18\006F0401.D
Operator : TL
Instrument : GC6
Sample Name : 08-1291 mb
Run Time Bar Code:
Acquired on : 13 Jun 18 11:09 AM
Report Created on: 14 Jun 18 08:30 AM

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 4
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-13-18\005F0901.D
Operator : TL
Instrument : GC6
Sample Name : 1000 Dx 52-185B
Run Time Bar Code:
Acquired on : 13 Jun 18 05:46 PM
Report Created on: 14 Jun 18 08:31 AM

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DX.MTH

506178

SAMPLE CHAIN OF CUSTODY

ME 06-11-18

Page # 1 of 1 BTV

Send Report to Chris Cass & Chris Carlson

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) Sarah Walter

PROJECT NAME/NO. Ballard Blocks II

PO # 1244-001

REMARKS project quote for As & cPAHs

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24hr TAT
Rush charges authorized by: C. Cass

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: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	Hg + Pb by 6020	Arsenic by 6020	cPAHs by 8270 SIM (Naphthalene by 8260, 1-methylnaphthalene by 8270, 2-methylnaphthalene by 8270)	Notes
Slab-Comp03-A	A		01A	6/11/18	1417	Soil	1	X	X	X			X	X	X	Analyze per COC
Slab-Comp03-B	B		B		1423			X	X	X			X	X	X	
Slab-Comp03-C	C		C		1411			X	X	X			X	X	X	
Slab-Comp03-D	D		01D		1350			X	X	X			X	X	X	
Slab-Comp03-E	E		E		1357	W		X	X	X			X	X	X	

Samples received at 20 °C

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by: Sarah Walter	Sarah Walter	SES	6/11/18	1640
Seattle, WA 98119-2029	Received by:	Jen Sherman	FBI	6/11/18	16:40
Ph. (206) 285-8282	Relinquished by:				
Fax (206) 283-5044	Received by:				

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 15, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on June 11, 2018 from the SOU_ 1249-001_ 20180611, F&BI 806179 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0615R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 11, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001_ 20180611, F&BI 806179 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806179 -01	Slab-Comp05-A
806179 -02	Slab-Comp05-B
806179 -03	Slab-Comp05-C
806179 -04	Slab-Comp05-D
806179 -05	Slab-Comp05-E
806179 -06	Slab-Comp05

All quality control requirements were acceptable.

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806179
Date Extracted: 06/13/18
Date Analyzed: 06/13/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-132)
Slab-Comp05 806179-01 comp	<0.02	<0.02	<0.02	<0.06	<5	89
Method Blank 08-1268 MB	<0.02	<0.02	<0.02	<0.06	<5	87

Note: The sample was pulverized and composited prior to analysis, therefore the results should be considered estimates.

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806179
Date Extracted: 06/13/18
Date Analyzed: 06/13/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
Slab-Comp05 806179-01 comp	51 x	<250	88
Method Blank 08-1291 MB	<50	<250	88

Analysis For Total Metals By EPA Method 200.8

Client ID:	Slab-Comp05	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_ 1249-001_ 20180611, F&BI 806179
Date Extracted:	06/13/18	Lab ID:	806179-01
Date Analyzed:	06/13/18	Data File:	806179-01.093
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.80

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_ 1249-001_ 20180611, F&BI 806179
Date Extracted:	06/13/18	Lab ID:	I8-381 mb
Date Analyzed:	06/13/18	Data File:	I8-381 mb.086
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Slab-Comp05	Client:	SoundEarth Strategies
Date Received:	06/11/18	Project:	SOU_ 1249-001_ 20180611, F&BI 806179
Date Extracted:	06/13/18	Lab ID:	806179-01 1/5
Date Analyzed:	06/13/18	Data File:	061310.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	94	31	163
Benzo(a)anthracene-d12	118	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.020
Chrysene	0.025
Benzo(a)pyrene	0.026
Benzo(b)fluoranthene	0.031
Benzo(k)fluoranthene	0.012
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001_ 20180611, F&BI 806179
Date Extracted:	06/13/18	Lab ID:	08-1292 mb 1/5
Date Analyzed:	06/13/18	Data File:	061306.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	92	31	163
Benzo(a)anthracene-d12	108	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806179

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 806208-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	91	66-121
Toluene	mg/kg (ppm)	0.5	95	72-128
Ethylbenzene	mg/kg (ppm)	0.5	95	69-132
Xylenes	mg/kg (ppm)	1.5	96	69-131
Gasoline	mg/kg (ppm)	20	100	61-153

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806179

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806210-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	102	98	64-133	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	100	58-147

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806179

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID 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	mg/kg (ppm)	10	103	101	85-115	2

Date of Report: 06/15/18
Date Received: 06/11/18
Project: SOU_ 1249-001_ 20180611, F&BI 806179

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806175-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	86	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	106	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	101	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.061	118 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.068	116 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.073	144 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.027	116	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.064	127 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.022	45	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	44	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	90	90	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	91	91	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	92	92	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	93	93	51-115	0
Chrysene	mg/kg (ppm)	0.17	96	96	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	95	95	56-123	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	96	96	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	90	90	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	93	93	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	95	95	50-141	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

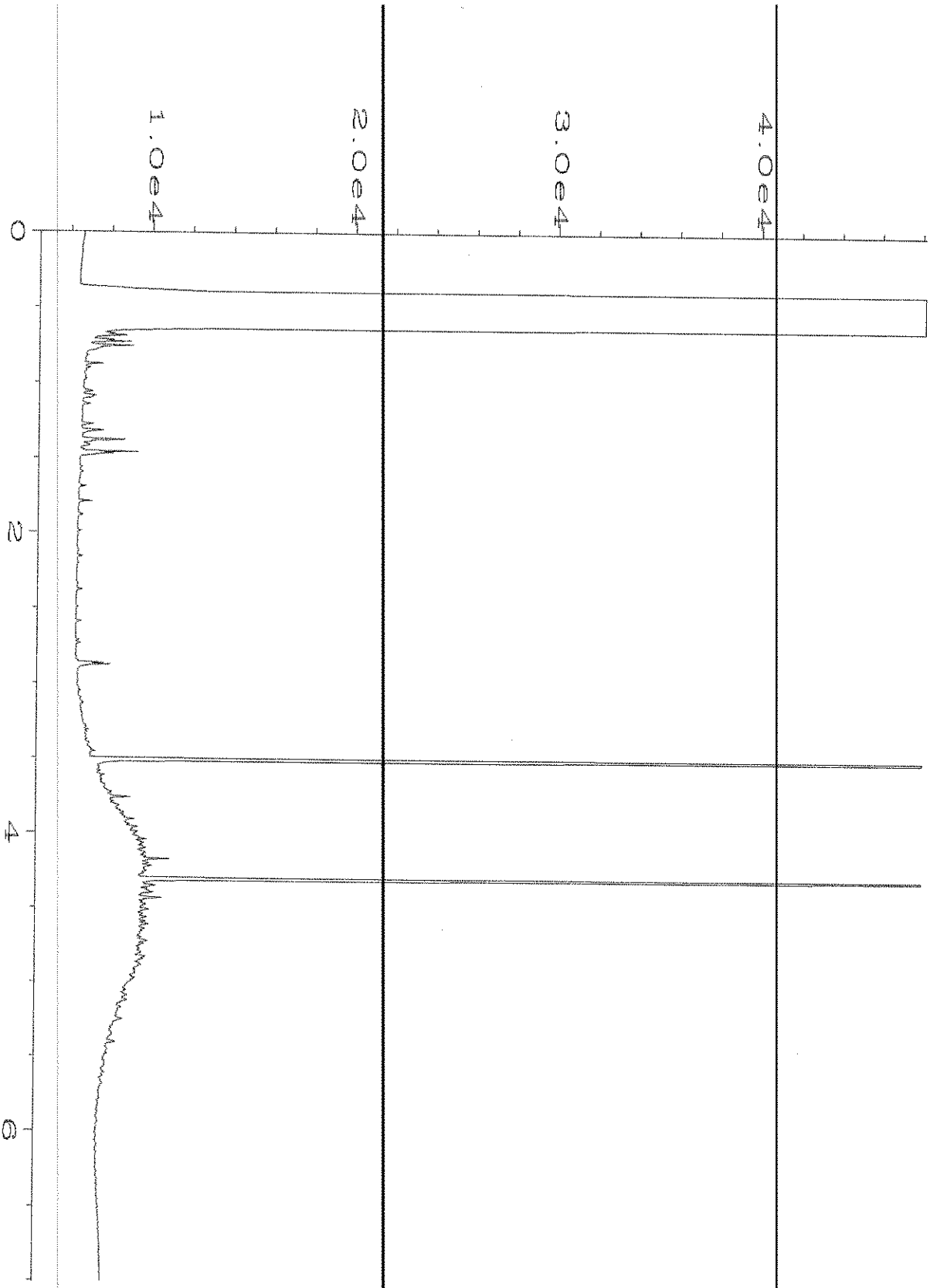
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

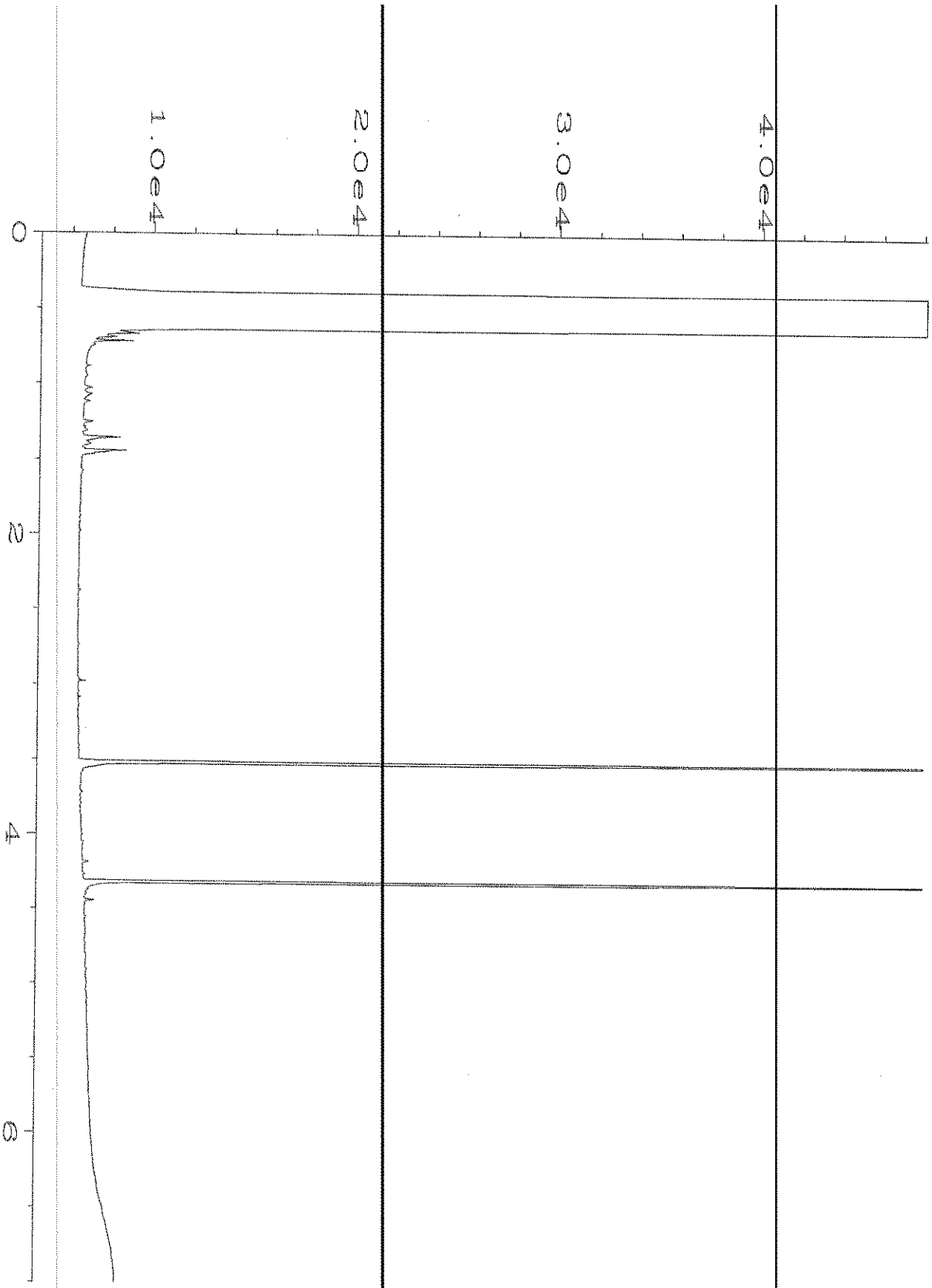
vo - The value reported fell outside the control limits established for this analyte.

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



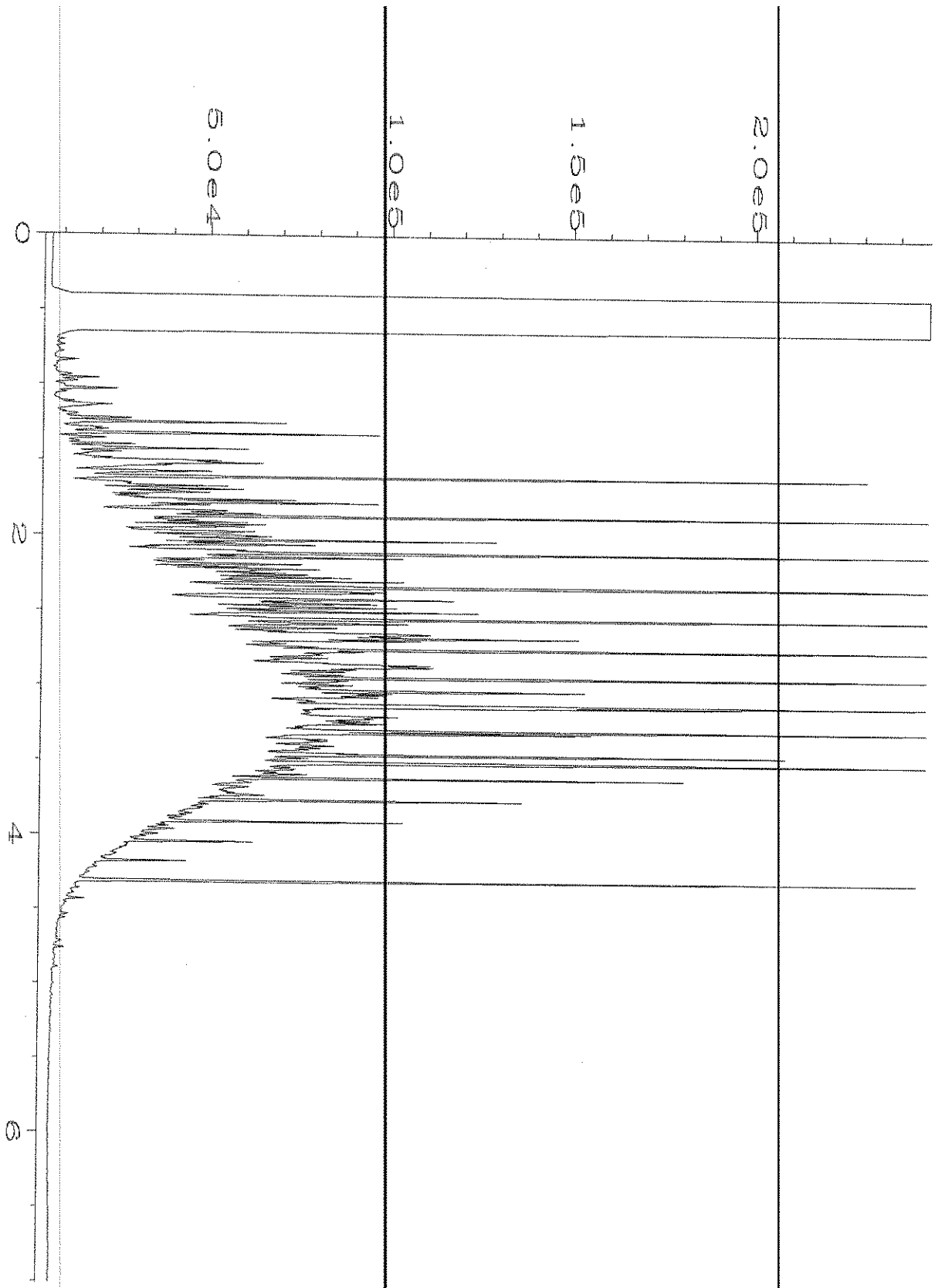
Data File Name : C:\HPCHEM\6\DATA\06-13-18\022F0601.D
Operator : TL
Instrument : GC6
Sample Name : 806179-01 comp
Run Time Bar Code:
Acquired on : 13 Jun 18 02:43 PM
Report Created on: 14 Jun 18 08:31 AM

Page Number : 1
Vial Number : 22
Injection Number : 1
Sequence Line : 6
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-13-18\006F0401.D
Operator : TL
Instrument : GC6
Sample Name : 08-1291 mb
Run Time Bar Code:
Acquired on : 13 Jun 18 11:09 AM
Report Created on: 14 Jun 18 08:30 AM

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 4
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\06-13-18\005F0901.D
Operator : TL
Instrument : GC6
Sample Name : 1000 Dx 52-185B
Run Time Bar Code:
Acquired on : 13 Jun 18 05:46 PM
Report Created on: 14 Jun 18 08:31 AM

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DX.MTH

5
6/11 806178 806179

SAMPLE CHAIN OF CUSTODY

ME 06-11-18

BIH

Send Report to Chris Cass & Chris Catt

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) Sarah Welter

PROJECT NAME/NO. Ballard Blocks II

PO # 1249-001

REMARKS Proj mgmt & ASE CPAHs

Page # 1 of 1

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24hr TAT
Rush charges authorized by: C. Cass

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: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	Hg by 7471B composite	Arsenic by 200.8	cPAHs by 8270D SIM w/ benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene	Notes
Slab Comp 05-A	A		06A	6/11/18	1530	Soil	1									Analyze per COC
Slab Comp 05-B	B		B		1520											
Slab Comp 05-C	C		C		1535											
Slab Comp 05-D	D		d		1540											
Slab Comp 05-E	E		E		1545											

Samples received at 20 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	6/11/18	16:40
Received by: Jen Shinazo	Jen Shinazo	FBT	6/11/18	16:40
Relinquished by:				
Received by:				

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

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 26, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on June 20, 2018 from the SOU_ 1249-001-05_ 20180620, F&BI 806363 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0626R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 20, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180620, F&BI 806363 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806363 -01	Conc-upperwall-01
806363 -02	Conc-upperwall-02
806363 -03	Conc-upperwall-03

The samples were crushed and composited per your request and labeled as Conc-upperwall-comp.

All quality control requirements were acceptable.

Date of Report: 06/26/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806363
Date Extracted: 06/22/18
Date Analyzed: 06/22/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-132)
Conc-upperwall-comp 806363-01,,03	<0.02	<0.02	<0.02	<0.06	<5	68
Method Blank 08-1278 MB2	<0.02	<0.02	<0.02	<0.06	<5	68

Note: The sample was pulverized and composited prior to analysis, therefore the results should be considered estimates.

Date of Report: 06/26/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806363
Date Extracted: 06/21/18
Date Analyzed: 06/21/18

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 48-168)
Conc-upperwall-comp 806363-01,,03	<50	<250	92
Method Blank 08-1339 MB2	<50	<250	94

Analysis For Total Metals By EPA Method 6020B

Client ID:	Conc-upperwall-comp	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	806363-01,,03
Date Analyzed:	06/21/18	Data File:	806363-01 02 03.076
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.82

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	I8-401 mb2
Date Analyzed:	06/21/18	Data File:	I8-401 mb2.047
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Conc-upperwall-comp	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	806363-01,,03 1/5
Date Analyzed:	06/21/18	Data File:	062128.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	106	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	08-1343 mb 1/5
Date Analyzed:	06/21/18	Data File:	062109.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	102	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/26/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806363

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 806401-03 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	103	66-121
Toluene	mg/kg (ppm)	0.5	99	72-128
Ethylbenzene	mg/kg (ppm)	0.5	100	69-132
Xylenes	mg/kg (ppm)	1.5	100	69-131
Gasoline	mg/kg (ppm)	20	110	61-153

Date of Report: 06/26/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806363

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806356-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	92	94	73-135	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	82	74-139

Date of Report: 06/26/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806363

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

Laboratory Code: 806346-03 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	5.57	96	97	75-125	1

Laboratory Code: Laboratory Control Sample

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

Date of Report: 06/26/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806363

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806364-03 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	79	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	83	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	86	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	83	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	85	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	84	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	86	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	81	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	80	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	84	83	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	87	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	88	87	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	88	90	51-115	2
Chrysene	mg/kg (ppm)	0.17	89	89	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	90	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	91	92	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	86	88	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	83	85	49-148	2
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	82	84	50-141	2

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

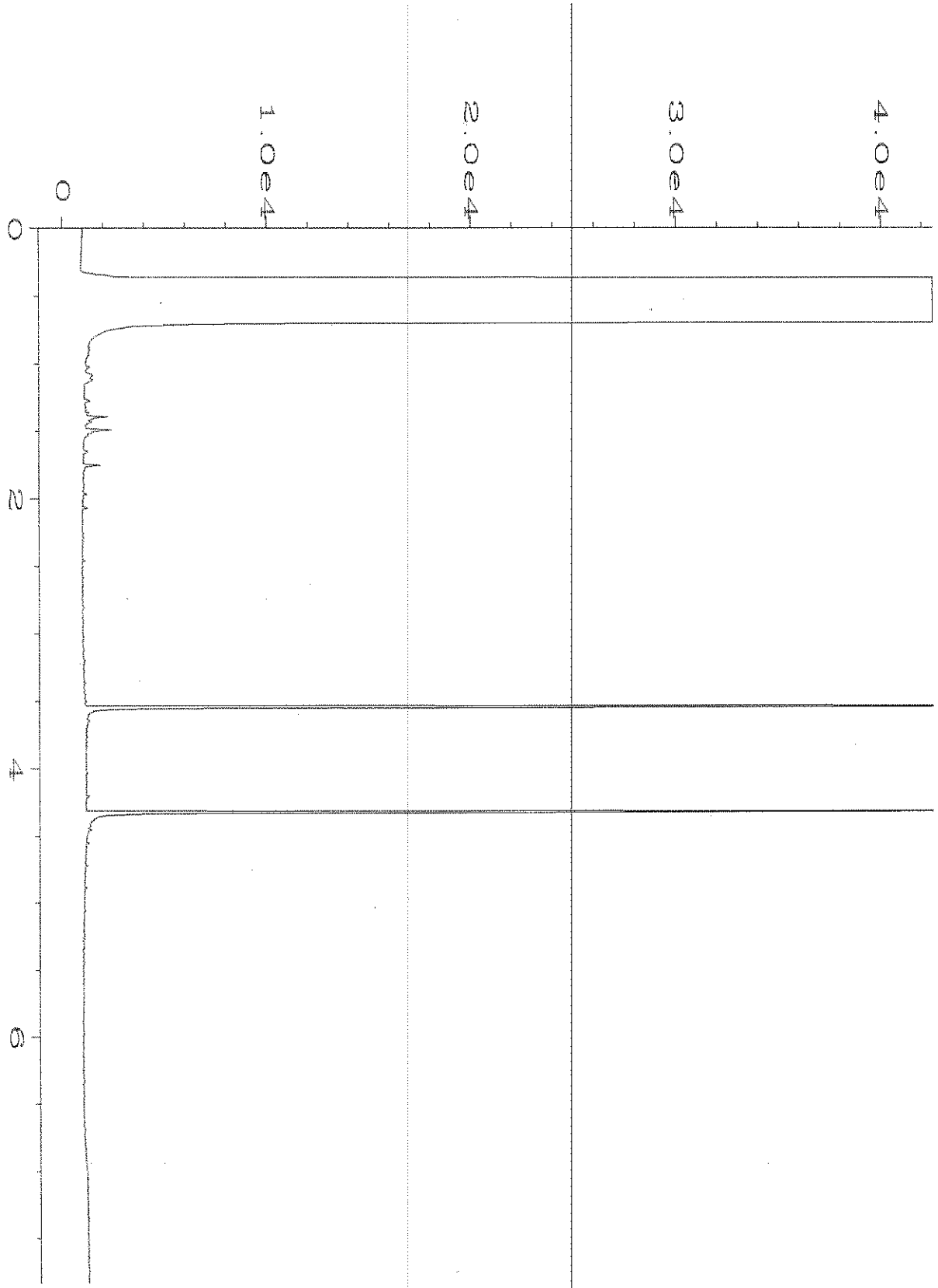
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

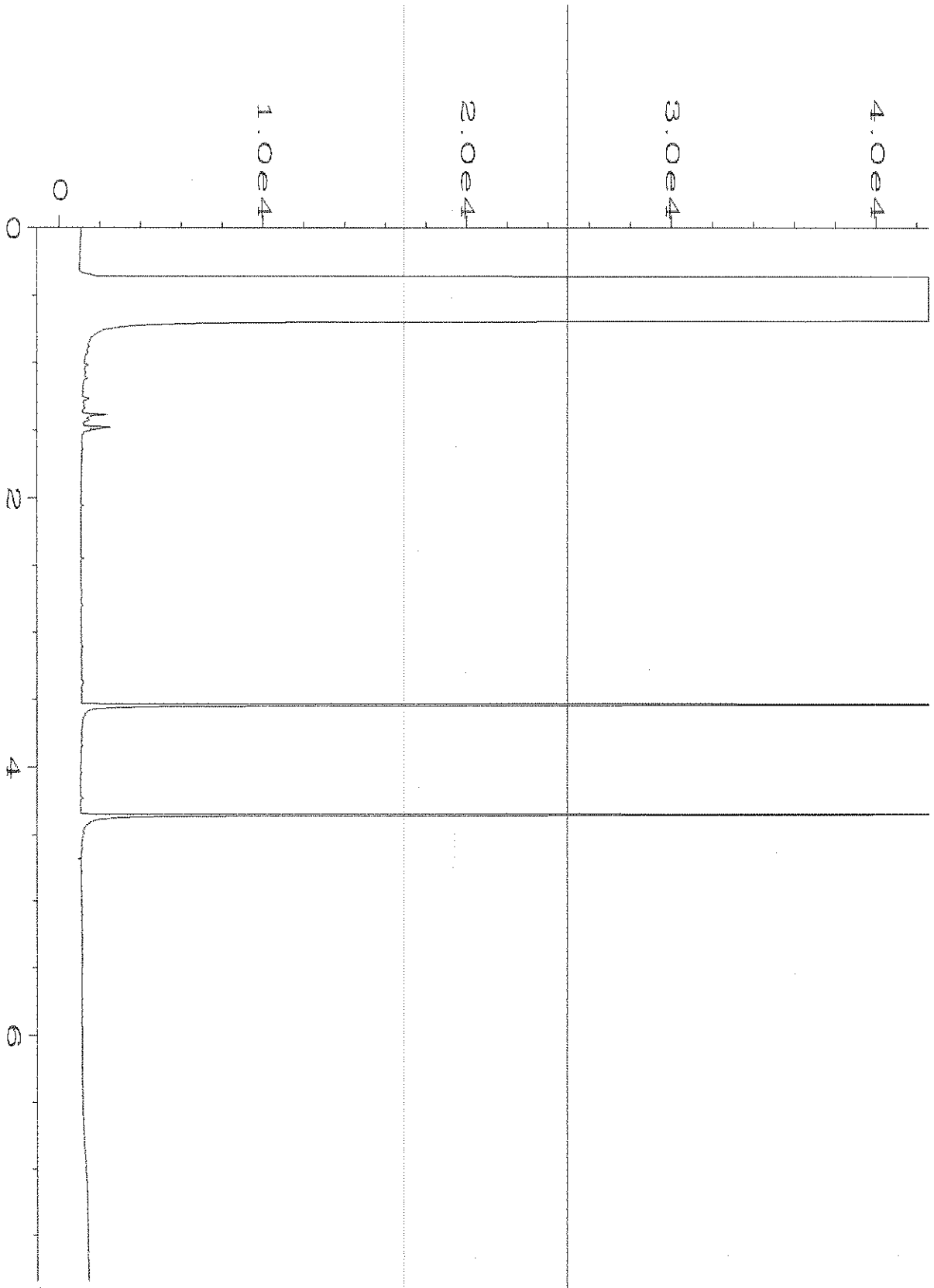
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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

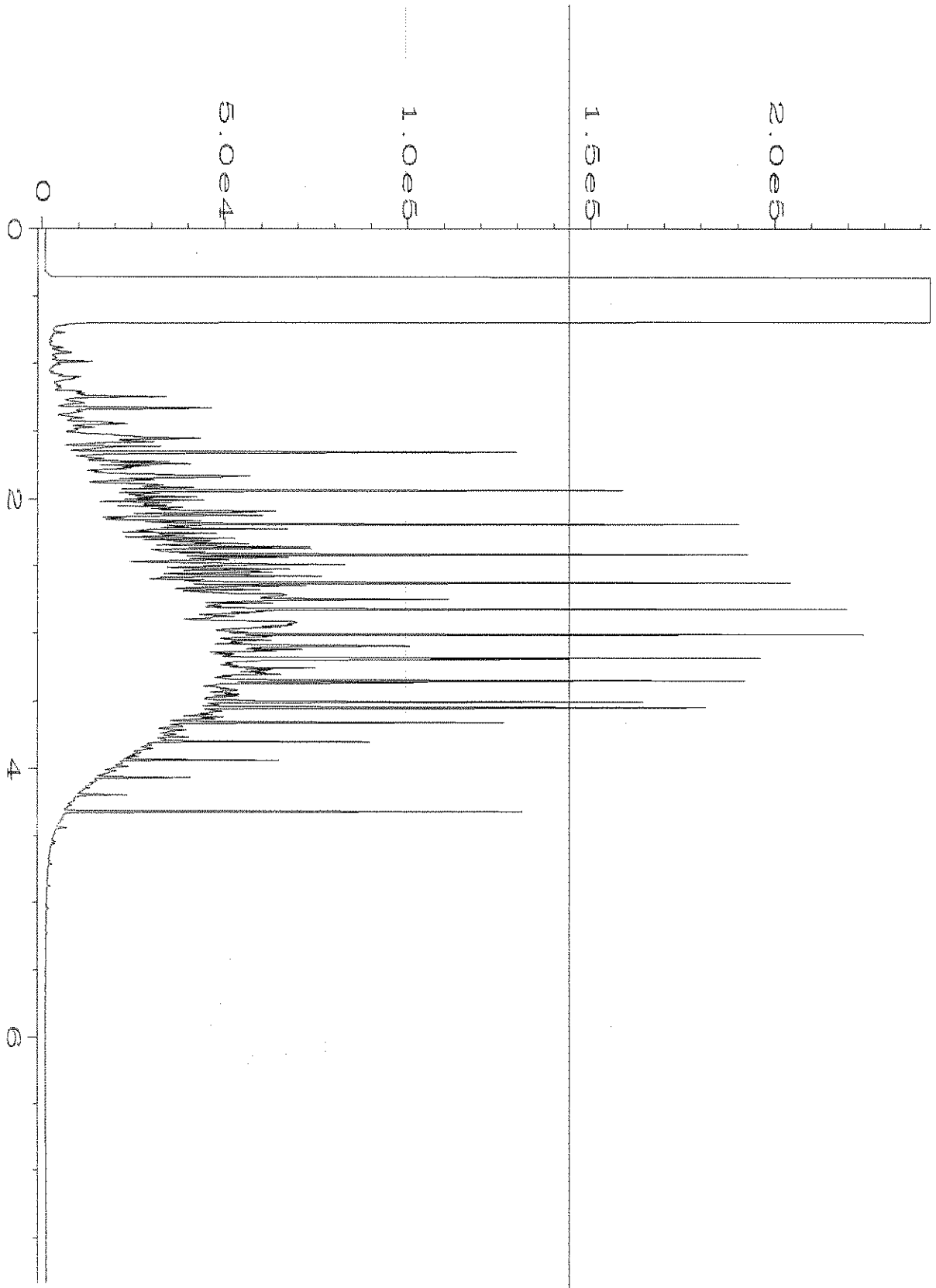
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Data File Name	: C:\HPCHEM\4\DATA\06-21-18\036F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 36
Sample Name	: 806363-01,,03	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 21 Jun 18 03:04 PM	Instrument Method	: DX.MTH
Report Created on	: 22 Jun 18 07:22 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\4\DATA\06-21-18\006F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 6
Sample Name	: 08-1339 mb2	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 21 Jun 18 08:46 AM	Instrument Method	: DX.MTH
Report Created on	: 22 Jun 18 07:22 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\4\DATA\06-21-18\005F0801.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 5
Sample Name	: 1000 Dx 52-185B	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 21 Jun 18 09:10 PM	Instrument Method	: DX.MTH
Report Created on	: 22 Jun 18 07:26 AM	Analysis Method	: DX.MTH

806363

SAMPLE CHAIN OF CUSTODY

ME 06-20-18

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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	1249-001-05

REMARKS project quote

TURNAROUND TIME
Standard (2 Weeks)
RUSH 3-day TAT
Rush charges authorized by: C. Cass

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: CPAHs by 8270D & Naphthalene & 1-Methylnaphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
Conc-upperwall-01	upper South		01	6/20/18	1000	Solid	1	X	X	X	X	X	pulverize & Composite prior to analysis
Conc-upperwall-02	Central		02		1010		1						
Conc-upperwall-03	North		03		1015		1						

CC 06/20/18

Samples received at 3.0 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Chris Cass	SoundEarth	6/20/18	1455
Received by:		FedEx	6/20/18	1455
Relinquished by:				
Received by:				

SoundEarth Strategies

APPENDIX E

UST01 TANK CONTENTS DISPOSAL RECORDS

Your Seattle Fire Department

APPLICATION FOR TEMPORARY PERMIT

Code 7908 **Commercial Tank Removal/Decommissioning**

Permit Fee: $255.00

Date Issued: 4-11-15

Tank(s) must be removed from site on the same day as permit is issued!

TO BE COMPLETED BY PERMIT APPLICANT

FIRM NAME TANK WISE

MAILING ADDRESS 5405 W Marginal Way SW SUITE

CITY Seattle STATE WA ZIP 98106

JOBSITE ADDRESS 1451 NW 46 ~~206-783-2425 cell~~

CONTACT PERSON Tom Wise PHONE NUMBER (206) 937-3985 cell

Number of Tank(s): 1 Tank Size(s): 1765

Product(s) Previously Contained: Black oil

☐ Aboveground tank

☐ Underground tank

☒ Removal (Marine Chemist inspection and certificate required for all tanks regardless of size or contents)

☐ Abandonment-in-Place (Marine Chemist certificate required for tanks previously containing Class I flammable liquids and/or unknowns)

Hot work being conducted: ☐ No ☐ Yes (If yes, a separate hot work permit is required)

Permit applications may be submitted in person weekdays from 8:00 a.m. to 4:30 p.m., or mailed to:

Seattle Fire Department
Fire Marshal's Office – Permits
220 Third Ave S, 2nd Floor
Seattle, WA 98104-2608

To pay with a Visa or Master Card: Fax or email this application
THEN CALL US TO CONFIRM RECEIPT AND MAKE PAYMENT
Tel: (206) 386-1450 / Fax: (206) 386-1348
E-mail: permits@seattle.gov

Call 386-1450, at least 24 hours prior to needed inspection time to arrange for an appointment.
TANKS MAY BE REMOVED/DECOMMISSIONED ONLY AFTER FIRE DEPARTMENT INSPECTION
NO HOT WORK IS ALLOWED ON A TANK SYSTEM PRIOR TO ISSUANCE OF THIS FIRE DEPARTMENT PERMIT!

Permission is hereby granted to remove or decommission the tank(s) identified in this permit in accordance with the attached conditions, all noted special conditions, and all applicable provisions of the Seattle Fire Code, federal, state and local regulations. **THIS PERMIT IS NULL AND VOID IF PERMIT CONDITIONS ARE NOT ATTACHED**

Special permit conditions: *Tank removal/decommissioning must be performed, or directly supervised, by an ICC certified individual (WAC 173-360-600)*

FMO USE:
Check No.: CC 000120940410 18
Receipt No.: 5-288462
Application ID#: 112597

APPROVED BY:
Inspector: Tony Nunn SFD ID# 1511
Name of Marine Chemist Tom Silly Certificate # 11166
Date: 4-11-15

(01/17)

SOUND TESTING, INC.
P.O. BOX 16204 SEATTLE, WA 98116
(206) 932-0206 FAX (206) 937-3848
WWW.SOUNDTESTINGINC.COM

MARINE CHEMIST CERTIFICATE

SERIAL N° 47067

GRAHAM CONSTR – TOM WISE		APRIL 10 2018
Survey Requested by	Vessel Owner or Agent	Date
PLEASE SEE BELOW	STEEL UST	1400 N 46TH, NW
Vessel	Type of Vessel	Specific Location of Vessel
BUNKER RESIDUAL BOILER FUEL	O_2 LEL VISUAL	3:45 PM
Last Three (3) Loadings	Tests Performed	Time Survey Completed

1,500 GAL UST ALONG NW 46TH, ~200' EAST OF 15TH AVE NW

SAFE FOR HOT WORK

HOT WORK = CUT WITH SIDE-WHEEL ABRASIVE GRINDER

RECOMMEND SCORE TANK PLATE WITH WHEEL UNTIL PRUSSIAN BLUE – THEN MOVE ON – BREAK FINAL 1/16" WITH HAMMER OR HEAVY EQUIPMENT – HAVE EXTINGUISHER ON SITE.

In the event of changes adversely affecting conditions in the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist.

Qualifications: Manipulation of valves or devices tending to alter conditions in pipe lines or tanks noted above, unless specifically approved in this certificate, will require re-inspection and a new Certificate for spaces so affected. All piping, heating coils, pumps and floating roof gaskets attached to or contained within spaces listed above shall be considered "NOT SAFE" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS

(These detail the minimum conditions for Safe Entry and Hot Work.) The Marine Chemist may request additional measures if workplace conditions so dictate.

ATMOSPHERE SAFE FOR WORKERS means that in a space (a) the oxygen content is between 19.5% and 22% by volume, and (b) combustible gas is less than 10% of the Lower Explosive Limit, and (c) airborne toxic materials are within permissible concentrations as listed in OSHA's Subpart Z or in ACGIH's current list of Threshold Limit Values.

SAFE FOR HOT WORK means that (a) oxygen within the space is less than 22% by volume; and (b) the combustible gas is less than 10% of the Lower Explosive Limit; and (c) cargo residues within the space will not combust during hot work; and (d) pipes that can deliver hazardous materials to the workspace have been separated, blanked, or locked out, and nearby hazardous spaces have been evaluated and noted on the certificate.

NOT SAFE FOR HOT WORK: In the compartment or space so designated, hot work is not permitted.

"The undersigned acknowledges receipt of this Certificate and understands conditions and limitations under which it was issued."

Signed _____
Name Company Date

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed Tom Sly N° 598
Marine Chemist Certificate No

POSTING

TANK WISE

Tom Wise
Contractor Lic. #TANKWL*008DG
5405 W Marginal Way SW
Seattle, WA. 98106 King

Telephone (206) 937-3995
Fax (206) 932-1007

DATE: 4-9-18

To Whom It May Concern:

The unused underground tank at the following location:

1451 NW 46th

has been pumped out and triple rinsed of oil and or water. Products removed from tank were taken to Tank Wise for reclaiming by:

MARINE VACUUM SERVICE, INC. Water Removed
460 gal 2 gal
Black oil

TANK WISE LLC

TANK WISE REPRESENTATIVE

This Memorandum is an ack... that a Bill of Lading has been ... Original Bill of Lad... party named here... intended ... of record.

14847

Page 1 of 4

MARINE VACUUM SERVICE INC.
(Name of carrier) (SCAC)

Carrier No.

Date 4-10-18

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO:
Consignee MARINE VACUUM SERVICE INC
Street 1516 SOUTH GRAHAM STREET
City SEATTLE State WA Zip Code 98108

FROM:
Shipper HANK WISE
Street 14 ST NW 46TH ST
City Seattle State WA Zip Code
24 hr. Emergency Contact Tel. No. CHEMTEL 1-800-255-3924 CONTRACT MIS3627926

Route

Vehicle Number 323

No. of Units & Container Type	HM	BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 TT	X	(DOT SPEC TANK REQUIRED) UN1863 FUEL, AVIATION, TURBIN ENGINE, CLASS 3, PG I				
1 TT	X	(DOT SPEC TANK REQUIRED) UN1203 GASOLINE, MIXTURE CLASS 3, PG II				
1 TT	X	(DOT SPEC TANK REQUIRED) UN1203 GASOLINE, CLASS 3, PG II				
1 TT	X	NA1993 DIESEL MIXTURE, CLASS 3, PG III				
1 TT	X	NA1993 DIESEL, CLASS 3, PG III				
1 TT	X	NA1270 PETROLEUM OIL, CLASS 3, PG I				
1 TT	X	NA1270 PETROLEUM OIL, MIXTURE, CLASS 3, PG I				
1 TT		OILY WASTE WATER NON REG BY DOT	1,000 Gallons			
1 TT		WASTE WATER NON REG BY DOT				
1 TT		MARINE VESSEL SEWAGE NON REG BY DOT				
1 TT		STREET WASTE STORM PIPE CLEANING NON REG BY DOT				
		Arrived 11:30				
		Left 12:40				

PLACARDS TENDERED: YES ☐ NO ☐

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of Item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

_____ Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER HANK WISE
PER
DATE 4. 10. 2018

CARRIER Mar-Vac
PER
DATE 4. 10. 2018

3

Permanent post-office address of shipper.

STYLE F375-4 © 2012 LABELMASTER® (800) 621-5808 www.labelmaster.com

This Shipping Order

must be legibly filled in, in Ink indelible Pencil, or in Carbon, and retained by the agent

Shipper No. 07600

Page 1 of 4

MARINE VACUUM SERVICE INC.

(Name of carrier) (SCAC)

Carrier No. 223

Date 04-11-18

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO:

Consignee MARINE VACUUM SERVICE INC.

Street 1516 SOUTH GRAHAM STREET

City SEATTLE State WA Zip Code 98108

Route

FROM:

Shipper Tank Wise

Street 14511 NW 46th St

City Seattle State WA Zip Code

24 hr. Emergency Contact Tel. No. CHEMTEL 1-800-255-3924 CONTRACT MIS3627926

Vehicle Number 223

No. of Units & Container Type	HM	BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 TT	X	(DOT SPEC TANK REQUIRED) UN1863 FUEL, AVIATION, TURBIN ENGINE, CLASS 3, PG I				
1 TT	X	(DOT SPEC TANK REQUIRED) UN1203 GASOLINE, MIXTURE CLASS 3, PG II				
1 TT	X	(DOT SPEC TANK REQUIRED) UN1203 GASOLINE, CLASS 3, PG II				
1 TT	X	NA1993 DIESEL MIXTURE, CLASS 3, PG III				
1 TT	X	NA1993 DIESEL, CLASS 3, PG III	Start 9:45 on Job			
1 TT	X	NA1270 PETROLEUM OIL, CLASS 3, PG I	Finish 10:30			
1 TT	X	NA1270 PETROLEUM OIL, MIXTURE, CLASS 3, PG I				
1 TT		OILY WASTE WATER NON REG BY DOT	650gls			
1 TT		WASTE WATER NON REG BY DOT				
1 TT		MARINE VESSEL SEWAGE NON REG BY DOT				
1 TT		STREET WASTE STORM PIPE CLEANING NON REG BY DOT				

PLACARDS TENDERED: YES ☐ NO ☐

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of Item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER Tank Wise

PER ~~Tom Wise~~ X

CARRIER Mar-Vac

PER Carl Kirschner

DATE 04-11-18

2

Permanent post-office address of shipper.

APPENDIX F

LABORATORY ANALYTICAL REPORTS FOR UST01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

April 13, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on April 11, 2018 from the SOU_1249-001_ 20180411, F&BI 804201 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0413R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 11, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001_ 20180411, F&BI 804201 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
804201 -01	UST01-SP01
804201 -02	UST01-SP02
804201 -03	UST01-NSW-17.5

All quality control requirements were acceptable.

Date of Report: 04/13/18
Date Received: 04/11/18
Project: SOU_1249-001_ 20180411, F&BI 804201
Date Extracted: 04/11/18
Date Analyzed: 04/11/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
UST01-SP01 804201-01	<0.02	<0.02	<0.02	<0.06	16	84
UST01-SP02 804201-02	<0.02	<0.02	<0.02	<0.06	7.2	84
UST01-NSW-17.5 804201-03	<0.02	<0.02	<0.02	<0.06	<5	83
Method Blank 08-737 MB	<0.02	<0.02	<0.02	<0.06	<5	82

Date of Report: 04/13/18
Date Received: 04/11/18
Project: SOU_1249-001_ 20180411, F&BI 804201
Date Extracted: 04/11/18
Date Analyzed: 04/11/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
UST01-SP01 804201-01	100 x	<250	98
UST01-SP02 804201-02	60 x	<250	100
UST01-NSW-17.5 804201-03	68 x	<250	101
Method Blank 08-781 MB	<50	<250	99

Date of Report: 04/13/18
Date Received: 04/11/18
Project: SOU_1249-001_ 20180411, F&BI 804201

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 804203-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	96	69-120
Toluene	mg/kg (ppm)	0.5	95	70-117
Ethylbenzene	mg/kg (ppm)	0.5	100	65-123
Xylenes	mg/kg (ppm)	1.5	97	66-120
Gasoline	mg/kg (ppm)	20	110	71-131

Date of Report: 04/13/18
Date Received: 04/11/18
Project: SOU_1249-001_ 20180411, F&BI 804201

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 804189-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	94	92	64-133	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	94	58-147

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

804201

SAMPLE CHAIN OF CUSTODY

ME 04-11-18 VS1 // PO1

Page # 1 of 1

Send Report to Chris Cass

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) Sarah Welter

PROJECT NAME/NO. Ballard Blocks II

PO # 1249-001

REMARKS

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☒ RUSH 24 hr

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: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270				Notes
VST01-SP01	SP	–	01 A-E	4/10/18	1050			X	X	X						
VST01-SP02	SP	–	02	4/10/18	1100			X	X	X						
VST01-NSW-17.5	NSW	3.5	03	4/10/18	1110			X	X	X						
																Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	4/10/18	1140
Received by:	Elizabeth Webber-Bryce	F?BI	4/11/18	1140
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 2, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on June 28, 2018 from the SOU_1249-001-05_ 20180628, F&BI 806553 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0702R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 28, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180628, F&BI 806553 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806553 -01	UST01-WSW01-15
806553 -02	UST01-SSW01-15
806553 -03	UST01-ESW01-15
806553 -04	UST01-B01-13
806553 -05	UST01-NSW01-15
806553 -06	UST01-WSW02-15
806553 -07	UST01-SSW02-15
806553 -08	UST01-ESW02-15

All quality control requirements were acceptable.

Date of Report: 07/02/18
Date Received: 06/28/18
Project: SOU_1249-001-05_ 20180628, F&BI 806553
Date Extracted: 06/28/18
Date Analyzed: 06/28/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
UST01-WSW01-15 806553-01	120	<250	90
UST01-SSW01-15 806553-02	<50	<250	93
UST01-ESW01-15 806553-03	<50	<250	89
UST01-B01-13 806553-04	<50	<250	99
UST01-NSW01-15 806553-05	<50	<250	99
Method Blank 08-1433 MB	<50	<250	103

Date of Report: 07/02/18
Date Received: 06/28/18
Project: SOU_1249-001-05_ 20180628, F&BI 806553

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806542-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	84	88	64-133	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	94	58-147

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

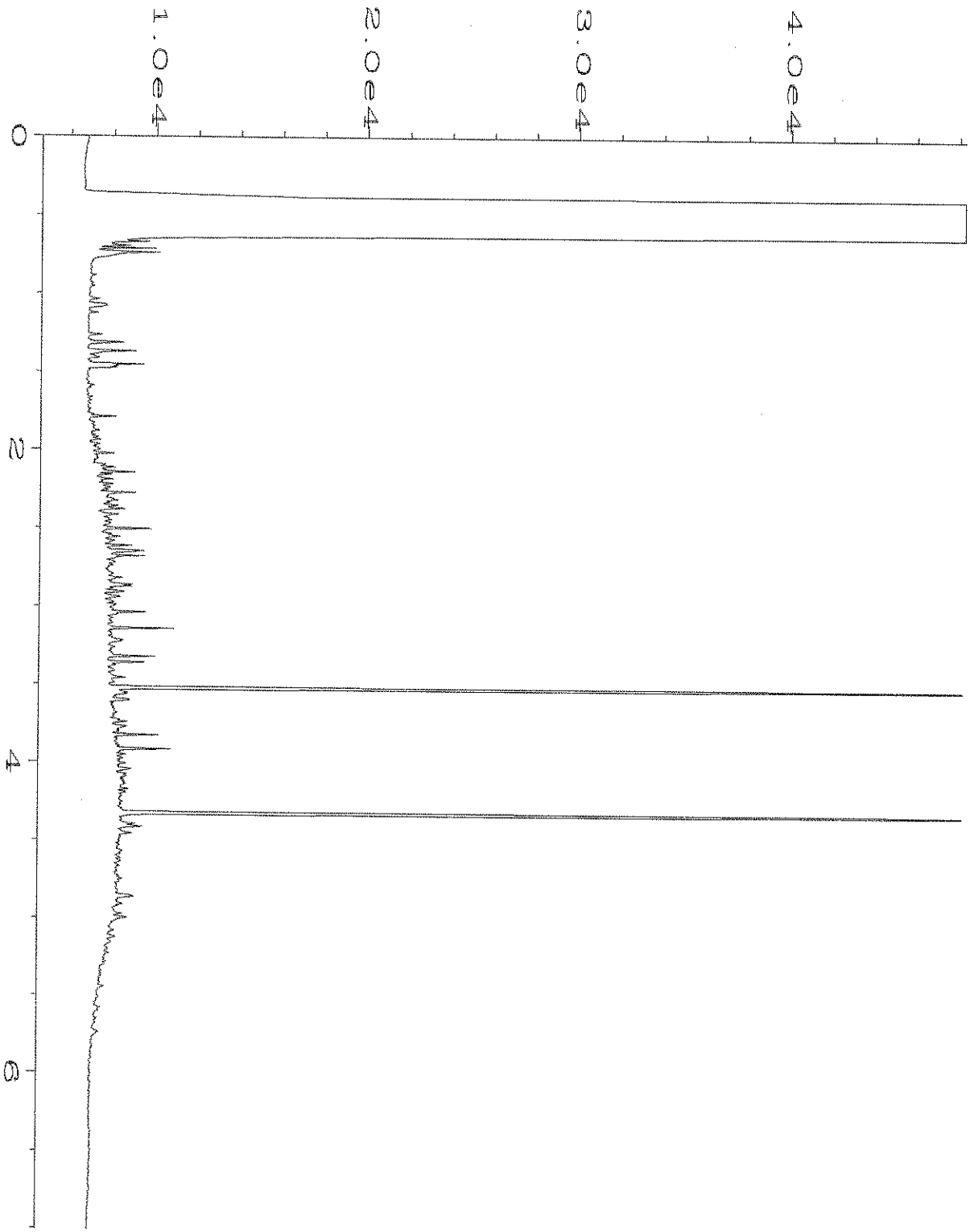
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

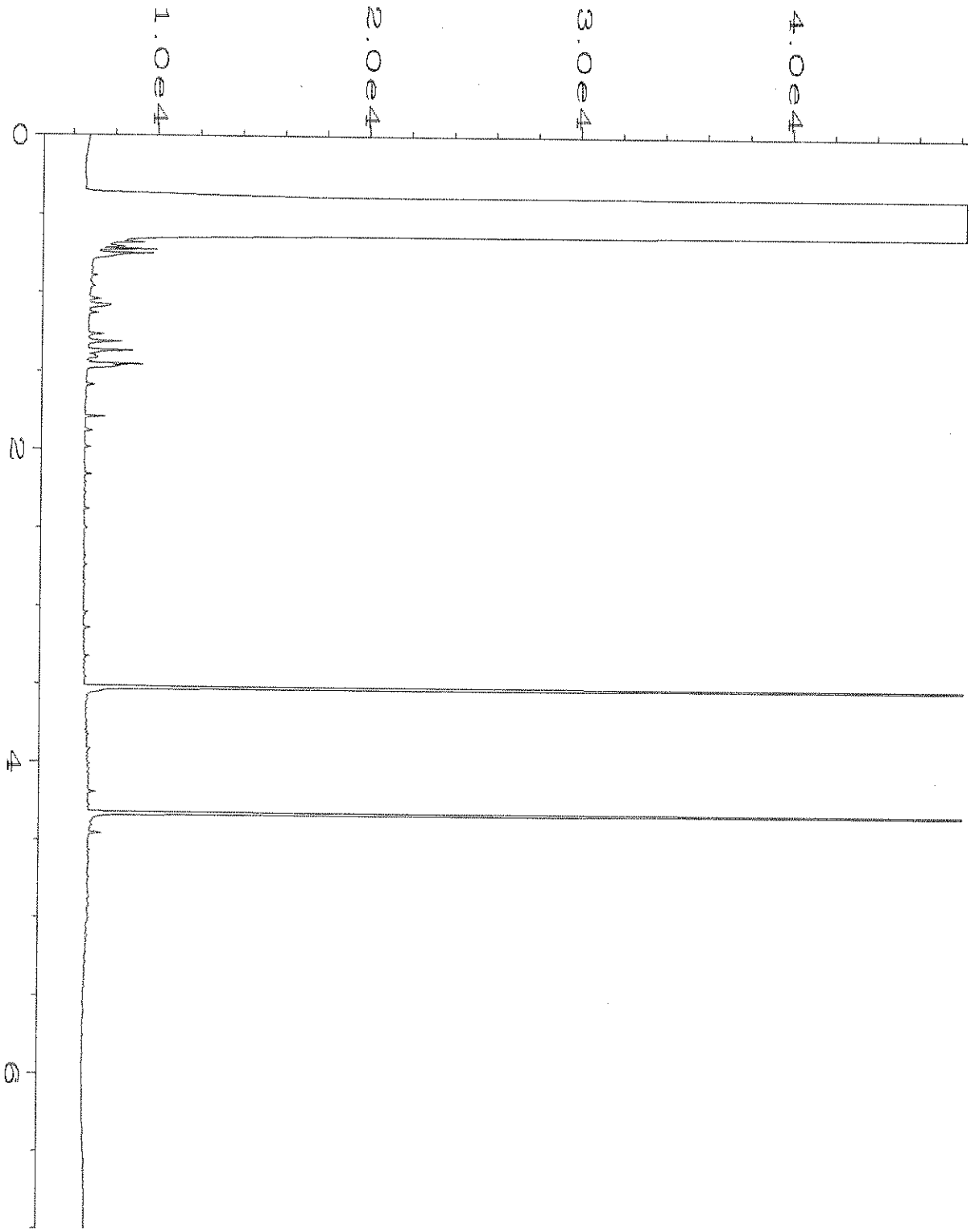
vo - The value reported fell outside the control limits established for this analyte.

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



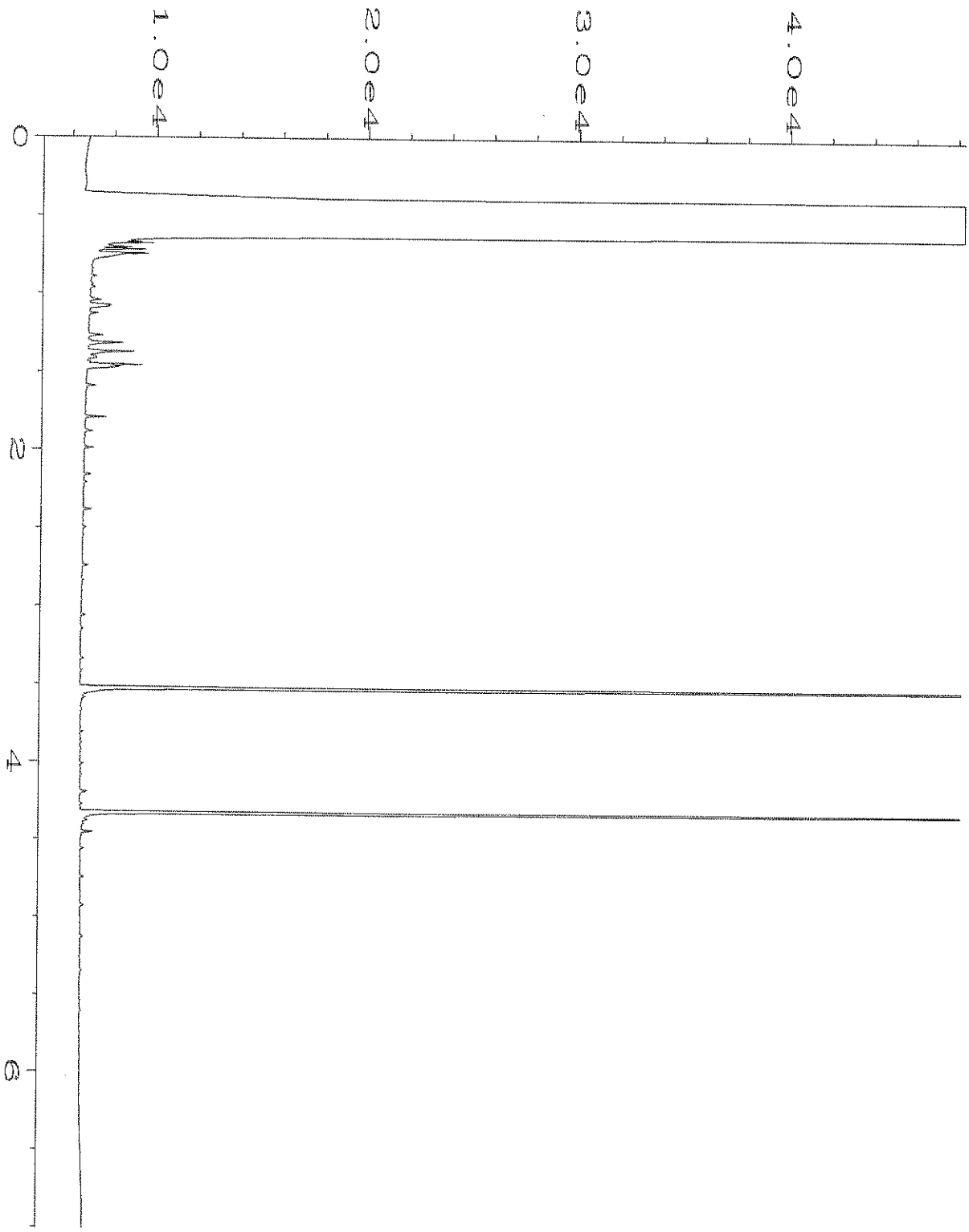
Data File Name : C:\HPCHEM\6\DATA\06-28-18\041F0801.D
Operator : TL
Instrument : GC6
Sample Name : 806553-01
Run Time Bar Code:
Acquired on : 28 Jun 18 05:34 PM
Report Created on: 29 Jun 18 08:26 AM

Page Number : 1
Vial Number : 41
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH



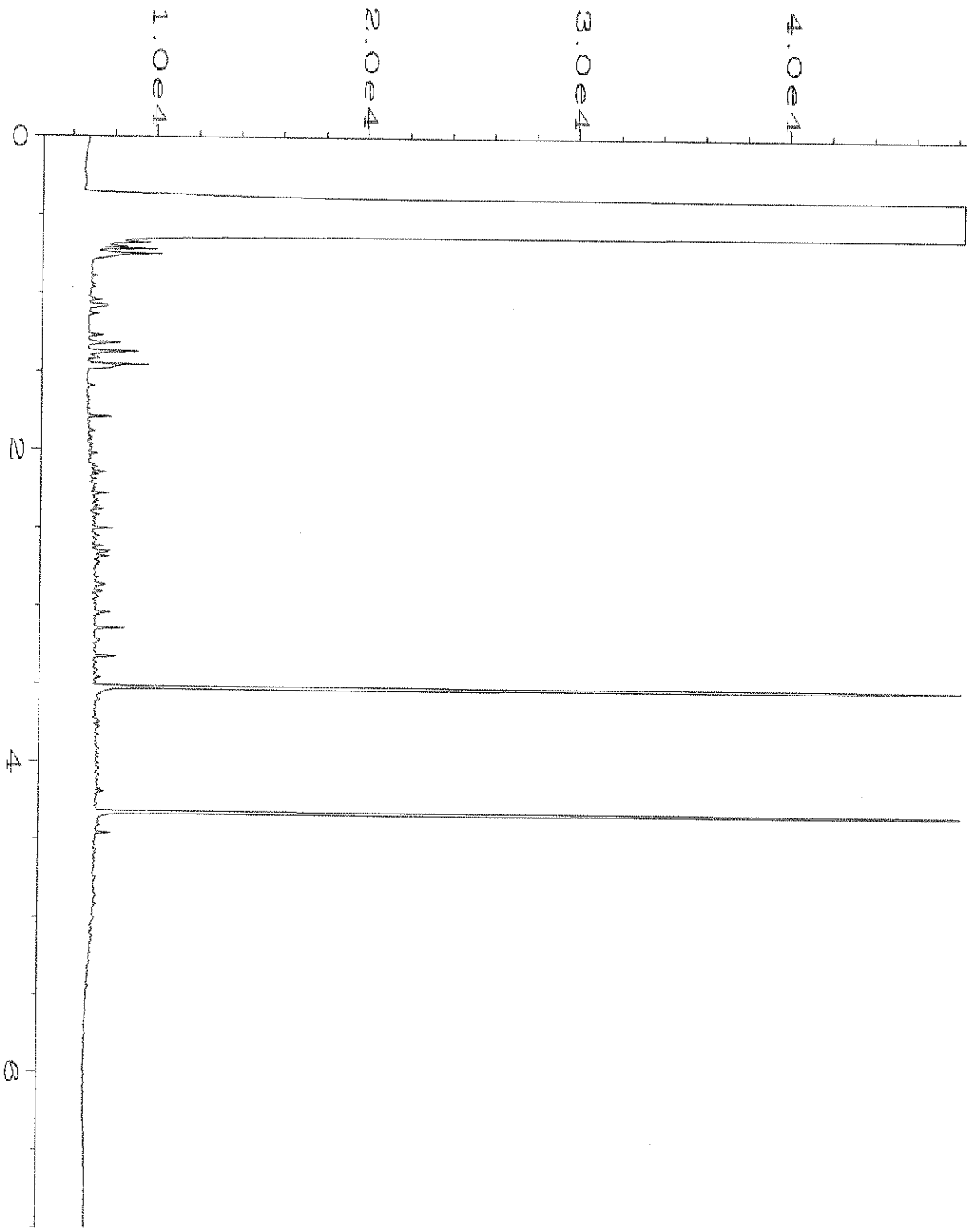
Data File Name : C:\HPCHEM\6\DATA\06-28-18\042F0801.D
Operator : TL
Instrument : GC6
Sample Name : 806553-02
Run Time Bar Code:
Acquired on : 28 Jun 18 05:45 PM
Report Created on: 29 Jun 18 08:26 AM

Page Number : 1
Vial Number : 42
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH



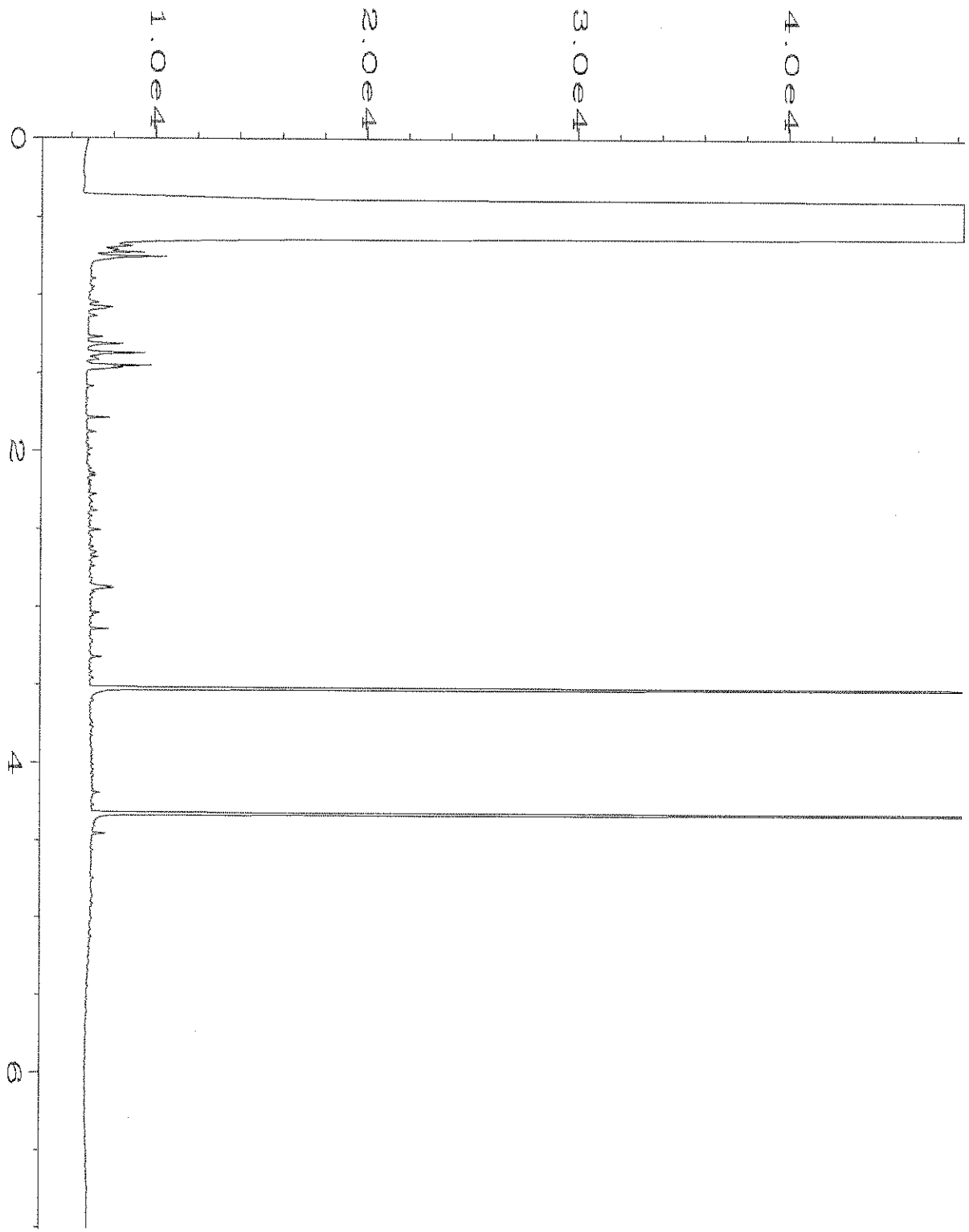
Data File Name : C:\HPCHEM\6\DATA\06-28-18\043F0801.D
Operator : TL
Instrument : GC6
Sample Name : 806553-03
Run Time Bar Code:
Acquired on : 28 Jun 18 05:56 PM
Report Created on: 29 Jun 18 08:26 AM

Page Number : 1
Vial Number : 43
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH



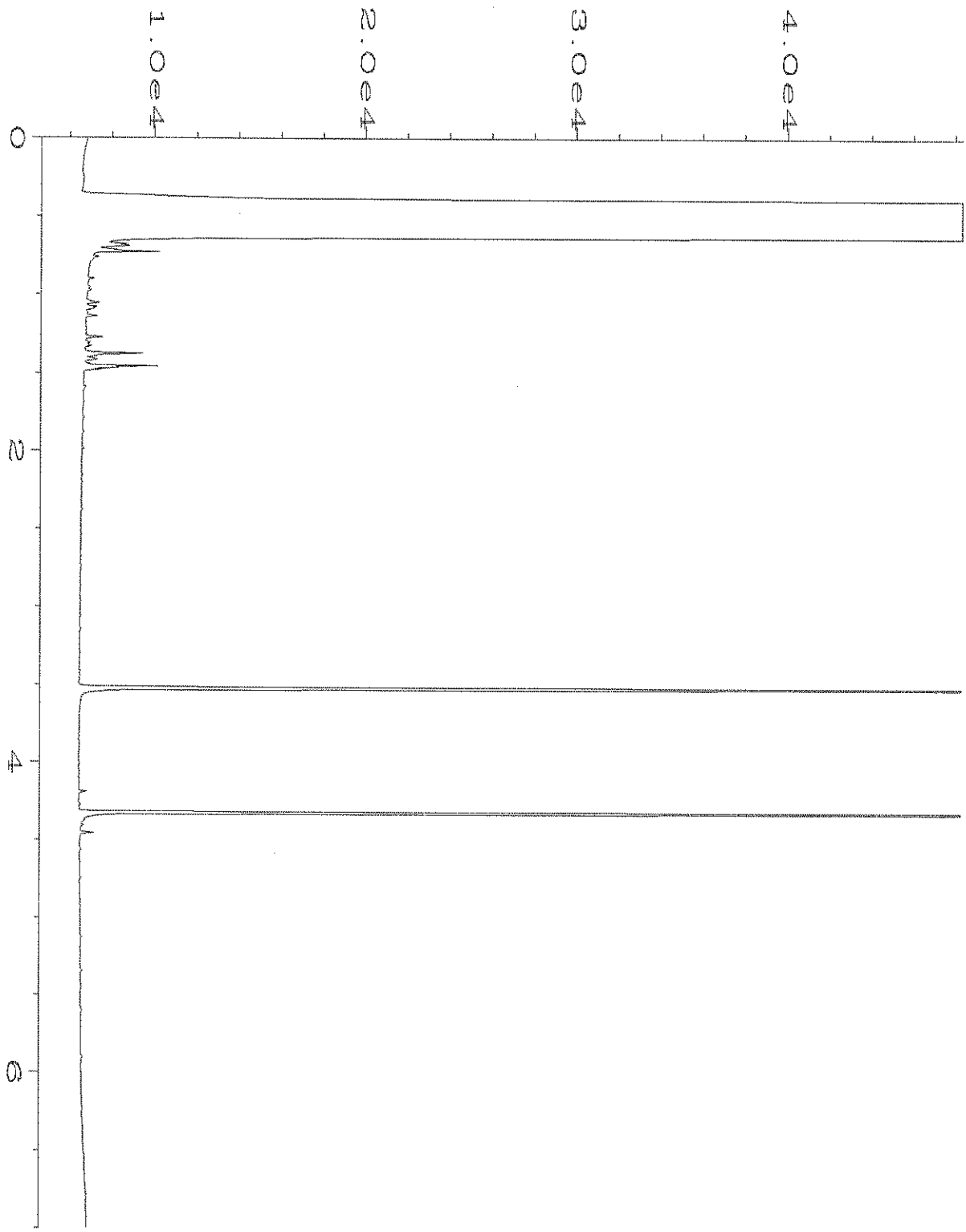
Data File Name : C:\HPCHEM\6\DATA\06-28-18\044F0801.D
Operator : TL
Instrument : GC6
Sample Name : 806553-04
Run Time Bar Code:
Acquired on : 28 Jun 18 06:07 PM
Report Created on: 29 Jun 18 08:26 AM

Page Number : 1
Vial Number : 44
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH

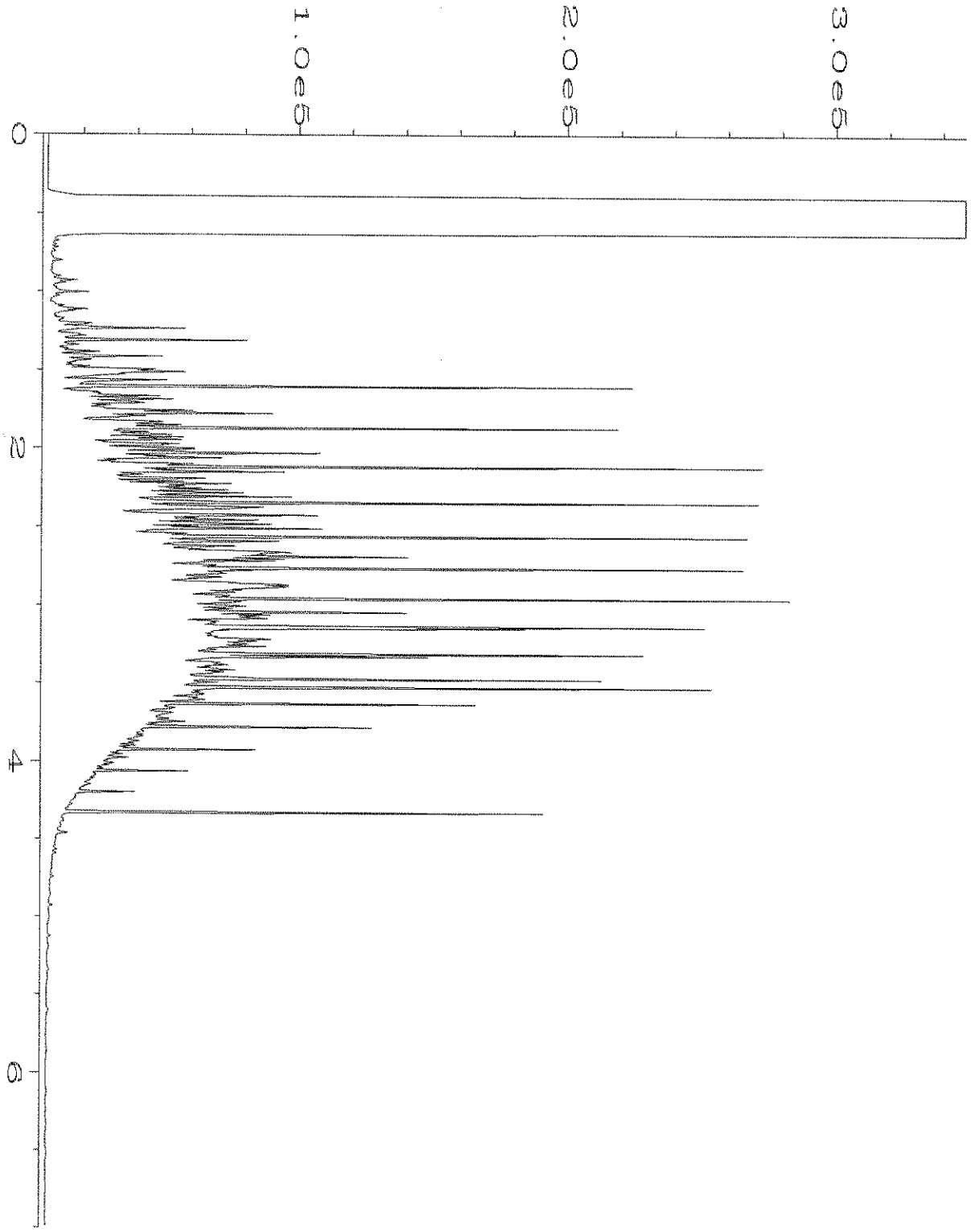


Data File Name : C:\HPCHEM\6\DATA\06-28-18\045F0801.D
Operator : TL
Instrument : GC6
Sample Name : 806553-05
Run Time Bar Code:
Acquired on : 28 Jun 18 06:18 PM
Report Created on: 29 Jun 18 08:27 AM

Page Number : 1
Vial Number : 45
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\6\DATA\06-28-18\018F0501.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 18
Sample Name	: 08-1433 mb	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 5
Acquired on	: 28 Jun 18 01:43 PM	Instrument Method	: DX.MTH
Report Created on	: 29 Jun 18 08:26 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\6\DATA\06-28-18\005F0901.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 5
Sample Name	: 1000 Dx 52-185B	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 9
Acquired on	: 28 Jun 18 06:40 PM	Instrument Method	: DX.MTH
Report Created on	: 29 Jun 18 08:25 AM	Analysis Method	: DX.MTH

SAMPLE CHAIN OF CUSTODY

806553

ME 6-28-18 A02 1 of 1

Send Report ~~to Chris Carter~~; Chris Cass

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

PO #: 1249-001-05

REMARKS (project quote)
24 Hour TAT

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24 Hour TAT
Rush charges authorized by:

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

Sample ID	Sample Location	Sample ~~Depth~~ Elev	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
UST01-WSW01-15	UST01-WSW	15	01	06-28-18	1130	Soil	1					X	
UST01-SSW01-15	UST01-SSW	15	02	"	1140	"	"					X	
UST01-ESW01-15	UST01-ESW	15	03	"	1145	"	"					X	
UST01-B01-13	UST01-B	13	04	"	1200	"	"					X	
UST01-NSW01-15	UST01-NSW	15	05	"	1205	"	"					X	
UST01-WSW02-15	UST01-WSW02	15	06	"	1125	"	"						HOLD
UST01-SSW02-15	UST01-SSW02	15	07	"	1230	"	"						"
UST01-ESW02-15	UST01-ESW02	15	08	"	1235	"	"						"
					APH 06-28-18								

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Ada Hamilton	SoundEarth	06-29-18	1525
Received by:	Nhan Phan	FEBI	6/28/18	1528
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 6, 2018

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

Dear Mr Carter:

Included are the additional results from the testing of material submitted on June 28, 2018 from the SOU_ 1249-001-05_ 20180628, F&BI 806553 project. There are 4 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 Cass
SOU0706R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 28, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180628, F&BI 806553 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806553 -01	UST01-WSW01-15
806553 -02	UST01-SSW01-15
806553 -03	UST01-ESW01-15
806553 -04	UST01-B01-13
806553 -05	UST01-NSW01-15
806553 -06	UST01-WSW02-15
806553 -07	UST01-SSW02-15
806553 -08	UST01-ESW02-15

All quality control requirements were acceptable.

Date of Report: 07/06/18
Date Received: 06/28/18
Project: SOU_ 1249-001-05_ 20180628, F&BI 806553
Date Extracted: 07/03/18
Date Analyzed: 07/03/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 56-165)
UST01-WSW02-15 806553-06	<50	<250	99
Method Blank 07-1447 MB2	<50	<250	94

Date of Report: 07/06/18
Date Received: 06/28/18
Project: SOU_ 1249-001-05_ 20180628, F&BI 806553

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 807001-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	88	86	64-133	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	86	58-147

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

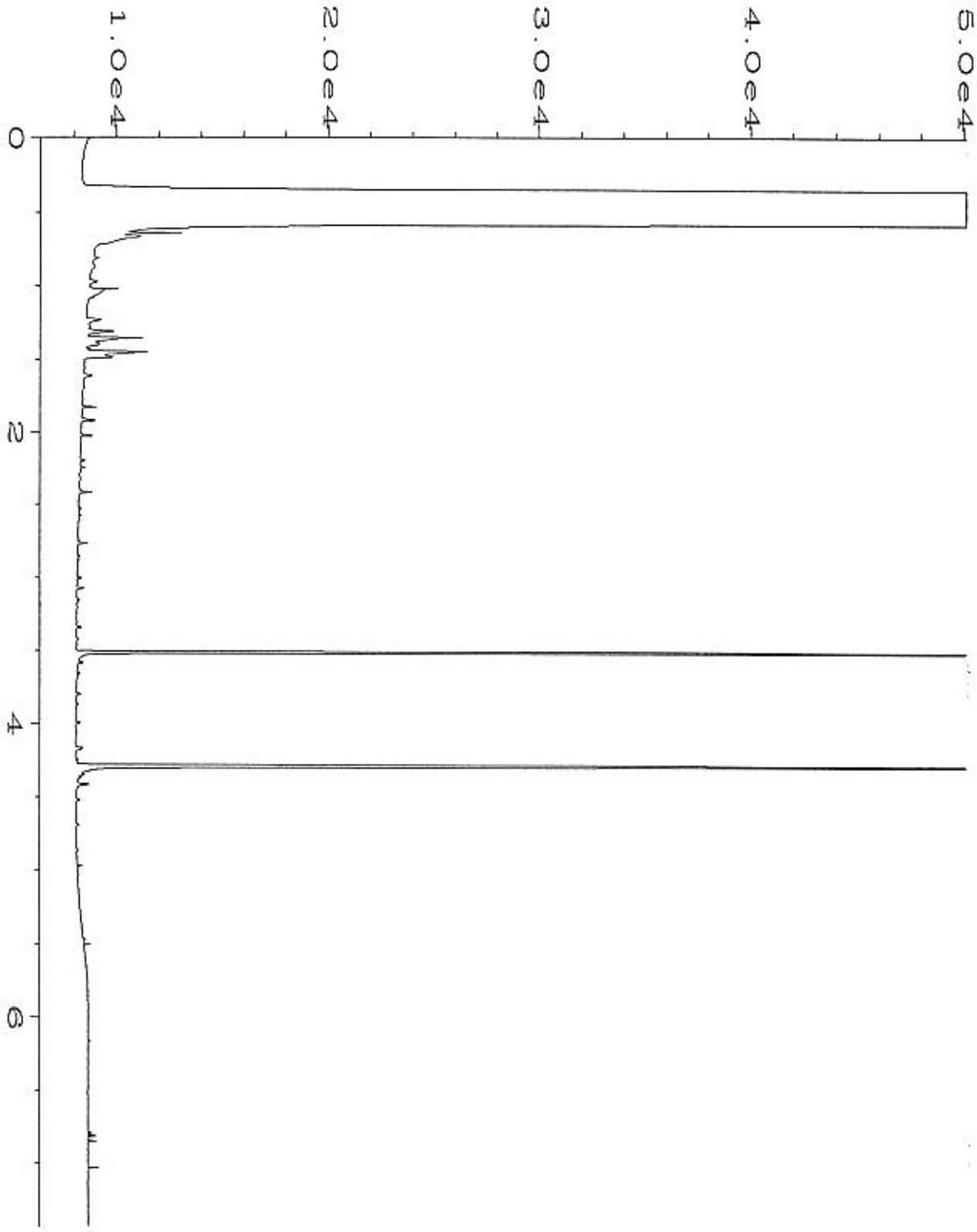
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

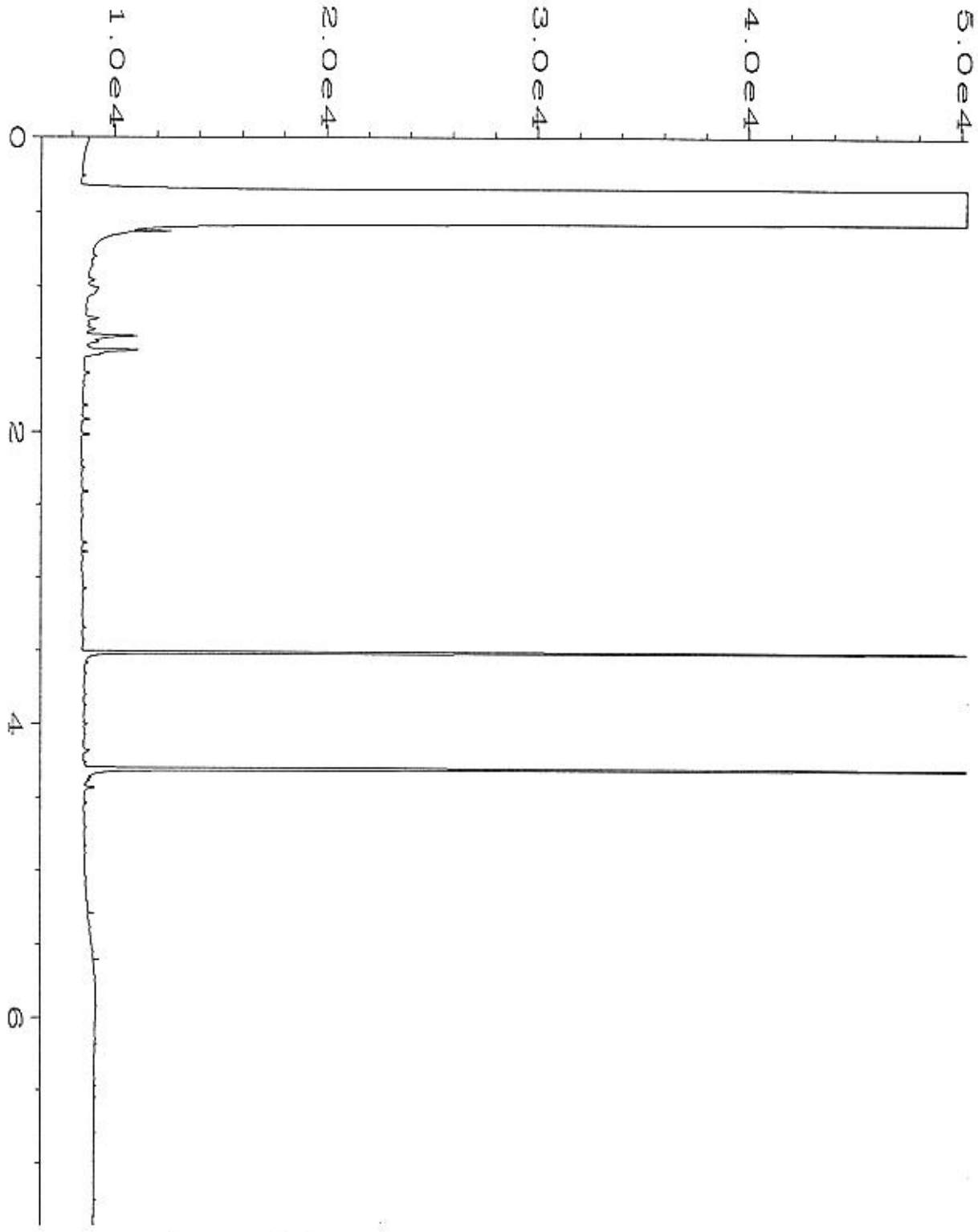
vo - The value reported fell outside the control limits established for this analyte.

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

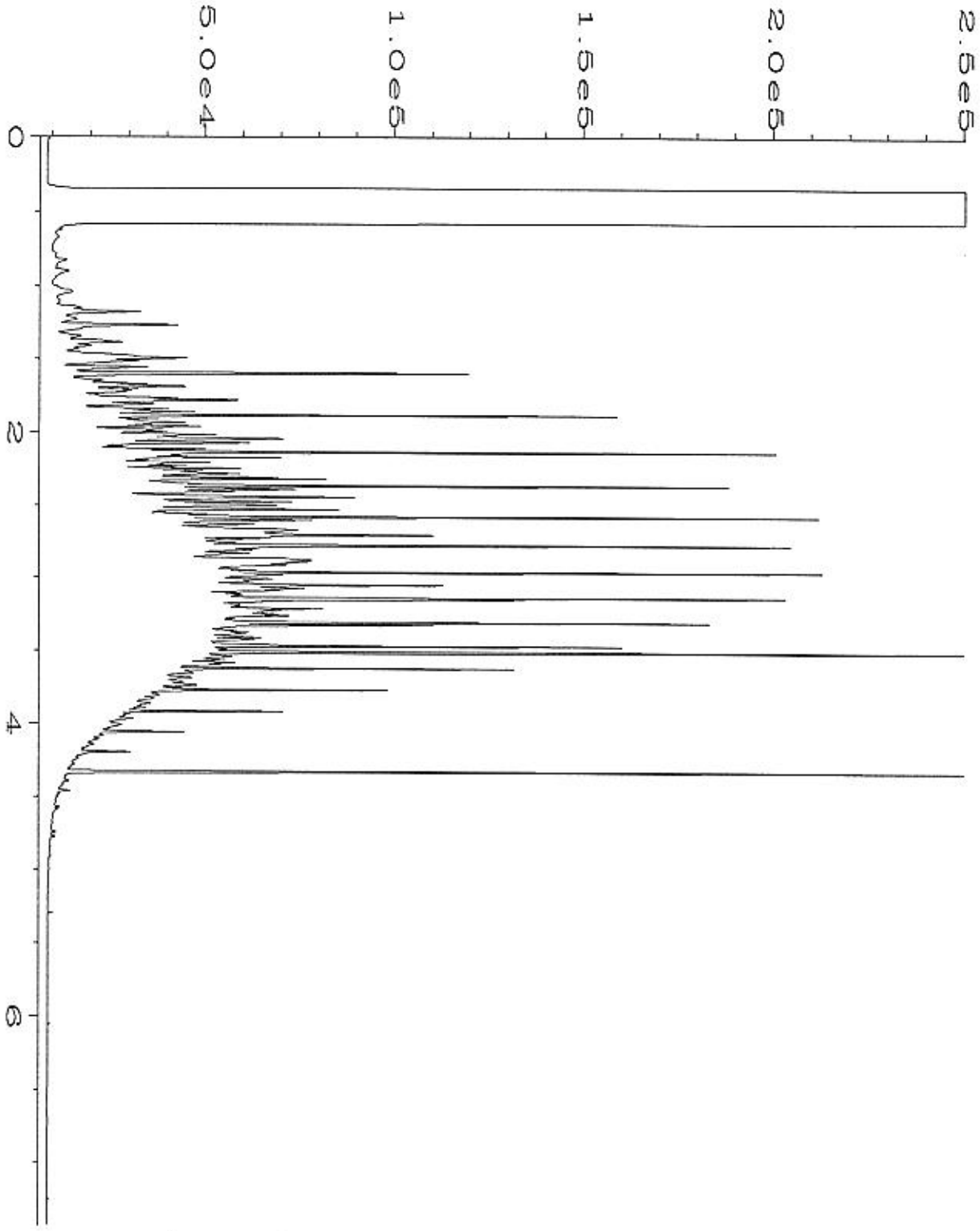


Data File Name : C:\HPCHEM\1\DATA\07-03-18\013F0301.D
Operator : TL
Instrument : GC1
Sample Name : 806553-06
Run Time Bar Code:
Acquired on : 03 Jul 18 10:09 AM
Report Created on: 03 Jul 18 01:07 PM

Page Number : 1
Vial Number : 13
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\07-03-18\006F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 6
Sample Name	: 07-1447 mb2	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 03 Jul 18 08:52 AM	Instrument Method	: DX.MTH
Report Created on	: 03 Jul 18 01:08 PM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\1\DATA\07-03-18\003F0201.D
Operator : TL
Instrument : GC1
Sample Name : 500 Dx 52-71D
Run Time Bar Code:
Acquired on : 03 Jul 18 05:51 AM
Report Created on: 03 Jul 18 01:08 PM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 2
Instrument Method: DX.MTH
Analysis Method : DX.MTH

SAMPLE CHAIN OF CUSTODY

806553

ME 6-28-18 A02 1 of 1

Send Report ~~Chris Carter~~; Chris Cass

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

PO #: 1249-001-05

REMARKS (project quote)
24 Hour TAT

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24 Hour TAT
Rush charges authorized by:

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

Sample ID	Sample Location	Sample ~~Depth~~ Elev	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
US701-WSW01-15	US701-WSW	15	01	06-28-18	1130	Soil	1					X	(Y) per CC
US701-SSW01-15	US701-SSW	15	02	"	1140	"	"					X	7/2/18
US701-ESW01-15	US701-ESW	15	03	"	1145	"	"					X	ME
US701-B01-13	US701-B	13	04	"	1200	"	"					X	
US701-NSW01-15	US701-NSW	15	05	"	1205	"	"					X	
US701-WSW02-15	US701-WSW02	15	06	"	1125	"	"					(X)	~~HOLD~~
US701-SSW02-15	US701-SSW02	15	07	"	1230	"	"						
US701-ESW02-15	US701-ESW02	15	08	"	1235	"	"						

XXX 06-28-18

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Ada Hamilton	SoundEarth	06-29-18	1525
Received by:	Nhan Phan	FEBI	6/28/18	1528
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

August 6, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 30, 2018 from the SOU_1249-001-05_ 20180730, F&BI 807589 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0806R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 30, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180730, F&BI 807589 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807589 -01	UST01-20180730
807589 -02	Temp Blank-20180730
807589 -03	Field Blank-20180730

All quality control requirements were acceptable.

Date of Report: 08/06/18
Date Received: 07/30/18
Project: SOU_1249-001-05_ 20180730, F&BI 807589
Date Extracted: 07/31/18
Date Analyzed: 07/31/18

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 47-140)
UST01-20180730 807589-01	130 x	<250	100
Method Blank 08-1678 MB	<50	<250	104

Date of Report: 08/06/18
Date Received: 07/30/18
Project: SOU_1249-001-05_ 20180730, F&BI 807589

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	80	84	61-133	5

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

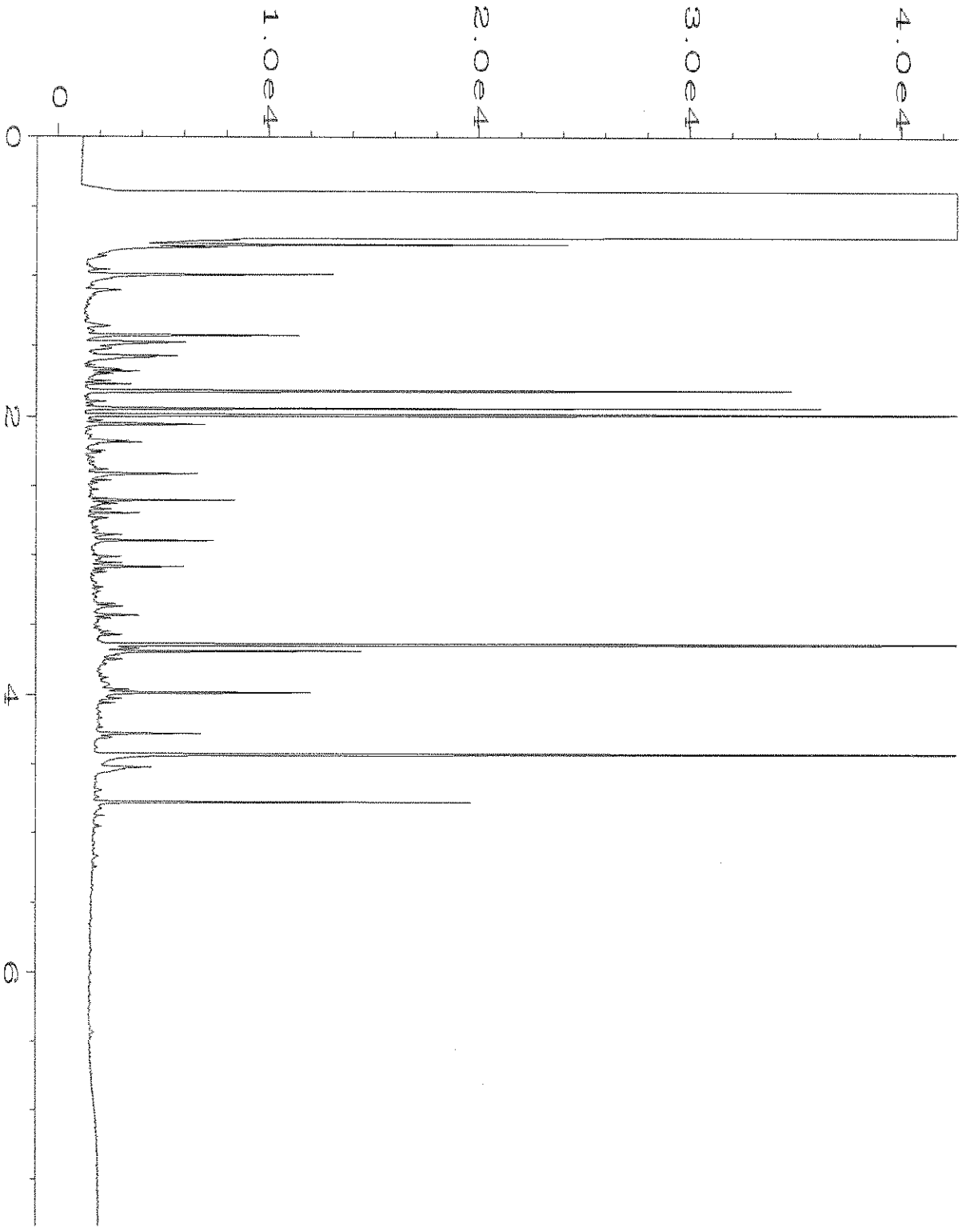
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

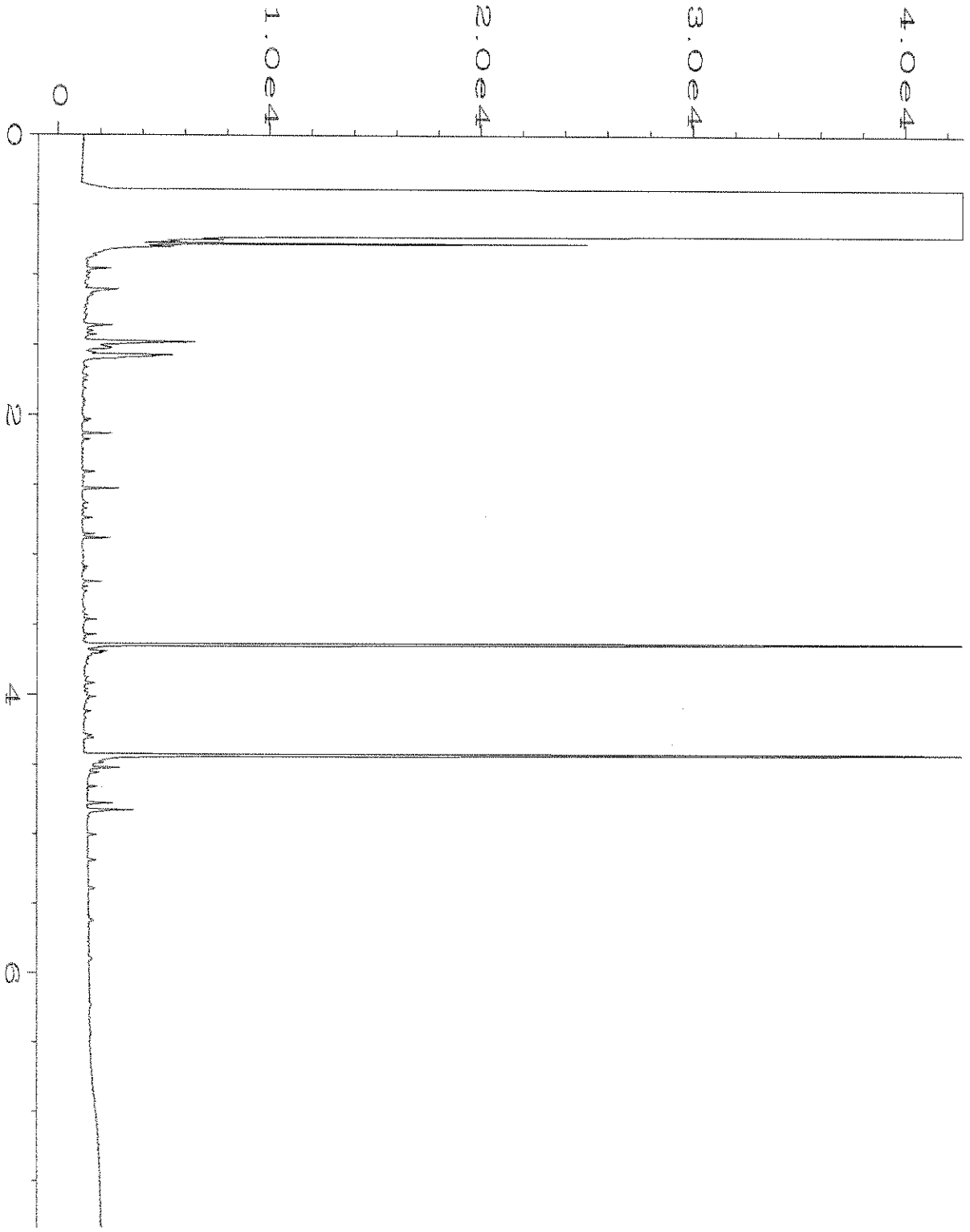
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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

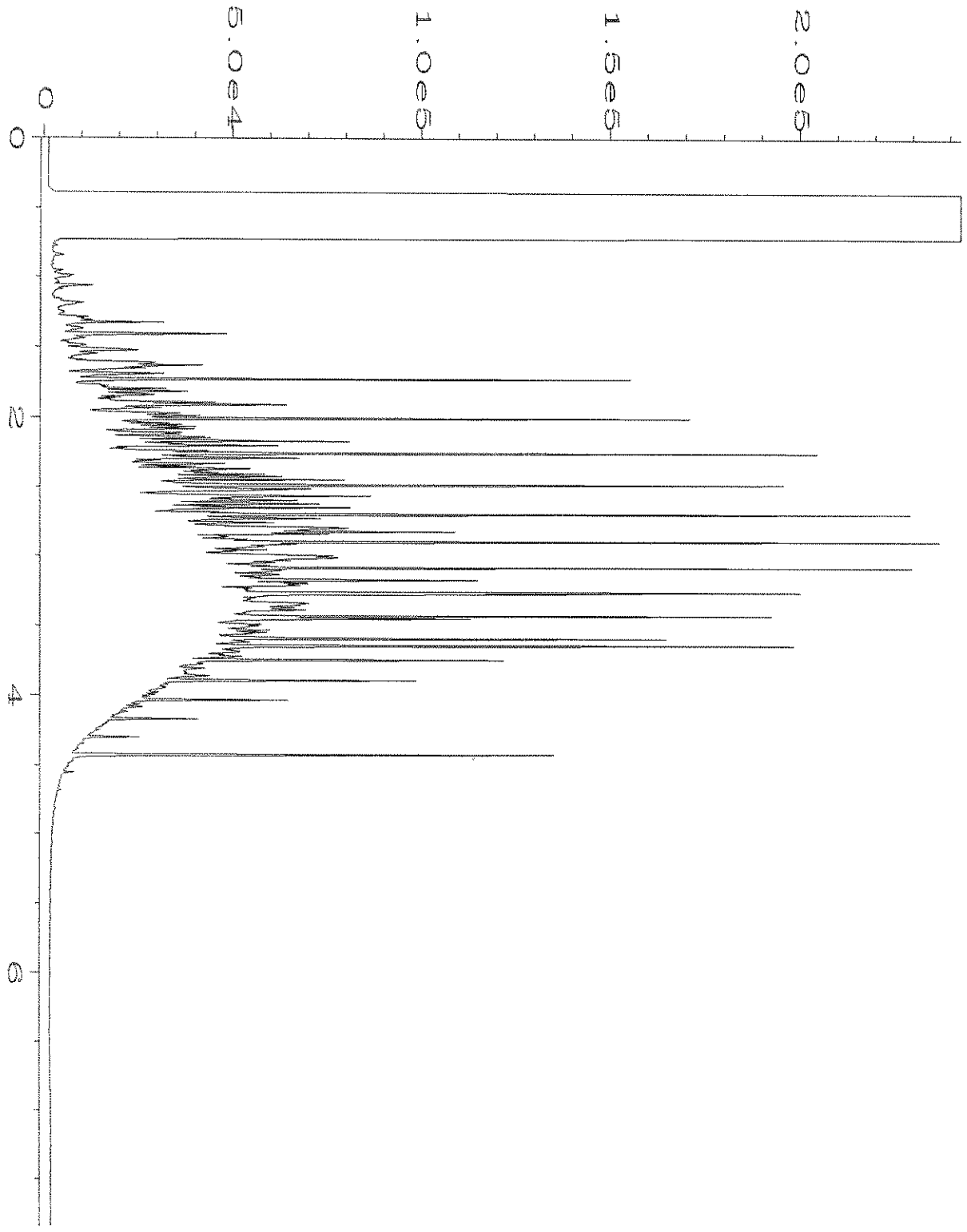
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Data File Name	: C:\HPCHEM\4\DATA\07-31-18\036F1201.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 36
Sample Name	: 807589-01	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 12
Acquired on	: 31 Jul 18 03:25 PM	Instrument Method	: DX.MTH
Report Created on	: 01 Aug 18 08:17 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\4\DATA\07-31-18\027F1201.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 27
Sample Name	: 08-1678 mb	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 12
Acquired on	: 31 Jul 18 01:32 PM	Instrument Method	: DX.MTH
Report Created on	: 01 Aug 18 08:16 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\4\DATA\07-31-18\005F1401.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 5
Sample Name	: 1000 Dx 52-185B	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 14
Acquired on	: 31 Jul 18 04:14 PM	Instrument Method	: DX.MTH
Report Created on	: 01 Aug 18 08:21 AM	Analysis Method	: DX.MTH

807589

SAMPLE CHAIN OF CUSTODY ME 7/30/18

VN1/C05

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Walter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 2 day
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	EPA Standard	Notes
USTO1-20180730	USTO1	–	01	7/30/18	1345	W	1						X	
Temp Blank-20180730	–	–	02	–	–	W	1							
Field Blank 20180730	–	–	03A-B	–	–	W	2							
								SHW						

Samples received at 6 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Walter	Sarah Walter	SES	7/30/18	1545
Received by: Lyza Radford	Liza Radford	FBI	7/30/18	1545
Relinquished by:				
Received by:				

SoundEarth Strategies

APPENDIX G

SOIL AND CONCRETE DISPOSAL DOCUMENTATION

CLASS 1

BR & RD LLC

Sultan, WA
425-330-4117

562466

CUSTOMER'S ORDER NO.	DEPT.	DATE:
BB2		9/14/18

NAME: Ponderosa Pacific Inc

ADDRESS: 31419 124th St SE

CITY, STATE, ZIP Sultan, WA 98294

SOLD BY:	CASH	C.O.D.	CHARGE	ON ACCT.	MDSE RTD.	PAID OUT

QUANTITY		DESCRIPTION	PRICE	AMOUNT	
48y	1	Triton, Dry Dirt	11	T/T	
	2				
72y	3	NW, Dry Dirt #15	111	T/T	
	4				
48y	5	NW, Dry Dirt #25	11	T/T	
	6				
24y	7	PPI, Dry Dirt	1	T/T	
	8				
	9				
	10		4.00	192	
	11				
	12			$768	00
	13				
	14				
	15				

RECEIVED BY:

ORIGINAL

5L320S

LAKESIDE INDUSTRIES, INC.

EXPORT

Monroe Plant
PO Box 247 Monroe, WA 98272
(425) 743-1289/(360) 794-7779
*** Recycled ***

Ticket #: 389407
Date: 03/19/18
Time: 09:27 AM

CUSTOMER INFORMATION

ID: 116297
Name: Ponderosa Pacific Inc
Address: 31419 124th St SE
Sultan, WA 98294
Phone: 360-793-2160

JOB INFORMATION

ID: BB2 ITEM 99
Name:
Location

PO#:

Truck and Carrier Information

Truck ID: P03
Descript: PONDEROSA PACIFIC # 3

Truck Weights

Gross	Tare	Net
95000 lb	41140 lb	53860 lb
47.50 TN	20.57 TN	26.93 TN
43.09 Mg	18.66 Mg	24.43 Mg
0 lb	------Legal------	0 lb

PRODUCT AND LOAD TOTALS

	1/TODAY	1/TO DATE
ID: 598		
Name: WASTE DUMP FEES	26.93 Tn	26.93 Tn
JMF#:	24.43 Mg	24.43 Mg

Seal: 134
W.Master: Gary Swanson Rcv'd By: Load Total: 53860

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID PPI7D Job ID: BD2

Customer 117 Name PONDAROSA

Product 12 Prod Name 12YDS DIRT

GROSS	60 lb
KB-TARE	0 lb
~~NET~~	60 lb
NET	0.03 Tons

3:33 PM 7 MAR 2018

Ticket 92627

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER66D Job ID: 1451 NW 46th

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	100 lb
KB-TARE	0 lb
NET	100 lb
NET	0.05 Tons

12:31 PM 2 JUL 2018

Ticket 101644

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TRID Job ID: Ballard Blocks

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS 0 lb

KB-TARE 0 lb

NET 0 lb

NET 0.00 Tons

4:48 PM 2 JUL 2018

Ticket 101675

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID WE6D Job ID: BALLARD BLOCKS 2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	300 lb
KB-TARE	0 lb
NET	300 lb
NET	0.15 Tons

3:53 PM 2 JUL 2018

Ticket 101664

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID WE57D Job ID: Ballard Blocks 2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	440 lb
KB-TARE	0 lb
NET	440 lb
NET	0.22 Tons

3:58 PM 2 JUL 2018

Ticket 101665

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER12D Job ID: Ballard Blocks 2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS 0 lb

KB-TARE 0 lb

NET 0 lb

NET 0.00 Tons

2:50 PM 2 JUL 2018

Ticket 101654

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER66D Job ID: Bound Block 2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS 0 lb

KB-TARE 0 lb

NET 0 lb

NET 0.00 Tons

4:13 PM 2 JUL 2018

Ticket 101671

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER44D Job ID: Ballard Blocks 2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	60 lb
KB-TARE	0 lb
NET	60 lb
NET	0.03 Tons

3:43 PM 2 JUL 2018

Ticket 101663

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER11D Job ID: Ballard Blocks '2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

4:06 PM 2 JUL 2018

Ticket 101667

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID HAYTER2D Job ID: Ballard Blocks 2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS 0 lb

KB-TARE 0 lb

NET 0 lb

NET 0.00 Tons

3:37 PM 2 JUL 2018

Ticket 101661

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER11D Job ID: 14151 NW 46Th

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	320 lb
KB-TARE	0 lb
NET	320 lb
NET	0.16 Tons

12:35 PM 2 JUL 2018

Ticket 101645

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID WE2D Job ID: 1451 NW 46th

Customer 117 Name PONDAROSA

Product 22 Prod Name 22YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

12:04 PM 2 JUL 2018

Ticket 101642

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER12D Job ID: 1451 NW 46th

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

7.12

GROSS 0 lb

KB-TARE 0 lb

NET 0 lb

NET 0.00 Tons

3124

12:01 PM 2 JUL 2018

Ticket 101639

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID PPI1D Job ID: BB2

Customer 117 Name PONDAROSA

Product 20 Prod Name 20YDS DIRT

GROSS	35000	lb
KB-TARE	0	lb
NET	35000	lb
NET	17.50	Tons

12:05 PM 3 JUL 2018

Ticket 101719

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID PPI1D Job ID: BB2

Customer 117 Name PONDAROSA

Product 20 Prod Name 20YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

3:03 PM 3 JUL 2018

Ticket 101749

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID PPI3D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	260 lb
KB-TARE	0 lb
NET	260 lb
NET	0.13 Tons

2:05 PM 3 JUL 2018

Ticket 101741

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID ACE10D

Job ID: BALLARD BLOCKS 2

Customer 117

Name PONDAROSA

Product 22

Prod Name 22YDS DIRT

GROSS	660 lb
KB-TARE	0 lb
NET	660 lb
NET	0.33 Tons

9:50 AM 3 JUL 2018

Ticket 101692

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID ACE10D Job ID: BB2

Customer 117 Name PONDAROSA

Product 22 Prod Name 22YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

12:52 PM 3 JUL 2018

Ticket 101730

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID WE6D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	960 lb
KB-TARE	0 lb
NET	960 lb
NET	0.48 Tons

10:16 AM 3 JUL 2018

Ticket 101699

Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID WE6D

Job ID: BB2

Customer 117

Name PONDAROSA

Product 24

Prod Name 24YDS DIRT

GROSS	180 lb
KB-TARE	0 lb
NET	180 lb
NET	0.09 Tons

1:02 PM 3 JUL 2018

Ticket 101732

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER12D

Job ID: BB2

Customer 117

Name PONDAROSA

Product 24

Prod Name 24YDS DIRT

GROSS 0 lb

KB-TARE 0 lb

NET 0 lb

NET 0.00 Tons

:16 PM 3 JUL 2018

icket 101750

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER12D Job ID: Brand Block 2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	120 lb
KB-TARE	0 lb
NET	120 lb
NET	0.06 Tons

9:29 AM 3 JUL 2018

Ticket 101689

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER12D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS 0 lb

KB-TARE 0 lb

NET 0 lb

NET 0.00 Tons

12:15 PM 3 JUL 2018

Ticket 101722

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER66D Job ID: Ballard Blocks 2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS 440 lb

KB-TARE 0 lb

NET 440 lb

NET 0.22 Tons

10:08 AM 3 JUL 2018

Ticket 101697

iSimpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER66D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS 38000 lb

KB-TARE 0 lb

NET 38000 lb

NET 19.00 Tons

1:06 PM 3 JUL 2018

7/3

2018

Ticket 101733

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID WE6D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

2:54 PM 5 JUL 2018

Ticket 101802

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID PPI3D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

9:55 AM 5 JUL 2018

Ticket 101776

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID PPI3D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS 0 lb

KB-TARE 0 lb

NET 0 lb

NET 0.00 Tons

12:32 PM 5 JUL 2018

Ticket 101793

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TRID

Job ID: BB2

Customer 117

Name PONDAROSA

Product 24

Prod Name 24YDS DIRT

GROSS 0 lb

KB-TARE 0 lb

NET 0 lb

NET 0.00 Tons

4:13 PM 5 JUL 2018

Ticket 101811

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID HAY2D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

3:06 PM 5 JUL 2018

Ticket 101806

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER12D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	780 lb
KB-TARE	0 lb
NET	780 lb
NET	0.39 Tons

2:32 PM 5 JUL 2018

Ticket 101801

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TRID Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

1:09 PM 5 JUL 2018

Ticket 101796

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER12D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	400 lb
KB-TARE	0 lb
NET	400 lb
NET	0.20 Tons

8:59 AM 5 JUL 2018

Ticket 101767

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER12D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

11:40 AM 5 JUL 2018

Ticket 101779

Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID WE57D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

12:17 PM 5 JUL 2018

Ticket 101789

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER66D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

12:14 PM 5 JUL 2018

Ticket 101787

Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID TIGER11D Job ID: BB7

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	340 lb
KB-TARE	0 lb
NET	340 lb
NET	0.17 Tons

12:25 PM 5 JUL 2018

Ticket 101791

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID WE6D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

12:09 PM 5 JUL 2018

Ticket 101783

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID HAY2D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	560 lb
KB-TARE	0 lb
NET	560 lb
NET	0.28 Tons

9:17 AM 5 JUL 2018

Ticket 101769

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID HAY2D Job ID: BB2

Customer 117 Name PONDAROSA

Product 24 Prod Name 24YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

12:15 PM 5 JUL 2018

Ticket 101788

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID PPI1D Job ID: BB2

Customer 117 Name PONDAROSA

Product 20 Prod Name 20YDS DIRT

GROSS 0 lb

KB-TARE 0 lb

NET 0 lb

NET 0.00 Tons

9:55 AM 5 JUL 2018

Ticket 101775

1Simpson Sand & Gravel

6610 140th St. NW Stanwood, WA 98292

(360) 631-6954 (425) 314-8353 (425)879-1024

Vehicle ID PPI1D Job ID: BB2

Customer 117 Name PONDAROSA

Product 20 Prod Name 20YDS DIRT

GROSS	0 lb
KB-TARE	0 lb
NET	0 lb
NET	0.00 Tons

12:36 PM 5 JUL 2018

Ticket 101794

BALLARD BLOCKS 2

CLEAN SOIL EXPORT LOG

#7

12/14/2018

Item	Start	Stop	Material Description	Profile	Dump Facility	Total Loads:	Solo:	Solo Yards:	T/T:	T/T Yards:	Tonnage
											0.00
	3/1/2018	11/30/2018	Clean Soil		Simpson	83	1	12	41	984.00	1320.72
	3/1/2018	11/30/2018	Clean Soil		We Do Dirt	6			3	72.00	95.76
	3/1/2018	11/30/2018	Clean Soil		Lakeside	2			1	24.00	31.92
	3/1/2018	11/30/2018	Clean Soil		BR & RD	16			8	192.00	255.36
			On Site Re-used Soil							747.12	993.67
											0.00
											0.00
											0.00
											0.00
			Total Tonnage								0.00
											2697.43

We Do Dirt
PO BOX 3123
Arlington, WA 98223
360-657-0390 Office
360-657-0391 Fax

Ticket# **3471**

Date: 7-5-18

IMPORT PILOT

Bill To: PONDAROSA	
Trucking Company: PONDAROSA	Truck# 1
Job/PO# BBZ	

Sold By	Total Billable Yds/Tons	
	24	Check ☐ # Cash ☐ Card ☐

Load	Yd/T	Description	Price	Amount
1	24	DIRT	#4 00	#96.00
2				
3				
4				#96.00
5				
6				
7				
8				
9				
10				
11				
12				

Driver Name (Print) _____

We Do Dirt
PO BOX 3123
Arlington, WA 98223
360-657-0390 Office
360-657-0391 Fax

Ticket# **3473**

Date: 7-5-18

IMPORT PILOT

Bill To: Ponderosa	
Trucking Company: We Do Dirt	Truck# 6
Job/PO# BB2	

Sold By	Total Billable (Yds)/Tons	Check ☐ # / Cash ☐ / Card ☐
	24	

Load	Yd/T	Description	Price	Amount
(1)	24	Dirt	$40.00	$ 96.00
2				
3				$ 96.00
4				
5				
6				
7				
8				
9				
10				
11				
12				

Driver Name (Print) _____

We Do Dirt
PO BOX 3123
Arlington, WA 98223
360-657-0390 Office
360-657-0391 Fax

Ticket# **3472**

Date: 7-5-18

IMPORT PILOT

Bill To: PONDAROSA	
Trucking Company: PONDAROSA	Truck# 3
Job/PO# BBZ	

Sold By	Total Billable Yds/Tons	Check ☐ # / Cash ☐ / Card ☐
	24	

Load	Yd/T	Description	Price	Amount
1	24	DIRT	$4.00	$ 96.00
2				
3				$ 96.00
4				
5				
6				
7				
8				
9				
10				
11				
12				

Driver Name (Print) _____

CLASS 2

WITH CUSTOMER SELECT FOR 1516

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
1516 REGENCY DBA BALLARD BLOCKS II										
AA*18*14160	CHARGE	07/06/18	1516							
	INVOICED	POND1		LLC	22.0000	28.80	633.60	0.00	0.00	633.60
AA*18*14181	CHARGE	07/06/18	1516							
	INVOICED	POND1		LLC	22.0000	28.38	624.36	0.00	0.00	624.36
AA*18*14296	CHARGE	07/10/18	1516							
	INVOICED	C750		LLC	22.0000	32.07	705.54	0.00	0.00	705.54
AA*18*14998	CHARGE	07/23/18	1516							
	INVOICED	POND3		LLC	22.0000	23.11	508.42	0.00	0.00	508.42
AA*18*15001	CHARGE	07/23/18	1516							
	INVOICED	POND1		LLC	22.0000	23.14	509.08	0.00	0.00	509.08
AA*18*15023	CHARGE	07/23/18	1516							
	INVOICED	POND3		LLC	22.0000	25.55	562.10	0.00	0.00	562.10
AA*18*15025	CHARGE	07/23/18	1516							
	INVOICED	POND1		LLC	22.0000	26.26	577.72	0.00	0.00	577.72
AA*18*15055	CHARGE	07/23/18	1516							
	INVOICED	POND1		LLC	22.0000	25.26	555.72	0.00	0.00	555.72
AA*18*16066	CHARGE	08/08/18	1516							
	INVOICED	TRI750		LLC	22.0000	18.46	406.12	0.00	0.00	406.12
AA*18*16434	CHARGE	08/15/18	1516							
	INVOICED	NWSG27		LLC	22.0000	37.32	821.04	0.00	0.00	821.04
AA*18*16454	CHARGE	08/15/18	1516							
	INVOICED	RB2		LLC	22.0000	27.18	597.96	0.00	0.00	597.96
AA*18*16456	CHARGE	08/15/18	1516							
	INVOICED	POND5		LLC	22.0000	17.39	382.58	0.00	0.00	382.58
AA*18*16484	CHARGE	08/15/18	1516							
	INVOICED	NWSG27		LLC	22.0000	29.12	640.64	0.00	0.00	640.64
AA*18*16487	CHARGE	08/15/18	1516							
	INVOICED	C750		LLC	22.0000	30.81	677.82	0.00	0.00	677.82
AA*18*16492	CHARGE	08/15/18	1516							
	INVOICED	RB2		LLC	22.0000	23.00	506.00	0.00	0.00	506.00
AA*18*16516	CHARGE	08/15/18	1516							
	INVOICED	POND5		LLC	22.0000	16.98	373.56	0.00	0.00	373.56
AA*18*16524	CHARGE	08/15/18	1516							
	INVOICED	NWSG27		LLC	22.0000	30.13	662.86	0.00	0.00	662.86
AA*18*16534	CHARGE	08/15/18	1516							
	INVOICED	RB2		LLC	22.0000	24.26	533.72	0.00	0.00	533.72
AA*18*16555	CHARGE	08/15/18	1516							
	INVOICED	C750		LLC	22.0000	32.34	711.48	0.00	0.00	711.48
AA*18*16561	CHARGE	08/16/18	1516							
	INVOICED	C750		LLC	22.0000	31.99	703.78	0.00	0.00	703.78
AA*18*16572	CHARGE	08/16/18	1516							
	INVOICED	RB2		LLC	22.0000	23.10	508.20	0.00	0.00	508.20
AA*18*16574	CHARGE	08/16/18	1516							
	INVOICED	POND5		LLC	22.0000	15.28	336.16	0.00	0.00	336.16
AA*18*16591	CHARGE	08/16/18	1516							
	INVOICED	C750		LLC	22.0000	37.24	819.28	0.00	0.00	819.28
AA*18*16596	CHARGE	08/16/18	1516							
	INVOICED	RB2		LLC	22.0000	25.12	552.64	0.00	0.00	552.64

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*18*16607	CHARGE	08/16/18	1516							
	INVOICED	POND5		LLC	22.0000	16.09	353.98	0.00	0.00	353.98
AA*18*16634	CHARGE	08/16/18	1516							
	INVOICED	C750		LLC	22.0000	35.67	784.74	0.00	0.00	784.74
AA*18*16635	CHARGE	08/16/18	1516							
	INVOICED	RB2		LLC	22.0000	25.44	559.68	0.00	0.00	559.68
AA*18*16781	CHARGE	08/20/18	1516							
	INVOICED	POND7		LLC	22.0000	16.34	359.48	0.00	0.00	359.48
AA*18*16814	CHARGE	08/20/18	1516							
	INVOICED	POND7		LLC	22.0000	16.22	356.84	0.00	0.00	356.84
AA*18*16834	CHARGE	08/21/18	1516							
	INVOICED	TIGER12		LLC	22.0000	32.10	706.20	0.00	0.00	706.20
AA*18*16835	CHARGE	08/21/18	1516							
	INVOICED	TIGER11		LLC	22.0000	34.36	755.92	0.00	0.00	755.92
AA*18*16837	CHARGE	08/21/18	1516							
	INVOICED	TIGER66		LLC	22.0000	30.13	662.86	0.00	0.00	662.86
AA*18*16838	CHARGE	08/21/18	1516							
	INVOICED	C750		LLC	22.0000	37.22	818.84	0.00	0.00	818.84
AA*18*16844	CHARGE	08/21/18	1516							
	INVOICED	MAL20		LLC	22.0000	30.00	660.00	0.00	0.00	660.00
AA*18*16847	CHARGE	08/21/18	1516							
	INVOICED	NWSG25		LLC	22.0000	31.69	697.18	0.00	0.00	697.18
AA*18*16853	CHARGE	08/21/18	1516							
	INVOICED	POND7		LLC	22.0000	17.30	380.60	0.00	0.00	380.60
AA*18*16861	CHARGE	08/21/18	1516							
	INVOICED	TIGER12		LLC	22.0000	29.26	643.72	0.00	0.00	643.72
AA*18*16862	CHARGE	08/21/18	1516							
	INVOICED	TIGER11		LLC	22.0000	31.20	686.40	0.00	0.00	686.40
AA*18*16868	CHARGE	08/21/18	1516							
	INVOICED	TIGER66		LLC	22.0000	31.05	683.10	0.00	0.00	683.10
AA*18*16871	CHARGE	08/21/18	1516							
	INVOICED	C750		LLC	22.0000	31.76	698.72	0.00	0.00	698.72
AA*18*16876	CHARGE	08/21/18	1516							
	INVOICED	NWSG25		LLC	22.0000	34.39	756.58	0.00	0.00	756.58
AA*18*16877	CHARGE	08/21/18	1516							
	INVOICED	MAL20		LLC	22.0000	31.00	682.00	0.00	0.00	682.00
AA*18*16891	CHARGE	08/21/18	1516							
	INVOICED	TIGER11		LLC	22.0000	32.20	708.40	0.00	0.00	708.40
AA*18*16892	CHARGE	08/21/18	1516							
	INVOICED	TIGER12		LLC	22.0000	30.73	676.06	0.00	0.00	676.06
AA*18*16898	CHARGE	08/21/18	1516							
	INVOICED	POND7		LLC	22.0000	15.91	350.02	0.00	0.00	350.02
AA*18*16899	CHARGE	08/21/18	1516							
	INVOICED	C750		LLC	22.0000	34.98	769.56	0.00	0.00	769.56
AA*18*16902	CHARGE	08/21/18	1516							
	INVOICED	POND4		LLC	22.0000	15.32	337.04	0.00	0.00	337.04
AA*18*16906	CHARGE	08/21/18	1516							
	INVOICED	TIGER66		LLC	22.0000	29.85	656.70	0.00	0.00	656.70
AA*18*16909	CHARGE	08/21/18	1516							
	INVOICED	NWSG25		LLC	22.0000	30.01	660.22	0.00	0.00	660.22

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*18*16911	CHARGE	08/21/18	1516							
	INVOICED	MAL20		LLC	22.0000	28.71	631.62	0.00	0.00	631.62
AA*18*16914	CHARGE	08/21/18	1516							
	INVOICED	TIGER11		LLC	22.0000	29.27	643.94	0.00	0.00	643.94
AA*18*16917	CHARGE	08/21/18	1516							
	INVOICED	TIGER12		LLC	22.0000	26.13	574.86	0.00	0.00	574.86
AA*18*16924	CHARGE	08/22/18	1516							
	INVOICED	TIGER11		LLC	22.0000	33.15	729.30	0.00	0.00	729.30
AA*18*16926	CHARGE	08/22/18	1516							
	INVOICED	TIGER12		LLC	22.0000	30.44	669.68	0.00	0.00	669.68
AA*18*16928	CHARGE	08/22/18	1516							
	INVOICED	C750		LLC	22.0000	35.10	772.20	0.00	0.00	772.20
AA*18*16929	CHARGE	08/22/18	1516							
	INVOICED	TIGER66		LLC	22.0000	33.21	730.62	0.00	0.00	730.62
AA*18*16936	CHARGE	08/22/18	1516							
	INVOICED	HOSANNA6		LLC	22.0000	25.23	555.06	0.00	0.00	555.06
AA*18*16938	CHARGE	08/22/18	1516							
	INVOICED	POND7		LLC	22.0000	16.45	361.90	0.00	0.00	361.90
AA*18*16941	CHARGE	08/22/18	1516							
	INVOICED	TIGER11		LLC	22.0000	34.02	748.44	0.00	0.00	748.44
AA*18*16943	CHARGE	08/22/18	1516							
	INVOICED	C750		LLC	22.0000	36.20	796.40	0.00	0.00	796.40
AA*18*16947	CHARGE	08/22/18	1516							
	INVOICED	TIGER12		LLC	22.0000	30.62	673.64	0.00	0.00	673.64
AA*18*16951	CHARGE	08/22/18	1516							
	INVOICED	TIGER66		LLC	22.0000	32.11	706.42	0.00	0.00	706.42
AA*18*16958	CHARGE	08/22/18	1516							
	INVOICED	HOSANNA6		LLC	22.0000	27.17	597.74	0.00	0.00	597.74
AA*18*16969	CHARGE	08/22/18	1516							
	INVOICED	TIGER11		LLC	22.0000	31.94	702.68	0.00	0.00	702.68
AA*18*16970	CHARGE	08/22/18	1516							
	INVOICED	POND7		LLC	22.0000	16.21	356.62	0.00	0.00	356.62
AA*18*16975	CHARGE	08/22/18	1516							
	INVOICED	TIGER12		LLC	22.0000	28.31	622.82	0.00	0.00	622.82
AA*18*16976	CHARGE	08/22/18	1516							
	INVOICED	TIGER66		LLC	22.0000	29.46	648.12	0.00	0.00	648.12
AA*18*16982	CHARGE	08/22/18	1516							
	INVOICED	HOSANNA6		LLC	22.0000	28.59	628.98	0.00	0.00	628.98
AA*18*16988	CHARGE	08/22/18	1516							
	INVOICED	TIGER11		LLC	22.0000	35.03	770.66	0.00	0.00	770.66
AA*18*16993	CHARGE	08/22/18	1516							
	INVOICED	C750		LLC	22.0000	35.86	788.92	0.00	0.00	788.92
AA*18*16998	CHARGE	08/23/18	1516							
	INVOICED	POND7		LLC	22.0000	15.90	349.80	0.00	0.00	349.80
AA*18*17563	CHARGE	09/06/18	1516							
	INVOICED	POND1		LLC	22.0000	19.81	435.82	0.00	0.00	435.82
AA*18*17635	CHARGE	09/10/18	1516							
	INVOICED	BW18		LLC	22.0000	38.81	853.82	0.00	0.00	853.82
AA*18*17637	CHARGE	09/10/18	1516							
	INVOICED	POND1		LLC	22.0000	32.69	719.18	0.00	0.00	719.18

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*18*17646	CHARGE	09/10/18	1516							
	INVOICED	BW9		LLC	22.0000	28.91	636.02	0.00	0.00	636.02
AA*18*17650	CHARGE	09/10/18	1516							
	INVOICED	C750		LLC	22.0000	36.13	794.86	0.00	0.00	794.86
AA*18*17667	CHARGE	09/10/18	1516							
	INVOICED	BW18		LLC	22.0000	38.84	854.48	0.00	0.00	854.48
AA*18*17671	CHARGE	09/10/18	1516							
	INVOICED	BW9		LLC	22.0000	33.19	730.18	0.00	0.00	730.18
AA*18*17673	CHARGE	09/10/18	1516							
	INVOICED	POND1		LLC	22.0000	25.31	556.82	0.00	0.00	556.82
AA*18*17682	CHARGE	09/10/18	1516							
	INVOICED	C750		LLC	22.0000	39.70	873.40	0.00	0.00	873.40
AA*18*17701	CHARGE	09/10/18	1516							
	INVOICED	BW9		LLC	22.0000	27.41	603.02	0.00	0.00	603.02
AA*18*17703	CHARGE	09/10/18	1516							
	INVOICED	BW18		LLC	22.0000	33.40	734.80	0.00	0.00	734.80
AA*18*17705	CHARGE	09/10/18	1516							
	INVOICED	POND1		LLC	22.0000	21.26	467.72	0.00	0.00	467.72
AA*18*17707	CHARGE	09/10/18	1516							
	INVOICED	C750		LLC	22.0000	34.06	749.32	0.00	0.00	749.32
AA*18*17717	CHARGE	09/11/18	1516							
	INVOICED	C750		LLC	22.0000	35.53	781.66	0.00	0.00	781.66
AA*18*17722	CHARGE	09/11/18	1516							
	INVOICED	HAY2		LLC	22.0000	34.19	752.18	0.00	0.00	752.18
AA*18*17730	CHARGE	09/11/18	1516							
	INVOICED	BW18		LLC	22.0000	29.54	649.88	0.00	0.00	649.88
AA*18*17740	CHARGE	09/11/18	1516							
	INVOICED	C750		LLC	22.0000	32.87	723.14	0.00	0.00	723.14
AA*18*17741	CHARGE	09/11/18	1516							
	INVOICED	POND5		LLC	22.0000	32.18	707.96	0.00	0.00	707.96
AA*18*17746	CHARGE	09/11/18	1516							
	INVOICED	HAY2		LLC	22.0000	34.47	758.34	0.00	0.00	758.34
AA*18*17753	CHARGE	09/11/18	1516							
	INVOICED	BW18		LLC	22.0000	29.60	651.20	0.00	0.00	651.20
AA*18*17756	CHARGE	09/11/18	1516							
	INVOICED	BW22		LLC	22.0000	30.64	674.08	0.00	0.00	674.08
AA*18*17767	CHARGE	09/11/18	1516							
	INVOICED	C750		LLC	22.0000	33.42	735.24	0.00	0.00	735.24
AA*18*17772	CHARGE	09/11/18	1516							
	INVOICED	HAY2		LLC	22.0000	37.37	822.14	0.00	0.00	822.14
AA*18*17774	CHARGE	09/11/18	1516							
	INVOICED	BW18		LLC	22.0000	34.54	759.88	0.00	0.00	759.88
AA*18*17775	CHARGE	09/11/18	1516							
	INVOICED	BW22		LLC	22.0000	28.00	616.00	0.00	0.00	616.00
AA*18*17788	CHARGE	09/12/18	1516							
	INVOICED	POND5		LLC	22.0000	32.09	705.98	0.00	0.00	705.98
AA*18*17789	CHARGE	09/12/18	1516							
	INVOICED	POND7		LLC	22.0000	15.15	333.30	0.00	0.00	333.30
AA*18*17873	CHARGE	09/13/18	1516							
	INVOICED	POND2		REBAR	15.0000	10.55	158.25	0.00	0.00	158.25

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*18*17886	CHARGE	09/13/18	1516							
	INVOICED	C750		LLC	22.0000	41.09	903.98	0.00	0.00	903.98
AA*18*18033	CHARGE	09/14/18	1516							
	INVOICED	POND1		LLC	22.0000	31.74	698.28	0.00	0.00	698.28
AA*18*18448	CHARGE	09/21/18	1516							
	INVOICED	BW23		LLC	22.0000	26.94	592.68	0.00	0.00	592.68
AA*18*18453	CHARGE	09/21/18	1516							
	INVOICED	BW22		LLC	22.0000	27.24	599.28	0.00	0.00	599.28
AA*18*18454	CHARGE	09/21/18	1516							
	INVOICED	BW20		LLC	22.0000	27.56	606.32	0.00	0.00	606.32
AA*18*18457	CHARGE	09/21/18	1516							
	INVOICED	BW19		LLC	22.0000	25.39	558.58	0.00	0.00	558.58
AA*18*18463	CHARGE	09/21/18	1516							
	INVOICED	BW16		LLC	22.0000	25.91	570.02	0.00	0.00	570.02
AA*18*18468	CHARGE	09/21/18	1516							
	INVOICED	BW18		LLC	22.0000	28.07	617.54	0.00	0.00	617.54
AA*18*18476	CHARGE	09/21/18	1516							
	INVOICED	BW23		LLC	22.0000	27.78	611.16	0.00	0.00	611.16
AA*18*18483	CHARGE	09/21/18	1516							
	INVOICED	BW22		LLC	22.0000	26.68	586.96	0.00	0.00	586.96
AA*18*18485	CHARGE	09/21/18	1516							
	INVOICED	BW19		LLC	22.0000	27.03	594.66	0.00	0.00	594.66
AA*18*18495	CHARGE	09/21/18	1516							
	INVOICED	BW9		LLC	22.0000	26.85	590.70	0.00	0.00	590.70
AA*18*18505	CHARGE	09/21/18	1516							
	INVOICED	BW16		LLC	22.0000	28.69	631.18	0.00	0.00	631.18
AA*18*18510	CHARGE	09/21/18	1516							
	INVOICED	BW23		LLC	22.0000	29.20	642.40	0.00	0.00	642.40
AA*18*18525	CHARGE	09/21/18	1516							
	INVOICED	BW19		LLC	22.0000	27.84	612.48	0.00	0.00	612.48
AA*18*18528	CHARGE	09/21/18	1516							
	INVOICED	BW22		LLC	22.0000	29.14	641.08	0.00	0.00	641.08
AA*18*18529	CHARGE	09/21/18	1516							
	INVOICED	BW9		LLC	22.0000	27.98	615.56	0.00	0.00	615.56
AA*18*18546	CHARGE	09/24/18	1516							
	INVOICED	TIG11		LLC	22.0000	28.85	634.70	0.00	0.00	634.70
AA*18*18552	CHARGE	09/24/18	1516							
	INVOICED	TIG12		LLC	22.0000	30.04	660.88	0.00	0.00	660.88
AA*18*18556	CHARGE	09/24/18	1516							
	INVOICED	BW23		LLC	22.0000	32.03	704.66	0.00	0.00	704.66
AA*18*18557	CHARGE	09/24/18	1516							
	INVOICED	TIG44		LLC	22.0000	30.77	676.94	0.00	0.00	676.94
AA*18*18563	CHARGE	09/24/18	1516							
	INVOICED	BW19		LLC	22.0000	30.11	662.42	0.00	0.00	662.42
AA*18*18566	CHARGE	09/24/18	1516							
	INVOICED	BW9		LLC	22.0000	33.14	729.08	0.00	0.00	729.08
AA*18*18574	CHARGE	09/24/18	1516							
	INVOICED	TIG11		LLC	22.0000	32.83	722.26	0.00	0.00	722.26
AA*18*18578	CHARGE	09/24/18	1516							
	INVOICED	TIG12		LLC	22.0000	29.34	645.48	0.00	0.00	645.48

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*18*18581	CHARGE	09/24/18	1516							
	INVOICED	BW23		LLC	22.0000	29.53	649.66	0.00	0.00	649.66
AA*18*18583	CHARGE	09/24/18	1516							
	INVOICED	TIG44		LLC	22.0000	32.91	724.02	0.00	0.00	724.02
AA*18*18587	CHARGE	09/24/18	1516							
	INVOICED	BW19		LLC	22.0000	28.45	625.90	0.00	0.00	625.90
AA*18*18590	CHARGE	09/24/18	1516							
	INVOICED	BW9		LLC	22.0000	28.12	618.64	0.00	0.00	618.64
AA*18*18603	CHARGE	09/24/18	1516							
	INVOICED	TIG11		LLC	22.0000	29.85	656.70	0.00	0.00	656.70
AA*18*18612	CHARGE	09/24/18	1516							
	INVOICED	TIG12		LLC	22.0000	27.54	605.88	0.00	0.00	605.88
AA*18*18615	CHARGE	09/24/18	1516							
	INVOICED	BW23		LLC	22.0000	27.82	612.04	0.00	0.00	612.04
AA*18*18623	CHARGE	09/24/18	1516							
	INVOICED	TIG44		LLC	22.0000	25.61	563.42	0.00	0.00	563.42
AA*18*18624	CHARGE	09/24/18	1516							
	INVOICED	BW19		LLC	22.0000	28.19	620.18	0.00	0.00	620.18
AA*18*18628	CHARGE	09/24/18	1516							
	INVOICED	BW9		LLC	22.0000	28.44	625.68	0.00	0.00	625.68
AA*18*18634	CHARGE	09/24/18	1516							
	INVOICED	TIG11		REBAR	15.0000	6.20	93.00	0.00	0.00	93.00
AA*18*18652	CHARGE	09/25/18	1516							
	INVOICED	TIG11		LLC	22.0000	31.63	695.86	0.00	0.00	695.86
AA*18*18659	CHARGE	09/25/18	1516							
	INVOICED	NWSG27		LLC	22.0000	26.55	584.10	0.00	0.00	584.10
AA*18*18661	CHARGE	09/25/18	1516							
	INVOICED	TIG44		LLC	22.0000	27.46	604.12	0.00	0.00	604.12
AA*18*18662	CHARGE	09/25/18	1516							
	INVOICED	TIG22		LLC	22.0000	25.76	566.72	0.00	0.00	566.72
AA*18*18663	CHARGE	09/25/18	1516							
	INVOICED	BW9		LLC	22.0000	25.31	556.82	0.00	0.00	556.82
AA*18*18667	CHARGE	09/25/18	1516							
	INVOICED	GS7		LLC	22.0000	20.56	452.32	0.00	0.00	452.32
AA*18*18675	CHARGE	09/25/18	1516							
	INVOICED	BW19		LLC	22.0000	25.25	555.50	0.00	0.00	555.50
AA*18*18677	CHARGE	09/25/18	1516							
	INVOICED	BW23		LLC	22.0000	24.87	547.14	0.00	0.00	547.14
AA*18*18680	CHARGE	09/25/18	1516							
	INVOICED	CORT8		LLC	22.0000	22.11	486.42	0.00	0.00	486.42
AA*18*18692	CHARGE	09/25/18	1516							
	INVOICED	TIG11		LLC	22.0000	29.00	638.00	0.00	0.00	638.00
AA*18*18697	CHARGE	09/25/18	1516							
	INVOICED	NWSG27		LLC	22.0000	30.73	676.06	0.00	0.00	676.06
AA*18*18702	CHARGE	09/25/18	1516							
	INVOICED	BW9		LLC	22.0000	29.17	641.74	0.00	0.00	641.74
AA*18*18703	CHARGE	09/25/18	1516							
	VOIDED	TIG44		LLC	22.0000	0.00	0.00	0.00	0.00	0.00
AA*18*18708	CHARGE	09/25/18	1516							
	INVOICED	GS7		LLC	22.0000	27.99	615.78	0.00	0.00	615.78

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*18*18710	CHARGE	09/25/18	1516							
	INVOICED	TIG22		LLC	22.0000	28.63	629.86	0.00	0.00	629.86
AA*18*18711	CHARGE	09/25/18	1516							
	INVOICED	TIG44		LLC	22.0000	28.68	630.96	0.00	0.00	630.96
AA*18*18717	CHARGE	09/25/18	1516							
	INVOICED	BW23		LLC	22.0000	27.87	613.14	0.00	0.00	613.14
AA*18*18719	CHARGE	09/25/18	1516							
	INVOICED	CORT8		LLC	22.0000	28.25	621.50	0.00	0.00	621.50
AA*18*18721	CHARGE	09/25/18	1516							
	INVOICED	BW19		LLC	22.0000	26.60	585.20	0.00	0.00	585.20
AA*18*18730	CHARGE	09/25/18	1516							
	INVOICED	TIG11		LLC	22.0000	29.40	646.80	0.00	0.00	646.80
AA*18*18743	CHARGE	09/25/18	1516							
	INVOICED	BW9		LLC	22.0000	28.29	622.38	0.00	0.00	622.38
AA*18*18750	CHARGE	09/25/18	1516							
	INVOICED	BW23		LLC	22.0000	28.94	636.68	0.00	0.00	636.68
AA*18*18751	CHARGE	09/25/18	1516							
	INVOICED	TIG22		LLC	22.0000	31.27	687.94	0.00	0.00	687.94
AA*18*18753	CHARGE	09/25/18	1516							
	INVOICED	BW19		LLC	22.0000	27.60	607.20	0.00	0.00	607.20
AA*18*18754	CHARGE	09/25/18	1516							
	INVOICED	CORT8		LLC	22.0000	31.29	688.38	0.00	0.00	688.38
AA*18*18837	CHARGE	09/26/18	1516							
	INVOICED	SH4		LLC	22.0000	30.09	661.98	0.00	0.00	661.98
AA*18*18879	CHARGE	09/27/18	1516							
	INVOICED	CORT8		LLC	22.0000	22.69	499.18	0.00	0.00	499.18
AA*18*18895	CHARGE	09/27/18	1516							
	INVOICED	CORT8		LLC	22.0000	24.78	545.16	0.00	0.00	545.16
AA*18*18914	CHARGE	09/28/18	1516							
	INVOICED	C750		LLC	22.0000	32.71	719.62	0.00	0.00	719.62
AA*18*18945	CHARGE	09/28/18	1516							
	INVOICED	CORT8		LLC	22.0000	25.79	567.38	0.00	0.00	567.38
AA*18*19671	CHARGE	10/10/18	1516							
	INVOICED	POND1		LLC	22.0000	30.11	662.42	0.00	0.00	662.42
AA*18*19957	CHARGE	10/15/18	1516							
	INVOICED	C750		LLC	22.0000	34.83	766.26	0.00	0.00	766.26
AA*18*20011	CHARGE	10/15/18	1516							
	INVOICED	C750		LLC	22.0000	31.67	696.74	0.00	0.00	696.74
AA*18*20029	CHARGE	10/16/18	1516							
	INVOICED	NWSG27		LLC	22.0000	32.96	725.12	0.00	0.00	725.12
AA*18*20041	CHARGE	10/16/18	1516							
	INVOICED	POND3		LLC	22.0000	29.13	640.86	0.00	0.00	640.86
AA*18*20073	CHARGE	10/16/18	1516							
	INVOICED	NWSG27		LLC	22.0000	25.79	567.38	0.00	0.00	567.38
AA*18*20129	CHARGE	10/17/18	1516							
	INVOICED	C750		LLC	22.0000	32.04	704.88	0.00	0.00	704.88
AA*18*20134	CHARGE	10/17/18	1516							
	INVOICED	POND3		LLC	22.0000	19.97	439.34	0.00	0.00	439.34
AA*18*20177	CHARGE	10/17/18	1516							
	INVOICED	POND3		LLC	22.0000	22.08	485.76	0.00	0.00	485.76

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*18*20366	CHARGE	10/19/18	1516							
	INVOICED	C750		LLC	22.0000	31.94	702.68	0.00	0.00	702.68
AA*18*20413	CHARGE	10/22/18	1516							
	INVOICED	C750		LLC	22.0000	34.27	753.94	0.00	0.00	753.94
AA*18*20437	CHARGE	10/22/18	1516							
	INVOICED	POND3		LLC	22.0000	31.22	686.84	0.00	0.00	686.84
AA*18*20445	CHARGE	10/22/18	1516							
	INVOICED	C750		LLC	22.0000	34.41	757.02	0.00	0.00	757.02
AA*18*20472	CHARGE	10/22/18	1516							
	INVOICED	POND3		LLC	22.0000	25.32	557.04	0.00	0.00	557.04
AA*18*20480	CHARGE	10/22/18	1516							
	INVOICED	C750		LLC	22.0000	35.59	782.98	0.00	0.00	782.98
122123	CHARGE	10/23/18	1516							
	INVOICED	C750		LLC	22.0000	34.35	755.70	0.00	0.00	755.70
122126	CHARGE	10/23/18	1516							
	INVOICED	BS712		LLC	22.0000	25.10	552.20	0.00	0.00	552.20
122131	CHARGE	10/23/18	1516							
	INVOICED	BS715		LLC	22.0000	25.51	561.22	0.00	0.00	561.22
122133	CHARGE	10/23/18	1516							
	INVOICED	POND3		LLC	22.0000	29.23	643.06	0.00	0.00	643.06
AA*18*20493	CHARGE	10/23/18	1516							
	INVOICED	CORT8		LLC	22.0000	26.72	587.84	0.00	0.00	587.84
AA*18*20511	CHARGE	10/23/18	1516							
	INVOICED	C750		LLC	22.0000	32.90	723.80	0.00	0.00	723.80
AA*18*20512	CHARGE	10/23/18	1516							
	INVOICED	POND3		LLC	22.0000	29.42	647.24	0.00	0.00	647.24
AA*18*20516	CHARGE	10/23/18	1516							
	INVOICED	BS712		LLC	22.0000	24.94	548.68	0.00	0.00	548.68
AA*18*20519	CHARGE	10/23/18	1516							
	INVOICED	BS715		LLC	22.0000	26.66	586.52	0.00	0.00	586.52
AA*18*20521	CHARGE	10/23/18	1516							
	INVOICED	CORT8		LLC	22.0000	26.12	574.64	0.00	0.00	574.64
AA*18*20527	CHARGE	10/23/18	1516							
	INVOICED	POND1		LLC	22.0000	26.05	573.10	0.00	0.00	573.10
AA*18*20545	CHARGE	10/23/18	1516							
	INVOICED	POND3		LLC	22.0000	28.59	628.98	0.00	0.00	628.98
AA*18*20551	CHARGE	10/23/18	1516							
	INVOICED	BS712		LLC	22.0000	26.68	586.96	0.00	0.00	586.96
AA*18*20553	CHARGE	10/23/18	1516							
	INVOICED	C750		LLC	22.0000	33.23	731.06	0.00	0.00	731.06
AA*18*20556	CHARGE	10/23/18	1516							
	INVOICED	CORT8		LLC	22.0000	28.77	632.94	0.00	0.00	632.94
AA*18*20557	CHARGE	10/23/18	1516							
	INVOICED	BS715		LLC	22.0000	26.54	583.88	0.00	0.00	583.88
AA*18*20578	CHARGE	10/24/18	1516							
	INVOICED	C750		LLC	22.0000	31.41	691.02	0.00	0.00	691.02
AA*18*20582	CHARGE	10/24/18	1516							
	INVOICED	SH4		LLC	22.0000	21.82	480.04	0.00	0.00	480.04
AA*18*20585	CHARGE	10/24/18	1516							
	INVOICED	BS712		LLC	22.0000	25.14	553.08	0.00	0.00	553.08

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*18*20588	CHARGE	10/24/18	1516							
	INVOICED	POND3		LLC	22.0000	25.90	569.80	0.00	0.00	569.80
AA*18*20592	CHARGE	10/24/18	1516							
	INVOICED	BS715		LLC	22.0000	23.49	516.78	0.00	0.00	516.78
AA*18*20595	CHARGE	10/24/18	1516							
	INVOICED	CORT8		LLC	22.0000	22.04	484.88	0.00	0.00	484.88
AA*18*20628	CHARGE	10/24/18	1516							
	INVOICED	C750		LLC	22.0000	29.36	645.92	0.00	0.00	645.92
AA*18*20631	CHARGE	10/24/18	1516							
	INVOICED	SH4		LLC	22.0000	21.81	479.82	0.00	0.00	479.82
AA*18*20633	CHARGE	10/24/18	1516							
	INVOICED	BS712		LLC	22.0000	22.31	490.82	0.00	0.00	490.82
AA*18*20636	CHARGE	10/24/18	1516							
	INVOICED	POND3		LLC	22.0000	24.09	529.98	0.00	0.00	529.98
AA*18*20638	CHARGE	10/24/18	1516							
	INVOICED	BS715		LLC	22.0000	25.65	564.30	0.00	0.00	564.30
AA*18*20647	CHARGE	10/24/18	1516							
	INVOICED	CORT8		LLC	22.0000	23.91	526.02	0.00	0.00	526.02
AA*18*20679	CHARGE	10/24/18	1516							
	INVOICED	BS712		LLC	22.0000	26.44	581.68	0.00	0.00	581.68
AA*18*20681	CHARGE	10/24/18	1516							
	INVOICED	POND3		LLC	22.0000	27.89	613.58	0.00	0.00	613.58
AA*18*20691	CHARGE	10/24/18	1516							
	INVOICED	SH4		LLC	22.0000	25.56	562.32	0.00	0.00	562.32
AA*18*20694	CHARGE	10/24/18	1516							
	INVOICED	CORT8		LLC	22.0000	27.58	606.76	0.00	0.00	606.76
AA*18*20696	CHARGE	10/24/18	1516							
	INVOICED	BS715		LLC	22.0000	23.37	514.14	0.00	0.00	514.14
AA*18*20698	CHARGE	10/24/18	1516							
	INVOICED	C750		LLC	22.0000	35.50	781.00	0.00	0.00	781.00
AA*18*20726	CHARGE	10/25/18	1516							
	INVOICED	C750		LLC	22.0000	32.37	712.14	0.00	0.00	712.14
AA*18*20727	CHARGE	10/25/18	1516							
	INVOICED	POND3		LLC	22.0000	26.52	583.44	0.00	0.00	583.44
AA*18*20828	CHARGE	10/25/18	1516							
	INVOICED	POND3		LLC	22.0000	20.59	452.98	0.00	0.00	452.98
AA*18*21034	CHARGE	10/29/18	1516							
	INVOICED	POND3		LLC	22.0000	21.26	467.72	0.00	0.00	467.72
AA*18*21091	CHARGE	10/29/18	1516							
	INVOICED	POND3		LLC	22.0000	20.32	447.04	0.00	0.00	447.04
AA*18*21130	CHARGE	10/30/18	1516							
	INVOICED	POND3		LLC	22.0000	21.34	469.48	0.00	0.00	469.48
AA*18*21192	CHARGE	10/30/18	1516							
	INVOICED	POND3		LLC	22.0000	24.51	539.22	0.00	0.00	539.22
AA*18*21246	CHARGE	10/31/18	1516							
	INVOICED	POND3		LLC	22.0000	27.37	602.14	0.00	0.00	602.14
AA*18*21293	CHARGE	10/31/18	1516							
	INVOICED	POND3		LLC	22.0000	24.72	543.84	0.00	0.00	543.84
AA*18*21552	CHARGE	11/05/18	1516							
	INVOICED	GW17		LLC	22.0000	26.10	574.20	0.00	0.00	574.20

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*18*21555	CHARGE	11/05/18	1516							
	INVOICED	BS715		LLC	22.0000	19.02	418.44	0.00	0.00	418.44
AA*18*21556	CHARGE	11/05/18	1516							
	INVOICED	BS713		LLC	22.0000	18.67	410.74	0.00	0.00	410.74
AA*18*21557	CHARGE	11/05/18	1516							
	INVOICED	GW15		LLC	22.0000	26.34	579.48	0.00	0.00	579.48
AA*18*21581	CHARGE	11/05/18	1516							
	INVOICED	GW17		LLC	22.0000	24.71	543.62	0.00	0.00	543.62
AA*18*21585	CHARGE	11/05/18	1516							
	INVOICED	GW15		LLC	22.0000	26.49	582.78	0.00	0.00	582.78
AA*18*21586	CHARGE	11/05/18	1516							
	INVOICED	BS715		LLC	22.0000	21.91	482.02	0.00	0.00	482.02
AA*18*21589	CHARGE	11/05/18	1516							
	INVOICED	BS713		LLC	22.0000	20.94	460.68	0.00	0.00	460.68
AA*18*21619	CHARGE	11/05/18	1516							
	INVOICED	GW15		LLC	22.0000	26.96	593.12	0.00	0.00	593.12
AA*18*21620	CHARGE	11/05/18	1516							
	INVOICED	BS713		LLC	22.0000	23.99	527.78	0.00	0.00	527.78
AA*18*21622	CHARGE	11/05/18	1516							
	INVOICED	GW17		LLC	22.0000	27.79	611.38	0.00	0.00	611.38
AA*18*21624	CHARGE	11/05/18	1516							
	INVOICED	BS715		LLC	22.0000	26.95	592.90	0.00	0.00	592.90
AA*18*21639	CHARGE	11/06/18	1516							
	INVOICED	GW17		LLC	22.0000	25.37	558.14	0.00	0.00	558.14
AA*18*21643	CHARGE	11/06/18	1516							
	INVOICED	GW15		LLC	22.0000	27.19	598.18	0.00	0.00	598.18
AA*18*21653	CHARGE	11/06/18	1516							
	INVOICED	BS715		LLC	22.0000	24.70	543.40	0.00	0.00	543.40
AA*18*21658	CHARGE	11/06/18	1516							
	INVOICED	BS713		LLC	22.0000	21.29	468.38	0.00	0.00	468.38
AA*18*21676	CHARGE	11/06/18	1516							
	INVOICED	GW17		LLC	22.0000	28.54	627.88	0.00	0.00	627.88
AA*18*21687	CHARGE	11/06/18	1516							
	INVOICED	GW15		LLC	22.0000	28.44	625.68	0.00	0.00	625.68
AA*18*21690	CHARGE	11/06/18	1516							
	INVOICED	BS715		LLC	22.0000	26.33	579.26	0.00	0.00	579.26
AA*18*21692	CHARGE	11/06/18	1516							
	INVOICED	BS713		LLC	22.0000	17.12	376.64	0.00	0.00	376.64
AA*18*21726	CHARGE	11/06/18	1516							
	INVOICED	GW15		LLC	22.0000	25.09	551.98	0.00	0.00	551.98
AA*18*21730	CHARGE	11/06/18	1516							
	INVOICED	GW17		LLC	22.0000	24.36	535.92	0.00	0.00	535.92
AA*18*21734	CHARGE	11/06/18	1516							
	INVOICED	BS715		LLC	22.0000	22.05	485.10	0.00	0.00	485.10
AA*18*21739	CHARGE	11/06/18	1516							
	INVOICED	BS713		LLC	22.0000	20.21	444.62	0.00	0.00	444.62
AA*18*21770	CHARGE	11/07/18	1516							
	INVOICED	GW15		LLC	22.0000	27.36	601.92	0.00	0.00	601.92
AA*18*21772	CHARGE	11/07/18	1516							
	INVOICED	BS715		LLC	22.0000	25.33	557.26	0.00	0.00	557.26

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*18*21773	CHARGE	11/07/18	1516							
	INVOICED	HEU4		LLC	22.0000	25.82	568.04	0.00	0.00	568.04
AA*18*21780	CHARGE	11/07/18	1516							
	INVOICED	CORT8		LLC	22.0000	27.40	602.80	0.00	0.00	602.80
AA*18*21781	CHARGE	11/07/18	1516							
	INVOICED	BS713		LLC	22.0000	20.85	458.70	0.00	0.00	458.70
AA*18*21830	CHARGE	11/07/18	1516							
	INVOICED	BS715		LLC	22.0000	20.54	451.88	0.00	0.00	451.88
AA*18*21836	CHARGE	11/07/18	1516							
	INVOICED	HEU4		LLC	22.0000	23.95	526.90	0.00	0.00	526.90
AA*18*21838	CHARGE	11/07/18	1516							
	INVOICED	GW15		LLC	22.0000	24.97	549.34	0.00	0.00	549.34
AA*18*21841	CHARGE	11/07/18	1516							
	INVOICED	BS713		LLC	22.0000	24.17	531.74	0.00	0.00	531.74
AA*18*21843	CHARGE	11/07/18	1516							
	INVOICED	CORT8		LLC	22.0000	23.43	515.46	0.00	0.00	515.46
AA*18*21888	CHARGE	11/08/18	1516							
	INVOICED	CORT8		LLC	22.0000	24.90	547.80	0.00	0.00	547.80
AA*18*21892	CHARGE	11/08/18	1516							
	INVOICED	GW15		LLC	22.0000	27.81	611.82	0.00	0.00	611.82
122162	CHARGE	11/09/18	1516							
	INVOICED	POND3		LLC	22.0000	26.16	575.52	0.00	0.00	575.52
122171	CHARGE	11/09/18	1516							
	INVOICED	CORT8		LLC	22.0000	26.33	579.26	0.00	0.00	579.26
122192	CHARGE	11/09/18	1516							
	INVOICED	POND3		LLC	22.0000	28.96	637.12	0.00	0.00	637.12
122193	CHARGE	11/09/18	1516							
	INVOICED	GW17		LLC	22.0000	24.78	545.16	0.00	0.00	545.16
122200	CHARGE	11/09/18	1516							
	INVOICED	CORT8		LLC	22.0000	23.59	518.98	0.00	0.00	518.98
122219	CHARGE	11/09/18	1516							
	INVOICED	GW17		LLC	22.0000	25.51	561.22	0.00	0.00	561.22
122222	CHARGE	11/09/18	1516							
	INVOICED	POND3		LLC	22.0000	26.19	576.18	0.00	0.00	576.18
AA*18*21941	CHARGE	11/09/18	1516							
	INVOICED	GW17		LLC	22.0000	25.28	556.16	0.00	0.00	556.16
AA*18*21950	CHARGE	11/12/18	1516							
	INVOICED	POND3		LLC	22.0000	23.59	518.98	0.00	0.00	518.98
AA*18*21983	CHARGE	11/12/18	1516							
	INVOICED	POND3		LLC	22.0000	24.44	537.68	0.00	0.00	537.68
AA*18*22011	CHARGE	11/12/18	1516							
	INVOICED	POND3		LLC	22.0000	29.66	652.52	0.00	0.00	652.52
AA*18*22393	CHARGE	11/19/18	1516							
	INVOICED	POND3		LLC	22.0000	30.62	673.64	0.00	0.00	673.64
AA*18*22419	CHARGE	11/19/18	1516							
	INVOICED	POND3		LLC	22.0000	25.56	562.32	0.00	0.00	562.32
AA*18*22463	CHARGE	11/19/18	1516							
	INVOICED	POND3		FILL	8.0000	29.26	234.08	0.00	0.00	234.08
AA*18*22501	CHARGE	11/20/18	1516							
	INVOICED	POND3		LLC	22.0000	29.61	651.42	0.00	0.00	651.42

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*18*22542	CHARGE	11/20/18	1516							
	INVOICED	POND3		LLC	22.0000	32.50	715.00	0.00	0.00	715.00
AA*18*22631	CHARGE	11/21/18	1516							
	INVOICED	POND3		LLC	22.0000	35.20	774.40	0.00	0.00	774.40
AA*18*22729	CHARGE	11/26/18	1516							
	INVOICED	POND3		LLC	22.0000	35.61	783.42	0.00	0.00	783.42
AA*18*22767	CHARGE	11/26/18	1516							
	INVOICED	POND3		LLC	22.0000	20.57	452.54	0.00	0.00	452.54
R#AA*18*22924	CHARGE	11/27/18	1516							
	INVOICED	POND3		LLC	22.0000	9.32	205.04	0.00	0.00	205.04
AA*18*23207	CHARGE	11/29/18	1516							
	INVOICED	POND3		LLC	22.0000	23.60	519.20	0.00	0.00	519.20
AA*18*23267	CHARGE	11/29/18	1516							
	INVOICED	POND3		LLC	22.0000	21.27	467.94	0.00	0.00	467.94
AA*18*23409	CHARGE	11/30/18	1516							
	INVOICED	POND3		LLC	22.0000	25.74	566.28	0.00	0.00	566.28
AA*18*23438	CHARGE	12/03/18	1516							
	INVOICED	C750		LLC	22.0000	30.23	665.06	0.00	0.00	665.06
AA*18*23443	CHARGE	12/03/18	1516							
	INVOICED	CURRIE3		LLC	22.0000	23.99	527.78	0.00	0.00	527.78
AA*18*23482	CHARGE	12/03/18	1516							
	INVOICED	C750		LLC	22.0000	32.06	705.32	0.00	0.00	705.32
AA*18*23496	CHARGE	12/03/18	1516							
	INVOICED	CURRIE3		LLC	22.0000	27.59	606.98	0.00	0.00	606.98
AA*18*23518	CHARGE	12/03/18	1516							
	INVOICED	C750		LLC	22.0000	31.81	699.82	0.00	0.00	699.82
AA*18*23524	CHARGE	12/03/18	1516							
	INVOICED	CURRIE3		LLC	22.0000	27.61	607.42	0.00	0.00	607.42
AA*18*23541	CHARGE	12/04/18	1516							
	INVOICED	POND1		LLC	22.0000	19.73	434.06	0.00	0.00	434.06
AA*18*23665	CHARGE	12/05/18	1516							
	INVOICED	CURRIE3		LLC	22.0000	30.96	681.12	0.00	0.00	681.12
AA*18*23677	CHARGE	12/05/18	1516							
	INVOICED	POND3		LLC	22.0000	26.04	572.88	0.00	0.00	572.88
AA*18*23678	CHARGE	12/05/18	1516							
	INVOICED	C750		LLC	22.0000	38.94	856.68	0.00	0.00	856.68
AA*18*23734	CHARGE	12/06/18	1516							
	INVOICED	POND3		LLC	22.0000	26.87	591.14	0.00	0.00	591.14
AA*18*24296	CHARGE	12/18/18	1516							
	INVOICED	POND3		LLC	22.0000	16.24	357.28	0.00	0.00	357.28
AA*19*105	CHARGE	01/03/19	1516							
	INVOICED	POND1		LLC	22.0000	26.12	574.64	0.00	0.00	574.64
AA*19*214	CHARGE	01/07/19	1516							
	INVOICED	POND4		LLC	22.0000	24.47	538.34	0.00	0.00	538.34
AA*19*354	CHARGE	01/10/19	1516							
	INVOICED	POND-4		LLC	22.0000	14.36	315.92	0.00	0.00	315.92
AA*19*410	CHARGE	01/14/19	1516							
	INVOICED	POND1		LLC	22.0000	13.76	302.72	0.00	0.00	302.72
AA*19*483	CHARGE	01/15/19	1516							
	INVOICED	POND1		LLC	22.0000	21.98	483.56	0.00	0.00	483.56

WITH CUSTOMER SELECT FOR 1516

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*19*606	CHARGE	01/17/19	1516							
	UN-INV.	POND4		LLC	22.0000	14.81	325.82	0.00	0.00	325.82
AA*19*617	CHARGE	01/17/19	1516							
	UN-INV.	WEDO2		LLC	22.0000	19.33	425.26	0.00	0.00	425.26
AA*19*638	CHARGE	01/17/19	1516							
	UN-INV.	POND4		LLC	22.0000	21.31	468.82	0.00	0.00	468.82
AA*19*653	CHARGE	01/17/19	1516							
	UN-INV.	WEDO2		LLC	22.0000	17.50	385.00	0.00	0.00	385.00
AA*19*673	CHARGE	01/17/19	1516							
	UN-INV.	WEDO2		LLC	22.0000	21.21	466.62	0.00	0.00	466.62
AA*19*690	CHARGE	01/18/19	1516							
	UN-INV.	WEDO2		LLC	22.0000	25.23	555.06	0.00	0.00	555.06
AA*19*691	CHARGE	01/18/19	1516							
	UN-INV.	WEDO1		LLC	22.0000	18.79	413.38	0.00	0.00	413.38
AA*19*698	CHARGE	01/18/19	1516							
	UN-INV.	POND1		LLC	22.0000	18.62	409.64	0.00	0.00	409.64
AA*19*707	CHARGE	01/18/19	1516							
	UN-INV.	WEDO2		LLC	22.0000	17.47	384.34	0.00	0.00	384.34
AA*19*710	CHARGE	01/18/19	1516							
	UN-INV.	WEDO1		LLC	22.0000	13.40	294.80	0.00	0.00	294.80
AA*19*727	CHARGE	01/18/19	1516							
	UN-INV.	POND1		LLC	22.0000	23.34	513.48	0.00	0.00	513.48
AA*19*737	CHARGE	01/18/19	1516							
	UN-INV.	WEDO2		LLC	22.0000	24.76	544.72	0.00	0.00	544.72
AA*19*738	CHARGE	01/18/19	1516							
	UN-INV.	WEDO1		LLC	22.0000	15.31	336.82	0.00	0.00	336.82
AA*19*748	CHARGE	01/21/19	1516							
	UN-INV.	POND1		LLC	22.0000	21.86	480.92	0.00	0.00	480.92
AA*19*749	CHARGE	01/21/19	1516							
	UN-INV.	POND7		LLC	22.0000	10.61	233.42	0.00	0.00	233.42
AA*19*781	CHARGE	01/22/19	1516							
	UN-INV.	HAY6		LLC	22.0000	17.57	386.54	0.00	0.00	386.54
AA*19*783	CHARGE	01/22/19	1516							
	UN-INV.	GS7		LLC	22.0000	18.19	400.18	0.00	0.00	400.18
AA*19*785	CHARGE	01/22/19	1516							
	UN-INV.	POND1		LLC	22.0000	11.32	249.04	0.00	0.00	249.04
AA*19*806	CHARGE	01/22/19	1516							
	UN-INV.	HAY6		LLC	22.0000	15.05	331.10	0.00	0.00	331.10
AA*19*822	CHARGE	01/22/19	1516							
	UN-INV.	POND1		LLC	22.0000	12.74	280.28	0.00	0.00	280.28
AA*19*823	CHARGE	01/22/19	1516							
	UN-INV.	GS7		LLC	22.0000	11.92	262.24	0.00	0.00	262.24
AA*19*851	CHARGE	01/22/19	1516							
	UN-INV.	HAY6		LLC	22.0000	20.65	454.30	0.00	0.00	454.30
AA*19*963	CHARGE	01/24/19	1516							
	UN-INV.	POND1		LLC	22.0000	19.86	436.92	0.00	0.00	436.92
AA*19*1018	CHARGE	01/25/19	1516							
	UN-INV.	C750		LLC	22.0000	30.83	678.26	0.00	0.00	678.26
AA*19*1021	CHARGE	01/25/19	1516							
	UN-INV.	POND1		LLC	22.0000	24.34	535.48	0.00	0.00	535.48

TICKET NO.	TYPE / PROC.CTL	DATE / TRUCK	CUST CODE / JOB CODE	PRODUCT	PRICE/TON	TONS	PRODUCT AMT.	DELIVERY	TAX	TICKET.TOT
AA*19*1059	CHARGE	01/25/19	1516							
	UN-INV.	POND1		LLC	22.0000	22.30	490.60	0.00	0.00	490.60
AA*19*1064	CHARGE	01/25/19	1516							
	UN-INV.	C750		LLC	22.0000	30.89	679.58	0.00	0.00	679.58
AA*19*987	CHARGE	01/25/19	1516							
	UN-INV.	C750		LLC	22.0000	31.84	700.48	0.00	0.00	700.48
AA*19*993	CHARGE	01/25/19	1516							
	UN-INV.	POND1		LLC	22.0000	23.02	506.44	0.00	0.00	506.44
						8,727.13	191,469.97	0.00	0.00	191,469.97
**** REPORT TOTALS ****						8,727.13	191,469.97	0.00	0.00	191,469.97

CLASS 3

Waste Management

Date	Profile #	Manifest #	Ticket #	Waste	Facility	Carrier	Vehicle	Tons/Tonnes	Material Quantity	Material Unit
1/11/2019	113191WA	NA	145894	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P1SD	23.25	23.25	TON
1/11/2019	113191WA	NA	145890	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P1SD	24.92	24.92	TON
1/11/2019	113191WA	NA	145884	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P1SD	20.72	20.72	TON
1/11/2019	113191WA	NA	145878	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P1SD	19	19	TON
9/27/2018	113191WA	NA	144437	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P04	22.77	22.77	TON
9/26/2018	113191WA	NA	144420	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	W22	16.73	16.73	TON
9/26/2018	113191WA	NA	144419	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	W16	36.85	36.85	TON
8/24/2018	113191WA	NA	143834	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	31.12	31.12	TON
8/24/2018	113191WA	NA	143832	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	30.15	30.15	TON
8/24/2018	113191WA	NA	143830	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	26.02	26.02	TON
8/24/2018	113191WA	NA	143829	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	28.71	28.71	TON
8/24/2018	113191WA	NA	143828	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	28.68	28.68	TON
8/24/2018	113191WA	NA	143827	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	20.68	20.68	TON
8/24/2018	113191WA	NA	143825	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	27.79	27.79	TON
8/24/2018	113191WA	NA	143823	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	NW27	27.57	27.57	TON
8/24/2018	113191WA	NA	143820	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	31.63	31.63	TON
8/24/2018	113191WA	NA	143818	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	31.02	31.02	TON
8/24/2018	113191WA	NA	143816	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	30.2	30.2	TON
8/24/2018	113191WA	NA	143812	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	32.96	32.96	TON
8/24/2018	113191WA	NA	143811	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	35.55	35.55	TON
8/24/2018	113191WA	NA	143810	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	NW27	36.22	36.22	TON
8/24/2018	113191WA	NA	143807	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	26.19	26.19	TON
8/24/2018	113191WA	NA	143806	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	27.55	27.55	TON
8/24/2018	113191WA	NA	143805	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	27.3	27.3	TON
8/24/2018	113191WA	NA	143804	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	27.6	27.6	TON
8/24/2018	113191WA	NA	143803	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	28.35	28.35	TON
8/24/2018	113191WA	NA	143802	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	31.14	31.14	TON
8/24/2018	113191WA	NA	143796	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	NW27	36.55	36.55	TON
8/24/2018	113191WA	NA	143795	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	34.9	34.9	TON
8/24/2018	113191WA	NA	143794	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	29.7	29.7	TON
8/24/2018	113191WA	NA	143793	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	24.33	24.33	TON
8/24/2018	113191WA	NA	143792	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	32.68	32.68	TON
8/24/2018	113191WA	NA	143791	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	32.67	32.67	TON
8/24/2018	113191WA	NA	143790	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	30.29	30.29	TON
8/24/2018	113191WA	NA	143789	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	34.1	34.1	TON
8/3/2018	113191WA	NA	143262	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	27.64	27.64	TON
8/3/2018	113191WA	NA	143260	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	30.45	30.45	TON
8/3/2018	113191WA	NA	143258	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	33.63	33.63	TON
8/3/2018	113191WA	NA	143257	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	27.34	27.34	TON
8/3/2018	113191WA	NA	143256	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER66	32.11	32.11	TON
8/3/2018	113191WA	NA	143255	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	29.79	29.79	TON
8/3/2018	113191WA	NA	143254	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	NW27	32.06	32.06	TON
8/3/2018	113191WA	NA	143252	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	29.32	29.32	TON
8/3/2018	113191WA	NA	143249	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	27.3	27.3	TON
8/3/2018	113191WA	NA	143248	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	29.92	29.92	TON
8/3/2018	113191WA	NA	143247	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER66	27.32	27.32	TON
8/3/2018	113191WA	NA	143246	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	30.93	30.93	TON
8/3/2018	113191WA	NA	143244	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	NW27	31.78	31.78	TON
8/3/2018	113191WA	NA	143243	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	27.53	27.53	TON
8/3/2018	113191WA	NA	143242	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	33.45	33.45	TON
8/3/2018	113191WA	NA	143240	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	33.47	33.47	TON
8/3/2018	113191WA	NA	143238	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	29.5	29.5	TON
8/3/2018	113191WA	NA	143236	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	NW27	29.18	29.18	TON
8/3/2018	113191WA	NA	143234	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	27.08	27.08	TON
8/3/2018	113191WA	NA	143232	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	27.66	27.66	TON
8/3/2018	113191WA	NA	143231	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	27.55	27.55	TON
8/3/2018	113191WA	NA	143227	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	NW27	29.29	29.29	TON
8/3/2018	113191WA	NA	143228	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	30.62	30.62	TON
8/3/2018	113191WA	NA	143226	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	25.08	25.08	TON
8/3/2018	113191WA	NA	143225	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	23.9	23.9	TON
8/3/2018	113191WA	NA	143222	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	29.49	29.49	TON
8/1/2018	113191WA	NA	143186	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	24.54	24.54	TON
8/1/2018	113191WA	NA	143185	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	20.88	20.88	TON
8/1/2018	113191WA	NA	143183	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	GS7	19.53	19.53	TON
8/1/2018	113191WA	NA	143182	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	26.23	26.23	TON
8/1/2018	113191WA	NA	143181	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER66	27.23	27.23	TON
8/1/2018	113191WA	NA	143178	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	27.78	27.78	TON
8/1/2018	113191WA	NA	143176	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	27.51	27.51	TON
8/1/2018	113191WA	NA	143175	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	GS7	28.49	28.49	TON
8/1/2018	113191WA	NA	143173	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER66	26.11	26.11	TON
8/1/2018	113191WA	NA	143172	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	26.75	26.75	TON
8/1/2018	113191WA	NA	143171	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	30.81	30.81	TON
8/1/2018	113191WA	NA	143170	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	26.13	26.13	TON
8/1/2018	113191WA	NA	143168	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	30.33	30.33	TON
8/1/2018	113191WA	NA	143167	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	GS7	29.48	29.48	TON
8/1/2018	113191WA	NA	143165	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	33.01	33.01	TON
8/1/2018	113191WA	NA	143164	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER66	29.71	29.71	TON
8/1/2018	113191WA	NA	143163	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	29.59	29.59	TON
8/1/2018	113191WA	NA	143162	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	27.89	27.89	TON
8/1/2018	113191WA	NA	143159	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	30.59	30.59	TON
8/1/2018	113191WA	NA	143157	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	30.91	30.91	TON
8/1/2018	113191WA	NA	143156	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	GS7	31.18	31.18	TON
8/1/2018	113191WA	NA	143155	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	31.19	31.19	TON
8/1/2018	113191WA	NA	143154	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER66	29.34	29.34	TON
8/1/2018	113191WA	NA	143151	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	33.67	33.67	TON
8/1/2018	113191WA	NA	143149	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	31.74	31.74	TON
8/1/2018	113191WA	NA	143148	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	31.54	31.54	TON
8/1/2018	113191WA	NA	143146	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	30.04	30.04	TON
8/1/2018	113191WA	NA	143145	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	32.92	32.92	TON
8/1/2018	113191WA	NA	143142	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	GS7	30.5	30.5	TON
8/1/2018	113191WA	NA	143144	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER66	31.96	31.96	TON
8/1/2018	113191WA	NA	143143	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	30.52	30.52	TON
8/1/2018	113191WA	NA	143140	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	32.66	32.66	TON
8/1/2018	113191WA	NA	143138	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	30.18	30.18	TON
8/1/2018	113191WA	NA	143137	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER 44	29.85	29.85	TON
8/1/2018	113191WA	NA	143136	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T	30.44	30.44	TON
8/1/2018	113191WA	NA	143135	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER66	29.52	29.52	TON
8/1/2018	113191WA	NA	143134	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	32.68	32.68	TON
8/1/2018	113191WA	NA	143133	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	33.47	33.47	TON
7/31/2018	113191WA	NA	143124	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER66	24.94	24.94	TON
7/31/2018	113191WA	NA	143123	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	30.42	30.42	TON
7/31/2018	113191WA	na	143120	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	32.84	32.84	TON
7/31/2018	113191WA	NA	143103	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER66	26.81	26.81	TON
7/31/2018	113191WA	NA	143102	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	16.57	16.57	TON
7/31/2018	113191WA	NA	143099	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	30.23	30.23	TON
7/27/2018	113191WA	NA	143010	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	27.49	27.49	TON
7/27/2018	113191WA	NA	143009	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	24.47	24.47	TON
7/27/2018	113191WA	NA	143008	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	23.83	23.83	TON
7/27/2018	113191WA	NA	142997	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	28.97	28.97	TON
7/27/2018	113191WA	NA	142996	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	24.83	24.83	TON

7/27/2018	113191WA	NA	142995	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44		26.88	26.88 TON
7/27/2018	113191WA	NA	142993	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		30.07	30.07 TON
7/27/2018	113191WA	NA	142991	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		28.89	28.89 TON
7/27/2018	113191WA	NA	142990	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44		31.29	31.29 TON
7/27/2018	113191WA	NA	142989	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		30.59	30.59 TON
7/27/2018	113191WA	NA	142988	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		28.17	28.17 TON
7/27/2018	113191WA	NA	142987	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44		30.58	30.58 TON
7/27/2018	113191WA	NA	142984	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		29.7	29.7 TON
7/27/2018	113191WA	NA	142983	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		28.28	28.28 TON
7/27/2018	113191WA	NA	142981	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44		29.44	29.44 TON
7/27/2018	113191WA	NA	142979	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		30.06	30.06 TON
7/27/2018	113191WA	NA	142978	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		28.96	28.96 TON
7/26/2018	113191WA	NA	142922	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	BRANDT2		30.5	30.5 TON
7/26/2018	113191WA	NA	142921	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T		30.05	30.05 TON
7/26/2018	113191WA	NA	142920	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		30.88	30.88 TON
7/26/2018	113191WA	NA	142917	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		34.97	34.97 TON
7/26/2018	113191WA	NA	142915	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44		33.81	33.81 TON
7/26/2018	113191WA	NA	142892	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		28.61	28.61 TON
7/26/2018	113191WA	NA	142891	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		29.39	29.39 TON
7/26/2018	113191WA	NA	142890	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		31.37	31.37 TON
7/26/2018	113191WA	NA	142888	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		30.47	30.47 TON
7/26/2018	113191WA	NA	142887	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44		28.16	28.16 TON
7/26/2018	113191WA	NA	142885	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T		28.61	28.61 TON
7/25/2018	113191WA	NA	142854	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44		27.39	27.39 TON
7/25/2018	113191WA	NA	142851	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		31.55	31.55 TON
7/25/2018	113191WA	NA	142850	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		25.9	25.9 TON
7/25/2018	113191WA	NA	142849	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		28.44	28.44 TON
7/25/2018	113191WA	NA	142846	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		26.06	26.06 TON
7/25/2018	113191WA	NA	142838	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	BRANDT2		30.98	30.98 TON
7/25/2018	113191WA	NA	142836	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T		29.71	29.71 TON
7/25/2018	113191WA	NA	142835	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44		27.95	27.95 TON
7/25/2018	113191WA	NA	142834	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		33.4	33.4 TON
7/25/2018	113191WA	NA	142833	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		28.89	28.89 TON
7/25/2018	113191WA	NA	142832	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		29.36	29.36 TON
7/25/2018	113191WA	NA	142831	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		30.05	30.05 TON
7/19/2018	113191WA	NA	142716	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10		24.25	24.25 TON
7/19/2018	113191WA	NA	142714	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	BRANDT2		29.3	29.3 TON
7/19/2018	113191WA	NA	142713	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		27.1	27.1 TON
7/19/2018	113191WA	NA	142711	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		29.34	29.34 TON
7/19/2018	113191WA	NA	142710	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		21.86	21.86 TON
7/19/2018	113191WA	NA	142709	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T		21.79	21.79 TON
7/19/2018	113191WA	NA	142708	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		29.3	29.3 TON
7/19/2018	113191WA	NA	142706	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10		27.97	27.97 TON
7/19/2018	113191WA	NA	142705	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	BRANDT2		28.78	28.78 TON
7/19/2018	113191WA	NA	142702	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		34.42	34.42 TON
7/19/2018	113191WA	NA	142701	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		32.93	32.93 TON
7/19/2018	113191WA	NA	142695	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		33.78	33.78 TON
7/19/2018	113191WA	NA	142697	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		32.75	32.75 TON
7/19/2018	113191WA	NA	142696	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T		34.74	34.74 TON
7/19/2018	113191WA	NA	142692	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10		30.64	30.64 TON
7/19/2018	113191WA	NA	142691	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	BRANDT2		33.25	33.25 TON
7/19/2018	113191WA	NA	142689	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		34.75	34.75 TON
7/19/2018	113191WA	NA	142687	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		36.01	36.01 TON
7/19/2018	113191WA	NA	142686	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		37.89	37.89 TON
7/19/2018	113191WA	NA	142685	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		33.36	33.36 TON
7/19/2018	113191WA	NA	142684	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T		30.35	30.35 TON
7/19/2018	113191WA	NA	142680	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10		31.92	31.92 TON
7/19/2018	113191WA	NA	142678	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	BRANDT2		33.59	33.59 TON
7/19/2018	113191WA	NA	142676	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		30.42	30.42 TON
7/19/2018	113191WA	NA	142674	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		28.22	28.22 TON
7/19/2018	113191WA	NA	142670	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		29.81	29.81 TON
7/19/2018	113191WA	NA	142668	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		28.43	28.43 TON
7/19/2018	113191WA	NA	142661	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10		30.9	30.9 TON
7/19/2018	113191WA	NA	142660	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*		20	29.27	29.27 TON
7/19/2018	113191WA	NA	142671	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	BRANDT2		28.62	28.62 TON
7/19/2018	113191WA	NA	142669	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	M20T		26.12	26.12 TON
7/19/2018	113191WA	NA	142655	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		34.26	34.26 TON
7/19/2018	113191WA	NA	142673	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		31.6	31.6 TON
7/19/2018	113191WA	NA	142652	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		32.56	32.56 TON
7/19/2018	113191WA	NA	142650	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		27.96	27.96 TON
7/19/2018	113191WA	NA	142672	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	BRANDT2		30.63	30.63 TON
7/19/2018	113191WA	NA	142648	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10		30.33	30.33 TON
7/19/2018	113191WA	NA	142645	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		34.42	34.42 TON
7/19/2018	113191WA	NA	142644	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		31.22	31.22 TON
7/19/2018	113191WA	NA	142643	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		29.81	29.81 TON
7/19/2018	113191WA	NA	142642	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		30.6	30.6 TON
7/17/2018	113191WA	NA	142604	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		26.68	26.68 TON
7/17/2018	113191WA	NA	142603	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	Steelhead15		24.16	24.16 TON
7/17/2018	113191WA	NA	142602	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		30.17	30.17 TON
7/17/2018	113191WA	NA	142601	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		30.47	30.47 TON
7/17/2018	113191WA	NA	142677	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		30.7	30.7 TON
7/17/2018	113191WA	NA	142592	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		33.62	33.62 TON
7/17/2018	113191WA	NA	142581	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		30.87	30.87 TON
7/17/2018	113191WA	NA	142565	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		34.68	34.68 TON
7/17/2018	113191WA	na	142562	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		31.62	31.62 TON
7/17/2018	113191WA	NA	142559	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		33.01	33.01 TON
7/17/2018	113191WA	NA	142556	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		30.25	30.25 TON
7/17/2018	113191WA	NA	142555	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	Steelhead15		23.72	23.72 TON
7/17/2018	113191WA	NA	142553	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		32.52	32.52 TON
7/17/2018	113191WA	NA	142551	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		28.01	28.01 TON
7/17/2018	113191WA	NA	142546	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		33.34	33.34 TON
7/17/2018	113191WA	NA	142545	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		31.28	31.28 TON
7/17/2018	113191WA	NA	142544	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	Steelhead15		26.63	26.63 TON
7/17/2018	113191WA	NA	142543	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		30.84	30.84 TON
7/17/2018	113191WA	na	142541	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		28.51	28.51 TON
7/17/2018	113191WA	NA	142537	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		33.18	33.18 TON
7/17/2018	113191WA	NA	142535	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	Steelhead15		24.97	24.97 TON
7/17/2018	113191WA	NA	142533	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		28.86	28.86 TON
7/17/2018	113191WA	NA	142532	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		28.48	28.48 TON
7/17/2018	113191WA	NA	142531	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		26.11	26.11 TON
7/17/2018	113191WA	NA	142529	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2		31.12	31.12 TON
7/17/2018	113191WA	NA	142528	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	Steelhead15		25	25 TON
7/17/2018	113191WA	NA	142527	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11		30.36	30.36 TON
7/17/2018	113191WA	NA	142526	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		32.03	32.03 TON
7/17/2018	113191WA	NA	142525	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12		29.54	29.54 TON
7/17/2018	113191WA	NA	142588	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	Steelhead15		25.55	25.55 TON
7/16/2018	113191WA	NA	142520	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		32.71	32.71 TON
7/16/2018	113191WA	NA	142618	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA04		15.7	15.7 TON
7/16/2018	113191WA	NA	142513	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		29.12	29.12 TON
7/16/2018	113191WA	NA	142506	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		29.96	29.96 TON
7/16/2018	113191WA	na	142505	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA1		25.61	25.61 TON
7/16/2018	113191WA	NA	142502	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON		38.22	38.22 TON

7/16/2018	113191WA	NJA	142495	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA1	27.78	27.78 TON
7/16/2018	113191WA	NA	142494	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	38.83	38.83 TON
7/16/2018	113191WA	na	142486	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	34.35	34.35 TON
7/16/2018	113191WA	NA	142481	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	38.83	38.83 TON
7/13/2018	113191WA	NA	142456	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	28.32	28.32 TON
7/13/2018	113191WA	NA	142453	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	31.82	31.82 TON
7/13/2018	113191WA	NA	142451	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	25.32	25.32 TON
7/13/2018	113191WA	NA	142449	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	24.6	24.6 TON
7/13/2018	113191WA	NA	142448	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	26.26	26.26 TON
7/13/2018	113191WA	NA	142446	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD57	28.6	28.6 TON
7/13/2018	113191WA	NA	142443	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	32.1	32.1 TON
7/13/2018	113191WA	NA	142441	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA04	15.26	15.26 TON
7/13/2018	113191WA	NA	142439	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	27.83	27.83 TON
7/13/2018	113191WA	NA	142437	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	30.76	30.76 TON
7/13/2018	113191WA	NA	142436	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	28.91	28.91 TON
7/13/2018	113191WA	NA	142435	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	30.99	30.99 TON
7/13/2018	113191WA	NA	142434	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	24.88	24.88 TON
7/13/2018	113191WA	NA	142433	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	34.05	34.05 TON
7/13/2018	113191WA	NA	142431	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	30.23	30.23 TON
7/13/2018	113191WA	NA	142429	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD57	29.79	29.79 TON
7/13/2018	113191WA	NA	142428	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA04	15.82	15.82 TON
7/13/2018	113191WA	NA	142427	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	32.27	32.27 TON
7/13/2018	113191WA	NA	142426	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	32.38	32.38 TON
7/13/2018	113191WA	NA	142425	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	29.3	29.3 TON
7/13/2018	113191WA	NA	142424	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	22.36	22.36 TON
7/13/2018	113191WA	NA	142423	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	25.53	25.53 TON
7/13/2018	113191WA	NA	142422	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	31.39	31.39 TON
7/13/2018	113191WA	NA	142421	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	28.68	28.68 TON
7/13/2018	113191WA	NA	142420	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD57	30.38	30.38 TON
7/13/2018	113191WA	NA	142418	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	28.82	28.82 TON
7/13/2018	113191WA	NA	142417	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	32.51	32.51 TON
7/13/2018	113191WA	NA	142414	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA04	15.83	15.83 TON
7/13/2018	113191WA	NA	142413	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	25.8	25.8 TON
7/13/2018	113191WA	NA	142412	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	29.64	29.64 TON
7/13/2018	113191WA	NA	142410	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	30	30 TON
7/13/2018	113191WA	NA	142409	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	33.66	33.66 TON
7/13/2018	113191WA	NA	142407	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	31.99	31.99 TON
7/13/2018	113191WA	NA	142403	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	27.7	27.7 TON
7/13/2018	113191WA	NA	142402	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD57	26.86	26.86 TON
7/13/2018	113191WA	NA	142401	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	31.21	31.21 TON
7/13/2018	113191WA	NA	142400	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	22.97	22.97 TON
7/13/2018	113191WA	NA	142399	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	30.77	30.77 TON
7/13/2018	113191WA	NA	142398	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	30.22	30.22 TON
7/13/2018	113191WA	NA	142397	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	33.85	33.85 TON
7/13/2018	113191WA	NA	142395	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	27.19	27.19 TON
7/13/2018	113191WA	NA	142394	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	30.14	30.14 TON
7/13/2018	113191WA	NA	142393	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	30.03	30.03 TON
7/12/2018	113191WA	NA	142387	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	34.68	34.68 TON
7/12/2018	113191WA	NA	142385	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD57	30.41	30.41 TON
7/12/2018	113191WA	NA	142384	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	31.51	31.51 TON
7/12/2018	113191WA	NA	142382	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	27.75	27.75 TON
7/12/2018	113191WA	NA	142381	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	26.55	26.55 TON
7/12/2018	113191WA	NA	142378	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	28.29	28.29 TON
7/12/2018	113191WA	NA	142376	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	30.76	30.76 TON
7/12/2018	113191WA	NA	142375	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	32.01	32.01 TON
7/12/2018	113191WA	NA	142374	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD57	30.44	30.44 TON
7/12/2018	113191WA	NA	142373	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	32.78	32.78 TON
7/12/2018	113191WA	NA	142369	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	32.68	32.68 TON
7/12/2018	113191WA	NA	142368	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	28.66	28.66 TON
7/12/2018	113191WA	NA	142364	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	29.33	29.33 TON
7/12/2018	113191WA	NA	142361	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	32.73	32.73 TON
7/12/2018	113191WA	NA	142360	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	23.45	23.45 TON
7/12/2018	113191WA	NA	142357	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	32.2	32.2 TON
7/12/2018	113191WA	NA	142356	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD57	31.34	31.34 TON
7/12/2018	113191WA	NA	142355	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	30.79	30.79 TON
7/12/2018	113191WA	NA	142353	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	30.09	30.09 TON
7/12/2018	113191WA	NA	142352	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	26.75	26.75 TON
7/12/2018	113191WA	NA	142350	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	27.86	27.86 TON
7/12/2018	113191WA	NA	142349	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	22.13	22.13 TON
7/12/2018	113191WA	NA	142348	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	29.22	29.22 TON
7/12/2018	113191WA	NA	142347	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	27.37	27.37 TON
7/12/2018	113191WA	NA	142344	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD57	30.01	30.01 TON
7/12/2018	113191WA	NA	142342	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	32.14	32.14 TON
7/12/2018	113191WA	NA	142340	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	36.36	36.36 TON
7/12/2018	113191WA	NA	142339	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	31.01	31.01 TON
7/12/2018	113191WA	NA	142332	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	31.95	31.95 TON
7/12/2018	113191WA	NA	142329	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	35.45	35.45 TON
7/12/2018	113191WA	NA	142328	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	32.57	32.57 TON
7/12/2018	113191WA	NA	142323	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD57	35.9	35.9 TON
7/12/2018	113191WA	NA	142327	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	35.45	35.45 TON
7/12/2018	113191WA	NA	142322	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	33.94	33.94 TON
7/12/2018	113191WA	NA	142325	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	27.35	27.35 TON
7/12/2018	113191WA	NA	142320	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	28.81	28.81 TON
7/12/2018	113191WA	NA	142318	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	30.84	30.84 TON
7/12/2018	113191WA	NA	142316	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	32.94	32.94 TON
7/12/2018	113191WA	NA	142314	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	34.51	34.51 TON
7/12/2018	113191WA	NA	142313	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	31.58	31.58 TON
7/11/2018	113191WA	NA	142307	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	36.42	36.42 TON
7/11/2018	113191WA	NA	142304	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	29.92	29.92 TON
7/11/2018	113191WA	NA	142303	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	37.76	37.76 TON
7/11/2018	113191WA	NA	142302	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	31.27	31.27 TON
7/11/2018	113191WA	NA	142300	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	34.25	34.25 TON
7/11/2018	113191WA	NA	142299	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	35	35 TON
7/11/2018	113191WA	NA	142338	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	37.81	37.81 TON
7/11/2018	113191WA	NA	142295	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	31.32	31.32 TON
7/11/2018	113191WA	NA	142294	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	39.33	39.33 TON
7/11/2018	113191WA	NA	142292	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	31.56	31.56 TON
7/11/2018	113191WA	NA	142291	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	32.8	32.8 TON
7/11/2018	113191WA	NA	142290	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	34.75	34.75 TON
7/11/2018	113191WA	NA	142337	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	36.29	36.29 TON
7/11/2018	113191WA	NA	142286	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA1	27.12	27.12 TON
7/11/2018	113191WA	NA	142284	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	32.58	32.58 TON
7/11/2018	113191WA	NA	142282	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	38.55	38.55 TON
7/11/2018	113191WA	NA	142281	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	36.32	36.32 TON
7/11/2018	113191WA	NA	142280	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	29.99	29.99 TON
7/11/2018	113191WA	NA	142279	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	34.33	34.33 TON
7/11/2018	113191WA	NA	142336	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	34.99	34.99 TON
7/11/2018	113191WA	NA	142274	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA1	25.94	25.94 TON
7/11/2018	113191WA	NA	142271	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	28.93	28.93 TON
7/11/2018	113191WA	NA	142270	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	27.35	27.35 TON
7/11/2018	113191WA	NA	142269	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	30.67	30.67 TON
7/11/2018	113191WA	NA	142266	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	27.93	27.93 TON

7/11/2018	113191WA	NA	142265	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	30.53	30.53	TON
7/11/2018	113191WA	NA	142335	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	31.23	31.23	TON
7/11/2018	113191WA	NA	142256	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE10	22.78	22.78	TON
7/11/2018	113191WA	NA	142255	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER44	25.17	25.17	TON
7/11/2018	113191WA	NA	142258	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	29.88	29.88	TON
7/11/2018	113191WA	NA	142257	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	28.78	28.78	TON
7/11/2018	113191WA	NA	142254	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	30.81	30.81	TON
7/11/2018	113191WA	NA	142333	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD6	27.17	27.17	TON
7/10/2018	113191WA	na	142242	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	35.68	35.68	TON
7/10/2018	113191WA	NA	142238	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	35.08	35.08	TON
7/10/2018	113191WA	NA	142231	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	32.73	32.73	TON
6/28/2018	113191WA	NA	142104	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	34.8	34.8	TON
6/28/2018	113191WA	NA	142102	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	33.98	33.98	TON
6/28/2018	113191WA	NA	142100	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	34.49	34.49	TON
6/28/2018	113191WA	NA	142098	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	33.35	33.35	TON
6/28/2018	113191WA	NA	142094	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD2	28.95	28.95	TON
6/28/2018	113191WA	NA	142092	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	34.22	34.22	TON
6/28/2018	113191WA	NA	142091	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	31.17	31.17	TON
6/28/2018	113191WA	NA	142090	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA1	20.85	20.85	TON
6/28/2018	113191WA	NA	142088	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	29.93	29.93	TON
6/28/2018	113191WA	NA	142087	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	28.93	28.93	TON
6/28/2018	113191WA	NA	142086	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	34.08	34.08	TON
6/28/2018	113191WA	NA	142085	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	37.64	37.64	TON
6/28/2018	113191WA	NA	142081	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD2	31.21	31.21	TON
6/28/2018	113191WA	NA	142079	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	30.48	30.48	TON
6/28/2018	113191WA	NA	142078	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	32.54	32.54	TON
6/28/2018	113191WA	NA	142076	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	30.56	30.56	TON
6/28/2018	113191WA	NA	142074	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	31.86	31.86	TON
6/28/2018	113191WA	NA	142073	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	30.39	30.39	TON
6/28/2018	113191WA	NA	142071	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	33.99	33.99	TON
6/28/2018	113191WA	NA	142065	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD2	28.72	28.72	TON
6/28/2018	113191WA	NA	142063	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	34.85	34.85	TON
6/28/2018	113191WA	NA	142062	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	34.99	34.99	TON
6/28/2018	113191WA	NA	142061	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	34.75	34.75	TON
6/28/2018	113191WA	NA	142059	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	31.02	31.02	TON
6/28/2018	113191WA	NA	142057	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	34.55	34.55	TON
6/28/2018	113191WA	NA	142055	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD2	25.51	25.51	TON
6/28/2018	113191WA	NA	142054	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	37.6	37.6	TON
6/28/2018	113191WA	NA	142050	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	29.91	29.91	TON
6/28/2018	113191WA	NA	142049	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	32.35	32.35	TON
6/28/2018	113191WA	NA	142044	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	38.09	38.09	TON
6/28/2018	113191WA	NA	142043	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	29.24	29.24	TON
6/28/2018	113191WA	NA	142040	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	36.58	36.58	TON
6/28/2018	113191WA	NA	142038	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	34.26	34.26	TON
6/28/2018	113191WA	NA	142037	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD2	28.39	28.39	TON
6/28/2018	113191WA	NA	142034	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	32.11	32.11	TON
6/28/2018	113191WA	NA	142033	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	33.86	33.86	TON
6/28/2018	113191WA	NA	142030	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	31.98	31.98	TON
6/28/2018	113191WA	NA	142028	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	23.75	23.75	TON
6/28/2018	113191WA	NA	142027	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD2	30.29	30.29	TON
6/28/2018	113191WA	NA	142026	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	34.42	34.42	TON
6/28/2018	113191WA	NA	142025	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	33.56	33.56	TON
6/27/2018	113191WA	NA	142018	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA1	25.8	25.8	TON
6/27/2018	113191WA	NA	142016	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	25.62	25.62	TON
6/27/2018	113191WA	NA	142014	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA1	21.55	21.55	TON
6/27/2018	113191WA	NA	142013	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	20.91	20.91	TON
6/27/2018	113191WA	NA	142006	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA1	24.83	24.83	TON
6/27/2018	113191WA	NA	142004	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	25.66	25.66	TON
6/27/2018	113191WA	NA	141989	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	36.84	36.84	TON
6/26/2018	113191WA	NA	141984	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	34.75	34.75	TON
6/26/2018	113191WA	NA	141983	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	40.27	40.27	TON
6/26/2018	113191WA	NA	141982	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	33.79	33.79	TON
6/26/2018	113191WA	NA	141981	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	38.43	38.43	TON
6/26/2018	113191WA	NA	141980	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD2	36.05	36.05	TON
6/26/2018	113191WA	NA	141978	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	35.52	35.52	TON
6/26/2018	113191WA	NA	141977	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	36.06	36.06	TON
6/26/2018	113191WA	NA	141976	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	25.9	25.9	TON
6/26/2018	113191WA	NA	141972	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA1	25.63	25.63	TON
6/26/2018	113191WA	NA	141975	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	37.79	37.79	TON
6/26/2018	113191WA	NA	141973	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	39.19	39.19	TON
6/26/2018	113191WA	NA	141971	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	37.14	37.14	TON
6/26/2018	113191WA	NA	141970	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	36.55	36.55	TON
6/26/2018	113191WA	NA	141969	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA04	17.77	17.77	TON
6/26/2018	113191WA	NA	141968	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD2	29.98	29.98	TON
6/26/2018	113191WA	NA	141967	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	36.84	36.84	TON
6/26/2018	113191WA	NA	141966	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	P3	27.52	27.52	TON
6/26/2018	113191WA	NA	141965	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	36.21	36.21	TON
6/26/2018	113191WA	NA	141964	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	33.52	33.52	TON
6/26/2018	113191WA	NA	141963	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	37.88	37.88	TON
6/26/2018	113191WA	NA	141960	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	32.61	32.61	TON
6/26/2018	113191WA	NA	141959	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	27.88	27.88	TON
6/26/2018	113191WA	NA	141958	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA04	13.41	13.41	TON
6/26/2018	113191WA	NA	141956	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	29.74	29.74	TON
6/26/2018	113191WA	NA	141955	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD2	27.56	27.56	TON
6/26/2018	113191WA	NA	141950	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	31.41	31.41	TON
6/26/2018	113191WA	NA	141951	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	33.47	33.47	TON
6/26/2018	113191WA	NA	141948	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	30.99	30.99	TON
6/26/2018	113191WA	NA	141946	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	29.79	29.79	TON
6/26/2018	113191WA	NA	141944	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	33.59	33.59	TON
6/26/2018	113191WA	NA	141941	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA04	17.68	17.68	TON
6/26/2018	113191WA	NA	141937	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	33.33	33.33	TON
6/26/2018	113191WA	NA	141947	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD2	28.78	28.78	TON
6/26/2018	113191WA	NA	141945	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER11	33.57	33.57	TON
6/26/2018	113191WA	NA	141943	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TRITON	33.56	33.56	TON
6/26/2018	113191WA	NA	141942	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	ACE9	36.49	36.49	TON
6/26/2018	113191WA	NA	141940	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	PONDEROSA04	17.67	17.67	TON
6/26/2018	113191WA	NA	141939	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	HAYTER2	32.9	32.9	TON
6/26/2018	113191WA	NA	141936	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	TIGER12	31.09	31.09	TON
6/26/2018	113191WA	NA	141938	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	T66	28.58	28.58	TON
6/26/2018	113191WA	NA	141933	LF02 - PAH- and arsenic-impacted soil	AK St Reload and Recycle Facility	*	WD2	28.27	28.27	TON
									13054.83	TON Total

Waste Management - Wet soil disposal

Date	Profile #	Manifest #	Ticket #	Waste	Facility	Carrier	Vehicle	Tons/Tonnes	Material Quantity	Material Unit	
1/28/2019	113192WA	NA	27218	LF02 PAH- and arsenic-impacted saturated soil	8th Avenue Facility	SELF	KW2	5.4	5.4	TON	
11/7/2018	113192WA	NA	25164	LF02 PAH- and arsenic-impacted saturated soil	8th Avenue Facility	SELF	KW2	4.88	4.88	TON	
11/7/2018	113192WA	NA	25163	LF02 PAH- and arsenic-impacted saturated soil	8th Avenue Facility	SELF	P19	2.12	2.12	TON	
11/7/2018	113192WA	NA	25144	LF02 PAH- and arsenic-impacted saturated soil	8th Avenue Facility	SELF	P19	5.21	5.21	TON	
9/28/2018	113192WA	NA	24047	LF02 PAH- and arsenic-impacted saturated soil	8th Avenue Facility	SELF	KW2	3.92	3.92	TON	
9/28/2018	113192WA	NA	24038	LF02 PAH- and arsenic-impacted saturated soil	8th Avenue Facility	SELF	KW2	8.57	8.57	TON	
7/18/2018	113192WA	NA	21021	LF02 PAH- and arsenic-impacted saturated soil	8th Avenue Facility	SELF	PV-425	7.4	7.4	TON	
									37.5	TON	Total

Waste Management - Concrete Export

Date	Profile #	Manifest #	Ticket #	Waste	Facility	Carrier	Vehicle	Tons/Tonnes	Material Quantity	Material Unit
1/11/2019	113435WA	113435wa	826585	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	26.2	26.2	TON
12/21/2018	113435WA	113435wa	825453	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		0	16.73	16.73	TON
12/19/2018	113435WA	113435wa	825300	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		10	24.42	24.42	TON
12/19/2018	113435WA	113435wa	825289	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		16	26.76	26.76	TON
9/12/2018	113435WA	113435wa	817828	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		52	28.29	28.29	TON
9/6/2018	113435WA	113435wa	816934	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		23	31.22	31.22	TON
9/6/2018	113435WA	113435wa	816933	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		22	32.83	32.83	TON
9/5/2018	113435WA	113435wa	816890	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF	ROCK BLINSKY TRUCKING	0	19.87	19.87	TON
9/5/2018	113435WA	113435wa	816878	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		75	26.83	26.83	TON
9/5/2018	113435WA	113435wa	816877	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		12	28.61	28.61	TON
8/14/2018	113435WA	113435wa	815195	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		101	25.47	25.47	TON
8/7/2018	113435WA	113435wa	814687	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		RL05	29.17	29.17	TON
8/6/2018	113435WA	113435wa	814478	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		75	27.68	27.68	TON
8/3/2018	113435WA	113435wa	814394	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		52	31.44	31.44	TON
8/3/2018	113435WA	113435wa	814371	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		75	27.31	27.31	TON
8/2/2018	113435WA	113435wa	814325	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		18	29.65	29.65	TON
8/2/2018	113435WA	113435wa	814243	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		71	30.64	30.64	TON
7/31/2018	113435WA	113435wa	813967	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		17	30.4	30.4	TON
7/31/2018	113435WA	113435wa	813965	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		18	31.91	31.91	TON
7/27/2018	113435WA	113435wa	813765	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		RL05	31.44	31.44	TON
7/27/2018	113435WA	113435wa	813752	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		6	29.31	29.31	TON
7/27/2018	113435WA	113435wa	813739	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		71	32.88	32.88	TON
7/27/2018	113435WA	113435wa	813695	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	33.59	33.59	TON
7/26/2018	113435WA	113435wa	813635	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		Purple	31.96	31.96	TON
7/26/2018	113435WA	113435wa	813620	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		6	30.5	30.5	TON
7/26/2018	113435WA	113435wa	813612	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	33.1	33.1	TON
7/26/2018	113435WA	113435wa	813605	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		71	33.02	33.02	TON
7/26/2018	113435WA	113435wa	813599	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		RL05	30.35	30.35	TON
7/25/2018	113435WA	113435wa	814030	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	33.32	33.32	TON
7/25/2018	113435WA	113435wa	813997	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		101	29.94	29.94	TON
7/25/2018	113435WA	113435wa	814029	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		6	29.73	29.73	TON
7/25/2018	113435WA	113435wa	813994	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		16	34.6	34.6	TON
7/25/2018	113435WA	113435wa	814027	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		0	27.2	27.2	TON
7/25/2018	113435WA	113435wa	813993	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	32.07	32.07	TON
7/24/2018	113435WA	113435wa	814026	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		6	25.7	25.7	TON
7/24/2018	113435WA	113435wa	813992	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		Purple	29.24	29.24	TON
7/24/2018	113435WA	113435wa	814025	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	32.3	32.3	TON
7/18/2018	113435WA	113435wa	813991	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		16	31.38	31.38	TON
7/18/2018	113435WA	113435wa	814024	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		18	31.4	31.4	TON
7/18/2018	113435WA	113435wa	813990	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		22	33.25	33.25	TON
7/18/2018	113435WA	113435wa	813692	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		17	33.53	33.53	TON
7/18/2018	113435WA	113435wa	814023	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		14	34.6	34.6	TON
7/18/2018	113435WA	113435wa	814022	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	31.7	31.7	TON
7/18/2018	113435WA	113435wa	813690	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		18	31.58	31.58	TON
7/18/2018	113435WA	113435wa	813689	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		16	32.78	32.78	TON
7/18/2018	113435WA	113435wa	814021	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		22	32.94	32.94	TON
7/17/2018	113435WA	113435wa	813688	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		18	35.14	35.14	TON
7/17/2018	113435WA	113435wa	814020	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		23	31.81	31.81	TON
7/17/2018	113435WA	113435wa	814019	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		16	35.62	35.62	TON
7/17/2018	113435WA	113435wa	813686	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		22	32.37	32.37	TON
7/17/2018	113435WA	113435wa	814018	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		71	32.43	32.43	TON
7/13/2018	113435WA	113435wa	813684	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		18	33.04	33.04	TON
7/13/2018	113435WA	113435wa	814017	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		16	27.91	27.91	TON
7/13/2018	113435WA	113435wa	813683	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		14	34.69	34.69	TON
7/13/2018	113435WA	113435wa	814015	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		RL05	30.24	30.24	TON
7/13/2018	113435WA	113435wa	813682	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		Purple	31.66	31.66	TON
7/13/2018	113435WA	113435wa	814014	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	32.04	32.04	TON
7/12/2018	113435WA	113435wa	813680	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		22	31.9	31.9	TON
7/12/2018	113435WA	113435wa	814013	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		23	33.19	33.19	TON
7/12/2018	113435WA	113435wa	813681	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		0	26.56	26.56	TON
7/12/2018	113435WA	113435wa	814012	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		71	32.51	32.51	TON
7/12/2018	113435WA	113435wa	813678	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		Purple	33.03	33.03	TON

7/12/2018	113435WA	113435wa	814010	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	32.74	32.74	TON
7/12/2018	113435WA	113435wa	813677	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF	RL05		30.03	30.03	TON
7/11/2018	113435WA	113435wa	814009	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	32.71	32.71	TON
7/11/2018	113435WA	113435wa	813675	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		106	29.93	29.93	TON
7/11/2018	113435WA	113435wa	814008	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF	Purple		27.68	27.68	TON
7/11/2018	113435WA	113435wa	813674	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		0	22.31	22.31	TON
7/10/2018	113435WA	113435wa	814007	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	31.23	31.23	TON
7/10/2018	113435WA	113435wa	813673	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		0	25.37	25.37	TON
7/10/2018	113435WA	113435	814006	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		23	32.65	32.65	TON
7/10/2018	113435WA	113435wa	813672	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF	RL-05		29.75	29.75	TON
7/5/2018	113435WA	113435wa	814005	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		3	29.26	29.26	TON
7/5/2018	113435WA	113435wa	813671	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		2	25.22	25.22	TON
7/5/2018	113435WA	113435wa	814004	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		0	24.13	24.13	TON
7/3/2018	113435WA	113435wa	813670	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		16	37.11	37.11	TON
7/3/2018	113435WA	113435wa	814003	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		18	33.39	33.39	TON
7/3/2018	113435WA	113435wa	813669	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		14	34.83	34.83	TON
7/3/2018	113435WA	113435wa	814000	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	32.84	32.84	TON
7/3/2018	113435WA	113435wa	813667	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		23	32.61	32.61	TON
7/3/2018	113435WA	113435wa	813998	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		22	34.04	34.04	TON
7/3/2018	113435WA	113435wa	813666	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		2	29.2	29.2	TON
6/27/2018	113435WA	113435wa	811339	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		2	27.8	27.8	TON
6/27/2018	113435WA	113435wa	811340	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		3	26.23	26.23	TON
6/26/2018	113435WA	113435wa	811303	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		22	32.84	32.84	TON
6/26/2018	113435WA	113435wa	811298	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		1	23.6	23.6	TON
6/26/2018	113435WA	113435wa	811294	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		3	28.41	28.41	TON
6/26/2018	113435WA	113435wa	811292	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		2	30.37	30.37	TON
6/26/2018	113435WA	113435wa	811291	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		17	32.76	32.76	TON
6/26/2018	113435WA	113435wa	811288	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		14	33.51	33.51	TON
6/26/2018	113435WA	113435wa	811287	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		52	29.77	29.77	TON
6/21/2018	113435WA	113435wa	810996	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		23	31.23	31.23	TON
6/21/2018	113435WA	113435wa	810995	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		6	25.1	25.1	TON
6/21/2018	113435WA	113435wa	810986	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		16	30.8	30.8	TON
6/21/2018	113435WA	113435wa	810983	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		14	30.58	30.58	TON
6/21/2018	113435WA	113435wa	810984	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		3	21.84	21.84	TON
6/21/2018	113435WA	113435wa	810981	LF01 - Concrete encrusted w/ PAH & arsenic impacted soil	Greater Wenatchee Regional LF		15	36.51	36.51	TON
									2941.36	TON

Total

Republic Services

tknumb	datein	timein	truk	cust	job	weii	weio	qty
962145	4/6/2018	11:56:00	7 PONDEROSA	333482	TB-4702	87500	41560	22.97
962149	4/6/2018	13:08:00	5 PONDEROSA	333482	TB-4702	55360	26720	14.32
962150	4/6/2018	13:14:00	04 PONDEROSA	333482	TB-4702	96200	44000	26.1
962151	4/6/2018	13:19:00	7 PONDEROSA	333482	TB-4702	91820	40200	25.81
962223	4/10/2018	08:41:00	04 PONDEROSA	333482	TB-4702	58680	29480	14.6
962344	4/13/2018	09:18:00	04 PONDEROSA	333482	TB-4702	106500	45320	30.59
962350	4/13/2018	10:45:00	04 PONDEROSA	333482	TB-4702	115820	46920	34.45
962354	4/13/2018	12:28:00	04 PONDEROSA	333482	TB-4702	98060	46300	25.88
962358	4/13/2018	13:51:00	6 PONDEROSA	333482	TB-4702	54320	23540	15.39
962359	4/13/2018	14:02:00	04 PONDEROSA	333482	TB-4702	102680	46320	28.18
962360	4/13/2018	15:01:00	6 PONDEROSA	333482	TB-4702	54780	23600	15.59
962488	4/18/2018	11:16:00	6 PONDEROSA	333482	TB-4702	63340	25320	19.01
962493	4/18/2018	13:01:00	6 PONDEROSA	333482	TB-4702	61380	25160	18.11
962507	4/19/2018	07:56:00	7 PONDEROSA	333482	TB-4702	99500	37760	30.87
962508	4/19/2018	09:31:00	7 PPI	333482	TB-4702	100980	38180	31.4
962511	4/19/2018	11:12:00	7 PPI	333482	TB-4702	91820	37860	26.98
962516	4/19/2018	12:59:00	7 PPI	333482	TB-4702	95160	37800	28.68
962519	4/19/2018	14:19:00	7 PPI	333482	TB-4702	93580	37920	27.83
962534	4/20/2018	08:12:00	6 PONDEROSA	333482	TB-4702	48080	23820	12.13
962535	4/20/2018	09:14:00	6 PONDEROSA	333482	TB-4702	52700	23880	14.41
962537	4/20/2018	10:33:00	6 PONDEROSA	333482	TB-4702	52060	23860	14.1
962633	4/24/2018	14:28:00	6 PONDEROSA	333482	TB-4702	54840	24040	15.4
962646	4/25/2018	08:22:00	6 PONDEROSA	333482	TB-4702	46200	23980	11.11
962651	4/25/2018	09:37:00	6 PONDEROSA	333482	TB-4702	50720	23920	13.4
962653	4/25/2018	10:42:00	6 PONDEROSA	333482	TB-4702	49880	23900	12.99
962662	4/25/2018	12:16:00	6 PONDEROSA	333482	TB-4702	50740	24160	13.29
962667	4/25/2018	13:36:00	6 PONDEROSA	333482	TB-4702	54100	24120	14.99
962673	4/25/2018	14:34:00	6 PONDEROSA	333482	TB-4702	58060	24100	16.98
962688	4/26/2018	07:31:00	6 PONDEROSA	333482	TB-4702	48340	24020	12.16
962691	4/26/2018	08:51:00	6 PONDEROSA	333482	TB-4702	51500	23940	13.78
962694	4/26/2018	10:06:00	6 PONDEROSA	333482	TB-4702	53260	23880	14.69
962698	4/26/2018	11:48:00	6 PONDEROSA	333482	TB-4702	53340	23920	14.71
962703	4/26/2018	12:51:00	6 PONDEROSA	333482	TB-4702	50860	23860	13.5
962706	4/26/2018	14:37:00	6 PONDEROSA	333482	TB-4702	52060	23820	14.12
962728	4/27/2018	07:50:00	6 PONDEROSA	333482	TB-4702	49700	23740	12.98
962733	4/27/2018	09:14:00	6 PONDEROSA	333482	TB-4702	51540	23780	13.88
962738	4/27/2018	10:22:00	6 PONDEROSA	333482	TB-4702	50980	23720	13.63
962742	4/27/2018	11:47:00	6 PONDEROSA	333482	TB-4702	53040	23940	14.55
962745	4/27/2018	12:57:00	6 PONDEROSA	333482	TB-4702	50860	23980	13.44
962762	4/30/2018	07:48:00	6 PONDEROSA	333482	TB-4702	51940	23980	13.98
962768	4/30/2018	09:25:00	6 PONDEROSA	333482	TB-4702	50980	23920	13.53
962771	4/30/2018	10:31:00	6 PONDEROSA	333482	TB-4702	51780	23900	13.94
962773	4/30/2018	11:34:00	6 PONDEROSA	333482	TB-4702	49640	23900	12.87
962778	4/30/2018	12:31:00	6 PONDEROSA	333482	TB-4702	53760	23900	14.93
962796	5/1/2018	07:35:00	6 PONDEROSA	333482	TB-4702	47760	24040	11.86
963149	5/10/2018	09:07:00	6 PONDEROSA	333482	TB-4702	54200	23700	15.25
963157	5/10/2018	10:17:00	6 PONDEROSA	333482	TB-4702	54260	23700	15.28
963165	5/10/2018	11:28:00	6 PONDEROSA	333482	TB-4702	55160	23680	15.74
963171	5/10/2018	12:25:00	6 PONDEROSA	333482	TB-4702	58100	23620	17.24
963178	5/10/2018	14:04:00	6 PONDEROSA	333482	TB-4702	50620	23580	13.52
963198	5/11/2018	08:04:00	6 PONDEROSA	333482	TB-4702	50760	23700	13.53
963203	5/11/2018	09:26:00	6 PONDEROSA	333482	TB-4702	57880	23660	17.11
963212	5/11/2018	10:32:00	6 PONDEROSA	333482	TB-4702	55120	23640	15.74

963219	5/11/2018	11:31:00	04 PONDEROSA	333482	TB-4702	106320	39520	33.4
963223	5/11/2018	11:59:00	6 PONDEROSA	333482	TB-4702	55460	23660	15.9
963253	5/14/2018	08:21:00	6 PONDEROSA	333482	TB-4702	53000	23740	14.63
963266	5/14/2018	09:38:00	04 PONDEROSA	333482	TB-4702	97440	39360	29.04
963273	5/14/2018	09:50:00	6 PONDEROSA	333482	TB-4702	51940	23720	14.11
963299	5/14/2018	11:29:00	6 PONDEROSA	333482	TB-4702	52720	23700	14.51
963304	5/14/2018	11:53:00	04 PONDEROSA	333482	TB-4702	102780	39440	31.67
963319	5/14/2018	13:18:00	6 PONDEROSA	333482	TB-4702	48220	23640	12.29
963326	5/14/2018	14:03:00	04 PONDEROSA	333482	TB-4702	101480	39440	31.02
963330	5/14/2018	14:32:00	6 PONDEROSA	333482	TB-4702	55100	23640	15.73
963350	5/15/2018	07:58:00	6 PONDEROSA	333482	TB-4702	48780	23600	12.59
963357	5/15/2018	09:20:00	6 PONDEROSA	333482	TB-4702	48920	23560	12.68
963366	5/15/2018	11:04:00	6 PONDEROSA	333482	TB-4702	46240	23560	11.34
963370	5/15/2018	12:09:00	6 PONDEROSA	333482	TB-4702	48160	23520	12.32
963372	5/15/2018	13:08:00	6 PONDEROSA	333482	TB-4702	46820	23500	11.66
963376	5/15/2018	14:14:00	6 PONDEROSA	333482	TB-4702	50740	23500	13.62
963391	5/16/2018	09:24:00	7 PONDEROSA	333482	TB-4702	53160	26000	13.58
963393	5/16/2018	09:57:00	6 PONDEROSA	333482	TB-4702	50300	23660	13.32
963394	5/16/2018	10:46:00	7 PONDEROSA	333482	TB-4702	56860	26060	15.4
963395	5/16/2018	11:11:00	6 PONDEROSA	333482	TB-4702	53040	23660	14.69
963399	5/16/2018	12:23:00	6 PONDEROSA	333482	TB-4702	51860	23640	14.11
963400	5/16/2018	12:36:00	7 PONDEROSA	333482	TB-4702	54780	25840	14.47
963404	5/16/2018	13:28:00	6 PONDEROSA	333482	TB-4702	51760	23600	14.08
963422	5/16/2018	14:53:00	6 PONDEROSA	333482	TB-4702	51280	23600	13.84
963432	5/17/2018	08:17:00	6 PONDEROSA	333482	TB-4702	54980	23740	15.62
963436	5/17/2018	09:48:00	6 PONDEROSA	333482	TB-4702	55280	23720	15.78
963438	5/17/2018	10:03:00	7 PONDEROSA	333482	TB-4702	57360	25480	15.94
963442	5/17/2018	10:51:00	6 PONDEROSA	333482	TB-4702	53280	23680	14.8
963447	5/17/2018	11:17:00	7 PONDEROSA	333482	TB-4702	57980	25500	16.24
963449	5/17/2018	12:01:00	6 PONDEROSA	333482	TB-4702	54300	23520	15.39
963451	5/17/2018	12:35:00	7 PONDEROSA	333482	TB-4702	58480	25520	16.48
963452	5/17/2018	13:00:00	6 PONDEROSA	333482	TB-4702	51680	23480	14.1
963459	5/17/2018	14:26:00	6 PONDEROSA	333482	TB-4702	51160	23460	13.85
963471	5/18/2018	08:00:00	6 PONDEROSA	333482	TB-4702	54480	23540	15.47
963474	5/18/2018	09:30:00	6 PONDEROSA	333482	TB-4702	54460	23520	15.47
963476	5/18/2018	09:31:00	04 PONDEROSA	333482	TB-4702	103040	39720	31.66
963485	5/18/2018	11:16:00	6 PONDEROSA	333482	TB-4702	56540	23520	16.51
963488	5/18/2018	11:37:00	04 PONDEROSA	333482	TB-4702	106120	39660	33.23
963492	5/18/2018	12:20:00	6 PONDEROSA	333482	TB-4702	56620	23180	16.72
963496	5/18/2018	14:08:00	6 PONDEROSA	333482	TB-4702	55960	23480	16.24
963520	5/21/2018	08:29:00	6 PONDEROSA	333482	TB-4702	52080	23780	14.15
963532	5/21/2018	10:05:00	6 PONDEROSA	333482	TB-4702	49740	23740	13
963542	5/21/2018	11:28:00	6 PONDEROSA	333482	TB-4702	52660	23720	14.47
963548	5/21/2018	12:27:00	6 PONDEROSA	333482	TB-4702	52680	23700	14.49
963570	5/21/2018	13:43:00	6 PONDEROSA	333482	TB-4702	49980	23680	13.15
963752	5/25/2018	07:47:00	6 PONDEROSA	333482	TB-4702	51720	23560	14.08
963759	5/25/2018	08:57:00	6 PONDEROSA	333482	TB-4702	52080	23540	14.27
963766	5/25/2018	09:55:00	6 PONDEROSA	333482	TB-4702	48440	23500	12.47
963775	5/25/2018	13:30:00	6 PONDEROSA	333482	TB-4702	51320	23380	13.97
963792	5/29/2018	07:57:00	04 PONDEROSA	333482	TB-4702	100380	37800	31.29
963798	5/29/2018	10:08:00	04 PONDEROSA	333482	TB-4702	96500	37740	29.38
963803	5/29/2018	12:37:00	04 PONDEROSA	333482	TB-4702	94560	37700	28.43
963984	6/1/2018	12:31:00	7 PONDEROSA	333482	TB-4702	58440	25780	16.33
963989	6/1/2018	13:56:00	7 PONDEROSA	333482	TB-4702	57820	25780	16.02
964021	6/4/2018	08:29:00	7 PONDEROSA	333482	TB-4702	56860	25980	15.44
964032	6/4/2018	10:01:00	7 PONDEROSA	333482	TB-4702	54120	25980	14.07

964108	6/5/2018	10:18:00	7 PONDEROSA	333482	TB-4702	54880	26700	14.09
964122	6/5/2018	11:52:00	7 PONDEROSA	333482	TB-4702	55120	26700	14.21
964137	6/5/2018	13:43:00	7 PONDEROSA	333482	TB-4702	54300	26700	13.8
964173	6/6/2018	08:19:00	7 PONDEROSA	333482	TB-4702	59160	25800	16.68
964174	6/6/2018	08:37:00	C750 TRITON	333482	TB-4702	104600	40460	32.07
964179	6/6/2018	09:59:00	7 PONDEROSA	333482	TB-4702	55800	25800	15
964181	6/6/2018	09:51:00	04 PONDEROSA	333482	TB-4702	99600	37980	30.81
964187	6/6/2018	10:29:00	C750 TRITON	333482	TB-4702	115580	40180	37.7
964193	6/6/2018	11:33:00	04 PONDEROSA	333482	TB-4702	102220	37980	32.12
964195	6/6/2018	12:06:00	7 PONDEROSA	333482	TB-4702	58040	25800	16.12
964198	6/6/2018	12:12:00	C750 TRITON	333482	TB-4702	86900	40180	23.36
964201	6/6/2018	12:57:00	04 PONDEROSA	333482	TB-4702	92520	37980	27.27
964204	6/6/2018	13:47:00	C750 TRITON	333482	TB-4702	101700	40180	30.76
964209	6/6/2018	15:25:00	C750 TRITON	333482	TB-4702	108260	40180	34.04
964233	6/7/2018	07:40:00	C750 TRITON	333482	TB-4702	113160	40520	36.32
964237	6/7/2018	08:23:00	04 PONDEROSA	333482	TB-4702	86860	37620	24.62
964243	6/7/2018	09:28:00	C750 TRITON	333482	TB-4702	110520	40520	35
964257	6/7/2018	11:06:00	C750 TRITON	333482	TB-4702	106000	40520	32.74
964269	6/7/2018	12:56:00	C750 TRITON	333482	TB-4702	108900	40520	34.19
964276	6/7/2018	14:35:00	C750 TRITON	333482	TB-4702	108620	40520	34.05
964292	6/8/2018	07:32:00	04 PONDEROSA	333482	TB-4702	93980	38000	27.99
964293	6/8/2018	07:47:00	C750 TRITON	333482	TB-4702	105880	40720	32.58
964299	6/8/2018	08:59:00	04 PONDEROSA	333482	TB-4702	93180	38000	27.59
964301	6/8/2018	09:21:00	C750 TRITON	333482	TB-4702	107220	40720	33.25
964312	6/8/2018	11:03:00	C750 TRITON	333482	TB-4702	105120	40720	32.2
964323	6/8/2018	12:35:00	C750 TRITON	333482	TB-4702	102160	40720	30.72
964330	6/8/2018	14:25:00	C750 TRITON	333482	TB-4702	106140	40720	32.71
964331	6/8/2018	14:48:00	04 PONDEROSA	333482	TB-4702	86780	38000	24.39
964353	6/11/2018	08:05:00	04 PONDEROSA	333482	TB-4702	102340	37840	32.25
964356	6/11/2018	08:49:00	C750 TRITON	333482	TB-4702	114300	40760	36.77
964357	6/11/2018	09:24:00	04 PONDEROSA	333482	TB-4702	99580	37840	30.87
964359	6/11/2018	10:21:00	C750 TRITON	333482	TB-4702	111500	40760	35.37
964361	6/11/2018	11:03:00	04 PONDEROSA	333482	TB-4702	95740	37840	28.95
964362	6/11/2018	11:46:00	C750 TRITON	333482	TB-4702	104060	40760	31.65
964369	6/11/2018	13:09:00	C750 TRITON	333482	TB-4702	115580	40760	37.41
964373	6/11/2018	14:39:00	C750 TRITON	333482	TB-4702	112500	40760	35.87
964394	6/12/2018	08:30:00	04 PONDEROSA	333482	TB-4702	98480	38000	30.24
964408	6/12/2018	10:05:00	04 PONDEROSA	333482	TB-4702	102800	38000	32.4
964423	6/12/2018	11:34:00	04 PONDEROSA	333482	TB-4702	100220	38000	31.11
964429	6/12/2018	13:08:00	04 PONDEROSA	333482	TB-4702	102960	38000	32.48
964660	6/15/2018	11:38:00	04 PONDEROSA	333482	TB-4702	97180	37720	29.73
964671	6/15/2018	14:10:00	04 PONDEROSA	333482	TB-4702	84380	37720	23.33
964707	6/18/2018	07:54:00	C750 TRITON	333482	TB-4702	105120	40180	32.47
964710	6/18/2018	09:33:00	C750 TRITON	333482	TB-4702	109480	40180	34.65
964721	6/18/2018	11:38:00	C750 TRITON	333482	TB-4702	98980	40180	29.4
964760	6/19/2018	08:25:00	C750 TRITON	333482	TB-4702	112060	40180	35.94
964766	6/19/2018	10:24:00	C750 TRITON	333482	TB-4702	113880	40180	36.85
964774	6/19/2018	12:16:00	C750 TRITON	333482	TB-4702	109440	40180	34.63
964791	6/19/2018	14:14:00	C750 TRITON	333482	TB-4702	92780	40180	26.3
964817	6/20/2018	08:35:00	C750 TRITON	333482	TB-4702	99540	40060	29.74
964818	6/20/2018	08:47:00	04 PONDEROSA	333482	TB-4702	62460	26560	17.95
964824	6/20/2018	10:10:00	04 PONDEROSA	333482	TB-4702	65740	26560	19.59
964828	6/20/2018	10:39:00	C750 TRITON	333482	TB-4702	104500	40060	32.22
964836	6/20/2018	12:00:00	04 PONDEROSA	333482	TB-4702	66680	26560	20.06
964840	6/20/2018	12:28:00	C750 TRITON	333482	TB-4702	110280	40060	35.11
964844	6/20/2018	13:17:00	04 PONDEROSA	333482	TB-4702	64920	26560	19.18

964847	6/20/2018	13:59:00	C750 TRITON	333482	TB-4702	103720	40060	31.83
964850	6/20/2018	14:40:00	04 PONDEROSA	333482	TB-4702	63720	26560	18.58
964854	6/20/2018	15:53:00	C750 TRITON	333482	TB-4702	107680	40060	33.81
964876	6/21/2018	08:07:00	04 PONDEROSA	333482	TB-4702	59280	26500	16.39
964879	6/21/2018	08:40:00	C750 TRITON	333482	TB-4702	102500	39860	31.32
964882	6/21/2018	09:33:00	04 PONDEROSA	333482	TB-4702	59240	26500	16.37
964885	6/21/2018	10:17:00	C750 TRITON	333482	TB-4702	96340	39860	28.24
964887	6/21/2018	10:37:00	04 PONDEROSA	333482	TB-4702	60300	26500	16.9
964889	6/21/2018	11:42:00	C750 TRITON	333482	TB-4702	110820	39860	35.48
964890	6/21/2018	11:48:00	04 PONDEROSA	333482	TB-4702	60440	26500	16.97
964897	6/21/2018	13:03:00	04 PONDEROSA	333482	TB-4702	62060	26500	17.78
964899	6/21/2018	13:40:00	C750 TRITON	333482	TB-4702	107240	39860	33.69
964901	6/21/2018	14:34:00	04 PONDEROSA	333482	TB-4702	60160	26500	16.83
964906	6/21/2018	15:12:00	C750 TRITON	333482	TB-4702	120180	39860	40.16
964920	6/22/2018	07:42:00	C750 TRITON	333482	TB-4702	115480	40060	37.71
964921	6/22/2018	07:50:00	04 PONDEROSA	333482	TB-4702	60540	26340	17.1
964922	6/22/2018	07:48:00	10 ACE CONSTRUCTION	333482	TB-4702	98700	36700	31
964924	6/22/2018	08:17:00	2 HAYTER	333482	TB-4702	108940	37140	35.9
964927	6/22/2018	08:40:00	11 TIGER EXCAVATION	333482	TB-4702	105520	42560	31.48
964928	6/22/2018	08:34:00	66 TIGER EXCAVATION	333482	TB-4702	103720	39460	32.13
964929	6/22/2018	09:01:00	04 PONDEROSA	333482	TB-4702	60560	26340	17.11
964931	6/22/2018	09:14:00	C750 TRITON	333482	TB-4702	109200	40060	34.57
964933	6/22/2018	09:07:00	10 ACE CONSTRUCTION	333482	TB-4702	89480	36660	26.41
964937	6/22/2018	09:54:00	2 HAYTER	333482	TB-4702	109940	37140	36.4
964938	6/22/2018	10:03:00	04 PONDEROSA	333482	TB-4702	58540	26340	16.1
964941	6/22/2018	10:19:00	11 TIGER EXCAVATION	333482	TB-4702	105160	42560	31.3
964942	6/22/2018	10:32:00	66 TIGER EXCAVATION	333482	TB-4702	108440	39460	34.49
964944	6/22/2018	10:43:00	10 ACE CONSTRUCTION	333482	TB-4702	91060	36660	27.2
964947	6/22/2018	11:06:00	C750 TRITON	333482	TB-4702	109240	40060	34.59
964948	6/22/2018	11:13:00	04 PONDEROSA	333482	TB-4702	57140	26340	15.4
964949	6/22/2018	11:29:00	2 HAYTER	333482	TB-4702	95880	37140	29.37
964957	6/22/2018	12:10:00	11 TIGER EXCAVATION	333482	TB-4702	98440	42560	27.94
964958	6/22/2018	12:21:00	66 TIGER EXCAVATION	333482	TB-4702	95560	39460	28.05
964959	6/22/2018	12:23:00	10 ACE CONSTRUCTION	333482	TB-4702	83860	36660	23.6
964960	6/22/2018	12:26:00	04 PONDEROSA	333482	TB-4702	53900	26340	13.78
964961	6/22/2018	12:31:00	C750 TRITON	333482	TB-4702	99920	40060	29.93
964964	6/22/2018	12:51:00	2 HAYTER	333482	TB-4702	94300	37140	28.58
964967	6/22/2018	13:30:00	11 TIGER EXCAVATION	333482	TB-4702	97900	42560	27.67
964968	6/22/2018	13:47:00	10 ACE CONSTRUCTION	333482	TB-4702	75340	36660	19.34
964969	6/22/2018	13:48:00	04 PONDEROSA	333482	TB-4702	51380	26340	12.52
964970	6/22/2018	13:50:00	66 TIGER EXCAVATION	333482	TB-4702	91620	39460	26.08
964971	6/22/2018	14:04:00	C750 TRITON	333482	TB-4702	94320	40060	27.13
964973	6/22/2018	14:22:00	2 HAYTER	333482	TB-4702	92900	37140	27.88
964975	6/22/2018	15:17:00	10 ACE CONSTRUCTION	333482	TB-4702	72700	36660	18.02
964976	6/22/2018	15:20:00	11 TIGER EXCAVATION	333482	TB-4702	93860	42560	25.65
964977	6/22/2018	15:21:00	04 PONDEROSA	333482	TB-4702	49740	26340	11.7
964978	6/22/2018	15:28:00	66 TIGER EXCAVATION	333482	TB-4702	89960	39460	25.25
964979	6/22/2018	15:45:00	C750 TRITON	333482	TB-4702	97580	40060	28.76
964994	6/25/2018	07:28:00	C750 TRITON	333482	TB-4702	108740	40160	34.29
964998	6/25/2018	07:56:00	11 TIGER EXCAVATION	333482	TB-4702	112060	42580	34.74
965000	6/25/2018	08:19:00	2 HAYTER	333482	TB-4702	109620	37140	36.24
965002	6/25/2018	08:22:00	9 ACE	333482	TB-4702	115540	38760	38.39
965005	6/25/2018	08:54:00	66 TIGER EXCAVATION	333482	TB-4702	115960	39700	38.13
965006	6/25/2018	09:12:00	C750 TRITON	333482	TB-4702	108580	40160	34.21
965007	6/25/2018	09:00:00	12 TIGER EXCAVATION	333482	TB-4702	110120	40920	34.6
965009	6/25/2018	09:10:00	2 WE DO DIRT	333482	TB-4702	99360	36740	31.31

965011	6/25/2018	09:36:00	11 TIGER EXCAVATION	333482	TB-4702	113320	42580	35.37
965013	6/25/2018	09:47:00	2 HAYTER	333482	TB-4702	101160	37140	32.01
965015	6/25/2018	09:53:00	9 ACE	333482	TB-4702	105520	38760	33.38
965018	6/25/2018	10:11:00	66 TIGER EXCAVATION	333482	TB-4702	90760	39700	25.53
965024	6/25/2018	10:40:00	12 TIGER EXCAVATION	333482	TB-4702	90980	40920	25.03
965025	6/25/2018	10:49:00	C750 TRITON	333482	TB-4702	92340	40160	26.09
965027	6/25/2018	10:59:00	2 WE DO DIRT	333482	TB-4702	80700	36740	21.98
965028	6/25/2018	11:04:00	11 TIGER EXCAVATION	333482	TB-4702	94460	42580	25.94
965031	6/25/2018	11:15:00	2 HAYTER	333482	TB-4702	97520	37140	30.19
965034	6/25/2018	11:20:00	9 ACE	333482	TB-4702	90820	38760	26.03
965036	6/25/2018	11:30:00	66 TIGER EXCAVATION	333482	TB-4702	96520	39700	28.41
965039	6/25/2018	11:48:00	12 TIGER EXCAVATION	333482	TB-4702	94220	40920	26.65
965044	6/25/2018	12:25:00	2 WE DO DIRT	333482	TB-4702	86780	36740	25.02
965045	6/25/2018	12:28:00	11 TIGER EXCAVATION	333482	TB-4702	101620	42580	29.52
965048	6/25/2018	12:43:00	2 HAYTER	333482	TB-4702	100960	37140	31.91
965049	6/25/2018	12:44:00	C750 TRITON	333482	TB-4702	94160	40160	27
965050	6/25/2018	12:51:00	9 ACE	333482	TB-4702	94840	38760	28.04
965051	6/25/2018	12:54:00	66 TIGER EXCAVATION	333482	TB-4702	90160	39700	25.23
965054	6/25/2018	13:08:00	12 TIGER EXCAVATION	333482	TB-4702	102740	40920	30.91
965056	6/25/2018	13:30:00	2 WE DO DIRT	333482	TB-4702	98080	36740	30.67
965058	6/25/2018	13:41:00	11 TIGER EXCAVATION	333482	TB-4702	104180	42580	30.8
965059	6/25/2018	14:04:00	2 HAYTER	333482	TB-4702	105540	37140	34.2
965061	6/25/2018	14:06:00	04 PONDEROSA	333482	TB-4702	56220	26420	14.9
965062	6/25/2018	14:23:00	C750 TRITON	333482	TB-4702	104380	40160	32.11
965063	6/25/2018	14:34:00	9 ACE	333482	TB-4702	113800	38760	37.52
965064	6/25/2018	14:45:00	66 TIGER EXCAVATION	333482	TB-4702	101840	39700	31.07
965065	6/25/2018	15:02:00	12 TIGER EXCAVATION	333482	TB-4702	104380	40920	31.73
965066	6/25/2018	15:16:00	11 TIGER EXCAVATION	333482	TB-4702	110140	42580	33.78
965067	6/25/2018	15:21:00	2 WE DO DIRT	333482	TB-4702	92580	36740	27.92
965068	6/25/2018	15:31:00	2 HAYTER	333482	TB-4702	95740	37140	29.3
965071	6/26/2018	07:15:00	C750 TRITON	333482	TB-4702	109580	40140	34.72
965073	6/26/2018	07:38:00	11 TIGER EXCAVATION	333482	TB-4702	102000	42560	29.72
965074	6/26/2018	07:54:00	9 ACE	333482	TB-4702	99920	39140	30.39
965119	6/26/2018	15:40:00	C750 TRITON	333482	TB-4702	115020	40140	37.44
965136	6/27/2018	07:12:00	C750 TRITON	333482	TB-4702	115220	40260	37.48
965137	6/27/2018	07:18:00	11 TIGER EXCAVATION	333482	TB-4702	112460	42480	34.99
965138	6/27/2018	07:36:00	2 HAYTER	333482	TB-4702	113620	37280	38.17
965139	6/27/2018	07:55:00	66 TIGER EXCAVATION	333482	TB-4702	107080	39400	33.84
965140	6/27/2018	08:00:00	12 TIGER EXCAVATION	333482	TB-4702	104260	40920	31.67
965144	6/27/2018	08:35:00	11 TIGER EXCAVATION	333482	TB-4702	112800	42480	35.16
965146	6/27/2018	08:54:00	C750 TRITON	333482	TB-4702	114280	40260	37.01
965148	6/27/2018	09:16:00	2 HAYTER	333482	TB-4702	101720	37280	32.22
965149	6/27/2018	09:03:00	9 ACE	333482	TB-4702	108780	39060	34.86
965150	6/27/2018	09:05:00	2 WE DO DIRT	333482	TB-4702	95940	36760	29.59
965153	6/27/2018	09:25:00	66 TIGER EXCAVATION	333482	TB-4702	104620	39400	32.61
965158	6/27/2018	09:36:00	12 TIGER EXCAVATION	333482	TB-4702	104400	40920	31.74
965160	6/27/2018	10:00:00	11 TIGER EXCAVATION	333482	TB-4702	108420	42480	32.97
965162	6/27/2018	10:19:00	C750 TRITON	333482	TB-4702	110920	40260	35.33
965165	6/27/2018	10:29:00	9 ACE	333482	TB-4702	112520	39060	36.73
965166	6/27/2018	10:32:00	2 WE DO DIRT	333482	TB-4702	100340	36760	31.79
965169	6/27/2018	10:46:00	2 HAYTER	333482	TB-4702	108340	37280	35.53
965172	6/27/2018	10:54:00	66 TIGER EXCAVATION	333482	TB-4702	97760	39400	29.18
965173	6/27/2018	10:57:00	12 TIGER EXCAVATION	333482	TB-4702	102240	40920	30.66
965175	6/27/2018	11:06:00	11 TIGER EXCAVATION	333482	TB-4702	109940	42480	33.73
965180	6/27/2018	11:42:00	9 ACE	333482	TB-4702	99800	39060	30.37
965181	6/27/2018	11:43:00	2 WE DO DIRT	333482	TB-4702	84360	36760	23.8

965183	6/27/2018	12:01:00	2 HAYTER	333482	TB-4702	101040	37280	31.88
965185	6/27/2018	12:21:00	C750 TRITON	333482	TB-4702	104140	40260	31.94
965187	6/27/2018	12:27:00	66 TIGER EXCAVATION	333482	TB-4702	101380	39400	30.99
965189	6/27/2018	12:30:00	12 TIGER EXCAVATION	333482	TB-4702	99220	40920	29.15
965190	6/27/2018	12:31:00	11 TIGER EXCAVATION	333482	TB-4702	108700	42480	33.11
965193	6/27/2018	12:50:00	9 ACE	333482	TB-4702	108000	39060	34.47
965196	6/27/2018	13:06:00	2 WE DO DIRT	333482	TB-4702	93120	36760	28.18
965198	6/27/2018	13:19:00	2 HAYTER	333482	TB-4702	99440	37280	31.08
965202	6/27/2018	13:41:00	C750 TRITON	333482	TB-4702	105560	40260	32.65
965203	6/27/2018	13:43:00	11 TIGER EXCAVATION	333482	TB-4702	107340	42480	32.43
965205	6/27/2018	13:50:00	66 TIGER EXCAVATION	333482	TB-4702	99640	39400	30.12
965206	6/27/2018	13:58:00	12 TIGER EXCAVATION	333482	TB-4702	106040	40920	32.56
965207	6/27/2018	14:00:00	9 ACE	333482	TB-4702	111620	39060	36.28
965210	6/27/2018	14:18:00	2 WE DO DIRT	333482	TB-4702	99220	36760	31.23
965213	6/27/2018	14:40:00	2 HAYTER	333482	TB-4702	112440	37280	37.58
965216	6/27/2018	15:08:00	11 TIGER EXCAVATION	333482	TB-4702	113140	42480	35.33
965217	6/27/2018	15:10:00	66 TIGER EXCAVATION	333482	TB-4702	101360	39400	30.98
965218	6/27/2018	15:12:00	C750 TRITON	333482	TB-4702	114940	40260	37.34
965219	6/27/2018	15:26:00	9 ACE	333482	TB-4702	97180	39060	29.06
965222	6/27/2018	15:34:00	12 TIGER EXCAVATION	333482	TB-4702	108740	40920	33.91
965301	7/2/2018	07:35:00	C750 TRITON	333482	TB-4702	120320	40420	39.95
965302	7/2/2018	07:22:00	12 TIGER EXCAVATION	333482	TB-4702	119920	41020	39.45
965303	7/2/2018	07:32:00	11 TIGER EXCAVATION	333482	TB-4702	123420	42340	40.54
965304	7/2/2018	07:42:00	66 TIGER EXCAVATION	333482	TB-4702	116260	37200	39.53
965305	7/2/2018	07:45:00	44 TIGER EXCAVATING	333482	TB-4702	113620	41920	35.85
965306	7/2/2018	07:53:00	2 HAYTER	333482	TB-4702	110960	37280	36.84
965308	7/2/2018	08:04:00	6 WE DO DIRT	333482	TB-4702	112640	40860	35.89
965312	7/2/2018	08:13:00	57 WE DO DIRT	333482	TB-4702	109100	40060	34.52
965313	7/2/2018	08:20:00	04 PONDEROSA	333482	TB-4702	57400	26320	15.54
965317	7/2/2018	08:59:00	12 TIGER EXCAVATION	333482	TB-4702	96000	41020	27.49
965318	7/2/2018	09:04:00	11 TIGER EXCAVATION	333482	TB-4702	96400	42340	27.03
965320	7/2/2018	08:50:00	2 WE DO DIRT	333482	TB-4702	92220	31420	30.4
965321	7/2/2018	09:16:00	66 TIGER EXCAVATION	333482	TB-4702	85340	37200	24.07
965323	7/2/2018	09:28:00	44 TIGER EXCAVATING	333482	TB-4702	92840	41920	25.46
965324	7/2/2018	09:35:00	2 HAYTER	333482	TB-4702	88840	37280	25.78
965325	7/2/2018	09:43:00	6 WE DO DIRT	333482	TB-4702	87560	40860	23.35
965326	7/2/2018	09:57:00	57 WE DO DIRT	333482	TB-4702	82120	40060	21.03
965327	7/2/2018	09:58:00	04 PONDEROSA	333482	TB-4702	53140	26320	13.41
965334	7/2/2018	10:42:00	44 TIGER EXCAVATING	333482	TB-4702	84980	41920	21.53
965335	7/2/2018	10:59:00	2 HAYTER	333482	TB-4702	83900	37280	23.31
965337	7/2/2018	11:09:00	6 WE DO DIRT	333482	TB-4702	88080	40860	23.61
965338	7/2/2018	11:19:00	57 WE DO DIRT	333482	TB-4702	87140	40060	23.54
965340	7/2/2018	11:30:00	04 PONDEROSA	333482	TB-4702	53660	26320	13.67
965343	7/2/2018	11:57:00	44 TIGER EXCAVATING	333482	TB-4702	92140	41920	25.11
965344	7/2/2018	12:08:00	2 HAYTER	333482	TB-4702	106480	37280	34.6
965345	7/2/2018	12:26:00	6 WE DO DIRT	333482	TB-4702	106760	40860	32.95
965347	7/2/2018	12:33:00	57 WE DO DIRT	333482	TB-4702	92300	40060	26.12
965348	7/2/2018	12:40:00	04 PONDEROSA	333482	TB-4702	57560	26320	15.62
965350	7/2/2018	13:05:00	C750 TRITON	333482	TB-4702	106540	40420	33.06
965352	7/2/2018	12:54:00	C750 TRITON	333482	TB-4702	100320	40140	30.09
965353	7/2/2018	13:07:00	C750 TRITON	333482	TB-4702	89860	40420	24.72
965354	7/2/2018	13:09:00	C750 TRITON	333482	TB-4702	94020	40140	26.94
965359	7/2/2018	14:14:00	04 PONDEROSA	333482	TB-4702	51080	26320	12.38
965373	7/3/2018	07:18:00	C750 TRITON	333482	TB-4702	100840	40140	30.35
965400	7/3/2018	08:59:00	C750 TRITON	333482	TB-4702	110460	40140	35.16
965408	7/3/2018	10:47:00	C750 TRITON	333482	TB-4702	103640	40140	31.75

965413	7/3/2018	12:12:00	C750 TRITON	333482	TB-4702	111340	40140	35.6
965417	7/3/2018	13:53:00	C750 TRITON	333482	TB-4702	113500	40140	36.68
965421	7/3/2018	14:52:00	6 WE DO DIRT	333482	TB-4702	111580	40540	35.52
965422	7/3/2018	15:22:00	C750 TRITON	333482	TB-4702	112360	40140	36.11
965437	7/5/2018	07:33:00	C750 TRITON	333482	TB-4702	107680	40320	33.68
965438	7/5/2018	07:34:00	6 WE DO DIRT	333482	TB-4702	96560	40820	27.87
965439	7/5/2018	07:41:00	57 WE DO DIRT	333482	TB-4702	100600	43440	28.58
965440	7/5/2018	07:48:00	66 TIGER EXCAVATION	333482	TB-4702	90740	39260	25.74
965441	7/5/2018	07:59:00	10 ACE CONSTRUCTION	333482	TB-4702	87440	36520	25.46
965442	7/5/2018	08:44:00	C750 TRITON	333482	TB-4702	102260	40320	30.97
965443	7/5/2018	08:53:00	6 WE DO DIRT	333482	TB-4702	96820	40820	28
965444	7/5/2018	08:59:00	57 WE DO DIRT	333482	TB-4702	105420	43440	30.99
965445	7/5/2018	09:05:00	66 TIGER EXCAVATION	333482	TB-4702	98520	39260	29.63
965446	7/5/2018	09:21:00	10 ACE CONSTRUCTION	333482	TB-4702	97280	36520	30.38
965448	7/5/2018	09:25:00	11 TIGER EXCAVATION	333482	TB-4702	103420	42560	30.43
965451	7/5/2018	09:50:00	C750 TRITON	333482	TB-4702	100040	40320	29.86
965465	7/5/2018	13:44:00	11 TIGER EXCAVATION	333482	TB-4702	98660	42560	28.05
965467	7/5/2018	13:49:00	04 PONDEROSA	333482	TB-4702	52500	26180	13.16
965469	7/5/2018	14:03:00	10 ACE CONSTRUCTION	333482	TB-4702	84780	36520	24.13
965473	7/5/2018	14:42:00	11 TIGER EXCAVATION	333482	TB-4702	99640	42560	28.54
965474	7/5/2018	14:58:00	04 PONDEROSA	333482	TB-4702	57500	26180	15.66
965481	7/5/2018	15:17:00	10 ACE CONSTRUCTION	333482	TB-4702	91960	36520	27.72
965524	7/6/2018	06:55:00	C750 TRITON	333482	TB-4702	96940	40340	28.3
965525	7/6/2018	07:08:00	8 O'BRIEN	333482	TB-4702	100760	41120	29.82
965526	7/6/2018	07:09:00	11 TIGER EXCAVATION	333482	TB-4702	95380	42560	26.41
965527	7/6/2018	07:18:00	2 HAYTER	333482	TB-4702	92800	37220	27.79
965528	7/6/2018	07:23:00	12 TIGER EXCAVATION	333482	TB-4702	95800	41120	27.34
965529	7/6/2018	07:31:00	66 TIGER EXCAVATION	333482	TB-4702	96200	39200	28.5
965530	7/6/2018	07:38:00	10 ACE CONSTRUCTION	333482	TB-4702	90940	36560	27.19
965531	7/6/2018	07:47:00	6 WE DO DIRT	333482	TB-4702	96240	40560	27.84
965532	7/6/2018	07:55:00	57 WE DO DIRT	333482	TB-4702	98540	40000	29.27
965535	7/6/2018	08:17:00	C750 TRITON	333482	TB-4702	104960	40340	32.31
965536	7/6/2018	08:29:00	8 O'BRIEN	333482	TB-4702	103520	41120	31.2
965537	7/6/2018	08:32:00	12 TIGER EXCAVATION	333482	TB-4702	98240	41120	28.56
965538	7/6/2018	08:34:00	11 TIGER EXCAVATION	333482	TB-4702	105380	42560	31.41
965539	7/6/2018	08:49:00	2 HAYTER	333482	TB-4702	104800	37220	33.79
965541	7/6/2018	08:54:00	66 TIGER EXCAVATION	333482	TB-4702	104200	39200	32.5
965542	7/6/2018	08:59:00	10 ACE CONSTRUCTION	333482	TB-4702	94900	36560	29.17
965543	7/6/2018	09:16:00	6 WE DO DIRT	333482	TB-4702	108020	40560	33.73
965545	7/6/2018	09:25:00	57 WE DO DIRT	333482	TB-4702	110860	40000	35.43
965546	7/6/2018	09:27:00	C750 TRITON	333482	TB-4702	107240	40340	33.45
965547	7/6/2018	09:33:00	8 O'BRIEN	333482	TB-4702	100700	41120	29.79
965548	7/6/2018	09:40:00	12 TIGER EXCAVATION	333482	TB-4702	99180	41120	29.03
965549	7/6/2018	09:42:00	11 TIGER EXCAVATION	333482	TB-4702	99240	42560	28.34
965550	7/6/2018	10:06:00	2 HAYTER	333482	TB-4702	96460	37220	29.62
965552	7/6/2018	10:08:00	66 TIGER EXCAVATION	333482	TB-4702	92820	39200	26.81
965554	7/6/2018	10:17:00	10 ACE CONSTRUCTION	333482	TB-4702	90360	36560	26.9
965555	7/6/2018	10:30:00	6 WE DO DIRT	333482	TB-4702	92060	40560	25.75
965556	7/6/2018	10:36:00	57 WE DO DIRT	333482	TB-4702	87700	40000	23.85
965557	7/6/2018	10:45:00	8 O'BRIEN	333482	TB-4702	95240	41120	27.06
965559	7/6/2018	10:52:00	C750 TRITON	333482	TB-4702	90600	40340	25.13
965560	7/6/2018	10:56:00	12 TIGER EXCAVATION	333482	TB-4702	92240	41120	25.56
965562	7/6/2018	11:03:00	11 TIGER EXCAVATION	333482	TB-4702	99400	42560	28.42
965564	7/6/2018	11:24:00	2 HAYTER	333482	TB-4702	94540	37220	28.66
965566	7/6/2018	11:31:00	66 TIGER EXCAVATION	333482	TB-4702	90640	39200	25.72
965567	7/6/2018	11:37:00	10 ACE CONSTRUCTION	333482	TB-4702	85500	36560	24.47

965568	7/6/2018	11:48:00	6 WE DO DIRT	333482	TB-4702	94100	40560	26.77
965569	7/6/2018	11:51:00	8 O'BRIEN	333482	TB-4702	97720	41120	28.3
965570	7/6/2018	12:05:00	11 TIGER EXCAVATION	333482	TB-4702	95320	42560	26.38
965571	7/6/2018	12:07:00	12 TIGER EXCAVATION	333482	TB-4702	95480	41120	27.18
965573	7/6/2018	12:23:00	C750 TRITON	333482	TB-4702	102540	40340	31.1
965576	7/6/2018	12:34:00	2 HAYTER	333482	TB-4702	99540	37220	31.16
965578	7/6/2018	12:50:00	66 TIGER EXCAVATION	333482	TB-4702	101020	39200	30.91
965579	7/6/2018	13:01:00	10 ACE CONSTRUCTION	333482	TB-4702	93180	36560	28.31
965580	7/6/2018	13:04:00	8 O'BRIEN	333482	TB-4702	105800	41120	32.34
965582	7/6/2018	13:28:00	6 WE DO DIRT	333482	TB-4702	93240	40560	26.34
965583	7/6/2018	13:31:00	11 TIGER EXCAVATION	333482	TB-4702	99780	42560	28.61
965584	7/6/2018	13:37:00	12 TIGER EXCAVATION	333482	TB-4702	101140	41120	30.01
965585	7/6/2018	13:50:00	C750 TRITON	333482	TB-4702	104880	40340	32.27
965586	7/6/2018	14:01:00	2 HAYTER	333482	TB-4702	94880	37220	28.83
965587	7/6/2018	14:06:00	66 TIGER EXCAVATION	333482	TB-4702	99740	39200	30.27
965588	7/6/2018	14:26:00	10 ACE CONSTRUCTION	333482	TB-4702	85060	36560	24.25
965607	7/9/2018	07:09:00	11 TIGER EXCAVATION	333482	TB-4702	110740	42560	34.09
965608	7/9/2018	07:21:00	C750 TRITON	333482	TB-4702	108900	40220	34.34
965609	7/9/2018	07:30:00	66 TIGER EXCAVATION	333482	TB-4702	103040	39340	31.85
965610	7/9/2018	07:41:00	2 HAYTER	333482	TB-4702	107200	37440	34.88
965613	7/9/2018	07:58:00	6 WE DO DIRT	333482	TB-4702	106120	40540	32.79
965614	7/9/2018	08:29:00	11 TIGER EXCAVATION	333482	TB-4702	103840	42560	30.64
965618	7/9/2018	08:51:00	C750 TRITON	333482	TB-4702	107240	40220	33.51
965619	7/9/2018	09:01:00	66 TIGER EXCAVATION	333482	TB-4702	106240	39340	33.45
965620	7/9/2018	08:39:00	10 ACE CONSTRUCTION	333482	TB-4702	103800	36680	33.56
965623	7/9/2018	09:15:00	2 HAYTER	333482	TB-4702	116520	37440	39.54
965627	7/9/2018	09:35:00	6 WE DO DIRT	333482	TB-4702	107900	40540	33.68
965629	7/9/2018	10:13:00	11 TIGER EXCAVATION	333482	TB-4702	108140	42560	32.79
965631	7/9/2018	10:27:00	10 ACE CONSTRUCTION	333482	TB-4702	97000	36680	30.16
965632	7/9/2018	10:29:00	C750 TRITON	333482	TB-4702	107080	40220	33.43
965633	7/9/2018	10:37:00	66 TIGER EXCAVATION	333482	TB-4702	104100	39340	32.38
965635	7/9/2018	10:49:00	2 HAYTER	333482	TB-4702	103460	37440	33.01
965638	7/9/2018	10:56:00	6 WE DO DIRT	333482	TB-4702	99760	40540	29.61
965641	7/9/2018	11:42:00	11 TIGER EXCAVATION	333482	TB-4702	103920	42560	30.68
965642	7/9/2018	11:50:00	10 ACE CONSTRUCTION	333482	TB-4702	91120	36680	27.22
965646	7/9/2018	12:03:00	C750 TRITON	333482	TB-4702	99640	40220	29.71
965647	7/9/2018	12:10:00	66 TIGER EXCAVATION	333482	TB-4702	92960	39340	26.81
965648	7/9/2018	12:12:00	2 HAYTER	333482	TB-4702	101980	37440	32.27
965649	7/9/2018	12:22:00	6 WE DO DIRT	333482	TB-4702	102780	40540	31.12
965654	7/9/2018	13:07:00	11 TIGER EXCAVATION	333482	TB-4702	104820	42560	31.13
965657	7/9/2018	13:19:00	10 ACE CONSTRUCTION	333482	TB-4702	94820	36680	29.07
965659	7/9/2018	13:37:00	C750 TRITON	333482	TB-4702	105720	40220	32.75
965660	7/9/2018	13:53:00	66 TIGER EXCAVATION	333482	TB-4702	103020	39340	31.84
965662	7/9/2018	13:59:00	2 HAYTER	333482	TB-4702	107280	37440	34.92
965664	7/9/2018	14:03:00	6 WE DO DIRT	333482	TB-4702	110500	40540	34.98
965668	7/9/2018	14:26:00	11 TIGER EXCAVATION	333482	TB-4702	108260	42560	32.85
965670	7/9/2018	14:39:00	10 ACE CONSTRUCTION	333482	TB-4702	94940	36680	29.13
965673	7/9/2018	15:07:00	C750 TRITON	333482	TB-4702	111440	40220	35.61
965675	7/9/2018	15:17:00	66 TIGER EXCAVATION	333482	TB-4702	105440	39340	33.05
965676	7/9/2018	15:25:00	2 HAYTER	333482	TB-4702	102640	37440	32.6
965677	7/9/2018	15:45:00	6 WE DO DIRT	333482	TB-4702	91580	40540	25.52
966150	7/18/2018	07:02:00	12 TIGER EXCAVATION	333482	TB-4702	99900	40900	29.5
966151	7/18/2018	07:17:00	C750 TRITON	333482	TB-4702	102800	40040	31.38
966152	7/18/2018	07:20:00	11 TIGER EXCAVATION	333482	TB-4702	104780	42280	31.25
966153	7/18/2018	07:25:00	2 HAYTER	333482	TB-4702	102760	37200	32.78
966155	7/18/2018	07:39:00	10 ACE CONSTRUCTION	333482	TB-4702	91400	36720	27.34

966156	7/18/2018	08:02:00	20 MALTBY TRUCKING	333482	TB-4702	99200	39180	30.01
966158	7/18/2018	08:33:00	12 TIGER EXCAVATION	333482	TB-4702	107600	40900	33.35
966159	7/18/2018	08:23:00	B2 BRANDT	333482	TB-4702	110180	40900	34.64
966160	7/18/2018	08:51:00	C750 TRITON	333482	TB-4702	105480	40040	32.72
966161	7/18/2018	08:59:00	11 TIGER EXCAVATION	333482	TB-4702	110540	42280	34.13
966162	7/18/2018	09:08:00	2 HAYTER	333482	TB-4702	102480	37200	32.64
966164	7/18/2018	09:19:00	10 ACE CONSTRUCTION	333482	TB-4702	93300	36720	28.29
966165	7/18/2018	09:54:00	12 TIGER EXCAVATION	333482	TB-4702	106060	40900	32.58
966167	7/18/2018	10:10:00	C750 TRITON	333482	TB-4702	99660	40040	29.81
966168	7/18/2018	10:15:00	11 TIGER EXCAVATION	333482	TB-4702	110860	42280	34.29
966169	7/18/2018	10:24:00	2 HAYTER	333482	TB-4702	105040	37200	33.92
966170	7/18/2018	09:48:00	20 MALTBY TRUCKING	333482	TB-4702	95700	39160	28.27
966171	7/18/2018	10:56:00	10 ACE CONSTRUCTION	333482	TB-4702	92240	36720	27.76
966178	7/18/2018	11:39:00	12 TIGER EXCAVATION	333482	TB-4702	109300	40900	34.2
966179	7/18/2018	11:46:00	20 MALTBY TRUCKING	333482	TB-4702	98500	39160	29.67
966180	7/18/2018	11:54:00	C750 TRITON	333482	TB-4702	104380	40040	32.17
966181	7/18/2018	11:56:00	11 TIGER EXCAVATION	333482	TB-4702	105300	42280	31.51
966183	7/18/2018	12:07:00	2 HAYTER	333482	TB-4702	106060	37200	34.43
966184	7/18/2018	12:20:00	10 ACE CONSTRUCTION	333482	TB-4702	87240	36720	25.26
966185	7/18/2018	12:50:00	12 TIGER EXCAVATION	333482	TB-4702	97220	40900	28.16
966189	7/18/2018	13:07:00	20 MALTBY TRUCKING	333482	TB-4702	95980	39160	28.41
966191	7/18/2018	13:18:00	C750 TRITON	333482	TB-4702	98240	40040	29.1
966193	7/18/2018	13:48:00	11 TIGER EXCAVATION	333482	TB-4702	95180	42280	26.45
966195	7/18/2018	13:55:00	2 HAYTER	333482	TB-4702	96120	37200	29.46
966196	7/18/2018	14:04:00	12 TIGER EXCAVATION	333482	TB-4702	93880	40900	26.49
966198	7/18/2018	14:39:00	20 MALTBY TRUCKING	333482	TB-4702	96160	39160	28.5
966202	7/18/2018	14:58:00	C750 TRITON	333482	TB-4702	98900	40040	29.43
966203	7/18/2018	15:12:00	11 TIGER EXCAVATION	333482	TB-4702	96300	42280	27.01
966204	7/18/2018	15:19:00	2 HAYTER	333482	TB-4702	98100	37200	30.45
966255	7/24/2018	07:02:00	12 TIGER EXCAVATION	333482	TB-4702	88520	40880	23.82
966260	7/24/2018	07:12:00	11 TIGER EXCAVATION	333482	TB-4702	94940	42260	26.34
966266	7/24/2018	07:24:00	C750 TRITON	333482	TB-4702	100900	40040	30.43
966291	7/24/2018	07:43:00	20 MALTBY TRUCKING	333482	TB-4702	93300	39360	26.97
966308	7/24/2018	07:54:00	B2 BRANDT	333482	TB-4702	103400	41340	31.03
966319	7/24/2018	08:03:00	44 TIGER EXCAVATING	333482	TB-4702	91640	41980	24.83
966325	7/24/2018	08:33:00	12 TIGER EXCAVATION	333482	TB-4702	109080	40880	34.1
966326	7/24/2018	08:28:00	2 HAYTER	333482	TB-4702	99740	37200	31.27
966327	7/24/2018	08:31:00	21 NW SAND & GRAVEL	333482	TB-4702	106920	40520	33.2
966328	7/24/2018	08:53:00	11 TIGER EXCAVATION	333482	TB-4702	110760	42260	34.25
966329	7/24/2018	09:06:00	C750 TRITON	333482	TB-4702	110700	40040	35.33
966335	7/24/2018	09:17:00	20 MALTBY TRUCKING	333482	TB-4702	100820	39360	30.73
966338	7/24/2018	09:41:00	44 TIGER EXCAVATING	333482	TB-4702	101040	41980	29.53
966339	7/24/2018	09:33:00	B2 BRANDT	333482	TB-4702	111120	41240	34.94
966342	7/24/2018	10:08:00	2 HAYTER	333482	TB-4702	104940	37200	33.87
966343	7/24/2018	10:16:00	12 TIGER EXCAVATION	333482	TB-4702	104060	40880	31.59
966344	7/24/2018	10:29:00	21 NW SAND & GRAVEL	333482	TB-4702	105700	40520	32.59
966345	7/24/2018	10:33:00	11 TIGER EXCAVATION	333482	TB-4702	109200	42260	33.47
966346	7/24/2018	10:41:00	C750 TRITON	333482	TB-4702	104220	40040	32.09
966348	7/24/2018	11:10:00	20 MALTBY TRUCKING	333482	TB-4702	102780	39360	31.71
966349	7/24/2018	11:15:00	44 TIGER EXCAVATING	333482	TB-4702	101060	41980	29.54
966351	7/24/2018	11:29:00	2 HAYTER	333482	TB-4702	103960	37200	33.38
966352	7/24/2018	11:14:00	B2 BRANDT	333482	TB-4702	104400	41180	31.61
966353	7/24/2018	11:34:00	12 TIGER EXCAVATION	333482	TB-4702	98360	40880	28.74
966355	7/24/2018	11:54:00	11 TIGER EXCAVATION	333482	TB-4702	106680	42260	32.21
966357	7/24/2018	11:59:00	C750 TRITON	333482	TB-4702	101680	40040	30.82
966359	7/24/2018	12:06:00	21 NW SAND & GRAVEL	333482	TB-4702	108060	40520	33.77

966363	7/24/2018	12:48:00	44 TIGER EXCAVATING	333482	TB-4702	98220	41980	28.12
966365	7/24/2018	12:58:00	2 HAYTER	333482	TB-4702	98940	37200	30.87
966367	7/24/2018	13:04:00	20 MALTBY TRUCKING	333482	TB-4702	91300	39360	25.97
966368	7/24/2018	13:10:00	B2 BRANDT	333482	TB-4702	105180	41180	32
966369	7/24/2018	13:11:00	12 TIGER EXCAVATION	333482	TB-4702	98860	40880	28.99
966370	7/24/2018	13:12:00	11 TIGER EXCAVATION	333482	TB-4702	97460	42260	27.6
966372	7/24/2018	13:21:00	C750 TRITON	333482	TB-4702	100100	40040	30.03
966373	7/24/2018	13:24:00	21 NW SAND & GRAVEL	333482	TB-4702	106160	40520	32.82
966378	7/24/2018	14:02:00	44 TIGER EXCAVATING	333482	TB-4702	80160	41980	19.09
966379	7/24/2018	14:16:00	20 MALTBY TRUCKING	333482	TB-4702	75780	39360	18.21
966380	7/24/2018	14:22:00	2 HAYTER	333482	TB-4702	91380	37200	27.09
966384	7/24/2018	14:47:00	B2 BRANDT	333482	TB-4702	88660	41180	23.74
966385	7/24/2018	14:48:00	12 TIGER EXCAVATION	333482	TB-4702	89440	40880	24.28
966386	7/24/2018	14:58:00	11 TIGER EXCAVATION	333482	TB-4702	94900	42260	26.32
966388	7/24/2018	15:21:00	C750 TRITON	333482	TB-4702	104700	40040	32.33
966398	7/25/2018	06:59:00	C750 TRITON	333482	TB-4702	100260	40240	30.01
966399	7/25/2018	07:05:00	11 TIGER EXCAVATION	333482	TB-4702	100000	42200	28.9
966400	7/25/2018	07:11:00	12 TIGER EXCAVATION	333482	TB-4702	99600	44600	27.5
966401	7/25/2018	07:19:00	2 HAYTER	333482	TB-4702	102540	37340	32.6
966402	7/25/2018	07:29:00	20 MALTBY TRUCKING	333482	TB-4702	99520	39140	30.19
966403	7/25/2018	07:36:00	44 TIGER EXCAVATING	333482	TB-4702	102000	41980	30.01
966404	7/25/2018	07:45:00	B2 BRANDT	333482	TB-4702	106340	41860	32.24
966406	7/25/2018	08:19:00	C750 TRITON	333482	TB-4702	103040	40240	31.4
966407	7/25/2018	08:21:00	11 TIGER EXCAVATION	333482	TB-4702	102180	42200	29.99
966419	7/25/2018	12:30:00	B2 BRANDT	333482	TB-4702	105200	41860	31.67
966420	7/25/2018	12:56:00	11 TIGER EXCAVATION	333482	TB-4702	103700	42200	30.75
966421	7/25/2018	13:02:00	C750 TRITON	333482	TB-4702	103800	40240	31.78
966422	7/25/2018	13:22:00	12 TIGER EXCAVATION	333482	TB-4702	98460	44600	26.93
966423	7/25/2018	13:23:00	2 HAYTER	333482	TB-4702	102700	37340	32.68
966424	7/25/2018	13:46:00	44 TIGER EXCAVATING	333482	TB-4702	101820	41980	29.92
966426	7/25/2018	14:11:00	11 TIGER EXCAVATION	333482	TB-4702	102780	42200	30.29
966427	7/25/2018	14:16:00	C750 TRITON	333482	TB-4702	96440	40240	28.1
966429	7/25/2018	14:51:00	12 TIGER EXCAVATION	333482	TB-4702	87320	44600	21.36
966430	7/25/2018	14:56:00	2 HAYTER	333482	TB-4702	91000	37340	26.83
966431	7/25/2018	15:22:00	44 TIGER EXCAVATING	333482	TB-4702	89840	41980	23.93
966447	7/26/2018	06:49:00	C750 TRITON	333482	TB-4702	98920	40000	29.46
966448	7/26/2018	06:58:00	12 TIGER EXCAVATION	333482	TB-4702	104300	41220	31.54
966456	7/26/2018	09:08:00	44 TIGER EXCAVATING	333482	TB-4702	104900	41980	31.46
966458	7/26/2018	09:21:00	20 MALTBY TRUCKING	333482	TB-4702	95580	39100	28.24
966461	7/26/2018	09:26:00	2 HAYTER	333482	TB-4702	96740	37460	29.64
966462	7/26/2018	09:42:00	C750 TRITON	333482	TB-4702	106600	40000	33.3
966463	7/26/2018	09:52:00	12 TIGER EXCAVATION	333482	TB-4702	104880	41220	31.83
966465	7/26/2018	07:01:00	11 TIGER EXCAVATION	333482	TB-4702	102040	42120	29.96
966472	7/26/2018	10:42:00	44 TIGER EXCAVATING	333482	TB-4702	106060	41980	32.04
966473	7/26/2018	11:01:00	20 MALTBY TRUCKING	333482	TB-4702	96900	39100	28.9
966475	7/26/2018	11:06:00	2 HAYTER	333482	TB-4702	110980	37460	36.76
966477	7/26/2018	11:23:00	11 TIGER EXCAVATION	333482	TB-4702	111840	42120	34.86
966479	7/26/2018	11:17:00	B2 BRANDT	333482	TB-4702	114120	40860	36.63
966480	7/26/2018	11:33:00	12 TIGER EXCAVATION	333482	TB-4702	101040	41220	29.91
966482	7/26/2018	12:02:00	44 TIGER EXCAVATING	333482	TB-4702	100380	41980	29.2
966487	7/26/2018	12:22:00	2 HAYTER	333482	TB-4702	103020	37460	32.78
966489	7/26/2018	12:39:00	20 MALTBY TRUCKING	333482	TB-4702	107240	39100	34.07
966490	7/26/2018	12:50:00	11 TIGER EXCAVATION	333482	TB-4702	118460	42120	38.17
966491	7/26/2018	12:52:00	B2 BRANDT	333482	TB-4702	119880	40860	39.51
966586	7/30/2018	06:52:00	11 TIGER EXCAVATION	333482	TB-4702	108000	42520	32.74
966587	7/30/2018	06:59:00	66 TIGER EXCAVATION	333482	TB-4702	98600	39260	29.67

966588	7/30/2018	07:11:00	44 TIGER EXCAVATING	333482	TB-4702	108960	42740	33.11
966589	7/30/2018	07:18:00	20 MALTBY TRUCKING	333482	TB-4702	105840	39180	33.33
966591	7/30/2018	07:35:00	21 NW SAND & GRAVEL	333482	TB-4702	111900	40300	35.8
966592	7/30/2018	07:49:00	GS7/GRAYSTONE	333482	TB-4702	101960	36960	32.5
966593	7/30/2018	07:57:00	27 NW SAND AND GRAVE	333482	TB-4702	111760	40280	35.74
966595	7/30/2018	08:17:00	10 ACE CONSTRUCTION	333482	TB-4702	102520	36580	32.97
966596	7/30/2018	08:20:00	711 BUILDERS SUPPLY	333482	TB-4702	105560	39920	32.82
966597	7/30/2018	08:40:00	11 TIGER EXCAVATION	333482	TB-4702	113100	42520	35.29
966601	7/30/2018	09:00:00	66 TIGER EXCAVATION	333482	TB-4702	103560	39260	32.15
966602	7/30/2018	09:04:00	44 TIGER EXCAVATING	333482	TB-4702	102020	42740	29.64
966603	7/30/2018	09:11:00	20 MALTBY TRUCKING	333482	TB-4702	94880	39180	27.85
966606	7/30/2018	09:31:00	GS7/GRAYSTONE	333482	TB-4702	93240	36960	28.14
966608	7/30/2018	09:36:00	27 NW SAND AND GRAVE	333482	TB-4702	101300	40280	30.51
966610	7/30/2018	09:42:00	21 NW SAND & GRAVEL	333482	TB-4702	101360	40300	30.53
966611	7/30/2018	09:55:00	10 ACE CONSTRUCTION	333482	TB-4702	90680	36580	27.05
966614	7/30/2018	10:08:00	711 BUILDERS SUPPLY	333482	TB-4702	97220	39920	28.65
966615	7/30/2018	10:13:00	11 TIGER EXCAVATION	333482	TB-4702	103620	42520	30.55
966617	7/30/2018	10:17:00	66 TIGER EXCAVATION	333482	TB-4702	95640	39260	28.19
966618	7/30/2018	10:22:00	44 TIGER EXCAVATING	333482	TB-4702	100680	42740	28.97
966619	7/30/2018	10:39:00	20 MALTBY TRUCKING	333482	TB-4702	93620	39180	27.22
966622	7/30/2018	10:50:00	GS7/GRAYSTONE	333482	TB-4702	96960	36960	30
966624	7/30/2018	11:03:00	27 NW SAND AND GRAVE	333482	TB-4702	102360	40280	31.04
966625	7/30/2018	11:07:00	10 ACE CONSTRUCTION	333482	TB-4702	94600	36580	29.01
966626	7/30/2018	11:00:00	12 TIGER EXCAVATION	333482	TB-4702	101080	40880	30.1
966627	7/30/2018	11:13:00	21 NW SAND & GRAVEL	333482	TB-4702	105240	40300	32.47
966629	7/30/2018	11:26:00	66 TIGER EXCAVATION	333482	TB-4702	96980	39260	28.86
966631	7/30/2018	11:38:00	11 TIGER EXCAVATION	333482	TB-4702	101380	42520	29.43
966635	7/30/2018	11:49:00	44 TIGER EXCAVATING	333482	TB-4702	98440	42740	27.85
966636	7/30/2018	11:51:00	711 BUILDERS SUPPLY	333482	TB-4702	95340	39920	27.71
966637	7/30/2018	11:58:00	20 MALTBY TRUCKING	333482	TB-4702	93180	39180	27
966640	7/30/2018	12:06:00	12 TIGER EXCAVATION	333482	TB-4702	96940	40880	28.03
966641	7/30/2018	12:10:00	GS7/GRAYSTONE	333482	TB-4702	93880	36960	28.46
966642	7/30/2018	12:16:00	27 NW SAND AND GRAVE	333482	TB-4702	97480	40280	28.6
966645	7/30/2018	12:25:00	10 ACE CONSTRUCTION	333482	TB-4702	88240	36580	25.83
966646	7/30/2018	12:31:00	21 NW SAND & GRAVEL	333482	TB-4702	106580	40300	33.14
966647	7/30/2018	12:34:00	66 TIGER EXCAVATION	333482	TB-4702	98780	39260	29.76
966648	7/30/2018	12:42:00	11 TIGER EXCAVATION	333482	TB-4702	102840	42520	30.16
966649	7/30/2018	13:07:00	44 TIGER EXCAVATING	333482	TB-4702	97840	42740	27.55
966651	7/30/2018	12:53:00	3 HAYTER	333482	TB-4702	98440	40380	29.03
966655	7/30/2018	13:24:00	12 TIGER EXCAVATION	333482	TB-4702	96840	40880	27.98
966656	7/30/2018	13:04:00	10 HAYTER	333482	TB-4702	105880	43420	31.23
966658	7/30/2018	13:40:00	GS7/GRAYSTONE	333482	TB-4702	92760	36960	27.9
966659	7/30/2018	13:41:00	27 NW SAND AND GRAVE	333482	TB-4702	100100	40280	29.91
966660	7/30/2018	13:42:00	711 BUILDERS SUPPLY	333482	TB-4702	96400	39920	28.24
966664	7/30/2018	13:54:00	66 TIGER EXCAVATION	333482	TB-4702	104300	39260	32.52
966665	7/30/2018	13:58:00	10 ACE CONSTRUCTION	333482	TB-4702	97820	36580	30.62
966666	7/30/2018	14:02:00	11 TIGER EXCAVATION	333482	TB-4702	107940	42520	32.71
966670	7/30/2018	14:14:00	44 TIGER EXCAVATING	333482	TB-4702	99840	42740	28.55
966674	7/30/2018	14:34:00	10 HAYTER	333482	TB-4702	102880	43420	29.73
966675	7/30/2018	14:35:00	3 HAYTER	333482	TB-4702	109920	40380	34.77
966676	7/30/2018	14:39:00	12 TIGER EXCAVATION	333482	TB-4702	98840	40880	28.98
967093	8/10/2018	07:00:00	20 MALTBY TRUCKING	333482	TB-4702	94060	39120	27.47
967094	8/10/2018	07:11:00	C750 TRITON	333482	TB-4702	105120	40520	32.3
967095	8/10/2018	07:27:00	GS7/GRAYSTONE	333482	TB-4702	102220	37240	32.49
967096	8/10/2018	08:32:00	20 MALTBY TRUCKING	333482	TB-4702	95380	39120	28.13
967098	8/10/2018	08:39:00	C750 TRITON	333482	TB-4702	98920	40520	29.2

967099	8/10/2018	08:50:00	GS7/GRAYSTONE	333482	TB-4702	91160	37240	26.96
967104	8/10/2018	09:37:00	26 NW SAND & GRAVEL	333482	TB-4702	97140	46100	25.52
967105	8/10/2018	10:13:00	20 MALTBY TRUCKING	333482	TB-4702	90420	39120	25.65
967106	8/10/2018	10:22:00	GS7/GRAYSTONE	333482	TB-4702	91140	37240	26.95
967107	8/10/2018	10:34:00	C750 TRITON	333482	TB-4702	101320	40520	30.4
967112	8/10/2018	11:23:00	26 NW SAND & GRAVEL	333482	TB-4702	100500	46100	27.2
967113	8/10/2018	11:45:00	20 MALTBY TRUCKING	333482	TB-4702	92160	39120	26.52
967114	8/10/2018	11:51:00	GS7/GRAYSTONE	333482	TB-4702	95060	37240	28.91
967115	8/10/2018	12:13:00	C750 TRITON	333482	TB-4702	101980	40520	30.73
967117	8/10/2018	12:30:00	26 NW SAND & GRAVEL	333482	TB-4702	104060	46100	28.98
967123	8/10/2018	13:22:00	20 MALTBY TRUCKING	333482	TB-4702	95140	39120	28.01
967124	8/10/2018	13:50:00	26 NW SAND & GRAVEL	333482	TB-4702	107600	46100	30.75
967125	8/10/2018	13:53:00	C750 TRITON	333482	TB-4702	101140	40520	30.31
967161	8/13/2018	07:11:00	20 MALTBY TRUCKING	333482	TB-4702	92900	39660	26.62
967162	8/13/2018	07:16:00	21 NW SAND & GRAVEL	333482	TB-4702	104060	42340	30.86
967163	8/13/2018	07:26:00	C750 TRITON	333482	TB-4702	98000	40220	28.89
967166	8/13/2018	08:39:00	20 MALTBY TRUCKING	333482	TB-4702	93920	39660	27.13
967167	8/13/2018	08:46:00	21 NW SAND & GRAVEL	333482	TB-4702	104400	42340	31.03
967168	8/13/2018	08:51:00	C750 TRITON	333482	TB-4702	101240	40220	30.51
967174	8/13/2018	09:59:00	20 MALTBY TRUCKING	333482	TB-4702	96580	39660	28.46
967176	8/13/2018	10:05:00	21 NW SAND & GRAVEL	333482	TB-4702	108880	42340	33.27
967179	8/13/2018	10:11:00	C750 TRITON	333482	TB-4702	103840	40220	31.81
967187	8/13/2018	11:13:00	20 MALTBY TRUCKING	333482	TB-4702	96220	39660	28.28
967189	8/13/2018	11:22:00	21 NW SAND & GRAVEL	333482	TB-4702	100600	42340	29.13
967191	8/13/2018	11:30:00	C750 TRITON	333482	TB-4702	97980	40220	28.88
967199	8/13/2018	12:26:00	20 MALTBY TRUCKING	333482	TB-4702	97220	39660	28.78
967200	8/13/2018	12:31:00	21 NW SAND & GRAVEL	333482	TB-4702	105160	42340	31.41
967201	8/13/2018	12:44:00	C750 TRITON	333482	TB-4702	99060	40220	29.42
967208	8/13/2018	13:46:00	21 NW SAND & GRAVEL	333482	TB-4702	111620	42340	34.64
967210	8/13/2018	13:56:00	20 MALTBY TRUCKING	333482	TB-4702	99680	39660	30.01
967211	8/13/2018	14:04:00	C750 TRITON	333482	TB-4702	98400	40220	29.09
967216	8/13/2018	15:41:00	C750 TRITON	333482	TB-4702	96280	40220	28.03
967537	8/17/2018	06:58:00	C750 TRITON	333482	TB-4702	104140	39840	32.15
967542	8/17/2018	08:50:00	C750 TRITON	333482	TB-4702	100420	39840	30.29
967551	8/17/2018	09:56:00	7 PONDEROSA	333482	TB-4702	55900	28800	13.55
967552	8/17/2018	10:11:00	C750 TRITON	333482	TB-4702	97000	39840	28.58
967557	8/17/2018	11:15:00	7 PONDEROSA	333482	TB-4702	54280	28800	12.74
967561	8/17/2018	11:42:00	C750 TRITON	333482	TB-4702	97520	39840	28.84
967567	8/17/2018	13:36:00	C750 TRITON	333482	TB-4702	102280	39840	31.22
967585	8/20/2018	06:49:00	12 TIGER EXCAVATION	333482	TB-4702	103800	42300	30.75
967586	8/20/2018	06:50:00	66 TIGER EXCAVATION	333482	TB-4702	106300	39400	33.45
967587	8/20/2018	07:13:00	C750 TRITON	333482	TB-4702	107400	39780	33.81
967593	8/20/2018	09:34:00	12 TIGER EXCAVATION	333482	TB-4702	107060	42300	32.38
967595	8/20/2018	09:42:00	66 TIGER EXCAVATION	333482	TB-4702	102140	39400	31.37
967596	8/20/2018	09:46:00	C750 TRITON	333482	TB-4702	103980	39780	32.1
967600	8/20/2018	10:34:00	12 TIGER EXCAVATION	333482	TB-4702	96120	42300	26.91
967602	8/20/2018	10:47:00	66 TIGER EXCAVATION	333482	TB-4702	94180	39400	27.39
967603	8/20/2018	10:58:00	C750 TRITON	333482	TB-4702	96460	39780	28.34
967606	8/20/2018	11:27:00	12 TIGER EXCAVATION	333482	TB-4702	98800	42300	28.25
967610	8/20/2018	11:56:00	66 TIGER EXCAVATION	333482	TB-4702	98700	39400	29.65
967612	8/20/2018	12:10:00	C750 TRITON	333482	TB-4702	102560	39780	31.39
967614	8/20/2018	12:26:00	12 TIGER EXCAVATION	333482	TB-4702	91160	42300	24.43
967621	8/20/2018	13:31:00	C750 TRITON	333482	TB-4702	95860	39780	28.04
967622	8/20/2018	13:37:00	12 TIGER EXCAVATION	333482	TB-4702	89660	42300	23.68
967629	8/20/2018	14:26:00	66 TIGER EXCAVATION	333482	TB-4702	91380	39400	25.99
967630	8/20/2018	14:47:00	C750 TRITON	333482	TB-4702	95580	39780	27.9

967763	8/22/2018	12:55:00	C750 TRITON	333482	TB-4702	103040	39860	31.59
967769	8/22/2018	15:06:00	66 TIGER EXCAVATION	333482	TB-4702	100860	39200	30.83
967781	8/23/2018	06:42:00	12 TIGER EXCAVATION	333482	TB-4702	94660	41940	26.36
967782	8/23/2018	06:51:00	11 TIGER EXCAVATION	333482	TB-4702	94020	47000	23.51
967783	8/23/2018	07:02:00	66 TIGER EXCAVATION	333482	TB-4702	92360	42340	25.01
967784	8/23/2018	07:15:00	20 MALTBY TRUCKING	333482	TB-4702	88920	39380	24.77
967786	8/23/2018	07:28:00	27 NW SAND AND GRAVE	333482	TB-4702	95000	60780	17.11
967790	8/23/2018	08:04:00	12 TIGER EXCAVATION	333482	TB-4702	96140	41940	27.1
967791	8/23/2018	08:07:00	11 TIGER EXCAVATION	333482	TB-4702	96520	47000	24.76
967793	8/23/2018	08:23:00	66 TIGER EXCAVATION	333482	TB-4702	94100	42340	25.88
967796	8/23/2018	08:39:00	20 MALTBY TRUCKING	333482	TB-4702	92340	39380	26.48
967800	8/23/2018	08:52:00	27 NW SAND AND GRAVE	333482	TB-4702	109940	70420	19.76
967802	8/23/2018	09:18:00	12 TIGER EXCAVATION	333482	TB-4702	105940	41940	32
967807	8/23/2018	09:30:00	11 TIGER EXCAVATION	333482	TB-4702	102160	47800	27.18
967810	8/23/2018	09:42:00	66 TIGER EXCAVATION	333482	TB-4702	99920	46780	26.57
967811	8/23/2018	10:03:00	20 MALTBY TRUCKING	333482	TB-4702	91440	39380	26.03
967813	8/23/2018	10:08:00	7 PONDEROSA	333482	TB-4702	54140	29400	12.37
967818	8/23/2018	10:56:00	12 TIGER EXCAVATION	333482	TB-4702	93200	41940	25.63
967821	8/23/2018	10:51:00	C750 TRITON	333482	TB-4702	100120	39860	30.13
967827	8/23/2018	11:57:00	7 PONDEROSA	333482	TB-4702	57700	25760	15.97
967828	8/23/2018	11:28:00	66 TIGER EXCAVATION	333482	TB-4702	103400	40000	31.7
967829	8/23/2018	11:05:00	11 TIGER EXCAVATION	333482	TB-4702	96780	42220	27.28
967830	8/23/2018	10:15:00	27 NW SAND AND GRAVE	333482	TB-4702	110740	71700	19.52
967831	8/23/2018	12:29:00	20 MALTBY TRUCKING	333482	TB-4702	95520	39380	28.07
967836	8/23/2018	13:16:00	12 TIGER EXCAVATION	333482	TB-4702	102760	41940	30.41
967838	8/23/2018	12:59:00	C750 TRITON	333482	TB-4702	102340	39860	31.24
967846	8/23/2018	14:00:00	11 TIGER EXCAVATION	333482	TB-4702	98780	42200	28.29
967847	8/23/2018	13:52:00	66 TIGER EXCAVATION	333482	TB-4702	94160	39360	27.4
967848	8/23/2018	13:56:00	7 PONDEROSA	333482	TB-4702	54180	25460	14.36
967849	8/23/2018	14:13:00	20 MALTBY TRUCKING	333482	TB-4702	90340	39380	25.48
967852	8/23/2018	14:24:00	27 NW SAND AND GRAVE	333482	TB-4702	101380	40100	30.64
967854	8/23/2018	14:37:00	C750 TRITON	333482	TB-4702	103060	39820	31.62
967866	8/24/2018	06:54:00	20 MALTBY TRUCKING	333482	TB-4702	91040	39100	25.97
967867	8/24/2018	06:56:00	12 TIGER EXCAVATION	333482	TB-4702	97100	41140	27.98
967868	8/24/2018	07:12:00	11 TIGER EXCAVATION	333482	TB-4702	96560	42400	27.08
967869	8/24/2018	07:23:00	66 TIGER EXCAVATION	333482	TB-4702	95720	39540	28.09
967870	8/24/2018	07:27:00	C750 TRITON	333482	TB-4702	101100	39980	30.56
967871	8/24/2018	07:41:00	27 NW SAND AND GRAVE	333482	TB-4702	105460	40200	32.63
967872	8/24/2018	07:51:00	7 PONDEROSA	333482	TB-4702	57020	25360	15.83
967876	8/24/2018	08:10:00	10 ACE CONSTRUCTION	333482	TB-4702	96460	36540	29.96
967883	8/24/2018	08:24:00	9 ACE	333482	TB-4702	115820	39300	38.26
967891	8/24/2018	09:55:00	7 PONDEROSA	333482	TB-4702	59220	25380	16.92
967896	8/24/2018	11:56:00	7 PONDEROSA	333482	TB-4702	55700	25340	15.18
967903	8/24/2018	13:22:00	7 PONDEROSA	333482	TB-4702	54500	25300	14.6
967917	8/27/2018	06:51:00	12 TIGER EXCAVATION	333482	TB-4702	108920	41180	33.87
967918	8/27/2018	07:00:00	11 TIGER EXCAVATION	333482	TB-4702	105140	42260	31.44
967919	8/27/2018	07:11:00	C750 TRITON	333482	TB-4702	110320	40260	35.03
967921	8/27/2018	07:05:00	66 TIGER EXCAVATION	333482	TB-4702	104500	39480	32.51
967922	8/27/2018	07:22:00	2 HAYTER	333482	TB-4702	100780	38880	30.95
967923	8/27/2018	07:48:00	15 NW SAND & GRAVEL	333482	TB-4702	108820	39520	34.65
967924	8/27/2018	07:34:00	26 NW SAND & GRAVEL	333482	TB-4702	107480	44960	31.26
967928	8/27/2018	08:30:00	12 TIGER EXCAVATION	333482	TB-4702	96580	41180	27.7
967929	8/27/2018	08:49:00	11 TIGER EXCAVATION	333482	TB-4702	99160	42260	28.45
967930	8/27/2018	08:55:00	C750 TRITON	333482	TB-4702	97180	40260	28.46
967931	8/27/2018	08:58:00	66 TIGER EXCAVATION	333482	TB-4702	94700	39480	27.61
967933	8/27/2018	09:07:00	2 HAYTER	333482	TB-4702	98080	38880	29.6

967934	8/27/2018	09:11:00	15 NW SAND & GRAVEL	333482	TB-4702	96260	39520	28.37
967937	8/27/2018	09:16:00	26 NW SAND & GRAVEL	333482	TB-4702	99120	42100	28.51
967939	8/27/2018	09:43:00	12 TIGER EXCAVATION	333482	TB-4702	95240	41180	27.03
967941	8/27/2018	10:02:00	11 TIGER EXCAVATION	333482	TB-4702	93720	42260	25.73
967942	8/27/2018	10:10:00	C750 TRITON	333482	TB-4702	91920	40260	25.83
967944	8/27/2018	10:19:00	66 TIGER EXCAVATION	333482	TB-4702	92980	39480	26.75
967945	8/27/2018	10:24:00	2 HAYTER	333482	TB-4702	101580	38880	31.35
967946	8/27/2018	10:34:00	15 NW SAND & GRAVEL	333482	TB-4702	100920	39520	30.7
967947	8/27/2018	10:37:00	26 NW SAND & GRAVEL	333482	TB-4702	104260	44960	29.65
967949	8/27/2018	11:00:00	12 TIGER EXCAVATION	333482	TB-4702	93960	41180	26.39
967950	8/27/2018	11:10:00	11 TIGER EXCAVATION	333482	TB-4702	89920	42260	23.83
967951	8/27/2018	11:19:00	C750 TRITON	333482	TB-4702	90140	40260	24.94
967953	8/27/2018	11:35:00	66 TIGER EXCAVATION	333482	TB-4702	92500	39480	26.51
967955	8/27/2018	11:40:00	2 HAYTER	333482	TB-4702	95060	38880	28.09
967956	8/27/2018	12:04:00	15 NW SAND & GRAVEL	333482	TB-4702	93600	39520	27.04
967957	8/27/2018	12:11:00	26 NW SAND & GRAVEL	333482	TB-4702	98140	44960	26.59
967958	8/27/2018	12:22:00	12 TIGER EXCAVATION	333482	TB-4702	97360	41180	28.09
967961	8/27/2018	12:37:00	11 TIGER EXCAVATION	333482	TB-4702	101280	42260	29.51
967962	8/27/2018	12:56:00	C750 TRITON	333482	TB-4702	103480	40260	31.61
967963	8/27/2018	13:05:00	66 TIGER EXCAVATION	333482	TB-4702	97660	39480	29.09
967965	8/27/2018	13:14:00	2 HAYTER	333482	TB-4702	104220	38880	32.67
967966	8/27/2018	13:24:00	15 NW SAND & GRAVEL	333482	TB-4702	105940	39520	33.21
967968	8/27/2018	13:44:00	26 NW SAND & GRAVEL	333482	TB-4702	108320	44960	31.68
967969	8/27/2018	13:56:00	11 TIGER EXCAVATION	333482	TB-4702	105760	42260	31.75
967971	8/27/2018	14:13:00	C750 TRITON	333482	TB-4702	108560	40260	34.15
967975	8/27/2018	14:38:00	66 TIGER EXCAVATION	333482	TB-4702	98020	39480	29.27
967976	8/27/2018	14:45:00	2 HAYTER	333482	TB-4702	100960	38880	31.04
967978	8/27/2018	14:52:00	15 NW SAND & GRAVEL	333482	TB-4702	97960	39520	29.22
967979	8/27/2018	14:58:00	26 NW SAND & GRAVEL	333482	TB-4702	104980	44960	30.01
968016	8/28/2018	13:59:00	C750 TRITON	333482	TB-4702	54960	25000	14.98
968070	8/30/2018	07:07:00	21 NW SAND & GRAVEL	333482	TB-4702	101440	40280	30.58
968071	8/30/2018	07:59:00	22 BOBBY WOLFORD	333482	TB-4702	89100	38140	25.48
968072	8/30/2018	08:04:00	20 BOBBY WOLFORD	333482	TB-4702	92000	40640	25.68
968073	8/30/2018	08:14:00	C750 TRITON	333482	TB-4702	102460	39900	31.28
968074	8/30/2018	08:33:00	21 NW SAND & GRAVEL	333482	TB-4702	103620	40280	31.67
968076	8/30/2018	08:30:00	18 BOBBY WOLFORD	333482	TB-4702	98820	40500	29.16
968078	8/30/2018	09:14:00	20 BOBBY WOLFORD	333482	TB-4702	92680	40640	26.02
968080	8/30/2018	09:41:00	22 BOBBY WOLFORD	333482	TB-4702	92080	38140	26.97
968081	8/30/2018	09:32:00	16 BOBBY WOLFORD	333482	TB-4702	93400	39960	26.72
968082	8/30/2018	09:46:00	21 NW SAND & GRAVEL	333482	TB-4702	100640	40280	30.18
968084	8/30/2018	10:02:00	18 BOBBY WOLFORD	333482	TB-4702	100940	40500	30.22
968085	8/30/2018	10:21:00	20 BOBBY WOLFORD	333482	TB-4702	85400	40640	22.38
968088	8/30/2018	11:17:00	16 BOBBY WOLFORD	333482	TB-4702	77420	39960	18.73
968091	8/30/2018	11:25:00	22 BOBBY WOLFORD	333482	TB-4702	78400	38140	20.13
968092	8/30/2018	11:28:00	21 NW SAND & GRAVEL	333482	TB-4702	84860	40280	22.29
968093	8/30/2018	11:34:00	18 BOBBY WOLFORD	333482	TB-4702	88000	40500	23.75
968094	8/30/2018	11:42:00	20 BOBBY WOLFORD	333482	TB-4702	81020	40640	20.19
968096	8/30/2018	11:51:00	C750 TRITON	333482	TB-4702	91120	39900	25.61
968098	8/30/2018	12:35:00	16 BOBBY WOLFORD	333482	TB-4702	89380	39960	24.71
968099	8/30/2018	12:41:00	18 BOBBY WOLFORD	333482	TB-4702	83400	40500	21.45
968100	8/30/2018	12:53:00	21 NW SAND & GRAVEL	333482	TB-4702	94640	40280	27.18
968101	8/30/2018	12:58:00	20 BOBBY WOLFORD	333482	TB-4702	89340	40640	24.35
968104	8/30/2018	14:01:00	22 BOBBY WOLFORD	333482	TB-4702	95300	38140	28.58
968105	8/30/2018	14:04:00	16 BOBBY WOLFORD	333482	TB-4702	99000	39960	29.52
968106	8/30/2018	14:19:00	21 NW SAND & GRAVEL	333482	TB-4702	102240	40280	30.98
968107	8/30/2018	14:23:00	20 BOBBY WOLFORD	333482	TB-4702	96520	40640	27.94

968131	9/4/2018	07:32:00	C750 TRITON	333482	TB-4702	93420	39680	26.87
968148	9/4/2018	10:31:00	C750 TRITON	333482	TB-4702	90920	39680	25.62
968153	9/4/2018	10:49:00	7 PPI	333482	TB-4702	53940	25260	14.34
968165	9/4/2018	12:20:00	7 PONDEROSA	333482	TB-4702	48060	25520	11.27
968172	9/4/2018	13:12:00	C750 TRITON	333482	TB-4702	96840	39680	28.58
968175	9/4/2018	13:21:00	7 PONDEROSA	333482	TB-4702	53640	25520	14.06
968184	9/4/2018	14:35:00	C750 TRITON	333482	TB-4702	101220	39680	30.77
968196	9/5/2018	08:17:00	C750 TRITON	333482	TB-4702	102800	40120	31.34
968200	9/5/2018	09:51:00	C750 TRITON	333482	TB-4702	103100	40120	31.49
968203	9/5/2018	11:10:00	C750 TRITON	333482	TB-4702	98120	40120	29
968206	9/5/2018	12:35:00	C750 TRITON	333482	TB-4702	102040	40120	30.96
968216	9/5/2018	14:00:00	C750 TRITON	333482	TB-4702	107920	40120	33.9
968231	9/6/2018	07:23:00	C750 TRITON	333482	TB-4702	105120	39820	32.65
968238	9/6/2018	08:29:00	20 BOBBY WOLFORD	333482	TB-4702	99000	40520	29.24
968244	9/6/2018	09:20:00	C750 TRITON	333482	TB-4702	101100	39820	30.64
968246	9/6/2018	09:32:00	18 BOBBY WOLFORD	333482	TB-4702	99940	40620	29.66
968251	9/6/2018	10:10:00	20 BOBBY WOLFORD	333482	TB-4702	97940	40520	28.71
968256	9/6/2018	10:47:00	C750 TRITON	333482	TB-4702	102740	39820	31.46
968262	9/6/2018	11:08:00	18 BOBBY WOLFORD	333482	TB-4702	103820	40620	31.6
968263	9/6/2018	11:26:00	20 BOBBY WOLFORD	333482	TB-4702	96160	40520	27.82
968269	9/6/2018	12:28:00	C750 TRITON	333482	TB-4702	97760	39820	28.97
968270	9/6/2018	12:37:00	18 BOBBY WOLFORD	333482	TB-4702	98820	40620	29.1
968274	9/6/2018	12:57:00	20 BOBBY WOLFORD	333482	TB-4702	96320	40520	27.9
968280	9/6/2018	13:47:00	C750 TRITON	333482	TB-4702	98000	39820	29.09
968283	9/6/2018	13:55:00	18 BOBBY WOLFORD	333482	TB-4702	98380	40620	28.88
968284	9/6/2018	14:31:00	20 BOBBY WOLFORD	333482	TB-4702	97880	40520	28.68
968286	9/6/2018	15:04:00	C750 TRITON	333482	TB-4702	100300	39820	30.24
968287	9/6/2018	15:30:00	18 BOBBY WOLFORD	333482	TB-4702	100200	40620	29.79
968299	9/7/2018	06:53:00	C750 TRITON	333482	TB-4702	99960	39780	30.09
968300	9/7/2018	07:01:00	11 TIGER EXCAVATION	333482	TB-4702	104740	42200	31.27
968301	9/7/2018	07:16:00	66 TIGER EXCAVATION	333482	TB-4702	97880	39140	29.37
968302	9/7/2018	07:36:00	20 BOBBY WOLFORD	333482	TB-4702	100460	40500	29.98
968303	9/7/2018	08:05:00	C750 TRITON	333482	TB-4702	98900	39780	29.56
968305	9/7/2018	08:17:00	11 TIGER EXCAVATION	333482	TB-4702	101120	42200	29.46
968306	9/7/2018	08:33:00	18 BOBBY WOLFORD	333482	TB-4702	100120	40580	29.77
968307	9/7/2018	08:46:00	66 TIGER EXCAVATION	333482	TB-4702	99340	39140	30.1
968309	9/7/2018	09:07:00	20 BOBBY WOLFORD	333482	TB-4702	97020	40500	28.26
968311	9/7/2018	09:23:00	C750 TRITON	333482	TB-4702	97360	39780	28.79
968313	9/7/2018	09:43:00	11 TIGER EXCAVATION	333482	TB-4702	95940	42200	26.87
968315	9/7/2018	09:54:00	18 BOBBY WOLFORD	333482	TB-4702	95560	40580	27.49
968317	9/7/2018	10:13:00	66 TIGER EXCAVATION	333482	TB-4702	92860	39140	26.86
968318	9/7/2018	10:19:00	20 BOBBY WOLFORD	333482	TB-4702	93800	40500	26.65
968319	9/7/2018	10:31:00	C750 TRITON	333482	TB-4702	96880	39780	28.55
968320	9/7/2018	10:56:00	11 TIGER EXCAVATION	333482	TB-4702	101020	42200	29.41
968321	9/7/2018	11:10:00	18 BOBBY WOLFORD	333482	TB-4702	98800	40580	29.11
968323	9/7/2018	11:38:00	66 TIGER EXCAVATION	333482	TB-4702	90780	39140	25.82
968324	9/7/2018	11:50:00	20 BOBBY WOLFORD	333482	TB-4702	91340	40500	25.42
968325	9/7/2018	11:56:00	C750 TRITON	333482	TB-4702	96080	39780	28.15
968326	9/7/2018	12:11:00	11 TIGER EXCAVATION	333482	TB-4702	94660	42200	26.23
968328	9/7/2018	12:30:00	18 BOBBY WOLFORD	333482	TB-4702	93900	40580	26.66
968329	9/7/2018	12:46:00	66 TIGER EXCAVATION	333482	TB-4702	95980	39140	28.42
968330	9/7/2018	12:52:00	20 BOBBY WOLFORD	333482	TB-4702	94600	40500	27.05
968331	9/7/2018	12:58:00	C750 TRITON	333482	TB-4702	101760	39780	30.99
968334	9/7/2018	13:26:00	11 TIGER EXCAVATION	333482	TB-4702	100500	42200	29.15
968336	9/7/2018	13:44:00	18 BOBBY WOLFORD	333482	TB-4702	99980	40580	29.7
968337	9/7/2018	14:08:00	66 TIGER EXCAVATION	333482	TB-4702	97580	39140	29.22

968340	9/7/2018	14:24:00	C750 TRITON	333482	TB-4702	102520	39780	31.37
968347	9/10/2018	07:20:00	C750 TRITON	333482	TB-4702	101460	39980	30.74
968443	9/12/2018	06:58:00	C750 TRITON	333482	TB-4702	97260	40340	28.46
968444	9/12/2018	07:12:00	20 MALTBY TRUCKING	333482	TB-4702	89480	39340	25.07
968446	9/12/2018	08:27:00	C750 TRITON	333482	TB-4702	108120	40340	33.89
968447	9/12/2018	08:20:00	18 BOBBY WOLFORD	333482	TB-4702	91440	41060	25.19
968448	9/12/2018	08:35:00	22 BOBBY WOLFORD	333482	TB-4702	95580	38020	28.78
968449	9/12/2018	08:52:00	20 MALTBY TRUCKING	333482	TB-4702	101240	39340	30.95
968451	9/12/2018	09:48:00	18 BOBBY WOLFORD	333482	TB-4702	104780	41060	31.86
968453	9/12/2018	09:56:00	C750 TRITON	333482	TB-4702	105200	40340	32.43
968454	9/12/2018	10:04:00	22 BOBBY WOLFORD	333482	TB-4702	94120	38020	28.05
968456	9/12/2018	10:35:00	20 MALTBY TRUCKING	333482	TB-4702	98180	39340	29.42
968457	9/12/2018	11:03:00	18 BOBBY WOLFORD	333482	TB-4702	104480	41060	31.71
968458	9/12/2018	11:12:00	C750 TRITON	333482	TB-4702	106980	40340	33.32
968459	9/12/2018	11:23:00	22 BOBBY WOLFORD	333482	TB-4702	98540	38020	30.26
968462	9/12/2018	11:48:00	20 MALTBY TRUCKING	333482	TB-4702	96360	39340	28.51
968465	9/12/2018	12:07:00	18 BOBBY WOLFORD	333482	TB-4702	101920	41060	30.43
968466	9/12/2018	12:22:00	C750 TRITON	333482	TB-4702	111060	40340	35.36
968468	9/12/2018	12:42:00	22 BOBBY WOLFORD	333482	TB-4702	96820	38020	29.4
968469	9/12/2018	13:05:00	20 MALTBY TRUCKING	333482	TB-4702	97820	39340	29.24
968472	9/12/2018	13:27:00	18 BOBBY WOLFORD	333482	TB-4702	102400	41060	30.67
968473	9/12/2018	13:31:00	C750 TRITON	333482	TB-4702	101340	40340	30.5
968475	9/12/2018	13:42:00	5 PONDEROSA	333482	TB-4702	95100	37280	28.91
968477	9/12/2018	14:00:00	22 BOBBY WOLFORD	333482	TB-4702	97100	38020	29.54
968481	9/12/2018	14:26:00	20 MALTBY TRUCKING	333482	TB-4702	96200	39340	28.43
968482	9/12/2018	14:55:00	C750 TRITON	333482	TB-4702	101840	40340	30.75
968485	9/12/2018	15:49:00	22 BOBBY WOLFORD	333482	TB-4702	94320	38020	28.15
968486	9/12/2018	16:12:00	20 MALTBY TRUCKING	333482	TB-4702	99160	39340	29.91
968897	9/25/2018	13:10:00	27 NW SAND AND GRAVE	333482	TB-4702	95780	40120	27.83
968899	9/25/2018	13:18:00	GS7/GRAYSTONE	333482	TB-4702	83500	37000	23.25
968907	9/26/2018	06:55:00	11 TIGER EXCAVATION	333482	TB-4702	101500	42500	29.5
968908	9/26/2018	07:09:00	44 TIGER EXCAVATING	333482	TB-4702	98800	44000	27.4
968915	9/26/2018	07:40:00	20 MALTBY TRUCKING	333482	TB-4702	92780	39360	26.71
968917	9/26/2018	07:53:00	M5 MOSBRUCKER	333482	TB-4702	96560	39240	28.66
968918	9/26/2018	08:09:00	11 TIGER EXCAVATION	333482	TB-4702	98660	42500	28.08
968919	9/26/2018	08:04:00	9 ACE	333482	TB-4702	97320	38960	29.18
968921	9/26/2018	08:41:00	44 TIGER EXCAVATING	333482	TB-4702	101900	44000	28.95
968922	9/26/2018	08:32:00	16 BOBBY WOLFORD	333482	TB-4702	97120	40140	28.49
968923	9/26/2018	09:03:00	20 MALTBY TRUCKING	333482	TB-4702	96860	39360	28.75
968933	9/26/2018	09:24:00	M5 MOSBRUCKER	333482	TB-4702	96920	39080	28.92
968934	9/26/2018	09:40:00	11 TIGER EXCAVATION	333482	TB-4702	97780	42500	27.64
968935	9/26/2018	09:42:00	9 ACE	333482	TB-4702	103500	38960	32.27
968936	9/26/2018	09:52:00	22 BOBBY WOLFORD	333482	TB-4702	54420	27460	13.48
968937	9/26/2018	10:18:00	44 TIGER EXCAVATING	333482	TB-4702	99260	44000	27.63
968938	9/26/2018	10:33:00	20 MALTBY TRUCKING	333482	TB-4702	99560	39360	30.1
968943	9/26/2018	11:05:00	M5 MOSBRUCKER	333482	TB-4702	97220	39080	29.07
968944	9/26/2018	11:13:00	11 TIGER EXCAVATION	333482	TB-4702	104880	42500	31.19
968948	9/26/2018	11:28:00	9 ACE	333482	TB-4702	104100	38960	32.57
968951	9/26/2018	11:49:00	22 BOBBY WOLFORD	333482	TB-4702	53880	27460	13.21
968954	9/26/2018	12:07:00	44 TIGER EXCAVATING	333482	TB-4702	101220	44000	28.61
968958	9/26/2018	12:34:00	11 TIGER EXCAVATION	333482	TB-4702	105960	42500	31.73
968961	9/26/2018	12:47:00	M5 MOSBRUCKER	333482	TB-4702	101720	39080	31.32
968963	9/26/2018	13:24:00	9 ACE	333482	TB-4702	111720	38960	36.38
968966	9/26/2018	13:35:00	44 TIGER EXCAVATING	333482	TB-4702	101800	44000	28.9
968996	9/27/2018	07:50:00	C750 TRITON	333482	TB-4702	101940	39980	30.98
969000	9/27/2018	08:13:00	22 NW SAND & GRAVEL	333482	TB-4702	100300	39640	30.33

969016	9/27/2018	10:08:00	22 NW SAND & GRAVEL	333482	TB-4702	101200	39640	30.78
969017	9/27/2018	10:17:00	5 PONDEROSA	333482	TB-4702	90000	37600	26.2
969019	9/27/2018	10:40:00	C750 TRITON	333482	TB-4702	99060	39980	29.54
969028	9/27/2018	11:32:00	22 NW SAND & GRAVEL	333482	TB-4702	99760	39640	30.06
969039	9/27/2018	12:54:00	22 NW SAND & GRAVEL	333482	TB-4702	94420	39640	27.39
969041	9/27/2018	13:16:00	C750 TRITON	333482	TB-4702	96820	39980	28.42
969082	9/28/2018	09:51:00	04 PONDEROSA	333482	TB-4702	99000	37400	30.8
969086	9/28/2018	10:17:00	22 NW SAND & GRAVEL	333482	TB-4702	110240	41920	34.16
969093	9/28/2018	10:32:00	C750 TRITON	333482	TB-4702	109500	40200	34.65
969099	9/28/2018	11:33:00	04 PONDEROSA	333482	TB-4702	97180	37400	29.89
969103	9/28/2018	11:43:00	22 NW SAND & GRAVEL	333482	TB-4702	116040	41920	37.06
969107	9/28/2018	12:11:00	C750 TRITON	333482	TB-4702	112640	40200	36.22
969115	9/28/2018	12:39:00	04 PONDEROSA	333482	TB-4702	99980	37400	31.29
969121	9/28/2018	12:58:00	22 NW SAND & GRAVEL	333482	TB-4702	109560	41920	33.82
969127	9/28/2018	13:36:00	C750 TRITON	333482	TB-4702	103140	40200	31.47
969280	10/2/2018	13:23:00	04 PONDEROSA	333482	TB-4702	63280	37460	12.91
971622	12/12/2018	12:17:00	SOIL	333482	TB-4702	54860	25880	14.49
971626	12/12/2018	13:28:00	SOIL	333482	TB-4702	57620	25900	15.86
971651	12/13/2018	08:27:00	7 PPI	333482	TB-4702	53080	26160	13.46
971663	12/13/2018	09:58:00	5 PONDEROSA	333482	TB-4702	51480	26200	12.64
971671	12/13/2018	10:51:00	7 PPI	333482	TB-4702	52500	27100	12.7
971672	12/13/2018	10:58:00	7 PPI	333482	TB-4702	53060	27100	12.98
971687	12/13/2018	12:06:00	7 PPI	333482	TB-4702	57640	26500	15.57
971690	12/13/2018	12:44:00	5 PONDEROSA	333482	TB-4702	58660	26120	16.27
971696	12/13/2018	13:07:00	7 PONDEROSA	333482	TB-4702	58380	26060	16.16
971704	12/13/2018	14:03:00	5 PONDEROSA	333482	TB-4702	50800	26220	12.29
971708	12/13/2018	14:22:00	7 PONDEROSA	333482	TB-4702	54620	25820	14.4
971717	12/14/2018	07:33:00	7 PPI	333482	TB-4702	46640	25860	10.39
971718	12/14/2018	07:45:00	5 PONDEROSA	333482	TB-4702	49980	25960	12.01
971720	12/14/2018	07:58:00	4 PONDEROSA	333482	TB-4702	92380	38240	27.07
971721	12/14/2018	09:01:00	7 PPI	333482	TB-4702	52300	25500	13.4
971727	12/14/2018	09:17:00	5 PONDEROSA	333482	TB-4702	58360	25760	16.3
971728	12/14/2018	09:07:00	4 PONDEROSA	333482	TB-4702	90220	38120	26.05
971730	12/14/2018	10:06:00	7 PONDEROSA	333482	TB-4702	54480	25480	14.5
971732	12/14/2018	10:41:00	4 PONDEROSA	333482	TB-4702	90540	38380	26.08
971733	12/14/2018	10:47:00	5 PONDEROSA	333482	TB-4702	55180	25720	14.73
971734	12/14/2018	11:14:00	7 PPI	333482	TB-4702	56620	25440	15.59
971739	12/14/2018	11:56:00	04 PONDEROSA	333482	TB-4702	98800	38060	30.37
971740	12/14/2018	11:59:00	7 PPI	333482	TB-4702	54360	25860	14.25
971746	12/14/2018	13:49:00	04 PONDEROSA	333482	TB-4702	92920	38000	27.46
971747	12/14/2018	13:49:00	5 PONDEROSA	333482	TB-4702	56260	25620	15.32
971756	12/17/2018	07:37:00	7 PONDEROSA	333482	TB-4702	60000	25560	17.22
971757	12/17/2018	07:45:00	5 PONDEROSA	333482	TB-4702	57880	26040	15.92
971760	12/17/2018	08:02:00	04 PONDEROSA	333482	TB-4702	105260	38860	33.2
971768	12/17/2018	08:57:00	7 PPI	333482	TB-4702	54440	25520	14.46
971771	12/17/2018	09:16:00	7 PPI	333482	TB-4702	53660	26020	13.82
971779	12/17/2018	09:40:00	04 PONDEROSA	333482	TB-4702	93780	38540	27.62
971783	12/17/2018	10:13:00	7 PPI	333482	TB-4702	55420	25480	14.97
971793	12/17/2018	10:50:00	04 PONDEROSA	333482	TB-4702	93300	38480	27.41
971795	12/17/2018	11:14:00	5 PONDEROSA	333482	TB-4702	52460	26000	13.23
971799	12/17/2018	11:53:00	04 PONDEROSA	333482	TB-4702	94260	38400	27.93
971801	12/17/2018	12:05:00	7 PONDEROSA	333482	TB-4702	51040	25480	12.78
971803	12/17/2018	12:29:00	5 PONDEROSA	333482	TB-4702	53640	25980	13.83
971806	12/17/2018	12:53:00	4 PONDEROSA	333482	TB-4702	83380	38400	22.49
971808	12/17/2018	13:03:00	7 PONDEROSA	333482	TB-4702	50940	25440	12.75
971815	12/17/2018	13:43:00	5 PONDEROSA	333482	TB-4702	50380	25980	12.2

971831	12/18/2018	07:41:00	7 PONDEROSA	333482	TB-4702	55160	25560	14.8
971832	12/18/2018	07:57:00	04 PONDEROSA	333482	TB-4702	89400	38480	25.46
971833	12/18/2018	08:06:00	5 PONDEROSA	333482	TB-4702	53640	25940	13.85
971842	12/18/2018	09:21:00	7 PONDEROSA	333482	TB-4702	56500	25540	15.48
971843	12/18/2018	09:28:00	5 PONDEROSA	333482	TB-4702	59100	25940	16.58
971844	12/18/2018	09:33:00	04 PONDEROSA	333482	TB-4702	89380	38480	25.45
971856	12/18/2018	10:36:00	5 PONDEROSA	333482	TB-4702	57600	25940	15.83
971858	12/18/2018	10:43:00	7 PONDEROSA	333482	TB-4702	56460	25540	15.46
971859	12/18/2018	10:59:00	04 PONDEROSA	333482	TB-4702	92600	38480	27.06
971870	12/18/2018	11:49:00	7 PONDEROSA	333482	TB-4702	52640	25540	13.55
971872	12/18/2018	11:55:00	5 PONDEROSA	333482	TB-4702	55880	25940	14.97
971873	12/18/2018	12:05:00	04 PONDEROSA	333482	TB-4702	98160	38480	29.84
971876	12/18/2018	12:51:00	7 PONDEROSA	333482	TB-4702	53060	25540	13.76
971879	12/18/2018	13:01:00	5 PONDEROSA	333482	TB-4702	57340	25940	15.7
971880	12/18/2018	13:25:00	04 PONDEROSA	333482	TB-4702	100300	38480	30.91
971881	12/18/2018	13:58:00	5 PONDEROSA	333482	TB-4702	55440	25940	14.75
971905	12/19/2018	09:14:00	5 PONDEROSA	333482	TB-4702	63220	26100	18.56
971908	12/19/2018	09:39:00	04 PONDEROSA	333482	TB-4702	103660	39020	32.32
971911	12/19/2018	11:03:00	5 PONDEROSA	333482	TB-4702	67880	26100	20.89
971915	12/19/2018	11:26:00	04 PONDEROSA	333482	TB-4702	98920	39020	29.95
971919	12/19/2018	12:13:00	5 PONDEROSA	333482	TB-4702	68200	26100	21.05
971922	12/19/2018	12:26:00	04 PONDEROSA	333482	TB-4702	101120	39020	31.05
971932	12/19/2018	14:57:00	5 PONDEROSA	333482	TB-4702	60800	26100	17.35
971933	12/19/2018	14:59:00	04 PONDEROSA	333482	TB-4702	105580	39020	33.28
971945	12/20/2018	08:11:00	04 PONDEROSA	333482	TB-4702	97860	39060	29.4
971946	12/20/2018	08:15:00	7 PONDEROSA	333482	TB-4702	64080	26020	19.03
971947	12/20/2018	08:22:00	5 PONDEROSA	333482	TB-4702	61800	26120	17.84
971954	12/20/2018	09:51:00	04 PONDEROSA	333482	TB-4702	108660	39060	34.8
971956	12/20/2018	09:55:00	7 PONDEROSA	333482	TB-4702	61120	26020	17.55
971958	12/20/2018	10:00:00	5 PONDEROSA	333482	TB-4702	61380	26120	17.63
971963	12/20/2018	11:13:00	04 PONDEROSA	333482	TB-4702	94460	39060	27.7
971964	12/20/2018	11:20:00	5 PONDEROSA	333482	TB-4702	56480	26120	15.18
971965	12/20/2018	11:21:00	7 PONDEROSA	333482	TB-4702	56620	26020	15.3
971968	12/20/2018	12:16:00	04 PONDEROSA	333482	TB-4702	93580	39060	27.26
971969	12/20/2018	12:20:00	7 PONDEROSA	333482	TB-4702	54580	26020	14.28
971971	12/20/2018	12:32:00	5 PONDEROSA	333482	TB-4702	60400	26120	17.14
971974	12/20/2018	13:35:00	04 PONDEROSA	333482	TB-4702	93640	39060	27.29
971975	12/20/2018	13:41:00	7 PONDEROSA	333482	TB-4702	55540	26020	14.76
971976	12/20/2018	13:56:00	5 PONDEROSA	333482	TB-4702	59920	26120	16.9
971991	12/21/2018	07:41:00	04 PONDEROSA	333482	TB-4702	98320	39560	29.38
971993	12/21/2018	08:09:00	7 PONDEROSA	333482	TB-4702	60760	26280	17.24
971994	12/21/2018	08:13:00	5 PONDEROSA	333482	TB-4702	66700	26980	19.86
971997	12/21/2018	08:32:00	C750 TRITON	333482	TB-4702	113140	40820	36.16
971998	12/21/2018	09:05:00	04 PONDEROSA	333482	TB-4702	109940	39560	35.19
971999	12/21/2018	09:09:00	7 PONDEROSA	333482	TB-4702	64260	26280	18.99
972003	12/21/2018	09:33:00	5 PONDEROSA	333482	TB-4702	62800	26980	17.91
972005	12/21/2018	09:54:00	C750 TRITON	333482	TB-4702	110320	40820	34.75
972006	12/21/2018	10:14:00	04 PONDEROSA	333482	TB-4702	106000	39560	33.22
972009	12/21/2018	10:57:00	7 PONDEROSA	333482	TB-4702	64520	26280	19.12
972012	12/21/2018	11:08:00	5 PONDEROSA	333482	TB-4702	66720	26980	19.87
972013	12/21/2018	11:15:00	C750 TRITON	333482	TB-4702	104740	40820	31.96
972017	12/21/2018	11:33:00	04 PONDEROSA	333482	TB-4702	103180	39560	31.81
972021	12/21/2018	12:59:00	C750 TRITON	333482	TB-4702	100420	40820	29.8
972042	12/26/2018	08:19:00	7 PONDEROSA	333482	TB-4702	60640	26280	17.18
972043	12/26/2018	08:27:00	5 PONDEROSA	333482	TB-4702	53980	27220	13.38
972044	12/26/2018	08:31:00	04 PONDEROSA	333482	TB-4702	94620	39800	27.41

972046	12/26/2018	09:54:00	04 PONDEROSA	333482	TB-4702	97500	39800	28.85
972048	12/26/2018	10:01:00	7 PONDEROSA	333482	TB-4702	59520	26280	16.62
972049	12/26/2018	10:06:00	5 PONDEROSA	333482	TB-4702	57760	27220	15.27
972052	12/26/2018	11:15:00	04 PONDEROSA	333482	TB-4702	94260	39800	27.23
972053	12/26/2018	11:21:00	7 PONDEROSA	333482	TB-4702	56180	26280	14.95
972054	12/26/2018	11:44:00	5 PONDEROSA	333482	TB-4702	55220	27220	14
972055	12/26/2018	12:16:00	04 PONDEROSA	333482	TB-4702	83900	39800	22.05
972057	12/26/2018	13:01:00	7 PONDEROSA	333482	TB-4702	59680	26280	16.7
972075	12/26/2018	13:24:00	04 PONDEROSA	333482	TB-4702	98100	39800	29.15
972076	12/26/2018	13:32:00	5 PONDEROSA	333482	TB-4702	63660	27220	18.22
972077	12/26/2018	14:18:00	7 PONDEROSA	333482	TB-4702	65520	26280	19.62
972080	12/26/2018	15:41:00	7 PONDEROSA	333482	TB-4702	58140	26280	15.93
972090	12/27/2018	08:39:00	04 PONDEROSA	333482	TB-4702	94380	39660	27.36
972091	12/27/2018	08:55:00	5 PONDEROSA	333482	TB-4702	61460	27000	17.23
972095	12/27/2018	09:32:00	7 PONDEROSA	333482	TB-4702	59580	25820	16.88
972096	12/27/2018	09:39:00	04 PONDEROSA	333482	TB-4702	84920	39660	22.63
972097	12/27/2018	09:53:00	5 PONDEROSA	333482	TB-4702	56760	27000	14.88
972100	12/27/2018	10:23:00	7 PONDEROSA	333482	TB-4702	52720	25820	13.45
972102	12/27/2018	10:39:00	04 PONDEROSA	333482	TB-4702	92400	39660	26.37
972103	12/27/2018	10:50:00	5 PONDEROSA	333482	TB-4702	57920	27000	15.46
972106	12/27/2018	12:29:00	5 PONDEROSA	333482	TB-4702	64800	27000	18.9
972108	12/27/2018	12:33:00	04 PONDEROSA	333482	TB-4702	95200	39660	27.77
972111	12/27/2018	13:33:00	5 PONDEROSA	333482	TB-4702	60480	27000	16.74
972112	12/27/2018	13:49:00	04 PONDEROSA	333482	TB-4702	107460	39660	33.9
972127	12/28/2018	08:47:00	5 PONDEROSA	333482	TB-4702	49200	27880	10.66
972128	12/28/2018	08:53:00	04 PONDEROSA	333482	TB-4702	85960	39300	23.33
972130	12/28/2018	09:49:00	04 PONDEROSA	333482	TB-4702	86820	39300	23.76
972132	12/28/2018	10:27:00	5 PONDEROSA	333482	TB-4702	53640	27880	12.88
972134	12/28/2018	10:48:00	04 PONDEROSA	333482	TB-4702	89420	39300	25.06
972136	12/28/2018	10:51:00	7 PONDEROSA	333482	TB-4702	56700	26120	15.29
972137	12/28/2018	11:24:00	5 PONDEROSA	333482	TB-4702	57200	27880	14.66
972138	12/28/2018	12:26:00	04 PONDEROSA	333482	TB-4702	92460	39300	26.58
972140	12/28/2018	12:27:00	7 PONDEROSA	333482	TB-4702	50900	26120	12.39
972141	12/28/2018	12:48:00	5 PONDEROSA	333482	TB-4702	59460	27880	15.79
972144	12/28/2018	13:50:00	5 PONDEROSA	333482	TB-4702	58780	27880	15.45
972145	12/28/2018	13:59:00	7 PONDEROSA	333482	TB-4702	56140	26120	15.01
972146	12/28/2018	14:11:00	04 PONDEROSA	333482	TB-4702	86840	39300	23.77
972223	1/4/2019	08:19:00	04 PONDEROSA	333482	TB-4702	109280	41860	33.71
972236	1/4/2019	09:45:00	04 PONDEROSA	333482	TB-4702	84160	41860	21.15
972240	1/4/2019	10:53:00	04 PONDEROSA	333482	TB-4702	80120	41860	19.13
972244	1/4/2019	10:59:00	5 PONDEROSA	333482	TB-4702	49560	37300	6.13
972249	1/4/2019	11:08:00	7 PONDEROSA	333482	TB-4702	49420	26800	11.31
972254	1/4/2019	12:16:00	7 PONDEROSA	333482	TB-4702	52380	26800	12.79
972259	1/4/2019	12:37:00	04 PONDEROSA	333482	TB-4702	88960	41860	23.55
972260	1/4/2019	12:51:00	5 PONDEROSA	333482	TB-4702	65660	37300	14.18
972262	1/4/2019	13:10:00	7 PONDEROSA	333482	TB-4702	53120	26800	13.16
972265	1/4/2019	13:49:00	04 PONDEROSA	333482	TB-4702	91660	41860	24.9
972267	1/4/2019	14:07:00	7 PONDEROSA	333482	TB-4702	61320	26800	17.26
972283	1/7/2019	07:37:00	7 PONDEROSA	333482	TB-4702	57280	25760	15.76
972284	1/7/2019	07:39:00	04 PONDEROSA	333482	TB-4702	93660	39440	27.11
972285	1/7/2019	07:48:00	5 PONDEROSA	333482	TB-4702	55700	26400	14.65
972287	1/7/2019	08:48:00	7 PONDEROSA	333482	TB-4702	55620	25760	14.93
972288	1/7/2019	09:05:00	04 PONDEROSA	333482	TB-4702	93520	39440	27.04
972289	1/7/2019	09:10:00	5 PONDEROSA	333482	TB-4702	59360	26400	16.48
972295	1/7/2019	09:58:00	7 PONDEROSA	333482	TB-4702	59820	25760	17.03
972297	1/7/2019	10:29:00	04 PONDEROSA	333482	TB-4702	105480	39440	33.02

972299	1/7/2019	10:38:00	5 PONDEROSA	333482	TB-4702	65060	26400	19.33
972304	1/7/2019	11:41:00	7 PONDEROSA	333482	TB-4702	65260	25760	19.75
972310	1/7/2019	12:32:00	04 PONDEROSA	333482	TB-4702	108320	39440	34.44
972311	1/7/2019	12:35:00	5 PONDEROSA	333482	TB-4702	63280	26400	18.44
972407	1/8/2019	12:57:00	5 PONDEROSA	333482	TB-4702	59340	26360	16.49
972425	1/8/2019	14:28:00	5 PONDEROSA	333482	TB-4702	68820	26360	21.23
972701	1/11/2019	11:31:00	04 PONDEROSA	333482	TB-4702	91000	39000	26
972734	1/14/2019	08:36:00	11 TIGER EXCAVATION	333482	TB-4702	94660	40620	27.02
972750	1/14/2019	11:10:00	66 TIGER	333482	TB-4702	100000	39860	30.07
972756	1/14/2019	12:28:00	12 TIGER EXCAVATION	333482	TB-4702	107600	46040	30.78
972762	1/14/2019	12:49:00	66 TIGER EXCAVATION	333482	TB-4702	106040	38140	33.95
972770	1/14/2019	14:07:00	12 TIGER EXCAVATION	333482	TB-4702	105480	44760	30.36
972795	1/15/2019	08:31:00	12 TIGER EXCAVATION	333482	TB-4702	96060	43700	26.18
972797	1/15/2019	08:52:00	66 TIGER EXCAVATION	333482	TB-4702	88680	42940	22.87
972805	1/15/2019	09:18:00	33 TIGER	333482	TB-4702	104100	40140	31.98
972816	1/15/2019	11:10:00	12 TIGER EXCAVATION	333482	TB-4702	101720	44540	28.59
972817	1/15/2019	11:18:00	66 TIGER EXCAVATION	333482	TB-4702	101060	41800	29.63
972825	1/15/2019	12:09:00	33 TIGER	333482	TB-4702	94420	41060	26.68
972837	1/15/2019	13:06:00	12 TIGER EXCAVATION	333482	TB-4702	93540	44240	24.65
972840	1/15/2019	13:10:00	66 TIGER EXCAVATION	333482	TB-4702	83820	42500	20.66

28766.54 Total

Republic Services. Wood waste disposal

tknumb	datein	timein	truk	cust	job	ref		weii	weio	qty
1092703	6/28/2018	10:00:00	1	333426	TB-10328	1 PONDERROSA		51680	34420	8.63
1092723	6/28/2018	12:28:00	1	333426	TB-10328	1/PONDEROSA		45600	34760	5.42
1093595	7/9/2018	11:00:00	1	333426	TB-10328	PONDEROSA /1		47880	34660	6.61
1093620	7/9/2018	12:53:00	REGENCY	333426	TB-10328	1 PONDEROSA		47820	34680	6.57
1094452	7/18/2018	13:23:00	REGENCY	333426	TB-10328	PP12		15060	11340	1.86
1095544	7/30/2018	12:47:00	REGENCY	333426	TB-10328	2 PPI		48000	35040	6.48
1095565	7/30/2018	14:37:00	REGENCY	333426	TB-10328	2 PPI		48620	35040	6.79
1095649	7/31/2018	11:05:00	REGENCY	333426	TB-10328	7 PONDEROSA		31740	25560	3.09
1095659	7/31/2018	12:12:00	REGENCY	333426	TB-10328	7 PONDEROSA		33020	25540	3.74
1095672	7/31/2018	13:09:00	REGENCY	333426	TB-10328	7 PPI		32480	25500	3.49
1095873	8/2/2018	08:05:00	REGENCY	333426	TB-10328	3 PONDEROSA		53240	41240	6
1095885	8/2/2018	09:41:00	REGENCY	333426	TB-10328	3 PONDEROSA		55000	41540	6.73
1099065	9/7/2018	11:35:00	REGENCY	333426	TB-10328	1 PONDEROSA		49240	38360	5.44
1099097	9/7/2018	15:19:00	REGENCY	333426	TB-10328	1 PONDEROSA		49920	38360	5.78
1099376	9/11/2018	14:18:00	REGENCY	333426	TB-10328	7 PPI		33000	25280	3.86
1105620	11/27/2018	11:16:00	REGENCY	333426	TB-10328		3	54460	42820	5.82
1108572	1/4/2019	13:57:00	REGENCY	333426	TB-10328	5 PPI		29080	26480	1.3
1108826	1/8/2019	11:31:00	REGENCY	333426	TB-10328	5 PPI		31940	26220	2.86
1109470	1/15/2019	13:25:00	REGENCY	333426	TB-10328		1	56660	41420	7.62
1109750	1/18/2019	07:45:00	REGENCY	333426	TB-10328	1/PONDEROSA		47460	40000	3.73

Total: 101.82

APPENDIX H

DISPOSAL DOCUMENTATION FOR TRUCKED WASTEWATER

BRAVO environmental

WORK ORDER 51914

Order Date: 8
Required Date: 8 8 18
Work Date:

Ordered by: Clear Creek Systems
Company:

other contact
Nick
360 815 0421

Location: 1401 NW 46th St
Seattle

Phone: 877 324 9643
Job: Dispatch # 59984
PO #: D059984

Site Phone: 714 883 5118
Site Contact: Tim

Service Description

Haul contaminated water

6,000 gal

Notes:

Start Travel:	0800 am/pm	**Start Job:**	0930 am/pm	**Finish Job:**	1030 am/pm	**Finish off-loading:**	am/pm
Stop Travel:	1300 am/pm						
Disposal Site:	PRS	**Estimated Tons:**	N/A	**Receipt # for Disposal:**	see attached		
Decant Site:	PRS	**Estimated Gallons:**	N/A	**Water District:**	N/A		
Truck:	Full Empty	**Laborer:**	N/A	**Estimated Gallons:**	N/A		
		Operator:	Aaron	**Truck Number:**	T-07		

Rates, prevailing wage: ☒
Rates Non-prevailing wage ☒
3 hour minimum, portal to portal

Signature: Bill V. **Signed by:**

Signature above acknowledges approval of all work completed as stated on this work order:

Payment Terms: Net 30, all overdue accounts will be charged 1.5% monthly

6437 South 144th Street • Tukwila, WA 98168 • phone: 425.424.9000 • fax: 425.424.9002 • toll free: 888.BRAVO44
www.BravoEnvironmental.com

BRAVO environmental

WORK ORDER

22602

Order Date: 8/5/18
Required Date: 8/11/18
Work Date:

Ordered by:
Company: Clear Creek Systems

Location: 4517 14th Ave NW SEATTLE

Phone:
Job: D059984
PO #:

Site Phone: 714-883-5118
Site Contact: Tim

Service Description:

Remove (2) loads of waste water from Blue tank. Off load @ PRS in Tacoma

Notes:

* Call Zach 1 hour prior to arriving at PRS 253-202-8088 *

* Job gate/lock combo: 4101

8,000 gal

Start Travel: 0615 am/pm **Start Job:** 0700 am/pm **Finish Job:** 1330 am/pm **Finish off-loading:** 1430 am/pm **Stop Travel:** 1515 am/pm

Disposal Site:	PRS	**Estimated Tons:**	N/A	**Receipt # for Disposal**	81082, 81084
Decant Site:	N/A	**Estimated Gallons:**	N/A	**Water District:**	N/A
Truck:		**Laborer:**	N/A	**Estimated Gallons:**	N/A
		Operator:	Toby	**Truck Number:**	B-24

Rates, prevailing wage: ☒
Rates Non-prevailing wage:
3 hour minimum, portal to portal

Signature: _____ **Signed by:** _____

Signature above acknowledges approval of all work compleated as stated on this work order:

Payment Terms: Net 30, all overdue accounts will be charged 1.5% monthly

6437 South 144th Street Tukwila, WA 98168 • phone: 425.424.9000 • fax: 425.424.9002 • toll free: 888.BRAVO44
www.BravoEnvironmental.com

BRAVO environmental

Dispatch #: 60050 **Bravo Job #** D059984
Order Date: **Time** 4:00 PM
Disp. Date: 8/13/2018 **PO/Job #**
Work Date 8.13.18 **Customer Job#**
Assigned To: Dashaun Smith

Company
Clear Creek Systems Inc.
4101 Union Ave
Bakersfield CA 93305
(877) 324-9634

Site
Clear Creek Systems - Block at Ballar
4517 14th Ave NW
Seattle WA 00000
Site Contact
Nick
(360) 815-0421

B - 24

Equipment Assigned: RED
Service Order: Haul (1) load contaminated waste water from ~~blue~~ tank to PRS in Tacoma. PM: JE
GATE LOCK CODE 4101

13.35 TON
~4,000 gal

On-site on ASAP - Offload at PRS Tacoma

AM / ~~PM~~ **Start Travel:** 1500 **Start Job:** 1615 **Finish:** 1645 **Finish off loading:** 1900 AM / ~~PM~~ **Stop Travel:** 1930

Disposal Site: PRS **Est Tons:** ~ **Reciept Number Disposal:**

Decant Site: **Est. Gallons:** **Water District:** ~

Empty or Full: **Unit Number:** B24 **Est Gallons Used:** ~

Operator: DA SHAUN

Prevailing Wage YES **NO**

Laborer:

Signature N/A **Signed By**

Signature acknowledges approval of work completed **Payment Terms: Net 10**

BRAVO environmental

Dispatch #: 60013 **Bravo Job #** D059984
Order Date: **Time** 08:00 AM
Disp. Date: 8/14/2018 **PO/Job #**
Work Date 8-14-18 **Customer Job#**
Assigned To: John Ramsey, Aaron Barr

Company
Clear Creek Systems Inc.
4101 Union Ave
Bakersfield CA 93305
(877) 324-9634

Site
Clear Creek Systems - Block at Ballar
4517 14th Ave NW
Seattle WA 00000
Site Contact
Nick
(360) 815-0421

Equipment Assigned: T-07 CAT Tractor
Service Order: Haul (2) loads contaminated waste water to PRS in Tacoma in Tanker, confirm with site contact which tank to work on.

6,000 gal

On-site at 8:00AM

2 LOADS
HAD Blow out 2nd LOAD TOO FULL IN YARD

AM / PM
Start Travel: 0630 **Start Job:** 0745 **Finish:** 12:00 **Finish off loading:** —— **AM / (PM)** **Stop Travel:** 1300

Disposal Site: PRS **Est Tons:** **Reciept Number Disposal:** 81123

Decant Site: **Est. Gallons:** 6,000 **Water District:**

Empty or Full: **Unit Number:** T-07 **Est Gallons Used:**

Operator: John
Laborer:

Prevailing Wage YES (NO)

Signature _____ **Signed By** KEN LESOSKO PM

Signature acknowledges approval of work completed **Payment Terms: Net 10**

BRAVO environmental

Dispatch #: 60073 **Bravo Job #** D059984
Order Date: **Time** 11:00 AM
Disp. Date: 8/15/2018 **PO/Job #**
Work Date 8-15-18 **Customer Job#**
Assigned To: John Ramsey

Company
Clear Creek Systems Inc.
4101 Union Ave
Bakersfield CA 93305
(877) 324-9634

Site
Clear Creek Systems - Block at Ballar
4517 14th Ave NW
Seattle WA 00000
Site Contact
Nick
(360) 815-0421

Equipment Assigned: T-07 CAT Tractor
Service Order: Offload tanker

6,000 gal

AM / PM
Start Travel: — **Start Job:** 11:00 **Finish:** — **Finish off loading:** — AM / PM **Stop Travel:** 1315

Disposal Site: NRS **Est Tons:** **Reciept Number Disposal:** —

Decant Site: **Est. Gallons:** 6000 **Water District:** —

Empty or Full: **Unit Number:** T-07 **Est Gallons Used:** —

Operator: John
Laborer: —

Prevailing Wage YES NO

Signature _____ **Signed By** _____

Signature acknowledges approval of work completed **Payment Terms: Net 10**

BRAVO environmental

Dispatch #: 60139 **Bravo Job #** D059984
Order Date: **Time** 12:00
Disp. Date: 8/20/2018 **PO/Job #**
Work Date 8-20-18 **Customer Job#**
Assigned To: John Ramsey

Company
Clear Creek Systems Inc.
4101 Union Ave
Bakersfield CA 93305
(877) 324-9634

Site
Clear Creek Systems - Block at Ballar
4517 14th Ave NW
Seattle WA 00000
Site Contact
Nick
(360) 815-0421

Equipment Assigned: T-07
Service Order: Haul (2) loads contaminated waste water out of blue tank to PRS in Tacoma in Tanker, confirm with site contact which tank to work on.

1 LOAD

Cooksel

AM / PM
Start Travel: 11:00 **Start Job:** 12:00 **Finish:** 12:15 **Finish off loading:** 1345 AM / PM **Stop Travel:** 1445

Disposal Site: PRS **Est Tons:** — **Reciept Number Disposal:** 81239

Decant Site: — **Est. Gallons:** 5,000 **Water District:** —

Empty or Full: **Unit Number:** T-07 **Est Gallons Used:** —

Operator: John
Laborer: —

Prevailing Wage YES (NO)

Signature _____ **Signed By** _____

Signature acknowledges approval of work completed **Payment Terms: Net 10**

BRAVO environmental

WORK ORDER 52077

Order Date: 8
Required Date: 8 23 18
Work Date:

Ordered by: clear creek systems
Company:

Location: Block ab Ballard
4517 14th AVE NW

Phone:
Job:
PO #: D059984

Site Phone: 360 815 0421
Site Contact: Nick

Service Description

Two Loads of contaminated water to PRS Decon

8,000 gal

Notes:

Start Travel: 700 am/pm **Start Job:** 800 am/pm **Finish Job:** 1130 am/pm **Finish off-loading:** 1300 am/pm **Stop Travel:** 1330 am/pm

Disposal Site:	PRS	**Estimated Tons:**	N/A	**Receipt # for Disposal:**	Rescheduled
Decant Site:	PRS	**Estimated Gallons:**	N/A	**Water District:**	N/A
Truck:	Full / Empty	**Laborer:**	N/A	**Estimated Gallons:**	~~8000~~
		Operator:	Aaron	**Truck Number:**	B-24

Rates, prevailing wage: ☒
Rates Non-prevailing wage: ☒
3 hour minimum, portal to portal

Signature:

Signed by: Bill V (graham)

Signature above acknowledges approval of all work completed as stated on this work order:

Payment Terms: Net 30, all overdue accounts will be charged 1.5% monthly

6437 South 144th Street • Tukwila, WA 98168 • phone: 425.424.9000 • fax: 425.424.9002 • toll free: 888.BRAVO44
www.BravoEnvironmental.com

Paulsens
JPS1
64100

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

6.74 - 1617.6 gal

Work Order #

Job Name Clear Creek

Profile #

Customer Signature

Weigh Master Signature

Other Information
Clean water into manhole

JPSI.
Jenkins
66340

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

7.96 – 1910.4 gal

Work Order # _____

Job Name Clear Creek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

Clean water into manhole

6-3060
Jenkins

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

7.22 - 17328 gal

Work Order # _____

Job Name Clear Creek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

Clean water

64640

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

6.97 — 1672.8 gal

Work Order # _____

Job Name Clean Creek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

Jenkins
JPS1
65420

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

Work Order # 7.22-17328 Sol

Job Name Clear Creek

Profile #

Customer Signature

Weigh Master Signature

Other Information

Clean water into manhole

KW2 - Jenkins pipeline Services

JPS1

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

64640

6.96 - 1600.4 gal

Work Order # _____

Job Name Clear Creek

Profile # _____

Customer Signature

Weigh Master Signature

Other Information

Clean Waters into manhole

Clear Creek Systems, Inc.
4101 Union Ave

(661) 324-9634
FAX (661) 322-4206

Invoice

DATE	INVOICE #
9/19/2018	63036

BILL TO	SHIP TO
Graham Construction & Management, Inc **568 First Avenue South, Suite 400** **Seattle, WA 98104**	**14th Avenue W & 46th Avenue N** **Seattle, WA 98107**

P.O. NUMBER	TERMS	DUE DATE	REP	SHIP	VIA	F.O.B.	PROJECT
3100160540	Net 60	11/18/2018	CMJ	9/13/2018			17130- 14th Avenue ...

QUANTITY	DESCRIPTION	PRICE EACH	AMOUNT
	14th Avenue W & 46th Avenue N, Seattle, WA 98107		
46	**Tanker hours**	**187.50**	**8,625.00T**
9	**Tanker hours - OT**	**47.50**	**427.50T**
68,553.6	**Disposal of H2O per gallon**	**0.475**	**32,562.96T**
13.35	**Sludge disposal per ton**	**225.00**	**3,003.75T**
6	**After hours disposal fee**	**75.00**	**450.00T**
15.75	**Vac truck labor hours**	**235.00**	**3,701.25T**
1	**Vac truck labor hours - OT**	**30.00**	**30.00T**
	Sales Tax-Seattle-1726	**10.10%**	**4,928.85**

	Total	**$53,729.31**

BRAVO environmental

WORK ORDER 51914

Order Date: 8
Required Date: 8 8 10
Work Date:

Ordered by: Clear Creek systems
Company:

Location: 1401 NW 46th St Seattle

other contact
Nick
360 815 0421

Phone: 877 324 9643
Job: Dispatch # 59984
PO #: D059984

Site Phone: 714 883 5118
Site Contact: Tim

Service Description

Haul contaminated water

Notes:

Start Travel:	0800 am/pm	Start Job:	0930 am/pm	Finish Job:	1030 am/pm	Finish off-loading:	am/pm
Stop Travel:	1300 am/pm						
Disposal Site:	PRS	Estimated Tons:	N/A	Receipt # for Disposal:	See attached		
Decant Site:	PRS	Estimated Gallons:	N/A	Water District:	N/A		
Truck:	Full Empty	Laborer:	N/A	Estimated Gallons:	N/A		
		Operator:	Aaron	Truck Number:	T-07		

Rates, prevailing wage:
Rates Non-prevailing wage ☒
3 hour minimum, portal to portal ☒

Signature: Bill

Signed by:

Signature above acknowledges approval of all work completed as stated on this work order:

Payment Terms: Net 30, all overdue accounts will be charged 1.5% monthly

6437 South 144th Street • Tukwila, WA 98168 • phone: 425.424.9000 • fax: 425.424.9002 • toll free: 888.BRAVO44
www.BravoEnvironmental.com

BRAVO environmental

WORK ORDER

22602

Order Date: 8/8/18
Required Date: 8/11/18
Work Date:

Ordered by:
Company: Clear Creek Systems

Location: 4517 14th Ave NW SEATTLE

Phone:
Job: D059984
PO #:

Site Phone: 714-883-5118
Site Contact: Tim

Service Description:

Remove (2) loads of waste water from Blue tank. Off load @ PRS in Tacoma

Notes:

* Call Zach 1 hour prior to arriving at PRS 253-202-8088 *

* Job gate/lock combo: 4101

Start Travel: 0615 am/pm Start Job: 0700 am/pm Finish Job: 1330 am/pm Finish off-loading: 1430 am/pm Stop Travel: 1515 am/pm

Disposal Site:	PRS	Estimated Tons:	N/A	Receipt # for Disposal	81082, 81084
Decant Site:	N/A	Estimated Gallons:	N/A	Water District:	N/A
Truck:		Laborer:	N/A	Estimated Gallons:	N/A
		Operator:	Toby	Truck Number:	B-24

Rates, prevailing wage:
Rates Non-prevailing wage: ☒
3 hour minimum, portal to portal

Signature: _____ **Signed by:** _____

Signature above acknowledges approval of all work compleated as stated on this work order:

Payment Terms: Net 30, all overdue accounts will be charged 1.5% monthly

6437 South 144th Street Tukwila, WA 98168 • phone: 425.424.9000 • fax: 425.424.9002 • toll free: 888.BRAVO44
www.BravoEnvironmental.com

BRAVO environmental

Dispatch #: 60050 **Bravo Job #** D059984
Order Date: **Time** 4:00 PM
Disp. Date: 8/13/2018 **PO/Job #**
Work Date 8.13.18 **Customer Job#**
Assigned To: Dashaun Smith

Company

Clear Creek Systems Inc.
4101 Union Ave
Bakersfield CA 93305
(877) 324-9634

Site

Clear Creek Systems - Block at Ballar
4517 14th Ave NW
Seattle WA 00000
Site Contact
Nick
(360) 815-0421

B - 24

Equipment Assigned: RED

Service Order: Haul (1) load contaminated waste water from ~~blue~~ tank to PRS in Tacoma. PM: JE
GATE LOCK CODE 4101

On-site on ASAP - Offload at PRS Tacoma

AM / ~~PM~~ **Start Travel:** 1500 **Start Job:** 1615 **Finish:** 1645 **Finish off loading:** 1900 **AM / ~~PM~~ Stop Travel:** 1930

Disposal Site: PRS **Est Tons:** ~ **Reciept Number Disposal:**

Decant Site: **Est. Gallons:** **Water District:** ~

Empty or Full: **Unit Number:** B24 **Est Gallons Used:** ~

Operator: DA SHAUN

Prevailing Wage YES NO **Laborer:**

Signature N/A **Signed By**

Signature acknowledges approval of work completed **Payment Terms: Net 10**

BRAVO environmental

Dispatch #: 60013 **Bravo Job #** D059984
Order Date: **Time** 08:00 AM
Disp. Date: 8/14/2018 **PO/Job #**
Work Date 8-14-18 **Customer Job#**
Assigned To: John Ramsey, Aaron Barr

Company
Clear Creek Systems Inc.
4101 Union Ave
Bakersfield CA 93305
(877) 324-9634

Site
Clear Creek Systems - Block at Ballar
4517 14th Ave NW
Seattle WA 00000
Site Contact
Nick
(360) 815-0421

Equipment Assigned: T-07 CAT Tractor
Service Order: Haul (2) loads contaminated waste water to PRS in Tacoma in Tanker, confirm with site contact which tank to work on.

On-site at 8:00AM

2 LOADS

HAD BLOW OUT 2ND LOAD T-07 FULL IN YARD

AM / PM
Start Travel: 0630 **Start Job:** 0745 **Finish:** 1200 **Finish off loading:** ——— **AM / (PM)** **Stop Travel:** 1300

Disposal Site: PRS **Est Tons:** **Reciept Number Disposal:** 81123

Decant Site: **Est. Gallons:** 6,000 **Water District:**

Empty or Full: **Unit Number:** T-07 **Est Gallons Used:**

Operator: John

Prevailing Wage YES (NO)

Laborer:

Signature [signature] **Signed By** KEN LOSOKO PNE

Signature acknowledges approval of work completed **Payment Terms: Net 10**

BRAVO environmental

Dispatch #: 60073 **Bravo Job #** D059984
Order Date: **Time** 11:00 AM
Disp. Date: 8/15/2018 **PO/Job #**
Work Date 8-15-18 **Customer Job#**
Assigned To: John Ramsey

Company
Clear Creek Systems Inc.
4101 Union Ave
Bakersfield CA 93305
(877) 324-9634

Site
Clear Creek Systems - Block at Ballar
4517 14th Ave NW
Seattle WA 00000
Site Contact
Nick
(360) 815-0421

Equipment Assigned: T-07 CAT Tractor
Service Order: Offload tanker

AM / PM
Start Travel: — **Start Job:** 11:00 **Finish:** — **Finish off loading:** — **AM / PM** **Stop Travel:** 1315

Disposal Site: NRS **Est Tons:** **Reciept Number Disposal:** —

Decant Site: **Est. Gallons:** 6000 **Water District:** —

Empty or Full: **Unit Number:** T-07 **Est Gallons Used:** —

Operator: John
Laborer: —

Prevailing Wage YES NO

Signature _____ **Signed By** _____

Signature acknowledges approval of work completed

Payment Terms: Net 10

BRAVO environmental

Dispatch #: 60139 **Bravo Job #** D059984
Order Date: **Time** 12:00
Disp. Date: 8/20/2018 **PO/Job #**
Work Date 8-20-18 **Customer Job#**
Assigned To: John Ramsey

Company

Clear Creek Systems Inc.
4101 Union Ave
Bakersfield CA 93305
(877) 324-9634

Site

Clear Creek Systems - Block at Ballar
4517 14th Ave NW
Seattle WA 00000
Site Contact
Nick
(360) 815-0421

Equipment Assigned: T-07

Service Order: Haul (2) loads contaminated waste water out of blue tank to PRS in Tacoma in Tanker, confirm with site contact which tank to work on.

1 LOAD

AM / PM
Start Travel: 11:00 **Start Job:** 12:00 **Finish:** 12:15 **Finish off loading:** 1345 AM / PM **Stop Travel:** 1445

Disposal Site: PRS **Est Tons:** — **Reciept Number Disposal:** 81239

Decant Site: — **Est. Gallons:** 5,000 **Water District:** —

Empty or Full: **Unit Number:** T-07 **Est Gallons Used:** —

Operator: John
Laborer: —

Prevailing Wage YES (NO)

Signature _____ **Signed By** _____

Signature acknowledges approval of work completed

Payment Terms: Net 10

BRAVO environmental

WORK ORDER 52077

Order Date: 8
Required Date: 8 23 18
Work Date:

Ordered by: clear creek systems
Company:

Location: Block at Ballard
4517 14th AVE NW

Phone:
Job:
PO #: D0599484

Site Phone: 360 815 0421
Site Contact: Nick

Service Description

Two Loads of contaminated water to PRS Decon

Notes:

Start Travel:	700 am/pm	Start Job:	800 am/pm	Finish Job:	1130 am/pm	Finish off-loading:	1300 am/pm
Stop Travel:	1330 am/pm						
Disposal Site:	PRS	Estimated Tons:	N/A	Receipt # for Disposal:	See attached		
Decant Site:	PRS	Estimated Gallons:	N/A	Water District:	N/A		
Truck:	Full / Empty	Laborer:	N/A	Estimated Gallons:	~~8000~~ 8000		
		Operator:	Adam	Truck Number:	B-24		

Rates, prevailing wage: ☒
Rates Non-prevailing wage: ☒
3 hour minimum, portal to portal

Signature:

Signed by: Bill V (graham)

Signature above acknowledges approval of all work completed as stated on this work order:

Payment Terms: Net 30, all overdue accounts will be charged 1.5% monthly

6437 South 144th Street • Tukwila, WA 98168 • phone: 425.424.9000 • fax: 425.424.9002 • toll free: 888.BRAVO44
www.BravoEnvironmental.com

BRAVO environmental

WORK ORDER 52078

Order Date: 8
Required Date: 24 18
Work Date:

Ordered by:
Company: Clear creek systems

Location: Block at Bothell
4517 148th Ave NE

Phone:
Job: Dispatch # 60188
PO #: D059984

Site Phone:
Site Contact:

Service Description

1 Load out of Blue tank

Notes:

Start Travel: 07:00 am/pm | Start Job: 0730 am/pm | Finish Job: 0830 am/pm | Finish off-loading: 1000 am/pm | Stop Travel: 1100 am/pm

Disposal Site:	PRS	Estimated Tons:	N/A	Receipt # for Disposal:	see attached
Decant Site:	PRS	Estimated Gallons:	N/A	Water District:	N/A
Truck:	Full Empty	Laborer:	N/A	Estimated Gallons:	600
		Operator:	Aaron	Truck Number:	D-07

Rates, prevailing wage: ☒
Rates Non-prevailing wage: ☒
3 hour minimum, portal to portal

Signature:
Signed by: Bill VanMeveren graham

Signature above acknowledges approval of all work completed as stated on this work order:

Payment Terms: Net 30, all overdue accounts will be charged 1.5% monthly

6437 South 144th Street • Tukwila, WA 98168 • phone: 425.424.9000 • fax: 425.424.9002 • toll free: 888.BRAVO44
www.BravoEnvironmental.com

BRAVO environmental

Dispatch #: 60190 **Bravo Job #** D059984
Order Date: **Time** 08:00 AM
Disp. Date: 8/27/2018 **PO/Job #**
Work Date _____ **Customer Job#**
Assigned To: Toby Volk

Company

Clear Creek Systems Inc.
4101 Union Ave
Bakersfield CA 93305
(877) 324-9634

Site

Clear Creek Systems - Block at Ballar
4517 14th Ave NW
Seattle WA 00000
Site Contact
Nick
(360) 815-0421

Equipment Assigned: B-24 Hook
Service Order: Haul (3) loads contaminated waste water to PRS in Tacoma in Tanker. Please confirm with site contact which tank to work on.

On-site at 8:00AM

AM / PM
Start Travel: 0715 **Start Job:** 0800 **Finish:** 0830 **Finish off loading:** 1000 **Stop Travel:** 1145 (AM / PM)

Disposal Site: PRS **Est Tons:** N/A **Reciept Number Disposal:** 81382

Decant Site: N/A **Est. Gallons:** N/A **Water District:** N/A

Empty or Full: **Unit Number:** B-24 **Est Gallons Used:** N/A

Operator: Toby
Laborer: N/A

Prevailing Wage YES NO

Signature _____ **Signed By** _____

Signature acknowledges approval of work completed **Payment Terms: Net 10**

Perkins
JFS1
64100

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

TICKET # 2630
JENKINS PIPE
VEHICLE ID JFS1
COMPANY NAME
GROSS WEIGHT 64080 lb
TARE WEIGHT 50600 lb
NET WEIGHT 13480 lb
NET TONS 6.74 ton
DATE-TIME 1548772

Work Order #

Job Name Clear Creek

Profile #

Customer Signature

Weigh Master Signature

Other Information

Clear water into manhole

KW2.
Jenkins Pipeline Services
64640

JPS1

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

Work Order # _____

Job Name Clear Creek

Profile # _____

Customer Signature

Weigh Master Signature

Other Information
Clean Waters into manhole

Jenkins
JPS1
65420

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

TICKET # 26324
JENKINS PIPE
VEHICLE ID JPS1
CO-PANY NAME
GROSS WEIGHT 35440 lb
TARE WEIGHT 21000 lb
NET WEIGHT 14440 lb
NET WT-TONS 7.22 ton
2019-10-20 11432417

Work Order # _____

Job Name Clear Creek

Profile # _____

Customer Signature

Weigh Master Signature

Other Information
Clean water into manhole

64640

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

TICKET # 26328
JENKINS PIPE
VEHICLE ID JP81
COMPANY NAME
GROSS WEIGHT 64600 lb
TARE WEIGHT 50660 lb
NET WEIGHT 13940 lb
NET AT-TONS 6.97 ton
2016-09-30 12:24:33

Work Order # _____

Job Name Clear Creek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

6-3060
Jenkins

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

TICKET # 26331
JENKINS PIPE
VEHICLE ID JP61
COMPANY NAME
GROSS WEIGHT 65080 lb
TARE WEIGHT 50640 lb
NET WEIGHT 14440 lb
NET U.S. TONS 7.22 ton
2016-08-30 13:16:52

Work Order # _____

Job Name Clear Creek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

Clean water

JPSI.
Jenkins
66340

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

TICKET # 26504
JENKINS PIPE
VEHICLE ID JPSI
COMPANY NAME
GROSS WEIGHT 56540 lb
TARE WEIGHT 50620 lb
NET WEIGHT 15920 lb
NET AT-TIME 7.96 ton
2012-06-30 14412455

Work Order # _____

Job Name Clear Creek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

Clean water into manhole

66940
Jenkins
JP51

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

TICKET # 26337
JENKINS PIPE
VEHICLE ID JP51
COMPANY NAME
GROSS WEIGHT 66940 lb
TARE WEIGHT 50620 lb
NET WEIGHT 16320 lb
NET WT-TONS 8.16 ton
2019-06-30 15:00:28

Work Order # _____

Job Name Clear Creek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

Clean water
into manhole

61500

JP31

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

Work Order # _____

Job Name Clear Creeks

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

Clear water

60960

JPS1

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

TICKET # 26355
TERMINAL PIPE
VEHICLE ID JPS1
COMPANY NAME
GROSS WEIGHT 60980 lb
TARE WEIGHT 47100 lb
NET WEIGHT 13880 lb
NET IN TONS 6.94 ton
2016-09-14 12:44:02

Work Order # _____

Job Name Clearcreek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

Clearwater

6100

JPS1

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

TICKET # 26362
ITEMIZED HERE
VEHICLE ID JPS1
COMPANY NAME
GROSS WEIGHT 51100 lb
TARE WEIGHT 47060 lb
NET WEIGHT 4040 lb
NET TONS 7.02 TON
DATE/TIME 1414-PM

Work Order # _____

Job Name Clear Creek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

clean water

61020

JPSL

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

TICKET # 26388
TENANTS PIPE JPSL
VEHICLE ID
COMPANY NAME
GROSS WEIGHT 61040 lb
TARE WEIGHT 47080 lb
NET WEIGHT 13960 lb
NET OVERAGE 6.98 TON
2018-08-04 1314-0402

Work Order # _____

Job Name Clear Creek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

Clear work

BRAVO environmental

WORK ORDER 52078

Order Date: 8 24 18
Required Date:
Work Date:

Ordered by:
Company: Clear creek systems

Location: Block at Bothell 4517 146th Ave NE

Phone:
Job: Dispatch # 60188
PO #: D059984

Site Phone:
Site Contact:

Service Description

1 Load out of Blue tank

Notes:

Start Travel: 07:00 am/pm | Start Job: 07:30 am/pm | Finish Job: 08:30 am/pm | Finish off-loading: 10:00 am/pm | Stop Travel: 11:00 am/pm

Disposal Site:	PRS	Estimated Tons:	N/A	Receipt # for Disposal:	see attached
Decant Site:	PRS	Estimated Gallons:	N/A	Water District:	N/A
Truck:	Full Empty	Laborer:	N/A	Estimated Gallons:	600
		Operator:	Aaron	Truck Number:	D-07

Rates, prevailing wage: ☒
Rates Non-prevailing wage: ☒
3 hour minimum, portal to portal

Signature:
Signed by: Bill VanMeveren graham

Signature above acknowledges approval of all work completed as stated on this work order:

Payment Terms: Net 30, all overdue accounts will be charged 1.5% monthly

6437 South 144th Street • Tukwila, WA 98168 • phone: 425.424.9000 • fax: 425.424.9002 • toll free: 888.BRAVO44
www.BravoEnvironmental.com

BRAVO environmental

Dispatch #: 60190 **Bravo Job #** D059984
Order Date: **Time** 08:00 AM
Disp. Date: 8/27/2018 **PO/Job #**
Work Date _____ **Customer Job#**
Assigned To: Toby Volk

Company
Clear Creek Systems Inc.
4101 Union Ave
Bakersfield CA 93305
(877) 324-9634

Site
Clear Creek Systems - Block at Ballar
4517 14th Ave NW
Seattle WA 00000
Site Contact
Nick
(360) 815-0421

Equipment Assigned: B-24 Hook
Service Order: Haul (3) loads contaminated waste water to PRS in Tacoma in Tanker. Please confirm with site contact which tank to work on.

On-site at 8:00AM

3500 gal

AM / PM
Start Travel: 0715 **Start Job:** 0800 **Finish:** 0830 **Finish off loading:** 1000 **AM / PM Stop Travel:** 1145

Disposal Site: PRS **Est Tons:** N/A **Reciept Number Disposal:** 81382

Decant Site: N/A **Est. Gallons:** N/A **Water District:** N/A

Empty or Full: **Unit Number:** B-24 **Est Gallons Used:** N/A

Operator: Toby
Laborer: N/A

Prevailing Wage YES NO

Signature _____ **Signed By** _____

Signature acknowledges approval of work completed **Payment Terms: Net 10**

61500 JP31

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

Work Order # _____

Job Name Clear Creek

Profile # _____

Customer Signature

Weigh Master Signature

Other Information

Clear water

60960

JPS1

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

Work Order # _____

Job Name Clearcreek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

Clearwater

6100

JPS1

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

Work Order # _____

Job Name Clear Creek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

Clean water

61020

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

3PSL

Work Order # _____

Job Name Clear Creek

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

Clear work

Ventilation Power Cleaning, Inc.
3914 Leary Way NW
Seattle, WA 98107
Ph 206-634-2750 Fax 206-634-2753
Cont. Reg. VENTIPC243PA

Work Order # _____

Job Name _____

Profile # _____

_____
Customer Signature

_____
Weigh Master Signature

Other Information

This is from August's batch

APPENDIX I

DRAFT OF ENVIRONMENTAL COVENANT (DRAFT IN PROGRESS)

Restrictive Covenant

After Recording Return to:

Department of Ecology
Northwest Regional Office
3190 160th Avenue Southeast
Bellevue, Washington 98008-5452

Environmental Covenant

Grantor: Block at Ballard II LLC
Grantee: State of Washington Department of Ecology

King County Tax Parcel Nos.:

Parcel A: 276830-3245
Parcel B: 276830-3247
Parcel C: 276830-3315

Legal Descriptions:

Parcel A (Parcel No. 276830-3245):

LOTS 1 THROUGH 4, LOTS 19 THROUGH 22 AND THAT PORTION OF LOTS 5 AND 18, BLOCK 173, GILMAN PARK, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 3 OF PLATS, PAGE 40, IN KING COUNTY, WASHINGTON MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER LOT SAID LOT 1;
THENCE SOUTH 88°45'25" EAST, ALONG THE SOUTHERLY MARGIN OF NORTHWEST 46TH STREET, A DISTANCE OF 248.92 FEET;
THENCE SOUTH 01°28'50" WEST, A DISTANCE OF 200.03 FEET TO A POINT ON THE NORTHERLY MARGIN ON NORTHWEST 45TH STREET;
THENCE NORTH 88°44'38" WEST, ALONG SAID NORTHERLY MARGIN, A DISTANCE OF 174.72 FEET TO THE INTERSECTION WITH THE NORTHERLY MARGIN OF SHILSHOLE AVENUE;

THENCE NORTH 64°17'36" WEST, ALONG SAID NORTHERLY MARGIN, A DISTANCE OF 80.51 FEET TO THE INTERSECTION WITH THE EASTERLY MARGIN OF 15TH AVENUE NORTHWEST, ALSO BEING THE SOUTHWEST CORNER OF SAID LOT 22;
THENCE NORTH 01°12'47" EAST, ALONG SAID EASTERLY MARGIN, A DISTANCE OF 166.65 FEET TO THE POINT OF BEGINNING.

Parcel B (Parcel No. 276830-3247):

THAT PORTION OF LOTS 5 THROUGH 13, BLOCK 173, GILMAN PARK, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 3 OF PLATS, PAGE 40, IN KING COUNTY, WASHINGTON MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER LOT SAID LOT 1;
THENCE SOUTH 88°45'25" EAST, ALONG THE SOUTHERLY MARGIN OF NORTHWEST 46TH STREET, A DISTANCE OF 248.92 FEET TO THE POINT OF BEGINNING;
THENCE CONTINUING SOUTH 88°45'25" EAST, ALONG SAID SOUTHERLY MARGIN, A DISTANCE OF 301.00 FEET TO THE NORTHEAST CORNER OF SAID LOT 11;
THENCE SOUTH 01°13'09" WEST, ALONG THE WESTERLY MARGIN OF 14TH AVENUE NORTHWEST, A DISTANCE OF 132.90 FEET;
THENCE NORTH 88°46'53" WEST, A DISTANCE OF 79.98 FEET;
THENCE NORTH 01°14'35" EAST, A DISTANCE OF 41.85 FEET;
THENCE NORTH 88°45'25" WEST, A DISTANCE OF 221.46 FEET;
THENCE NORTH 01°28'50" EAST, A DISTANCE OF 91.08 FEET TO THE POINT OF BEGINNING.

Parcel C (Parcel No. 276830-3315):

THAT PORTION OF LOTS 5 THROUGH 10 AND LOTS 12 THROUGH 18, BLOCK 173, GILMAN PARK, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 3 OF PLATS, PAGE 40, IN KING COUNTY, WASHINGTON MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID LOT 11;
THENCE SOUTH 01°13'09" WEST, ALONG THE WESTERLY MARGIN OF 14TH AVENUE NORTHWEST, A DISTANCE OF 132.90 FEET TO THE POINT OF BEGINNING;
THENCE CONTINUING SOUTH 01°13'09" WEST, ALONG SAID WESTERLY MARGIN, A DISTANCE OF 67.20 FEET TO THE SOUTHEAST CORNER OF SAID LOT 12;
THENCE NORTH 88°44'38" WEST, ALONG THE NORTHERLY MARGIN OF NORTHWEST 45TH STREET, A DISTANCE OF 301.92 FEET;
THENCE NORTH 01°28'50" EAST, A DISTANCE OF 108.95 FEET;
THENCE SOUTH 88°45'25" EAST, A DISTANCE OF 221.46 FEET;

THENCE SOUTH 01°14'35" WEST, A DISTANCE OF 41.85 FEET;
THENCE SOUTH 88°46'53" EAST, A DISTANCE OF 79.98 FEET TO THE POINT OF BEGINNING.

SUBJECT TO A RAILWAY EASEMENT RECORDED JANUARY 8, 1948, UNDER RECORDING NUMBER 3761195.

Grantor, Block At Ballard II LLC, hereby binds Grantor, its successors and assigns to the land use restrictions identified herein and grants such other rights under this environmental covenant (hereafter "Covenant") made this 20th day of February, 2020 in favor of the State of Washington Department of Ecology (Ecology). Ecology shall have full right of enforcement of the rights conveyed under this Covenant pursuant to the Model Toxics Control Act, RCW 70.105D.030(1)(g), and the Uniform Environmental Covenants Act, RCW 64.70.

This Declaration of Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by Block at Ballard II LLC, its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

A remedial action (hereafter "Remedial Action") occurred under a Consent Decree with Ecology at the property that is the subject of this Covenant. The Remedial Action conducted at the property is described in the following document[s]:

Final Remedial Investigation, Feasibility Study, and Proposed Cleanup Action, January 19, 2010. Sound Environmental Strategies Corporation.

Revised Cleanup Action Plan, September 2017. Washington State Department of Ecology.

Final Cleanup Action Report, February 25, 2020. SoundEarth Strategies, Inc.
These documents are on file with the Washington State Department of Ecology.

This Covenant is required because the Remedial Action resulted in residual concentrations of polycyclic aromatic hydrocarbons (PAHs) and arsenic, which exceed the Model Toxics Control Act Method A Cleanup Level(s) for soil established under WAC 173-340-745.

The undersigned, Block at Ballard II LLC, is the fee owner of real property (hereafter "Property") in the County of King, State of Washington, that is subject to this Covenant. Legal

descriptions for Parcel A, Parcel B, and Parcel C that comprise the Property were provided earlier in this Covenant.

Block at Ballard II LLC makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").

Section 1. Portions of the Property adjacent to the north, south, west, and east Property boundaries (located outside of the shoring system and construction excavation footprints) contain residual PAH and arsenic contaminated soil associated with the Property. These Property portions are designated as Area B and are depicted on the attached Figures 1 through 8 (Exhibit A). Area B is completely capped by concrete sidewalks and non-impacted fill material placed during Property redevelopment activities. The upper approximately 3 to 7 vertical feet of soil in Area B from excavation slopeback locations shown on Figure 1 along the exterior of the perimeter shoring wall was removed during earthwork construction activities and was backfilled with non-impacted material. The upper approximately 2 to 3 feet of soil in Area B along the east and north sides of the parking garage foundation was also removed during earthwork construction activities and was backfilled with non-impacted soil (Figures 4 and 5). A continuous perimeter steel sheet pile shoring wall separates the below ground parking garage from Area B. The sidewalks and the foundation and shoring wall system were installed as components of the redevelopment project (Figures 1, 2, 4,5,6,7, and 8). Any activity that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited. Some examples of activities that are prohibited include: drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing or earthwork.

A second area located in Northwest 46th Street adjacent to the north Property boundary contains PAH- and arsenic-contaminated soil. This area is designated Area C and is shown on the attached Figures 1, 2, and 5 (Exhibit A). With respect to Area C, the covenant will extend from 6 feet below ground surface (bgs) to below the maximum depth of soil contamination encountered at 13 feet bgs (Figure 5). Area C is located within the City of Seattle (hereafter "City") right-of-way (ROW). Area C is completely capped by a concrete sidewalk and the concrete street surface. If the City is conducting any repair work at the depth between 6 feet bgs and 13 feet bgs within Area C, the City is responsible for following health and safety and soil management protocols as described in the February 2020 -Soil Management Plan (SMP). For the purposes of this Covenant, the SMP applies only to Area C as defined herein and in Exhibit A and does not apply to City ROW areas outside of Area C. Any other activity that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited. Examples of such other activities that are prohibited include: drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing or earthwork.

Section 2. Any activity that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 3. Unless authorized by the Cleanup Action Plan or this Restrictive Covenant, no activity is permitted on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, without prior written approval from Ecology.

Section 4. The Owner must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property other than the lease of individual units within the improvements to be constructed on the property. No conveyance of title, easement,

lease, or other partial interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5. The Owner must restrict leases to uses and activities consistent with the terms of this Covenant and notify all lessees of the restrictions on use of the Property.

Section 6. The Owner must notify and obtain approval from Ecology prior to any use of Area B, or any use by Owner of Area C, that is inconsistent with the terms of this Covenant. Ecology may approve any inconsistent use that permanently modifies any activity or use restriction only after public notice and comment. The Owner will notify Ecology upon evidence that the City is using Area C in a manner inconsistent with the terms of this Covenant.

Section 6. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.

Section 7. The Owner reserves the right under WAC 173-340-440 to record an instrument that provides that this Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

Block at Ballard II LLC

_____

[Name of Signatory]
[Title]

Dated: _____

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

_____
Robert W. Warren, P.Hg., MBA
Regional Section Manager
Toxics Cleanup Program
Northwest Regional Office

Dated: _____

[INDIVIDUAL ACKNOWLEDGMENT]

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, and acknowledged that **he/she** is the individual described herein and who executed the within and foregoing instrument and signed the same at **his/her** free and voluntary act and deed for the uses and purposes therein mentioned.

_____
Notary Public in and for the State of Washington, residing at _____.
My appointment expires_____.

[CORPORATE ACKNOWLEDGMENT]

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the _____ of the corporation that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that **he/she** was authorized to execute said instrument for said corporation.

_____
Notary Public in and for the State of Washington, residing at
_____.
My appointment expires_____.

[REPRESENTATIVE ACKNOWLEDGEMENT]

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ _____ personally appeared before me, acknowledged that **he/she** signed this instrument, on oath stated that **he/she** was authorized to execute this instrument, and acknowledged it as the _____ [type of authority] of _____ [name of

party being represented] to be the free and voluntary act and deed of such party for the uses and purposes mentioned in the instrument.

_____
Notary Public in and for the State of Washington, residing at _____.
My appointment expires _____.

Exhibit A
Figures 1 to 8

7/11/2019

P:\1249 REGENCY CENTERS\1249-001 WESMAR\TECHNICAL\CAD\20192019 ENVIRONMENTAL COVENANT FIGURES\1249-001_2019_COVENANT_PLAN.DWG

N

0 30 60

APPROXIMATE SCALE IN FEET

BALLARD BLOCKS 1

APPROXIMATE EDGE OF PAVEMENT

NORTHWEST 46TH STREET

PROPERTY BOUNDARY

OUTSIDE EDGE OF SHEET PILE WALL (LIMITS OF EXCAVATION)

SOUTH ELEVATION

EASEMENT FOR RAILROAD LINE

TRAIN TRACKS

TRAIN TRACKS

TRAIN TRACKS

NORTHWEST 45TH STREET

14TH AVENUE NORTHWEST

15TH AVENUE NORTHWEST

SHILSHOLE AVENUE NORTHWEST

LEGEND

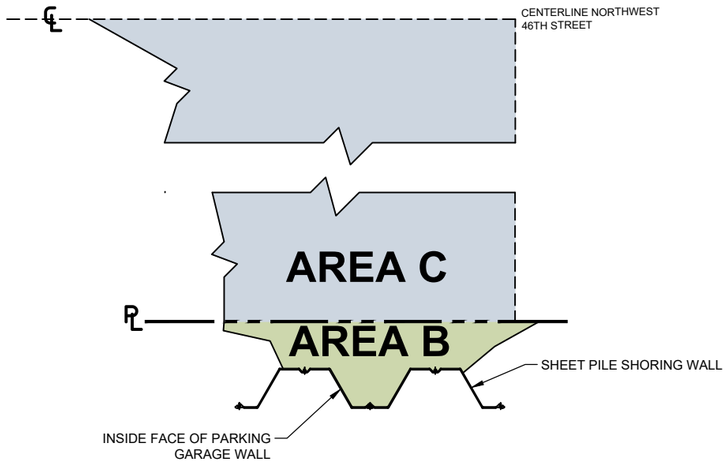
- PROPERTY BOUNDARY
- PERIMETER SHEET PILE SHORING WALL
- AREA B* (BETWEEN SHEET PILE SHORING WALL AND PROPERTY BOUNDARY)
- AREA C*
- SANITARY SEWER
- WATER LINE
- OVERHEAD POWER
- GAS LINE
- * AREAS B & C UNDER INSTITUTIONAL CONTROL AND SUBJECT TO ENVIRONMENTAL RESTRICTIVE COVENANT
- AREA WITH 1:1 EXCAVATION SLOPEBACK

SoundEarth Strategies

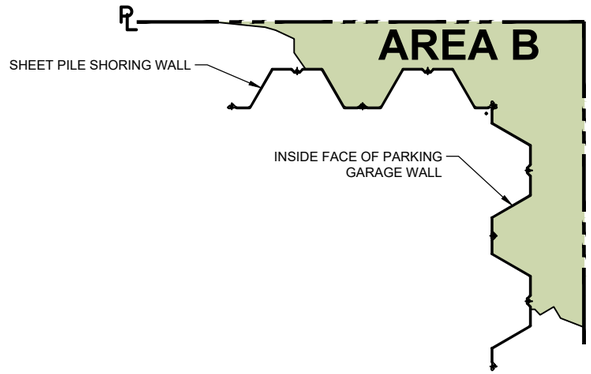
WWW.SOUNDEARTHINC.COM

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

FIGURE 1
INSTITUTIONAL CONTROL
AREAS B & C



1 AREA B/C DETAIL: NORTHERN PROPERTY BOUNDARY



2 AREA B DETAIL: NORTHEAST PROPERTY BOUNDARY

3 AREA B DETAIL: SOUTHERN PROPERTY BOUNDARY

N

0 2.5 5

APPROXIMATE SCALE IN FEET

SoundEarth Strategies

WWW.SOUNDEARTHINC.COM

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

FIGURE 2

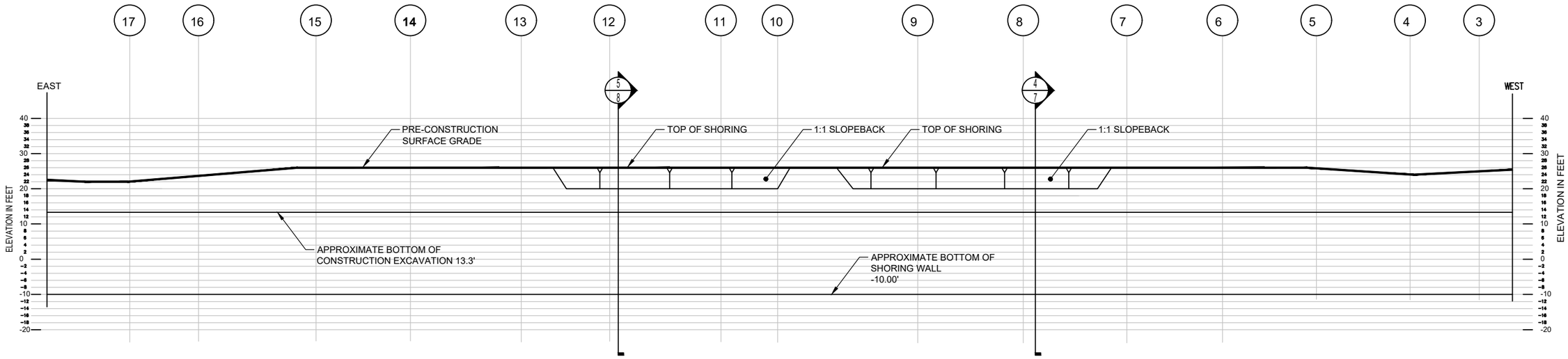
PLAN VIEW DETAILS OF SHORING WALL, PROPERTY BOUNDARY, AND REMAINING CONTAMINATION CONDITIONS

6/26/2019

P:\1249 REGENCY CENTERS\1249-001 WESMAR\TECHNICAL\CAD\2019\2019 ENVIRONMENTAL COVENANT FIGURES\1249-001_2019_COVENANT_PART-ELEV.DWG

0 15 30

APPROXIMATE SCALE IN FEET

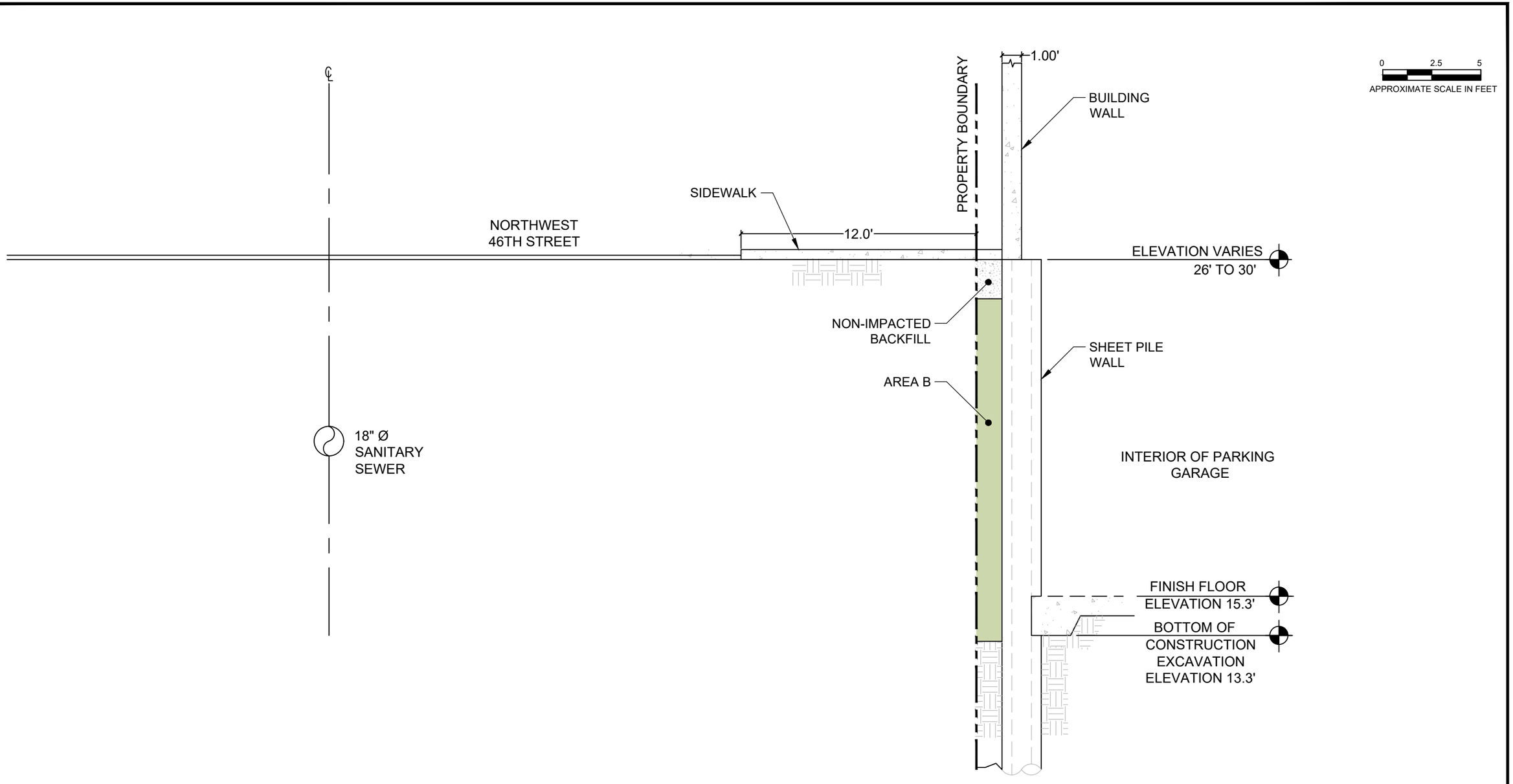


SoundEarth Strategies

WWW.SOUNDEARTHINC.COM

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

FIGURE 3
PARTIAL ELEVATION
SOUTH SHORING WALL



1/4 **SECTION AT NORTH LOOKING EAST**

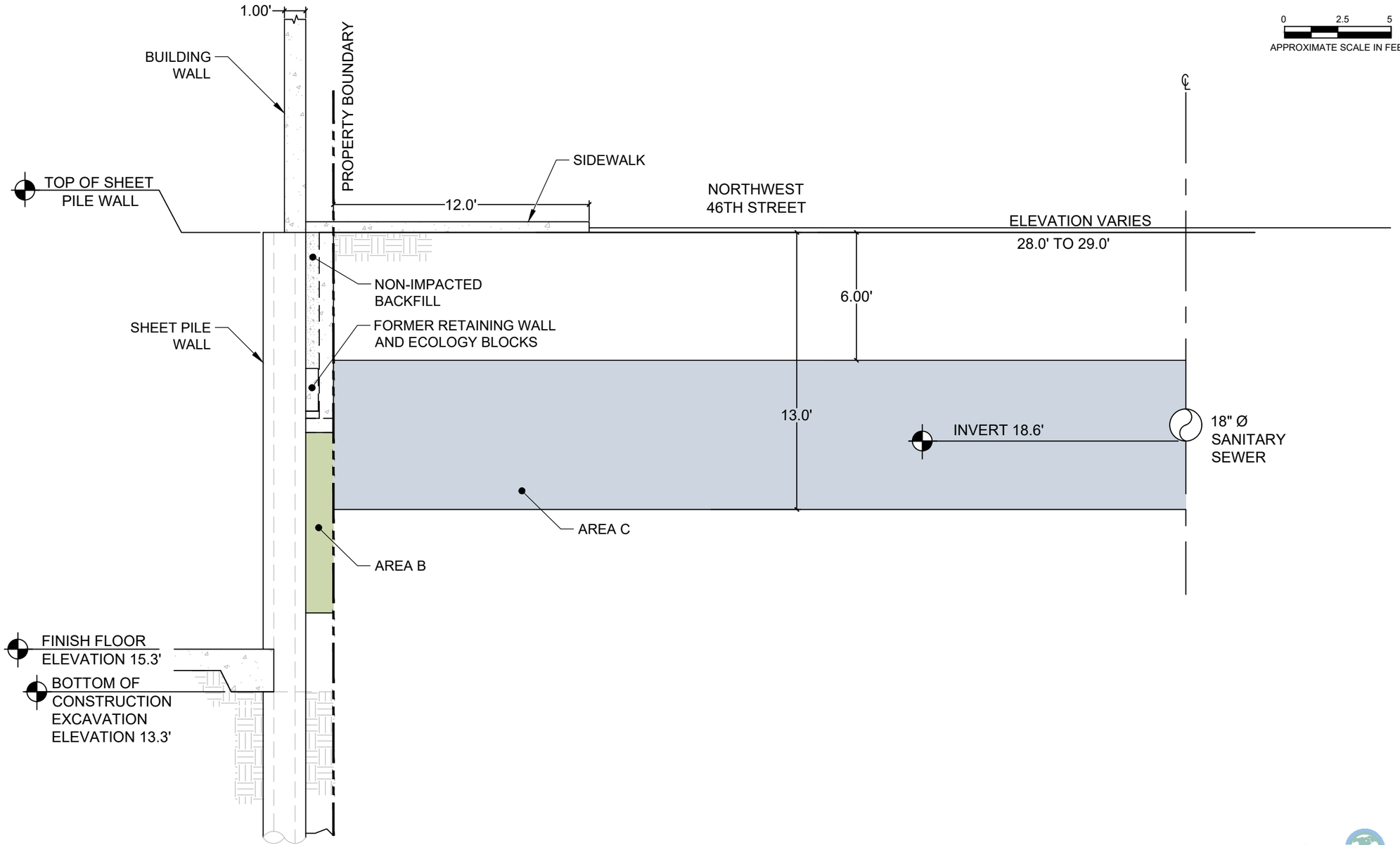
SoundEarth Strategies
WWW.SOUNDEARTHINC.COM

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

FIGURE 4
CROSS-SECTIONAL DETAIL
NORTH SHORING WALL

7/11/2019

P:\1249 REGENCY CENTERS\1249-001 WESMAR\TECHNICAL\CAD\2019\2019 ENVIRONMENTAL COVENANT FIGURES\1249-001_2019_COVENANT_SECT.DWG



2/5 **SECTION AT NORTH LOOKING WEST**

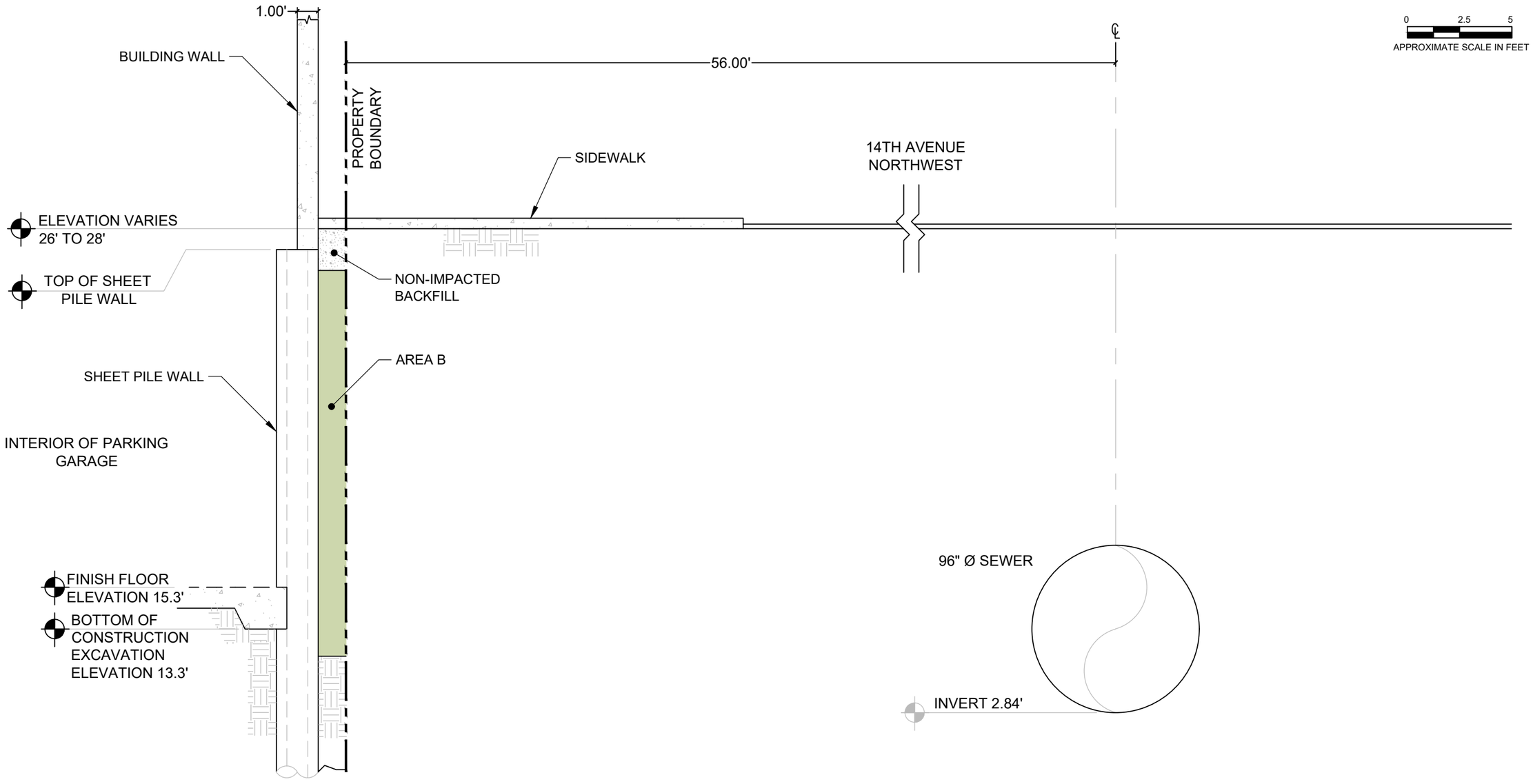
SoundEarth Strategies
WWW.SOUNDEARTHINC.COM

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

FIGURE 5
CROSS-SECTIONAL DETAIL
NORTH SHORING WALL

7/11/2019

P:\1249 REGENCY CENTERS\1249-001 WESMAR\TECHNICAL\CAD\2019\2019 ENVIRONMENTAL COVENANT FIGURES\1249-001_2019_COVENANT_SECT.DWG



3/6 **SECTION AT NORTH LOOKING NORTH**

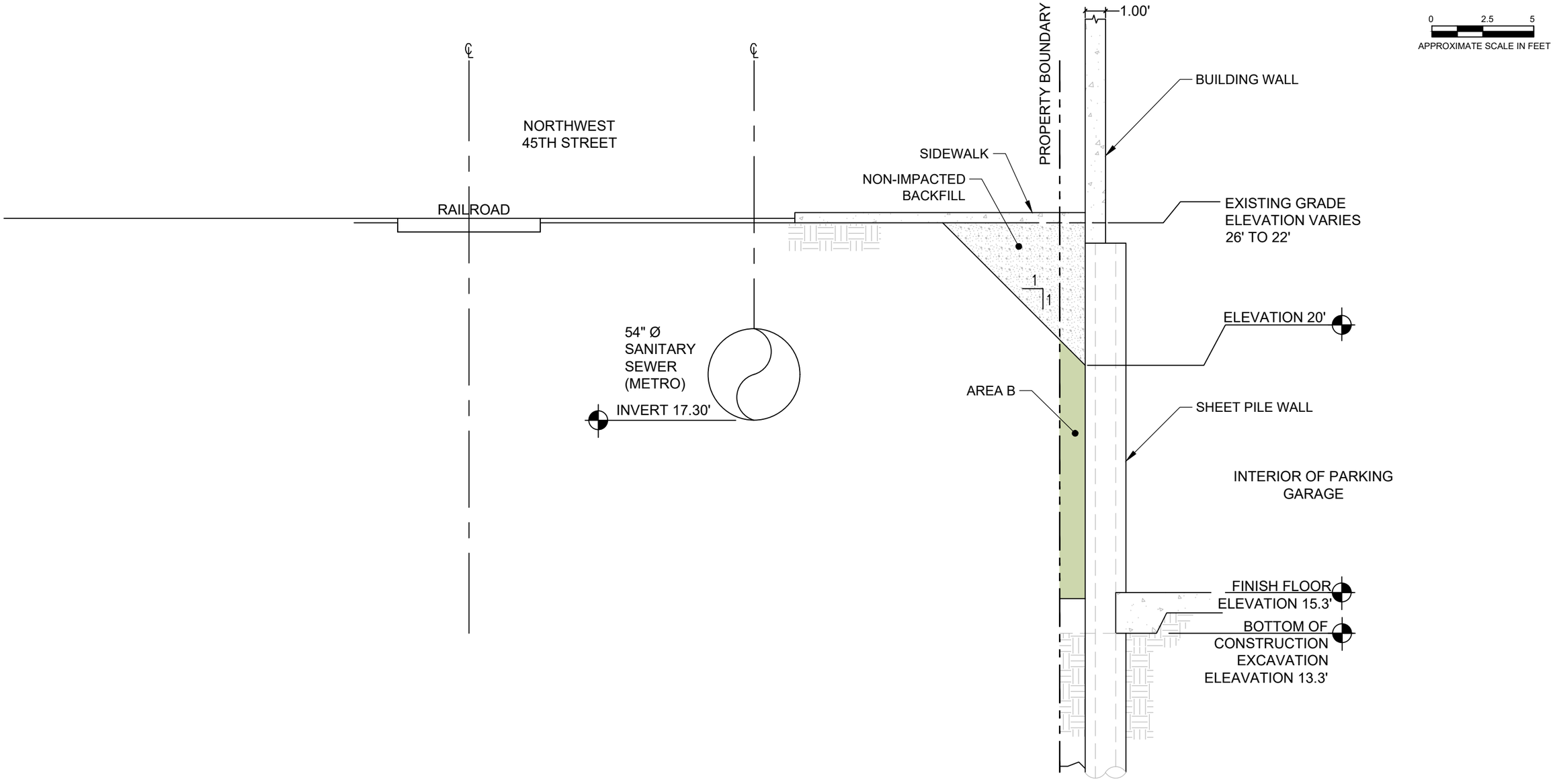
SoundEarth Strategies
WWW.SOUNDEARTHINC.COM

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

FIGURE 6
CROSS-SECTIONAL DETAIL
EAST SHORING WALL

7/11/2019

P:\1249 REGENCY CENTERS\1249-001 WESMAR\TECHNICAL\CAD\2019\2019 ENVIRONMENTAL COVENANT FIGURES\1249-001_2019_COVENANT_SECT.DWG



4/7 **SECTION AT SOUTH LOOKING WEST**

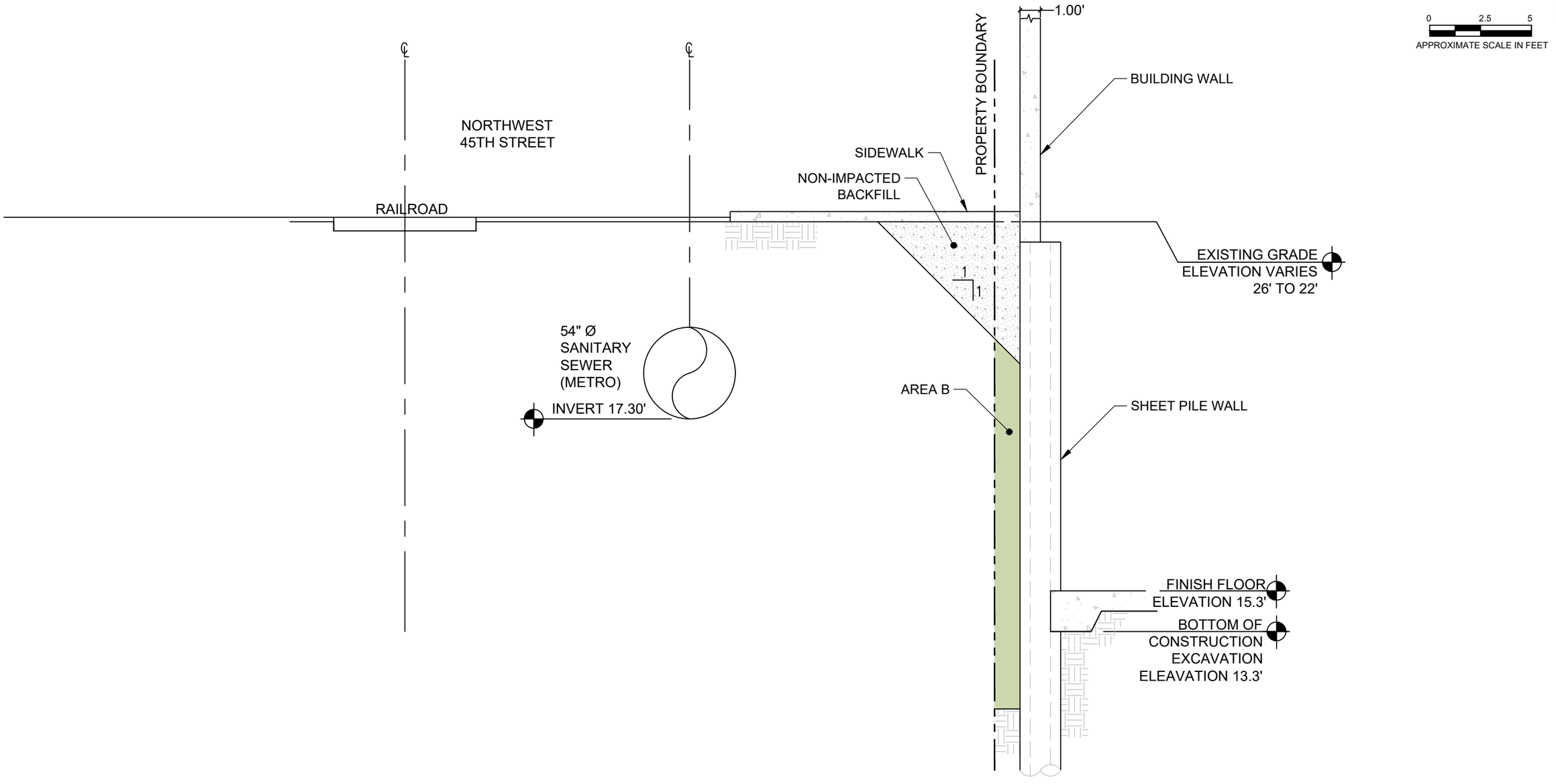
SoundEarth Strategies
WWW.SOUNDEARTHINC.COM

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

FIGURE 7
CROSS-SECTIONAL DETAIL
SOUTH SHORING WALL

7/11/2019

P:\1249 REGENCY CENTERS\1249-001 WESMAR\TECHNICAL\CAD\2019\2019 ENVIRONMENTAL COVENANT FIGURES\1249-001_2019_COVENANT_SECT.DWG



5/8 **SECTION AT SOUTH LOOKING WEST**

SoundEarth Strategies
WWW.SOUNDEARTHINC.COM

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

FIGURE 8
CROSS-SECTIONAL DETAIL
SOUTH SHORING WALL

APPENDIX J

JUNE 2018 WORKER AIR EXPOSURE SCENARIO ASSESSMENT LABORATORY ANALYTICAL REPORT

SGS GALSON

Mr. Corey League
SoundEarth Strategies, Inc.
2811 Fairview Avenue East
Suite 2000
Seattle, WA 98102

June 22, 2018

DOH ELAP #11626
AIHA-LAP #100324

Account# 21586

Login# L447336

Dear Mr. League:

Enclosed are the analytical results for the samples received by our laboratory on June 22, 2018. All test results meet the quality control requirements of AIHA-LAP and NELAC unless otherwise stated in this report. All samples on the chain of custody were received in good condition unless otherwise noted.

Please note the ID discrepancies recorded on the attached chain of custody. The IDs from the chain have been used.

Results in this report are based on the sampling data provided by the client and refer only to the samples as they were received at the laboratory. When possible, non-IOM samples will be retained for 14 days following the date of this report (unless an extension is specifically requested). IOM samples are retained for 7 days.

Current Scopes of Accreditation can be viewed at www.sgsgalson.com in the accreditations section of the "About" page.

Please contact Nicole Tormey at (888) 432-5227, if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

Lisa Swab
Laboratory Director

Enclosure(s)

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsonlabs.com

LABORATORY ANALYSIS REPORT

Client : SoundEarth Strategies, Inc.
Site : Ballard Blocks II
Project No. : Ballard Blocks II
Date Sampled : 21-JUN-18
Date Received : 22-JUN-18

Account No.: 21586
Login No. : L447336

Date Analyzed : 22-JUN-18
Report ID : 1073212

Arsenic

Sample ID	Lab ID	Air Vol liter	Total ug	Conc mg/m3
P01A-20180621	L447336-1	790	<0.30	<0.00038
P02A-20180621	L447336-2	714.4	<0.30	<0.00042
FB01A-20180621	L447336-3	NA	<0.30	NA

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 0.30 ug
Analytical Method : mod. NIOSH 7303/mod. OSHA ID-125G; ICP
OSHA PEL : 0.01 mg/m3 (TWA)
Collection Media : MCE UW 37mm

Submitted by: JPA
Approved by : JJL
Date : 22-JUN-18
Supervisor: KEG

NYS DOH # : 11626
QC by: CRD

< -Less Than
> -Greater Than
mg -Milligrams
ug -Micrograms
m3 -Cubic Meters
l -Liters
kg -Kilograms
NS -Not Specified
NA -Not Applicable
ppm -Parts per Million
ND -Not Detected

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsonlabs.com

LABORATORY ANALYSIS REPORT

Client : SoundEarth Strategies, Inc.
Site : Ballard Blocks II
Project No. : Ballard Blocks II
Date Sampled : 21-JUN-18
Date Received : 22-JUN-18

Account No.: 21586
Login No. : L447336

Date Analyzed : 22-JUN-18
Report ID : 1073262

Coal Tar Pitch Volatiles

Sample ID	Lab ID	Air Vol liter	Total mg	Conc mg/m3
P01B-20180621	L447336-4	375.25	<0.060	<0.16
P02B-20180621	L447336-5	720.1	<0.060	<0.083
FB01B-20180621	L447336-6	NA	<0.060	NA

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 0.060 mg
Analytical Method : mod. OSHA 58; Gravimetric
OSHA PEL : 0.2 mg/m3 (TWA)
Collection Media : 225-7 GFF

Submitted by: CPS/JAV/SFW
Approved by : JGC
Date : 22-JUN-18 NYS DOH # : 11626
Supervisor: JGC QC by: CRD

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsonlabs.com

LABORATORY ANALYSIS REPORT

Client : SoundEarth Strategies, Inc.
Site : Ballard Blocks II
Project No. : Ballard Blocks II
Date Sampled : 21-JUN-18
Date Received : 22-JUN-18

Account No.: 21586
Login No. : L447336

Date Analyzed : 22-JUN-18
Report ID : 1073252

Naphthalene

Sample ID	Lab ID	Time minutes	Raw ug	Total ug	Conc mg/m3	ppm
P01C-20180621	L447336-7	413	<10	<17	<0.69	<0.13
P02C-20180621	L447336-8	381	<10	<17	<0.75	<0.14
FB01C-20180621	L447336-9	NA	<10	<17	NA	NA

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 10. ug
Analytical Method : mod. NIOSH 1501; GC/FID BADGE
OSHA PEL : 10 ppm (TWA)
Collection Media : Assay 525

Submitted by: BDK
Approved by : MLN
Date : 22-JUN-18
Supervisor: KAG

NYS DOH # : 11626
QC by: CRD

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsonlabs.com

LABORATORY FOOTNOTE REPORT

Client Name : SoundEarth Strategies, Inc.
Site : Ballard Blocks II
Project No. : Ballard Blocks II

Date Sampled : 21-JUN-18
Date Received: 22-JUN-18
Date Analyzed: 22-JUN-18

Account No.: 21586
Login No. : L447336

Unless otherwise noted below, all quality control results associated with the samples were within established control limits or did not impact reported results.

Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process. The findings herein constitute no warranty of the samples' representativeness of any sampled environment and strictly relate to the samples as they were presented to the laboratory.

Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceeding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

Unless otherwise noted below, reported results have not been blank corrected for any field blank or method blank.

L447336 (Report ID: 1073212):
Reported results reflect elemental analysis of the requested metals. Certain compounds may not be solubilized during digestion, resulting in data that is biased low.
SOPs: MT-SOP-27(1), MT-SOP-29(2)

L447336 (Report ID: 1073212):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Arsenic	+/-8.1%	101%

L447336 (Report ID: 1073262):
SOPs: ic-ctpv(22)

< -Less Than	mg -Milligrams	m3 -Cubic Meters	kg -Kilograms	ppm -Parts per Million		
> -Greater Than	ug -Micrograms	l -Liters	NS -Not Specified	ND -Not Detected	NA -Not Applicable	

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsonlabs.com

LABORATORY FOOTNOTE REPORT

Client Name : SoundEarth Strategies, Inc.
Site : Ballard Blocks II
Project No. : Ballard Blocks II

Date Sampled : 21-JUN-18
Date Received: 22-JUN-18
Date Analyzed: 22-JUN-18

Account No.: 21586
Login No. : L447336

Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Coal Tar Pitch Volatiles	+/-19.5%	102%

L447336 (Report ID: 1073252):
Total ug corrected for a desorption efficiency of 60%.
SOPs: GC-SOP-16(19), GC-SOP-12(14), GC-SOP-9(19)
Naphthalene DE/LOQ study recoveries do not meet our standard acceptance criteria for this media type. Reported Naphthalene results should be considered estimates only.

L447336 (Report ID: 1073252):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Naphthalene	N/A	N/A

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms ppm -Parts per Million
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ND -Not Detected NA -Not Applicable

772529022690
Date:06/22/18
Shipper:FEDEX
Initials:MAK

L447336

Prep:UNKNOWN

GALSON CHAIN OF CUSTODY

R29

Turn Around Time (TAT):	(surcharge)
☐ Standard	0%
☐ 4 Business Days	35%
☐ 3 Business Days	50%
☐ 2 Business Days	75%
☑ Next Day by 6pm	100%
☐ Next Day by Noon	150%
☐ Same Day	200%

☐ Samples submitted using the FreePumpLoan™ Program

☑ Samples submitted using the FreeSamplingBadges™ Program

You may edit and complete this COC electronically by logging in to your Client Portal account at https://portal.galsonlabs.com/

Client Acct No.: 21586

Original Prep No.: PCA483859

CS Rep: NTORMEY

Online COC No.: 156286

Report To: Mr. Corey League
Company Name: SoundEarth Strategies, Inc.
Address 1: 2811 Fairview Avenue East
Address 2: Suite 2000
City, State Zip: Seattle, WA 98102
Phone No.: 206 - 306 - 1900
Cell No.: 253-722-9693
Email reports to: cleague@soundearthinc.com
Comments:

Invoice To: Mr. Corey League
Company Name: SoundEarth Strategies, Inc.
Address 1: 2811 Fairview Avenue East
Address 2: Suite 2000
City, State Zip: Seattle, WA 98102
Phone No.: 206 - 306 - 1900
Email Address: cleague@soundearthinc.com
Comments:
P.O. No.: 1249-001-05
Payment info.: ☐ I will call SGS Galson to provide credit card info
☐ Card on File (enter the last five digits on the line below)

Comments:

State Sampled: WA

Please indicate which OEL(s) this data will be used for:
☑ OSHA PEL ☐ ACGIH TLV ☐ MSHA ☐ Cal OSHA
☐ IAQ: _____ (Specify Limit(s)) ☐ Other: _____ (Specify Other)

Site Name: Ballard Blocks II
Project: Ballard Blocks II
Sampled By: Corey League
List description of industry or Process/interferences present in sampling area:

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	~~Sample Volume~~ ~~Sample Time~~ Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
POA-20180621	06/21/18	37mm UW MCE, 3pc	395	790	Arsenic	mod. NIOSH 7303/mod. OSHA ID-125G; ICP	
POZA-20180621	06/21/18	37mm UW MCE, 3pc	376	714.4	Arsenic	mod. NIOSH 7303/mod. OSHA ID-125G; ICP	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By:	Corey League		06/21/18	1505	Received By:				
Relinquished By:					Received By:	Michelle Krause	Michelle Krause	6/22/18	0942

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No.: 156286
Prep No.: PCA483859
Account No.: 21586
Draft: 6/15/2018 8:26:33 PM

SGS North America Inc. | 6601 Kirkville Road E. Syracuse, NY 13057, USA t +1 888 432 5227 | +1 315 432 5227 www.galsonlabs.com | www.sgs.com

SGS GALSON CHAIN OF CUSTODY

Comments :

* IDs are: ND4869, ND4034, ND4366 SC 6/22/18 - Used mins to match up - KMS 6/22/18

	Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume (Sample Time) Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
	FB01A-20180621	06/21/18	37mm UW MCE, 3pc	0	0	Arsenic	mod. NIOSH 7303/mod. OSHA ID-125G; ICP	
	P01B-20180621	06/21/18	225-709 GLASS FIBER FILTER in 2-PIECE CASSETTE	396	375.25	Coal Tar Pitch Volatiles	mod. OSHA 58; Gravimetric	
	P02B-20180621	06/21/18	225-709 GLASS FIBER FILTER in 2-PIECE CASSETTE	379	720.1	Coal Tar Pitch Volatiles	mod. OSHA 58; Gravimetric	
	FB01B-20180621	06/21/18	225-709 GLASS FIBER FILTER in 2-PIECE CASSETTE	0	0	Coal Tar Pitch Volatiles	mod. OSHA 58; Gravimetric	
*	P01C-20180621	06/21/18	Assay N525 Organic Vapor Monitor	413	—	Naphthalene	mod. NIOSH 1501; GC/FID BADGE	
*	P02C-20180621	06/21/18	Assay N525 Organic Vapor Monitor	381	—	Naphthalene	mod. NIOSH 1501; GC/FID BADGE	
*	FB01C-20180621	06/21/18	Assay N525 Organic Vapor Monitor	0	0	Naphthalene	mod. NIOSH 1501; GC/FID BADGE	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :	Cory Logue		06/21/18	1505	Received By :				
Relinquished By :					Received By :	Michelle Krause		6/22/18	0942

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

SC No. : 156286
Prep No. : PCA483659
Account No. : 21586
Draft : 6/15/2018 8:26:33 PM

SGS North America Inc. | 6601 Kirkville Road E. Syracuse, NY 13057, USA t +1 888 432 5227 | +1 315 432 5227 www.galsonlabs.com | www.sgs.com

APPENDIX K

LABORATORY ANALYTICAL REPORTS FOR SOIL—REMEDIAL EXCAVATION

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 7, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on June 1, 2018 from the SOU_1249-001_ 20180601, F&BI 806024 project. There are 16 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0607R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 1, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001_20180601, F&BI 806024 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806024 -01	TempBlank01-20180601
806024 -02	TripBlank01-20180601
806024 -03	B62A-1
806024 -04	B21A-1
806024 -05	B16A-2.5
806024 -06	B16A-4.5
806024 -07	B16A-5.5
806024 -08	B15A-1

An 8270D internal standard failed the acceptance criteria for sample B62A-1 due to matrix interferences. The data were flagged accordingly. The sample was diluted and reanalyzed.

Sample B62A-1 was extracted from a 4 ounce jar. The data were flagged accordingly.

All other quality control requirements were acceptable.

Date of Report: 06/07/18
Date Received: 06/01/18
Project: SOU_ 1249-001_ 20180601, F&BI 806024
Date Extracted: 06/05/18
Date Analyzed: 06/05/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR pH USING EPA METHOD 9045D

Sample ID Laboratory ID	pH
B62A-1 806024-03	11
B21A-1 806024-04	12
B16A-2.5 806024-05	8.3
B16A-4.5 806024-06	8.6
B16A-5.5 806024-07	8.9
B15A-1 806024-08	9.2

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B62A-1	Client:	SoundEarth Strategies
Date Received:	06/01/18	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/04/18	Lab ID:	806024-03 1/5
Date Analyzed:	06/04/18	Data File:	060421.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	99	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.70
2-Methylnaphthalene	0.24
1-Methylnaphthalene	0.26
Benz(a)anthracene	0.52
Chrysene	0.54
Benzo(a)pyrene	0.62 J
Benzo(b)fluoranthene	0.70 J
Benzo(k)fluoranthene	0.29 J
Indeno(1,2,3-cd)pyrene	0.23 J
Dibenz(a,h)anthracene	0.054 J

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B62A-1	Client:	SoundEarth Strategies
Date Received:	06/01/18	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/04/18	Lab ID:	806024-03 1/50
Date Analyzed:	06/04/18	Data File:	060419.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	117 d	31	163
Benzo(a)anthracene-d12	103 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.78
2-Methylnaphthalene	0.26
1-Methylnaphthalene	0.29
Benz(a)anthracene	0.50
Chrysene	0.57
Benzo(a)pyrene	0.62
Benzo(b)fluoranthene	0.62
Benzo(k)fluoranthene	0.22
Indeno(1,2,3-cd)pyrene	0.33
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/04/18	Lab ID:	08-1191 mb 1/5
Date Analyzed:	06/04/18	Data File:	060411.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B62A-1 pc	Client:	SoundEarth Strategies
Date Received:	06/01/18	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/04/18	Lab ID:	806024-03
Date Analyzed:	06/04/18	Data File:	060412.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	102	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	0.087
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	0.13
Tetrachloroethene	<0.025
Ethylbenzene	0.21
m,p-Xylene	0.84
o-Xylene	0.29

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B16A-2.5	Client:	SoundEarth Strategies
Date Received:	06/01/18	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/01/18	Lab ID:	806024-05
Date Analyzed:	06/01/18	Data File:	060125.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	89	113
Toluene-d8	102	64	137
4-Bromofluorobenzene	99	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B16A-4.5	Client:	SoundEarth Strategies
Date Received:	06/01/18	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/01/18	Lab ID:	806024-06
Date Analyzed:	06/01/18	Data File:	060126.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	89	113
Toluene-d8	104	64	137
4-Bromofluorobenzene	101	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B16A-5.5	Client:	SoundEarth Strategies
Date Received:	06/01/18	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/01/18	Lab ID:	806024-07
Date Analyzed:	06/01/18	Data File:	060127.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	89	113
Toluene-d8	102	64	137
4-Bromofluorobenzene	98	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/01/18	Lab ID:	08-1163 mb2
Date Analyzed:	06/01/18	Data File:	060109.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	102	55	145
4-Bromofluorobenzene	102	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001_ 20180601
Date Extracted:	06/04/18	Lab ID:	08-1198 mb
Date Analyzed:	06/04/18	Data File:	060406.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	101	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Date of Report: 06/07/18
Date Received: 06/01/18
Project: SOU_ 1249-001_ 20180601, F&BI 806024

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR pH BY METHOD 9045D

Laboratory Code: 806024-07 (Duplicate)

Analyte	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
pH	8.9	8.9	0	0-20

Date of Report: 06/07/18
Date Received: 06/01/18
Project: SOU_ 1249-001_ 20180601, F&BI 806024

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806030-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	81	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	80	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	79	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	76	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	81	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	77	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	84	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	72	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	75	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	78	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	87	88	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	87	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	86	87	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	84	86	51-115	2
Chrysene	mg/kg (ppm)	0.17	90	91	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	87	86	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	95	92	54-131	3
Benzo(a)pyrene	mg/kg (ppm)	0.17	80	77	51-118	4
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	83	83	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	85	87	50-141	2

Date of Report: 06/07/18
Date Received: 06/01/18
Project: SOU_ 1249-001_ 20180601, F&BI 806024

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 805524-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	33	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	42	10-101
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	48	22-107
Methylene chloride	mg/kg (ppm)	2.5	<0.5	67	14-128
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	59	13-112
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	65	23-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	71	25-120
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	67	22-124
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	59	27-112
Benzene	mg/kg (ppm)	2.5	0.055	60	26-114
Trichloroethene	mg/kg (ppm)	2.5	<0.02	56	30-112
Toluene	mg/kg (ppm)	2.5	0.26	55	34-112
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	39	25-114
Ethylbenzene	mg/kg (ppm)	2.5	2.6	42 b	34-115
m,p-Xylene	mg/kg (ppm)	5	9.2	40 b	25-125
o-Xylene	mg/kg (ppm)	2.5	5.0	49 b	27-126

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	78	73	42-107	7
Chloroethane	mg/kg (ppm)	2.5	80	78	47-115	3
1,1-Dichloroethene	mg/kg (ppm)	2.5	90	89	65-110	1
Methylene chloride	mg/kg (ppm)	2.5	96	95	50-127	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	97	71-113	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	98	98	74-109	0
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	102	101	73-110	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	99	97	73-111	2
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	106	103	72-116	3
Benzene	mg/kg (ppm)	2.5	101	100	72-106	1
Trichloroethene	mg/kg (ppm)	2.5	102	100	72-107	2
Toluene	mg/kg (ppm)	2.5	101	100	74-111	1
Tetrachloroethene	mg/kg (ppm)	2.5	106	103	73-111	3
Ethylbenzene	mg/kg (ppm)	2.5	102	102	75-112	0
m,p-Xylene	mg/kg (ppm)	5	103	102	77-115	1
o-Xylene	mg/kg (ppm)	2.5	104	103	76-115	1

Date of Report: 06/07/18
Date Received: 06/01/18
Project: SOU_ 1249-001_ 20180601, F&BI 806024

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 806024-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	37	36	10-138	3
Chloroethane	mg/kg (ppm)	2.5	<0.5	44	42	10-176	5
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	50	49	10-160	2
Methylene chloride	mg/kg (ppm)	2.5	<0.5	68	68	10-156	0
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	60	61	14-137	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	0.069	66	67	19-140	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	68	69	25-135	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	69	69	12-160	0
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	63	62	10-156	2
Benzene	mg/kg (ppm)	2.5	<0.03	67	67	29-129	0
Trichloroethene	mg/kg (ppm)	2.5	<0.02	98	100	21-139	2
Toluene	mg/kg (ppm)	2.5	0.10	66	67	35-130	2
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	65	65	20-133	0
Ethylbenzene	mg/kg (ppm)	2.5	0.17	69	71	32-137	3
m,p-Xylene	mg/kg (ppm)	5	0.66	70	71	34-136	1
o-Xylene	mg/kg (ppm)	2.5	0.23	72	73	33-134	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	85	22-139
Chloroethane	mg/kg (ppm)	2.5	83	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	98	47-128
Methylene chloride	mg/kg (ppm)	2.5	108	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	104	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	106	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	105	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	103	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	104	62-131
Benzene	mg/kg (ppm)	2.5	105	68-114
Trichloroethene	mg/kg (ppm)	2.5	103	64-117
Toluene	mg/kg (ppm)	2.5	101	66-126
Tetrachloroethene	mg/kg (ppm)	2.5	102	72-114
Ethylbenzene	mg/kg (ppm)	2.5	105	64-123
m,p-Xylene	mg/kg (ppm)	5	106	78-122
o-Xylene	mg/kg (ppm)	2.5	105	77-124

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

806024

SAMPLE CHAIN OF CUSTODY

ME 06-01-18, VSI /VW4/CI3

Page # 1 of 1

Send Report to Chris Cass

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

PO #: 1249-001

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH ~~3 day~~ 2 days per CC
Rush charges authorized by: 6/1/18 ME

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: NWTPH-Dx	NWTPH-Gx	8260C BTEX by ~~8021B~~	cVOCs by 8260C	SVOCs by 8270	PH	cPAHs	Naphthalenes	Notes
TempBlankO1-20180601			01	6/1/18	0925	W	1									⊗ per CC
TripBlankO1-20180601			02		0925	W	1									6/1/18
B62A-1 ~~20180601~~		1'	03		0950	S	1			⊗	⊗		X	⊗	⊗	ME
B21A-1 ~~20180601~~		1'	04A-E		1015	S	5						X			
B16A-2.5 ~~20180601~~		2.5'	05		1100	S	5			X	X		X			
B16A-4.5 ~~20180601~~		4.5'	06		1130	S	5			X	X		X			
B16A-5.5 ~~20180601~~		5.5'	07		1205	S	5			X	X		X			
B15A-1 ~~20180601~~		1'	08		1230	S	1						X			
								GRM								Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Glenn McKenney	SES	6/1/18	1325
Received by:	Liz UB	FTBI	6/1/18	1325
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 22, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on June 20, 2018 from the SOU_ 1249-001-05_ 20180620, F&BI 806364 project. There are 14 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0622R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 20, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180620, F&BI 806364 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806364 -01	D-10-18-SW
806364 -02	C-09-18-SW
806364 -03	B-09-18-SW

All quality control requirements were acceptable.

Date of Report: 06/22/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806364
Date Extracted: 06/21/18
Date Analyzed: 06/21/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
D-10-18-SW 806364-01	<50	<250	85
C-09-18-SW 806364-02	<50	<250	81
B-09-18-SW 806364-03	<50	<250	95
Method Blank 08-1344 MB	<50	<250	87

Analysis For Total Metals By EPA Method 6020B

Client ID:	D-10-18-SW	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	806364-01
Date Analyzed:	06/21/18	Data File:	806364-01.048
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.64

Analysis For Total Metals By EPA Method 6020B

Client ID:	C-09-18-SW	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	806364-02
Date Analyzed:	06/21/18	Data File:	806364-02.049
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.59

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-09-18-SW	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	806364-03
Date Analyzed:	06/21/18	Data File:	806364-03.050
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.00

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	I8-401 mb2
Date Analyzed:	06/21/18	Data File:	I8-401 mb2.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-10-18-SW	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	806364-01 1/50
Date Analyzed:	06/21/18	Data File:	062113.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	109 d	31	163
Benzo(a)anthracene-d12	111 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.31
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	7.7
Chrysene	8.0
Benzo(a)pyrene	8.0
Benzo(b)fluoranthene	7.5
Benzo(k)fluoranthene	2.9
Indeno(1,2,3-cd)pyrene	3.2
Dibenz(a,h)anthracene	0.84

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-09-18-SW	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	806364-02 1/5
Date Analyzed:	06/21/18	Data File:	062112.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	84	31	163
Benzo(a)anthracene-d12	105	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.046
2-Methylnaphthalene	0.025
1-Methylnaphthalene	0.025
Benz(a)anthracene	0.60
Chrysene	0.68
Benzo(a)pyrene	0.78
Benzo(b)fluoranthene	0.81
Benzo(k)fluoranthene	0.29
Indeno(1,2,3-cd)pyrene	0.36
Dibenz(a,h)anthracene	0.079

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-09-18-SW	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	806364-03 1/5
Date Analyzed:	06/21/18	Data File:	062110.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	101	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	08-1343 mb 1/5
Date Analyzed:	06/21/18	Data File:	062109.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	102	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/22/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806364

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806364-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	84	88	64-133	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	84	58-147

Date of Report: 06/22/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806364

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

Laboratory Code: 806346-03 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	5.57	96	97	75-125	1

Laboratory Code: Laboratory Control Sample

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

Date of Report: 06/22/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806364

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806364-03 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	79	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	83	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	86	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	83	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	85	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	84	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	86	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	81	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	80	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	84	83	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	87	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	88	87	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	88	90	51-115	2
Chrysene	mg/kg (ppm)	0.17	89	89	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	90	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	91	92	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	86	88	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	83	85	49-148	2
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	82	84	50-141	2

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

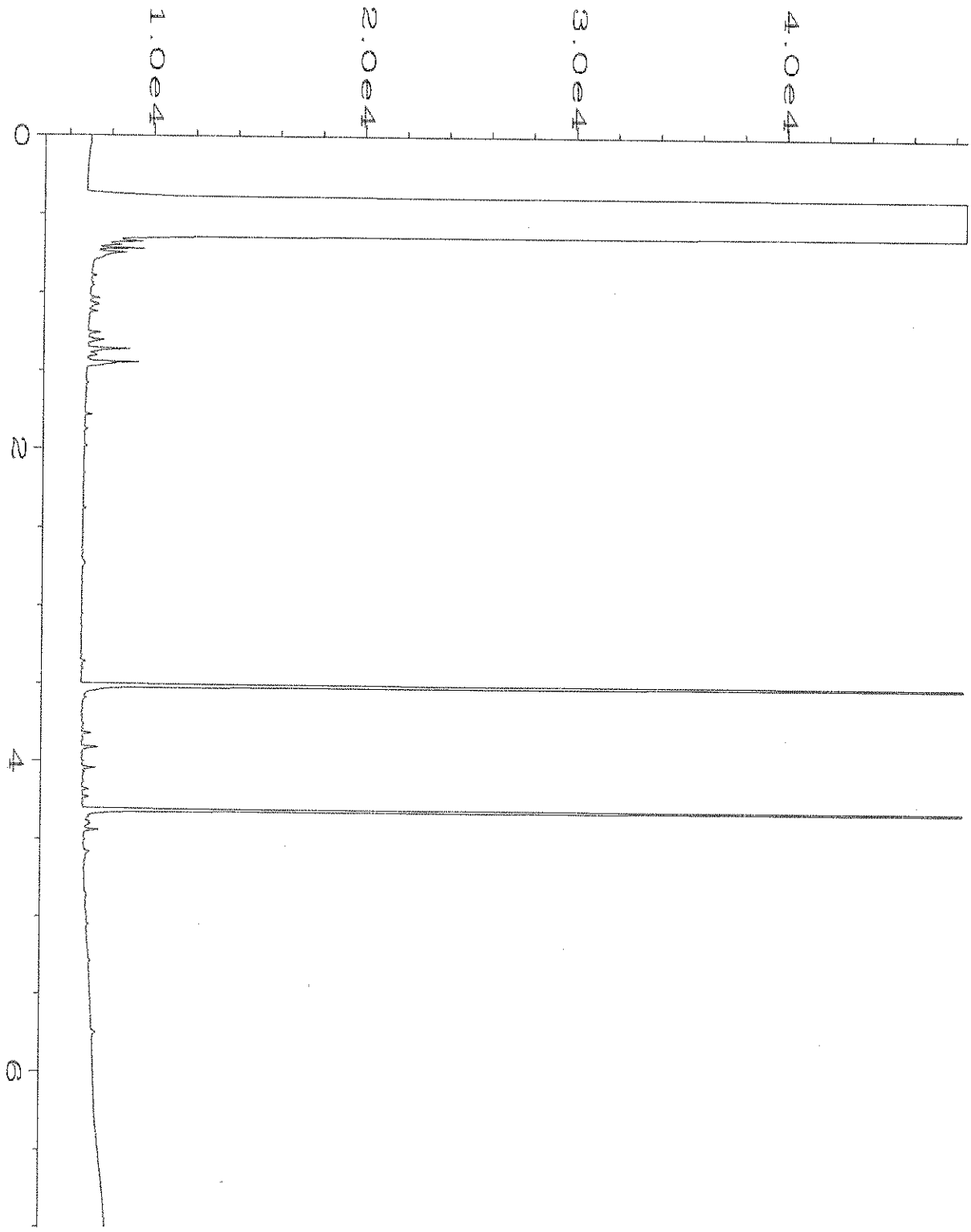
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

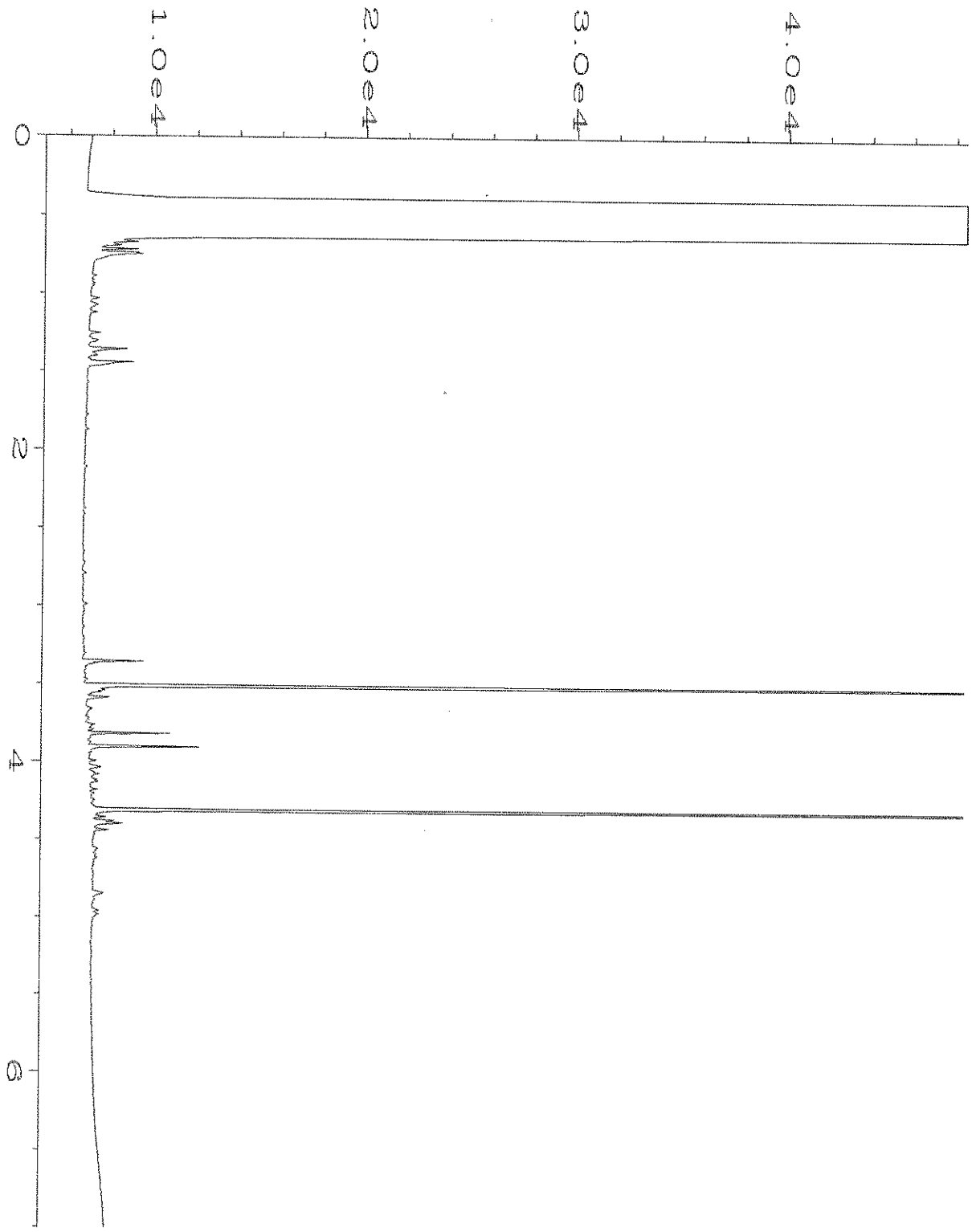
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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

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

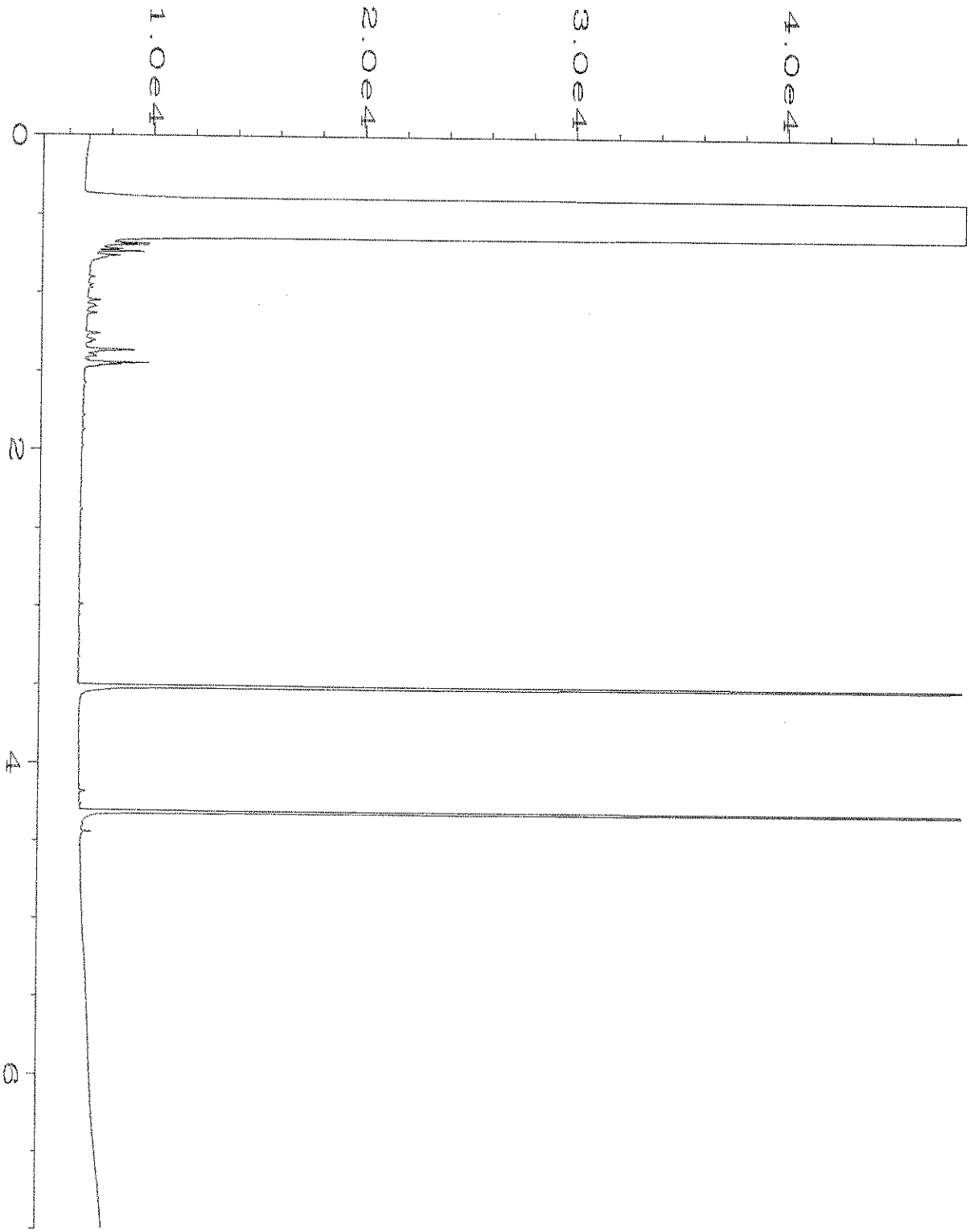


Data File Name	: C:\HPCHEM\6\DATA\06-21-18\010F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 10
Sample Name	: 806364-01	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 21 Jun 18 09:31 AM	Instrument Method	: DX.MTH
Report Created on	: 21 Jun 18 01:13 PM	Analysis Method	: DX.MTH



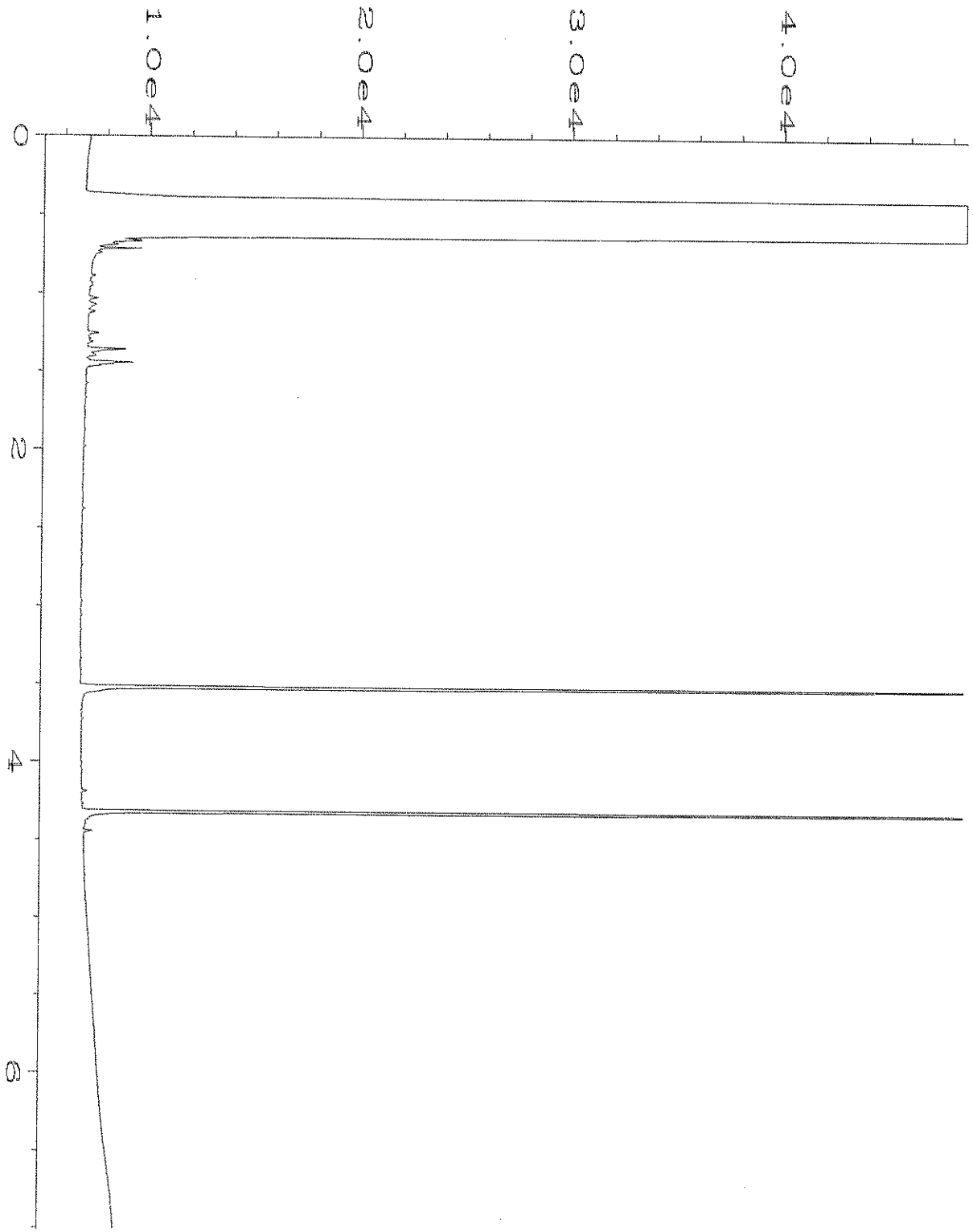
Data File Name : C:\HPCHEM\6\DATA\06-21-18\011F0301.D
Operator : TL
Instrument : GC6
Sample Name : 806364-02
Run Time Bar Code:
Acquired on : 21 Jun 18 09:45 AM
Report Created on: 21 Jun 18 01:13 PM

Page Number : 1
Vial Number : 11
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH

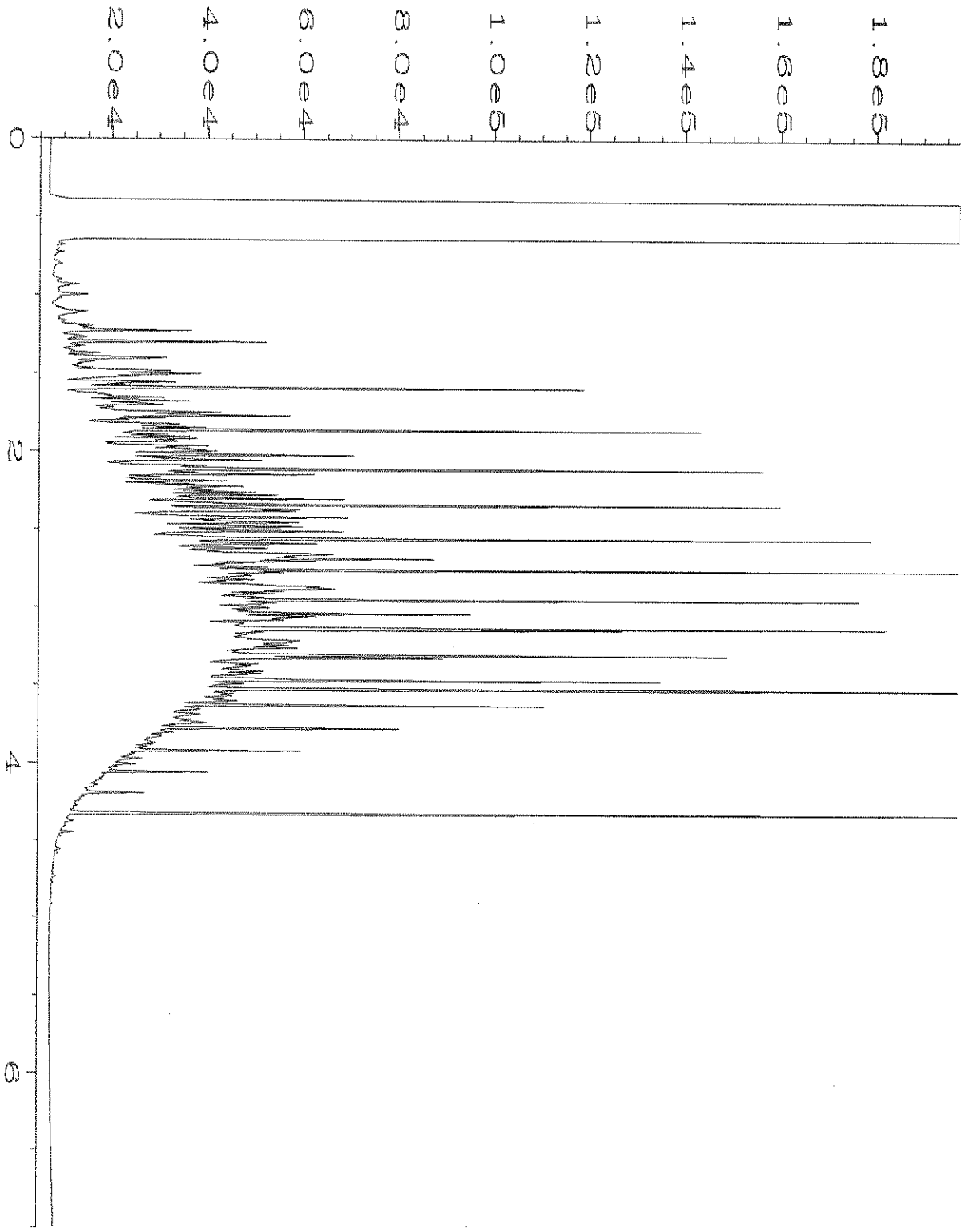


Data File Name : C:\HPCHEM\6\DATA\06-21-18\012F0301.D
Operator : TL
Instrument : GC6
Sample Name : 806364-03
Run Time Bar Code:
Acquired on : 21 Jun 18 09:59 AM
Report Created on: 21 Jun 18 01:13 PM

Page Number : 1
Vial Number : 12
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\6\DATA\06-21-18\006F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 6
Sample Name	: 08-1344 mb	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 21 Jun 18 08:40 AM	Instrument Method	: DX.MTH
Report Created on	: 21 Jun 18 01:13 PM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\6\DATA\06-21-18\003F0201.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 3
Sample Name	: 500 Dx 52-71D	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 21 Jun 18 05:46 AM	Instrument Method	: DX.MTH
Report Created on	: 21 Jun 18 01:13 PM	Analysis Method	: DX.MTH

806364

SAMPLE CHAIN OF CUSTODY

ME 6-20-18

A01

Page # 1 of 1

~~Send Report~~ to Chris Carter; Chris Cass

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	1249-001-05

REMARKS

~~HOLD~~ ML

TURNAROUND TIME
Standard (2 Weeks)
XRUSH COB 6/21 per cc
Rush charges authorized by: ML

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: +Naphthalenes CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
D-10-18-SW	D-10	3	01	6/20/18	1342	S	1	X	X			X	X - same day CC, ML 6/20/18
C-~~10~~09-18-SW	C-~~10~~09	3	02	↓	1347	S	1	X	X			X	~~HOLD~~
B-~~10~~09-18-SW	B-~~10~~09	3	03	↓	1350	S	1	X	X			X	↓
per CC ML 6/20/18	ML												
					GRM								

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Glenn R. McKenney	SES	6/20/18	1455
Received by:	Eric Law	Rush	6/20/18	1455
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 26, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on June 20, 2018 from the SOU_ 1249-001-05_ 20180620, F&BI 806365 project. There are 21 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0626R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 20, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180620, F&BI 806365 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806365 -01	TP-B-10-19
806365 -02	TP-B-10-17
806365 -03	TP-C-10-19
806365 -04	TP-C-10-17
806365 -05	TP-D-10-19
806365 -06	TP-D-10-17
806365 -07	TP-C-09-19
806365 -08	TP-C-09-17
806365 -09	TP-B-09-19
806365 -10	TP-B-09-17
806365 -11	TP-A10-19
806365 -12	TP-A10-17
806365 -13	Trip Blank

All quality control requirements were acceptable.

Date of Report: 06/26/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806365
Date Extracted: 06/21/18
Date Analyzed: 06/21/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 48-168)
TP-Comp-A-20180620 806365-01,03,11	<50	<250	97
TP-Comp-B-20180620 806365-02,04,12	<50	<250	102
Method Blank 08-1339 MB2	<50	<250	94

Analysis For Total Metals By EPA Method 200.8

Client ID:	TP-Comp-A-20180620	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	806365-01, 03, 11
Date Analyzed:	06/21/18	Data File:	806365-01, 03, 11.051
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.25

Analysis For Total Metals By EPA Method 200.8

Client ID:	TP-Comp-B-20180620	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	806365-02, 04, 12
Date Analyzed:	06/21/18	Data File:	806365-02, 04, 12.052
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.03

Analysis For Total Metals By EPA Method 200.8

Client ID:	TP-B-10-17	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/22/18	Lab ID:	806365-02
Date Analyzed:	06/22/18	Data File:	806365-02.039
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.31

Analysis For Total Metals By EPA Method 200.8

Client ID:	TP-C-10-17	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/22/18	Lab ID:	806365-04
Date Analyzed:	06/22/18	Data File:	806365-04.040
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.71

Analysis For Total Metals By EPA Method 200.8

Client ID:	TP-A10-17	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/22/18	Lab ID:	806365-12
Date Analyzed:	06/22/18	Data File:	806365-12.041
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.49

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/22/18	Lab ID:	I8-407 mb
Date Analyzed:	06/22/18	Data File:	I8-407 mb.032
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	I8-401 mb2
Date Analyzed:	06/21/18	Data File:	I8-401 mb2.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	TP-Comp-A-20180620	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	806365-01,03,11 1/5
Date Analyzed:	06/21/18	Data File:	062114.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	106	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.045
2-Methylnaphthalene	0.035
1-Methylnaphthalene	0.049
Benz(a)anthracene	0.67
Chrysene	0.94
Benzo(a)pyrene	0.80
Benzo(b)fluoranthene	0.98
Benzo(k)fluoranthene	0.36
Indeno(1,2,3-cd)pyrene	0.36
Dibenz(a,h)anthracene	0.080

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	TP-Comp-B-20180620	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	806365-02,04,12 1/5
Date Analyzed:	06/21/18	Data File:	062115.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	84	31	163
Benzo(a)anthracene-d12	104	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.12
2-Methylnaphthalene	0.044
1-Methylnaphthalene	0.033
Benz(a)anthracene	0.29
Chrysene	0.33
Benzo(a)pyrene	0.41
Benzo(b)fluoranthene	0.41
Benzo(k)fluoranthene	0.15
Indeno(1,2,3-cd)pyrene	0.15
Dibenz(a,h)anthracene	0.036

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	TP-B-10-17	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/22/18	Lab ID:	806365-02 1/5
Date Analyzed:	06/22/18	Data File:	062211.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	81	31	163
Benzo(a)anthracene-d12	100	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	TP-C-10-17	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/22/18	Lab ID:	806365-04 1/5
Date Analyzed:	06/22/18	Data File:	062212.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	31	160
Benzo(a)anthracene-d12	105	25	165

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	TP-A10-17	Client:	SoundEarth Strategies
Date Received:	06/20/18	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/22/18	Lab ID:	806365-12 1/50
Date Analyzed:	06/22/18	Data File:	062213.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	114 d	31	163
Benzo(a)anthracene-d12	117 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.17
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	0.57
Chrysene	0.64
Benzo(a)pyrene	0.64
Benzo(b)fluoranthene	0.65
Benzo(k)fluoranthene	0.21
Indeno(1,2,3-cd)pyrene	0.31
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/22/18	Lab ID:	08-1343 mb2 1/5
Date Analyzed:	06/22/18	Data File:	062210.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	101	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180620
Date Extracted:	06/21/18	Lab ID:	08-1343 mb 1/5
Date Analyzed:	06/21/18	Data File:	062109.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	102	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/26/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806365

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806356-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	92	94	73-135	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	82	74-139

Date of Report: 06/26/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806365

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

Laboratory Code: 806365-12 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	2.19	101	105	70-130	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	106	85-115

Date of Report: 06/26/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806365

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

Laboratory Code: 806346-03 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	5.57	96	97	75-125	1

Laboratory Code: Laboratory Control Sample

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

Date of Report: 06/26/18
Date Received: 06/20/18
Project: SOU_ 1249-001-05_ 20180620, F&BI 806365

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806364-03 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	79	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	83	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	86	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	83	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	85	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	84	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	86	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	81	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	80	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	84	83	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	87	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	88	87	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	88	90	51-115	2
Chrysene	mg/kg (ppm)	0.17	89	89	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	90	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	91	92	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	86	88	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	83	85	49-148	2
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	82	84	50-141	2

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

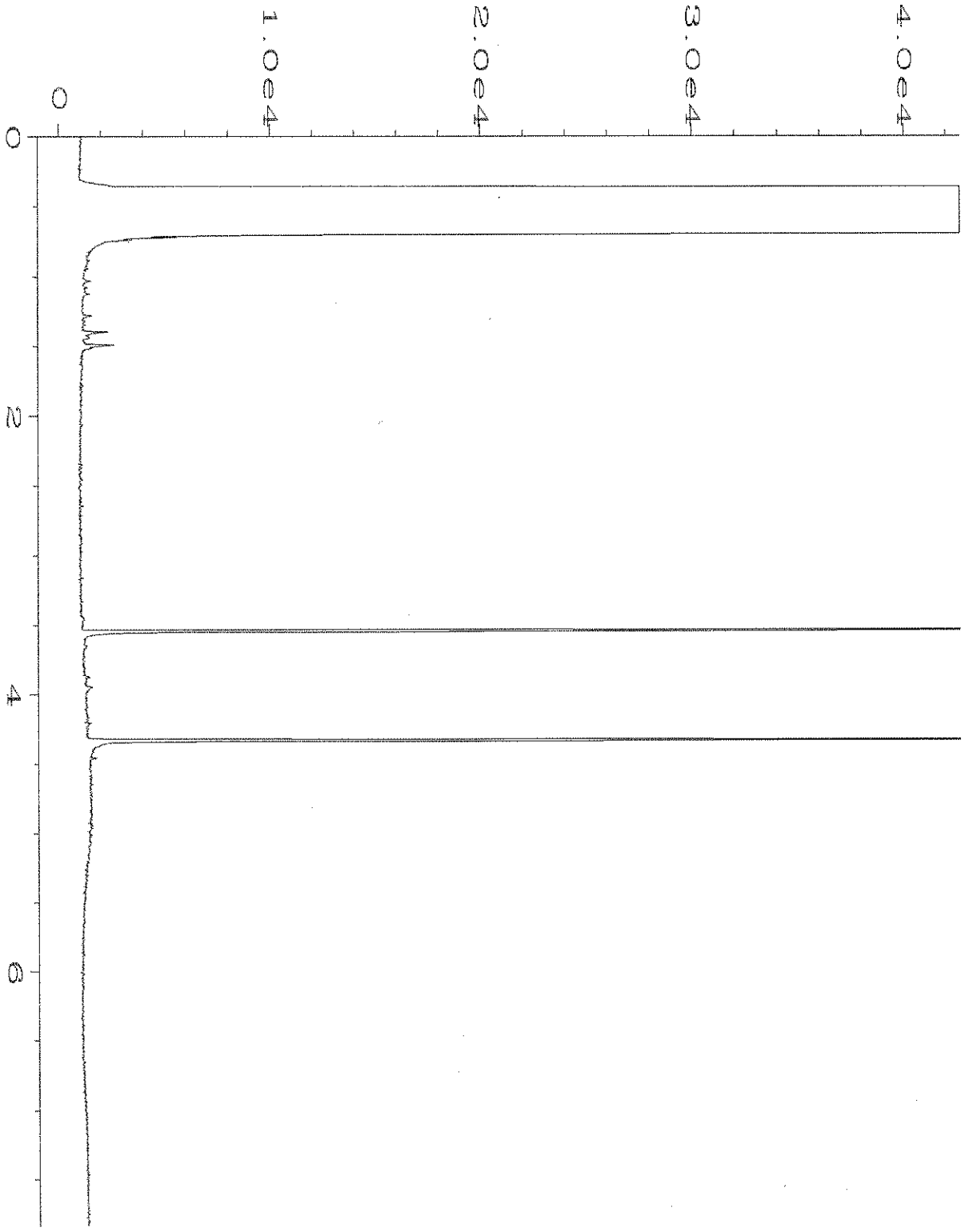
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

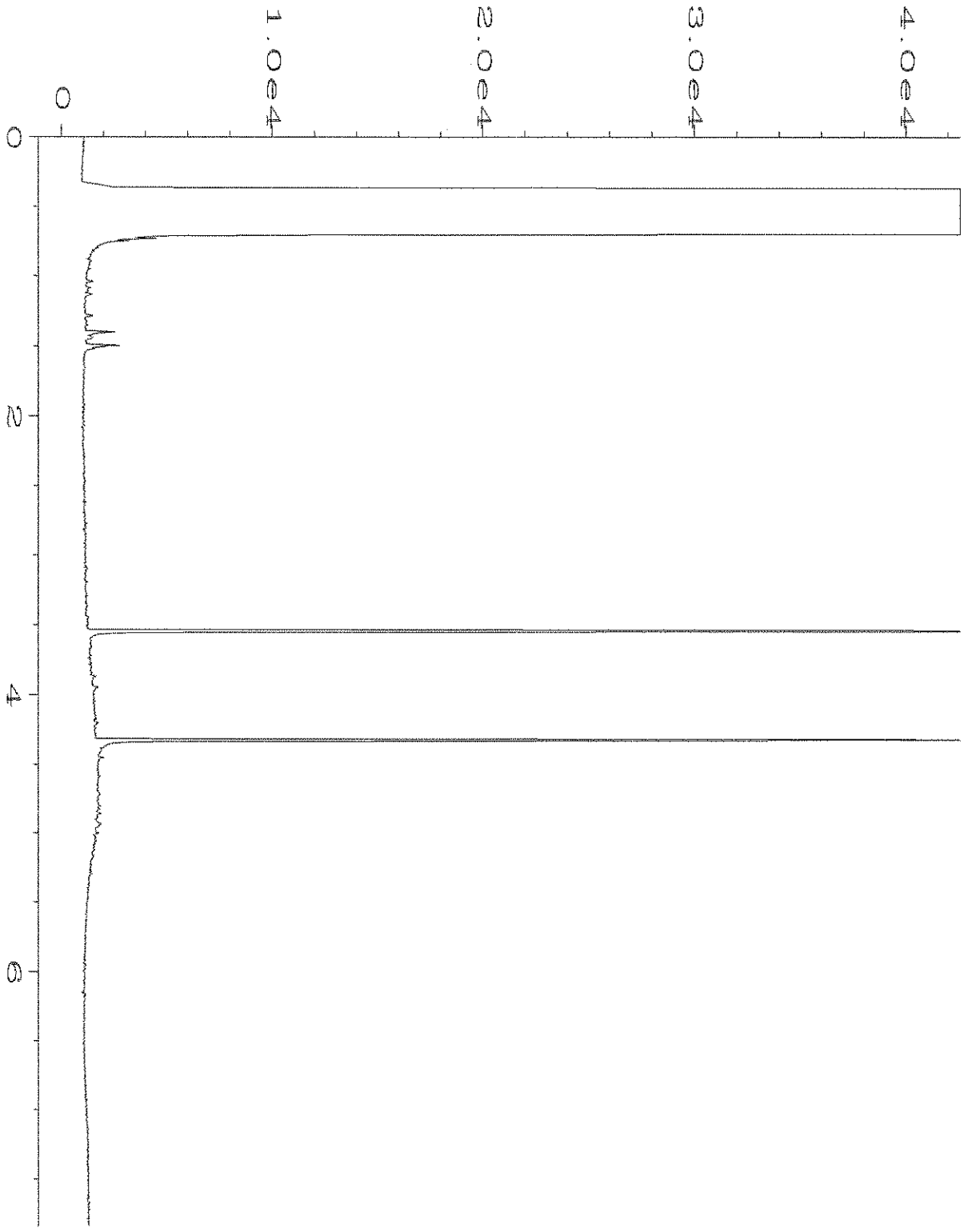
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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

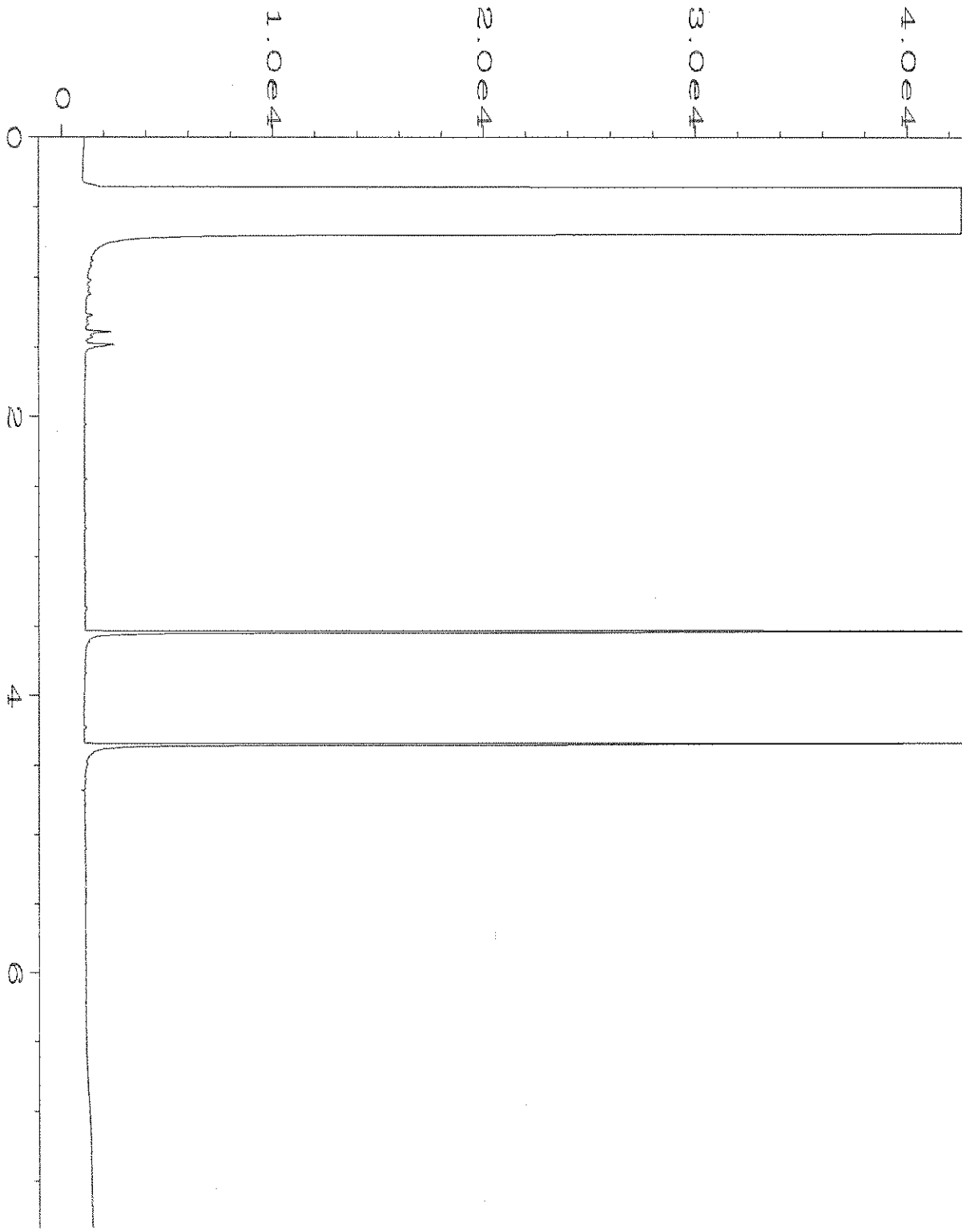
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



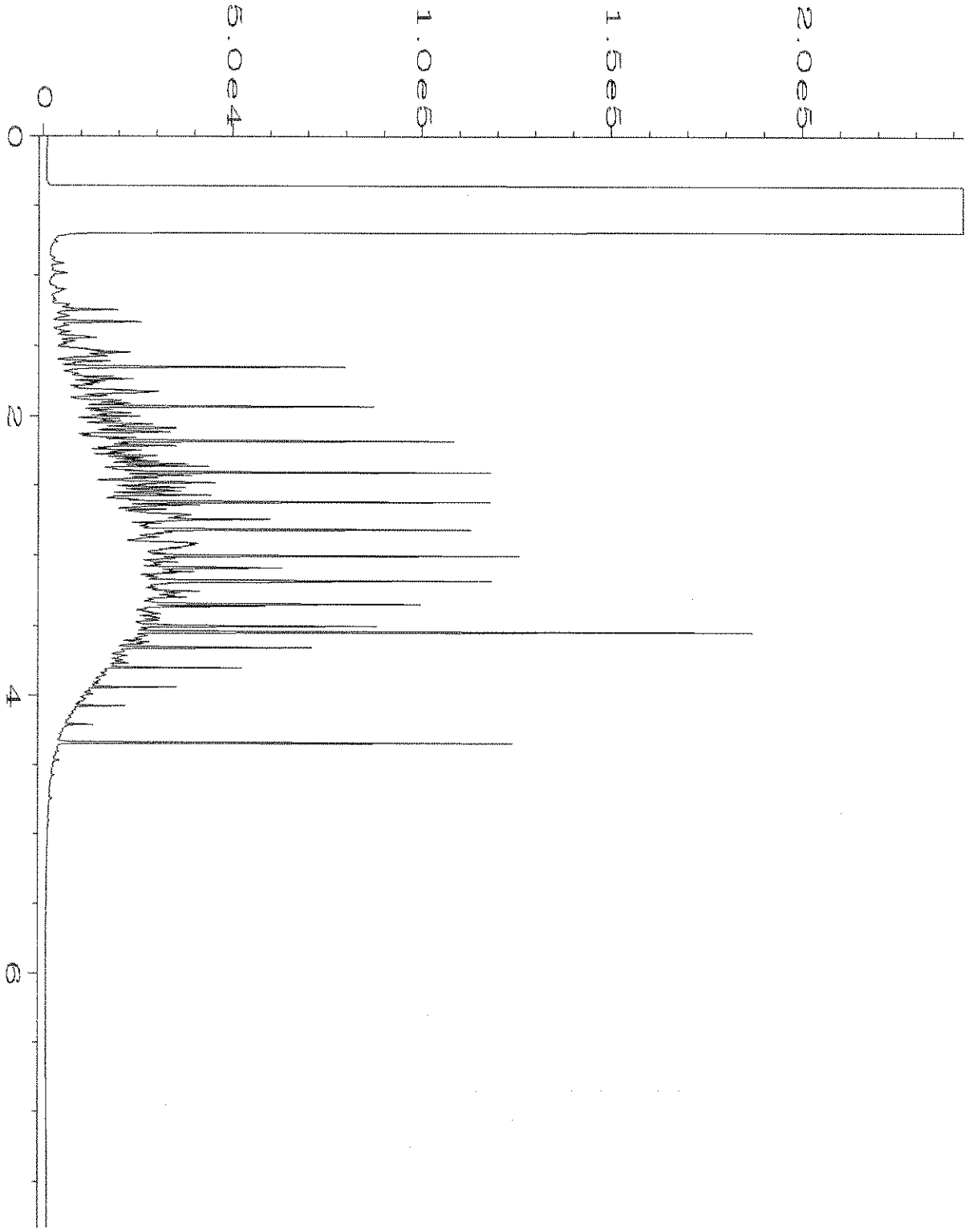
Data File Name	: C:\HPCHEM\4\DATA\06-21-18\013F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 13
Sample Name	: 806365-01,03,11	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 21 Jun 18 10:08 AM	Instrument Method	: DX.MTH
Report Created on	: 21 Jun 18 12:43 PM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\4\DATA\06-21-18\014F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 14
Sample Name	: 806365-02,04,12	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 21 Jun 18 10:20 AM	Instrument Method	: DX.MTH
Report Created on	: 21 Jun 18 12:43 PM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\4\DATA\06-21-18\006F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 6
Sample Name	: 08-1339 mb2	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 21 Jun 18 08:46 AM	Instrument Method	: DX.MTH
Report Created on	: 21 Jun 18 12:43 PM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\4\DATA\06-21-18\003F0201.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 3
Sample Name	: 500 Dx 52-71D	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 21 Jun 18 06:23 AM	Instrument Method	: DX.MTH
Report Created on	: 21 Jun 18 12:44 PM	Analysis Method	: DX.MTH

806365

SAMPLE CHAIN OF CUSTODY

ME 6/20/18 A03/VW1

Page # 1 of 2

Send Report to Chris Carter; Chris Cass

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	1249-001-05

REMARKS O = Archive as discrete soil sample per COC 6/20/18 ~~HOLD~~

TURNAROUND TIME
Standard (2 Weeks)
X RUSH COB 6/21/18 per cass
Rush charges authorized by: ML

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: +Naphthalenes CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
TP-B-10-19	B10	2	01	6/20/18	1155	S	1	A	A			A	A-composite and run same day per class ML 6/20/18 "TP-CompA-20180620"
TP-B-10-17	B10	4	02		1157	S	1	B	B			B	
TP-C-10-19	C10	2	03		1200	S	1	A	A			A	B-composite and run same day per class ML 6/20/18 "TP-CompB-20180620"
TP-C-10-17	C10	4	04		1205	S	1	B	B			B	
TP-D-10-19	D10	2	05		1207	S	1						
TP-D-10-17	D10	5	06		1208	S	1						
TP-C-09-19	C09	2	07		1222	S	1						
TP-C-09-17	C09	4	08		1224	S	1						
TP-B-09-19	B09	2	09		1225	S	1						Samples received at 4 °C
TP-B-09-17	B09	4	10		1230	S	1						

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Glenn McKenney	SES	6/20/18	1455
Received by:	Eric Glan	FEB	6/20/18	1455
Relinquished by:				
Received by:				

SoundEarth Strategies

806365

SAMPLE CHAIN OF CUSTODY

ME 6/20/18

A03/VW1

Page # 2 of 2

Send Report to Chris Carter; Chris Cass

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

PO # 1249-001-05

REMARKS ~~HOLD~~

TURNAROUND TIME
Standard (2 Weeks)
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: +Vinyl Cl CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
TP-A10-19	A10	2	11	6/20/18	1232	S	1	A	A			A	
TP-A10-17	A10	4	12	↓	1236	S	1	(B)	(B)			B	
Trip Blank			13	↓			1						
Added at Lab KR 6/20													

Notes: (B) = Analyzes discrete sample per COC 6/21/18

COC

~~Samples received at 4 °C~~

Su °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Glenn McKenny	SES	6/20/18	1455
Received by:	Eric Flor	FedEx	6/20/18	1950
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 26, 2018

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

Dear Mr Cass:

Included are the results from the testing of material submitted on June 21, 2018 from the SOU_1249-001-05_ 20180621, F&BI 806385 project. There are 14 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
SOU0626R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 21, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180621, F&BI 806385 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806385 -01	EX-B02-17
806385 -02	E-10-17-B
806385 -03	E-09-17-B
806385 -04	Trip Blank-20180621
806385 -05	Temp Blank-20180621

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B02-17	Client:	SoundEarth Strategies
Date Received:	06/21/18	Project:	SOU_1249-001-05_ 20180621
Date Extracted:	06/21/18	Lab ID:	806385-01 1/5
Date Analyzed:	06/21/18	Data File:	062117.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	96	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.083
2-Methylnaphthalene	0.043
1-Methylnaphthalene	0.027
Benz(a)anthracene	2.3 ve
Chrysene	2.1 ve
Benzo(a)pyrene	2.5 ve
Benzo(b)fluoranthene	2.5 ve
Benzo(k)fluoranthene	0.75
Indeno(1,2,3-cd)pyrene	0.73
Dibenz(a,h)anthracene	0.19

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B02-17	Client:	SoundEarth Strategies
Date Received:	06/21/18	Project:	SOU_1249-001-05_ 20180621
Date Extracted:	06/21/18	Lab ID:	806385-01 1/50
Date Analyzed:	06/25/18	Data File:	062521.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	105 d	31	163
Benzo(a)anthracene-d12	80 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.1
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	2.0
Chrysene	1.9
Benzo(a)pyrene	2.1
Benzo(b)fluoranthene	1.9
Benzo(k)fluoranthene	0.71
Indeno(1,2,3-cd)pyrene	1.0
Dibenz(a,h)anthracene	0.23

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-10-17-B	Client:	SoundEarth Strategies
Date Received:	06/21/18	Project:	SOU_1249-001-05_ 20180621
Date Extracted:	06/21/18	Lab ID:	806385-02 1/5
Date Analyzed:	06/21/18	Data File:	062118.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	109	31	163
Benzo(a)anthracene-d12	135	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.15
2-Methylnaphthalene	0.15
1-Methylnaphthalene	0.16
Benz(a)anthracene	3.3 ve
Chrysene	3.0 ve
Benzo(a)pyrene	3.6 ve J
Benzo(b)fluoranthene	3.9 ve J
Benzo(k)fluoranthene	1.1 J
Indeno(1,2,3-cd)pyrene	0.88 J
Dibenz(a,h)anthracene	0.23 J

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-10-17-B	Client:	SoundEarth Strategies
Date Received:	06/21/18	Project:	SOU_1249-001-05_ 20180621
Date Extracted:	06/21/18	Lab ID:	806385-02 1/500
Date Analyzed:	06/25/18	Data File:	062520.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	267 d	31	163
Benzo(a)anthracene-d12	95 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<1
2-Methylnaphthalene	<1
1-Methylnaphthalene	<1
Benz(a)anthracene	2.0
Chrysene	2.1
Benzo(a)pyrene	2.0
Benzo(b)fluoranthene	1.9
Benzo(k)fluoranthene	<1
Indeno(1,2,3-cd)pyrene	1.1
Dibenz(a,h)anthracene	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-09-17-B	Client:	SoundEarth Strategies
Date Received:	06/21/18	Project:	SOU_1249-001-05_ 20180621
Date Extracted:	06/21/18	Lab ID:	806385-03 1/5
Date Analyzed:	06/21/18	Data File:	062116.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	101	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.017
Chrysene	0.018
Benzo(a)pyrene	0.021
Benzo(b)fluoranthene	0.021
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	0.010
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180621
Date Extracted:	06/21/18	Lab ID:	08-1343 mb 1/5
Date Analyzed:	06/21/18	Data File:	062109.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	102	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B02-17	Client:	SoundEarth Strategies
Date Received:	06/21/18	Project:	SOU_1249-001-05_ 20180621
Date Extracted:	06/21/18	Lab ID:	806385-01
Date Analyzed:	06/21/18	Data File:	806385-01.077
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.27

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-10-17-B	Client:	SoundEarth Strategies
Date Received:	06/21/18	Project:	SOU_1249-001-05_ 20180621
Date Extracted:	06/21/18	Lab ID:	806385-02
Date Analyzed:	06/21/18	Data File:	806385-02.078
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.71

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-09-17-B	Client:	SoundEarth Strategies
Date Received:	06/21/18	Project:	SOU_1249-001-05_ 20180621
Date Extracted:	06/21/18	Lab ID:	806385-03
Date Analyzed:	06/21/18	Data File:	806385-03.079
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.16

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180621
Date Extracted:	06/21/18	Lab ID:	I8-401 mb2
Date Analyzed:	06/21/18	Data File:	I8-401 mb2.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Date of Report: 06/26/18
Date Received: 06/21/18
Project: SOU_1249-001-05_ 20180621, F&BI 806385

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806364-03 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	79	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	83	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	86	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	83	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	85	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	84	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	86	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	81	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	80	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	84	83	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	87	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	88	87	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	88	90	51-115	2
Chrysene	mg/kg (ppm)	0.17	89	89	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	90	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	91	92	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	86	88	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	83	85	49-148	2
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	82	84	50-141	2

Date of Report: 06/26/18
Date Received: 06/21/18
Project: SOU_1249-001-05_ 20180621, F&BI 806385

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

Laboratory Code: 806346-03 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	5.57	96	97	75-125	1

Laboratory Code: Laboratory Control Sample

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

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

SAMPLE CHAIN OF CUSTODY

806385 ME 06/21/18 BI / / VW1

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Kyle Lowery

PROJECT NAME/NO. Ballard Blocks II Property

PO # 1249-001-05

REMARKS project quote

TURNAROUND TIME
~~Standard (2 Weeks)~~
RUSH 24-hr TAT
Rush charges authorized by: Chris Cass

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

Sample ID	Sample Location	Sample ~~Depth~~ elev.	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, cPAHs by 8270D	Arsenic 6020A	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
EX-B02-17	B02	17	01	06/21/18	1000	Soil	1	X	X				
E-10-17-B	E10	17	02	↓	1010	Soil	1	X	X				
E-09-17-B	E09	17	03	↓	1020	Soil	1	X	X				
Trip Blank-20180621			04		1030								
Temp Blank-20180621			05		1031								

EGC 06/21/18

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Kyle Lowery	Kyle Lowery	SES	06/21/18	1030
Received by:	MATTHEW PARKER	FBI	6/21/18	1030
Relinquished by:			samples received at	2 °C
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 26, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on June 22, 2018 from the SOU_1249-001-05_ 20180622, F&BI 806430 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0626R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 22, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180622, F&BI 806430 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806430 -01	Ex-B12-17
806430 -02	Field Blank_20180622
806430 -03	Temp Blank_20180622

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Ex-B12-17	Client:	SoundEarth Strategies
Date Received:	06/22/18	Project:	SOU_1249-001-05_ 20180622
Date Extracted:	06/25/18	Lab ID:	806430-01 1/5
Date Analyzed:	06/25/18	Data File:	062518.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	84	31	163
Benzo(a)anthracene-d12	95	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180622
Date Extracted:	06/25/18	Lab ID:	08-1368 mb 1/5
Date Analyzed:	06/25/18	Data File:	062517.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	31	163
Benzo(a)anthracene-d12	92	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	Ex-B12-17	Client:	SoundEarth Strategies
Date Received:	06/22/18	Project:	SOU_1249-001-05_ 20180622
Date Extracted:	06/25/18	Lab ID:	806430-01
Date Analyzed:	06/25/18	Data File:	806430-01.040
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.61

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180622
Date Extracted:	06/25/18	Lab ID:	I8-410 mb
Date Analyzed:	06/25/18	Data File:	I8-410 mb.038
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Date of Report: 06/26/18
Date Received: 06/22/18
Project: SOU_ 1249-001-05_ 20180622, F&BI 806430

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806430-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	82	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	83	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	88	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	87	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	89	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	87	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	87	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	86	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	82	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	83	86	58-121	4
2-Methylnaphthalene	mg/kg (ppm)	0.17	85	88	58-123	3
1-Methylnaphthalene	mg/kg (ppm)	0.17	85	87	60-124	2
Benz(a)anthracene	mg/kg (ppm)	0.17	86	88	51-115	2
Chrysene	mg/kg (ppm)	0.17	88	90	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	90	92	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	89	93	54-131	4
Benzo(a)pyrene	mg/kg (ppm)	0.17	76	82	51-118	8
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	84	81	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	85	79	50-141	7

Date of Report: 06/26/18
Date Received: 06/22/18
Project: SOU_ 1249-001-05_ 20180622, F&BI 806430

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

Laboratory Code: 806430-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	2.16	97	95	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	100	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

806430

SAMPLE CHAIN OF CUSTODY

ME 06/22/18 AI, VW1

Page [redacted] 1 of 1

Send Report to Chris Carter; Chris Cass

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

PO #: 1249-001-05

REMARKS (project quote)

TURNAROUND TIME
Standard (2 Weeks)
(X) RUSH 6/25/18 per AH 6/22/18 mc
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: Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, cPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
EX-B12-17	B12	17	01	0622-B	1000	Soil	1	X	X				
Field Blank_20180622	—	—	02	"	—	—	—						
Temp Blank_20180622	—	—	03	"	—	—	—						
			ATH	06-22-18									
													Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Ada Hamilton	SoundEarth	06-22-18	1550
Received by:	Eric Young	Ecb	6/22/18	1550
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 28, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on June 25, 2018 from the SOU_ 1249-001-05_ 20180625, F&BI 806473 project. There are 14 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0628R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 25, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180625, F&BI 806473 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806473 -01	D-09-17-B
806473 -02	D-11-17-WSW
806473 -03	C-11-20-WSW
806473 -04	B-11-20-WSW
806473 -05	Field Blank_201080625
806473 -06	Temp Blank_201080625

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-09-17-B	Client:	SoundEarth Strategies
Date Received:	06/25/18	Project:	SOU_ 1249-001-05_ 20180625
Date Extracted:	06/26/18	Lab ID:	806473-01
Date Analyzed:	06/26/18	Data File:	806473-01.035
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.35

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-11-17-WSW	Client:	SoundEarth Strategies
Date Received:	06/25/18	Project:	SOU_ 1249-001-05_ 20180625
Date Extracted:	06/26/18	Lab ID:	806473-02
Date Analyzed:	06/26/18	Data File:	806473-02.087
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.99

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-11-20-WSW	Client:	SoundEarth Strategies
Date Received:	06/25/18	Project:	SOU_ 1249-001-05_ 20180625
Date Extracted:	06/26/18	Lab ID:	806473-03
Date Analyzed:	06/26/18	Data File:	806473-03.088
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.21

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-11-20-WSW	Client:	SoundEarth Strategies
Date Received:	06/25/18	Project:	SOU_ 1249-001-05_ 20180625
Date Extracted:	06/26/18	Lab ID:	806473-04
Date Analyzed:	06/26/18	Data File:	806473-04.099
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.26

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180625
Date Extracted:	06/26/18	Lab ID:	I8-416 mb
Date Analyzed:	06/26/18	Data File:	I8-416 mb.073
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-09-17-B	Client:	SoundEarth Strategies
Date Received:	06/25/18	Project:	SOU_ 1249-001-05_ 20180625
Date Extracted:	06/26/18	Lab ID:	806473-01 1/5
Date Analyzed:	06/26/18	Data File:	062605.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	101	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.019
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.047
Chrysene	0.053
Benzo(a)pyrene	0.052
Benzo(b)fluoranthene	0.052
Benzo(k)fluoranthene	0.020
Indeno(1,2,3-cd)pyrene	0.029
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-11-17-WSW	Client:	SoundEarth Strategies
Date Received:	06/25/18	Project:	SOU_ 1249-001-05_ 20180625
Date Extracted:	06/26/18	Lab ID:	806473-02 1/5
Date Analyzed:	06/26/18	Data File:	062606.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	98	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-11-20-WSW	Client:	SoundEarth Strategies
Date Received:	06/25/18	Project:	SOU_ 1249-001-05_ 20180625
Date Extracted:	06/26/18	Lab ID:	806473-03 1/5
Date Analyzed:	06/26/18	Data File:	062607.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	97	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-11-20-WSW	Client:	SoundEarth Strategies
Date Received:	06/25/18	Project:	SOU_ 1249-001-05_ 20180625
Date Extracted:	06/26/18	Lab ID:	806473-04 1/50
Date Analyzed:	06/26/18	Data File:	062608.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	123 d	31	163
Benzo(a)anthracene-d12	105 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.44
2-Methylnaphthalene	0.22
1-Methylnaphthalene	0.30
Benz(a)anthracene	3.7
Chrysene	4.3
Benzo(a)pyrene	4.3
Benzo(b)fluoranthene	5.3
Benzo(k)fluoranthene	2.1
Indeno(1,2,3-cd)pyrene	2.5
Dibenz(a,h)anthracene	0.56

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180625
Date Extracted:	06/26/18	Lab ID:	08-1368 mb2 1/5
Date Analyzed:	06/26/18	Data File:	062604.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	31	163
Benzo(a)anthracene-d12	100	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/28/18
Date Received: 06/25/18
Project: SOU_ 1249-001-05_ 20180625, F&BI 806473

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

Laboratory Code: 806473-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.13	96	96	70-130	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	99	85-115

Date of Report: 06/28/18
Date Received: 06/25/18
Project: SOU_ 1249-001-05_ 20180625, F&BI 806473

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806430-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	82	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	83	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	88	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	87	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	89	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	87	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	87	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	86	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	82	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	83	86	58-121	4
2-Methylnaphthalene	mg/kg (ppm)	0.17	85	88	58-123	3
1-Methylnaphthalene	mg/kg (ppm)	0.17	85	87	60-124	2
Benz(a)anthracene	mg/kg (ppm)	0.17	86	88	51-115	2
Chrysene	mg/kg (ppm)	0.17	88	90	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	90	92	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	89	93	54-131	4
Benzo(a)pyrene	mg/kg (ppm)	0.17	76	82	51-118	8
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	84	81	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	85	79	50-141	7

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

806473

SAMPLE CHAIN OF CUSTODY

ME 6/25/18 VW 3/A02

Page 1 of 1

Send Reports to: Chris Carter; Chris Cass

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

PO #: 1249-001-05

REMARKS (project quote)

24 Hour TAT

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24 Hour TAT
Rush charges authorized by:

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

Sample ID	Sample Location	Sample ~~Depth~~ Elev	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: Naphthalene, 1-MeNaph, 2-MeNaph, cPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
D-09-17-B	D-09	17	01	06-25-18	0845	Soil	1	X	X				
D-11-17-WSW	D-11	17	02		1220			X	X				
C-11-20-WSW	C-11	20	03		1250			X	X				
B-11-20-WSW	B-11	20	04		1345			X	X				
Field Blank_20180625	—	—	05		—								
Temp Blank_20180625	—	—	06A/B		—								

ATH 06-25-18

Samples ~~received~~ at 2 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Ada Hamilton	SoundEarth	06-25-18	1535
Received by:	HONG NGUYEN	FedEx	〃	〃
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 29, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on June 26, 2018 from the SOU_1249-001-05_ 20180626, F&BI 806499 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0629R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 26, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180626, F&BI 806499 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806499 -01	E-08-17-B
806499 -02	A-11-15.5-B
806499 -03	A-10-15.5-B
806499 -04	Field Blank-20180626
806499 -05	Temp Blank-20180626

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 6020B

Client ID:	E-08-17-B	Client:	SoundEarth Strategies
Date Received:	06/26/18	Project:	SOU_1249-001-05_ 20180626
Date Extracted:	06/27/18	Lab ID:	806499-01
Date Analyzed:	06/27/18	Data File:	806499-01.028
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.61

Analysis For Total Metals By EPA Method 6020B

Client ID:	A-11-15.5-B	Client:	SoundEarth Strategies
Date Received:	06/26/18	Project:	SOU_1249-001-05_ 20180626
Date Extracted:	06/27/18	Lab ID:	806499-02
Date Analyzed:	06/27/18	Data File:	806499-02.029
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.57

Analysis For Total Metals By EPA Method 6020B

Client ID:	A-10-15.5-B	Client:	SoundEarth Strategies
Date Received:	06/26/18	Project:	SOU_1249-001-05_ 20180626
Date Extracted:	06/27/18	Lab ID:	806499-03
Date Analyzed:	06/27/18	Data File:	806499-03.030
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.27

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180626
Date Extracted:	06/27/18	Lab ID:	I8-416 mb2
Date Analyzed:	06/27/18	Data File:	I8-416 mb2.027
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-08-17-B	Client:	SoundEarth Strategies
Date Received:	06/26/18	Project:	SOU_1249-001-05_ 20180626
Date Extracted:	06/27/18	Lab ID:	806499-01 1/5
Date Analyzed:	06/27/18	Data File:	062709.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	89	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.013
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.016
Chrysene	0.018
Benzo(a)pyrene	0.019
Benzo(b)fluoranthene	0.020
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	0.011
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-11-15.5-B	Client:	SoundEarth Strategies
Date Received:	06/26/18	Project:	SOU_1249-001-05_ 20180626
Date Extracted:	06/27/18	Lab ID:	806499-02 1/50
Date Analyzed:	06/27/18	Data File:	062710.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	131 d	31	163
Benzo(a)anthracene-d12	109 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.1
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	0.53
Chrysene	0.56
Benzo(a)pyrene	0.51
Benzo(b)fluoranthene	0.48
Benzo(k)fluoranthene	0.18
Indeno(1,2,3-cd)pyrene	0.27
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-10-15.5-B	Client:	SoundEarth Strategies
Date Received:	06/26/18	Project:	SOU_1249-001-05_ 20180626
Date Extracted:	06/27/18	Lab ID:	806499-03 1/5
Date Analyzed:	06/27/18	Data File:	062707.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	93	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180626
Date Extracted:	06/27/18	Lab ID:	08-1422 mb 1/5
Date Analyzed:	06/27/18	Data File:	062706.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	89	31	163
Benzo(a)anthracene-d12	103	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/29/18
Date Received: 06/26/18
Project: SOU_1249-001-05_ 20180626, F&BI 806499

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

Laboratory Code: 806473-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.13	96	96	70-130	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	99	85-115

Date of Report: 06/29/18
Date Received: 06/26/18
Project: SOU_1249-001-05_ 20180626, F&BI 806499

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806499-03 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	75	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	79	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	79	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	82	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	84	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	82	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	83	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	81	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	80	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	81	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	81	81	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	85	84	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	84	83	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	86	88	51-115	2
Chrysene	mg/kg (ppm)	0.17	85	89	55-129	5
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	90	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	84	85	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	83	83	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	91	86	49-148	6
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	90	87	50-141	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

SAMPLE CHAIN OF CUSTODY

806499

ME 06/26/18

AI / VW1

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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

PO #: 1249-001-05

REMARKS (project quote): 24-hour TAT

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24 Hour TAT
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth (ft)	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: Naphthalene, 2-Methylnaphthalene, CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
E-08-17-B	E-08	17	01	06-26-18	1245	Soil	1	X	X				
A-11-15.5-B	A-11	15.5	02	"	1510	"	"	X	X				
A-10-15.5-B	A-10	15.5	03	"	1515	"	"	X	X				
Field Blank_20180626	—	—	04A/B	"	—	—	—						Vials labeled TripBlank
Temp Blnk-20180626	—	—	05		—	-	-						

TPH 06-26-18

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Ada Hamilton	SoundEarth	06-26-18	16:09
Received by:	Jon Shimazu	FBI	06-26-18	16:09
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 2, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on June 27, 2018 from the SOU_1249-001-05_ 20180627, F&BI 806532 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0702R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 27, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180627, F&BI 806532 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806532 -01	B-11-17-WSW
806532 -02	B-11-15.5-WSW
806532 -03	D-08-17-B
806532 -04	Field Blank_20180627
806532 -05	Temp Blank_20180627

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-11-17-WSW	Client:	SoundEarth Strategies
Date Received:	06/27/18	Project:	SOU_1249-001-05_ 20180627
Date Extracted:	06/28/18	Lab ID:	806532-01
Date Analyzed:	06/28/18	Data File:	806532-01.030
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.03

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-11-15.5-WSW	Client:	SoundEarth Strategies
Date Received:	06/27/18	Project:	SOU_1249-001-05_ 20180627
Date Extracted:	06/28/18	Lab ID:	806532-02
Date Analyzed:	06/28/18	Data File:	806532-02.031
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-08-17-B	Client:	SoundEarth Strategies
Date Received:	06/27/18	Project:	SOU_1249-001-05_ 20180627
Date Extracted:	06/28/18	Lab ID:	806532-03
Date Analyzed:	06/28/18	Data File:	806532-03.034
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180627
Date Extracted:	06/28/18	Lab ID:	I8-421 mb
Date Analyzed:	06/28/18	Data File:	I8-421 mb.028
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-11-17-WSW	Client:	SoundEarth Strategies
Date Received:	06/27/18	Project:	SOU_1249-001-05_ 20180627
Date Extracted:	06/28/18	Lab ID:	806532-01 1/5
Date Analyzed:	06/28/18	Data File:	062810.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	95	31	163
Benzo(a)anthracene-d12	108	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-11-15.5-WSW	Client:	SoundEarth Strategies
Date Received:	06/27/18	Project:	SOU_1249-001-05_ 20180627
Date Extracted:	06/28/18	Lab ID:	806532-02 1/5
Date Analyzed:	06/28/18	Data File:	062811.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	96	31	163
Benzo(a)anthracene-d12	107	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.033
Chrysene	0.040
Benzo(a)pyrene	0.041
Benzo(b)fluoranthene	0.041
Benzo(k)fluoranthene	0.016
Indeno(1,2,3-cd)pyrene	0.027
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-08-17-B	Client:	SoundEarth Strategies
Date Received:	06/27/18	Project:	SOU_1249-001-05_ 20180627
Date Extracted:	06/28/18	Lab ID:	806532-03 1/5
Date Analyzed:	06/28/18	Data File:	062812.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	91	31	163
Benzo(a)anthracene-d12	99	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180627
Date Extracted:	06/28/18	Lab ID:	08-1422 mb2 1/5
Date Analyzed:	06/28/18	Data File:	062809.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	106	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/02/18
Date Received: 06/27/18
Project: SOU_1249-001-05_ 20180627, F&BI 806532

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

Laboratory Code: 806532-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<1	103	102	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	101	85-115

Date of Report: 07/02/18
Date Received: 06/27/18
Project: SOU_1249-001-05_ 20180627, F&BI 806532

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806499-03 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	75	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	79	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	79	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	82	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	84	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	82	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	83	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	81	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	80	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	81	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	81	81	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	85	84	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	84	83	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	86	88	51-115	2
Chrysene	mg/kg (ppm)	0.17	85	89	55-129	5
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	90	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	84	85	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	83	83	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	91	86	49-148	6
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	90	87	50-141	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

806532

SAMPLE CHAIN OF CUSTODY ME 6/27/18

A01/VW2

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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

PO #: 1249-001-05

REMARKS (project quote)

24 hour TAT

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24 hour TAT
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth Elev	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: Naphthalene + 2-Methylnaphthalene + cPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
B-11-17-WSW	B-11	17	01	06-27-18	1105	soil	1	X	X				
B-11-15.5-WSW	B-11	15.5	02	"	1135	"	"	X	X				
D-08-17-B	D-08	17	03	"	1155	"	"	X	X				
Field Blank_20180627	—	—	04A-B	—	—								
Temp Blank_20180627	—	—	05	—	—								
													Samples received at 4 °C

ABH 06-27-18

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Ada Hamilton	SoundEarth	06-27-18	1550
Received by:		FEDEX	6-27-18	15:50
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 2, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on June 28, 2018 from the SOU_1249-001-05_ 20180628, F&BI 806553 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0702R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 28, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180628, F&BI 806553 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806553 -01	UST01-WSW01-15
806553 -02	UST01-SSW01-15
806553 -03	UST01-ESW01-15
806553 -04	UST01-B01-13
806553 -05	UST01-NSW01-15
806553 -06	UST01-WSW02-15
806553 -07	UST01-SSW02-15
806553 -08	UST01-ESW02-15

All quality control requirements were acceptable.

Date of Report: 07/02/18
Date Received: 06/28/18
Project: SOU_1249-001-05_ 20180628, F&BI 806553
Date Extracted: 06/28/18
Date Analyzed: 06/28/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
UST01-WSW01-15 806553-01	120	<250	90
UST01-SSW01-15 806553-02	<50	<250	93
UST01-ESW01-15 806553-03	<50	<250	89
UST01-B01-13 806553-04	<50	<250	99
UST01-NSW01-15 806553-05	<50	<250	99
Method Blank 08-1433 MB	<50	<250	103

Date of Report: 07/02/18
Date Received: 06/28/18
Project: SOU_1249-001-05_ 20180628, F&BI 806553

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 806542-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	84	88	64-133	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	94	58-147

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

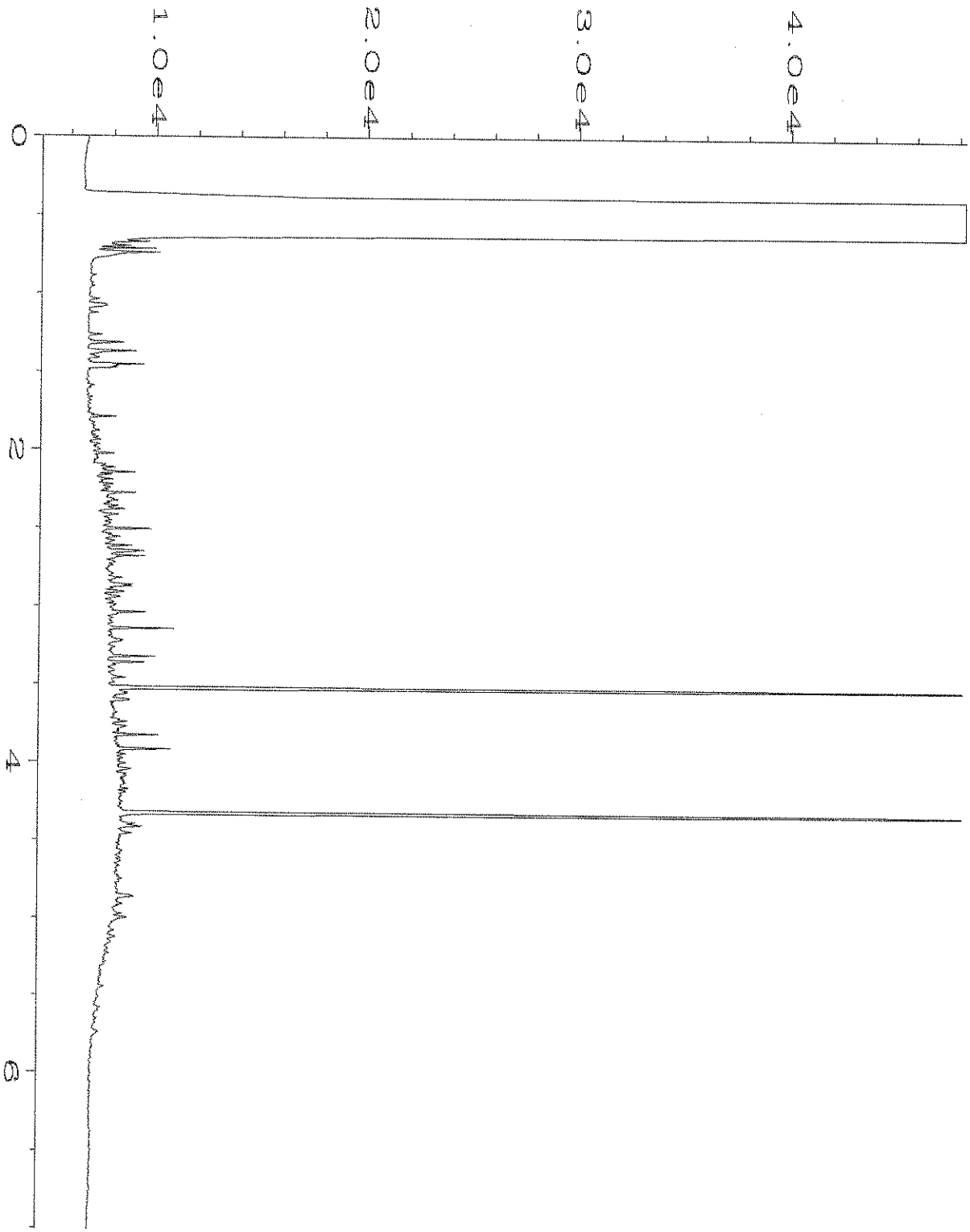
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

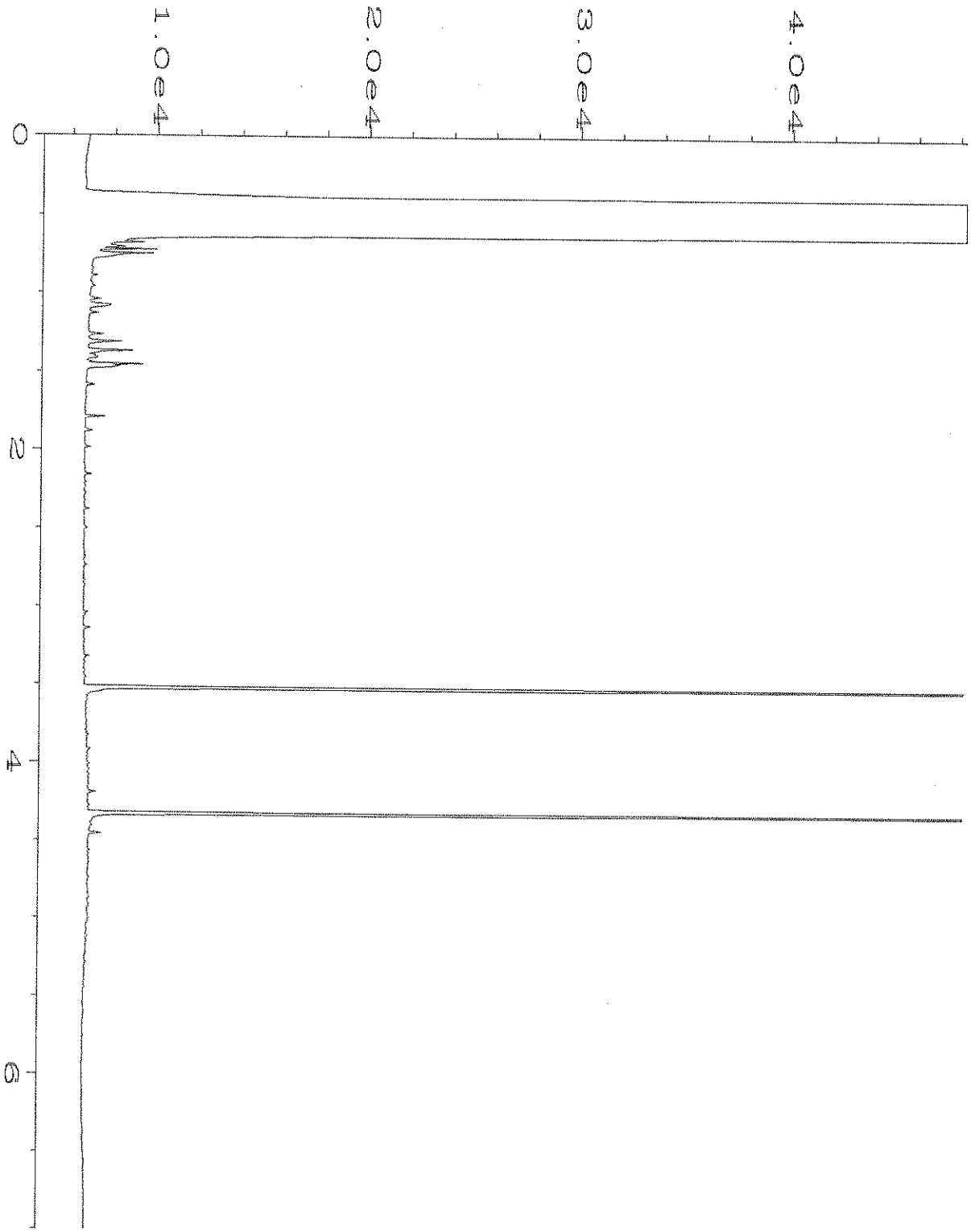
vo - The value reported fell outside the control limits established for this analyte.

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



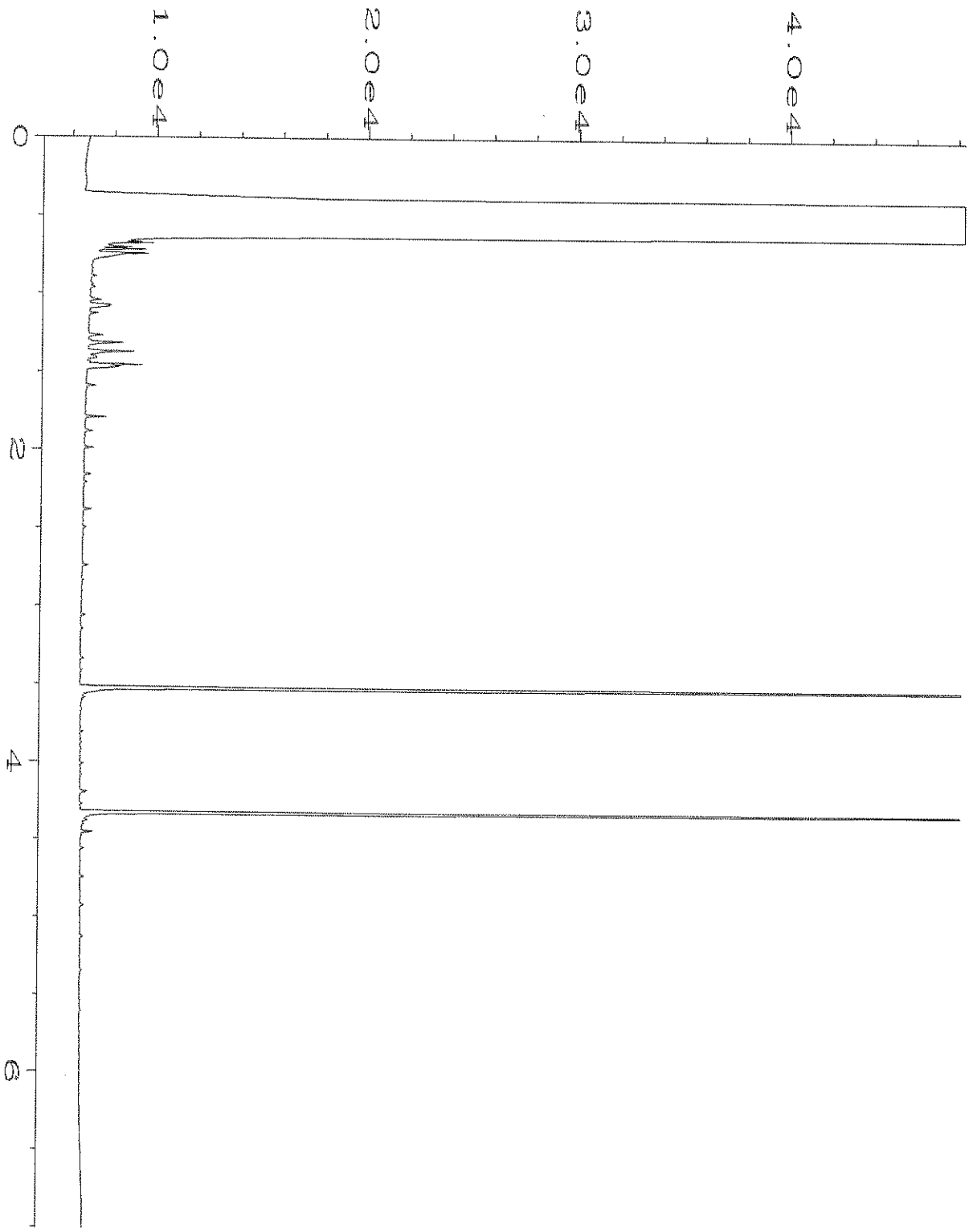
Data File Name : C:\HPCHEM\6\DATA\06-28-18\041F0801.D
Operator : TL
Instrument : GC6
Sample Name : 806553-01
Run Time Bar Code:
Acquired on : 28 Jun 18 05:34 PM
Report Created on: 29 Jun 18 08:26 AM

Page Number : 1
Vial Number : 41
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH



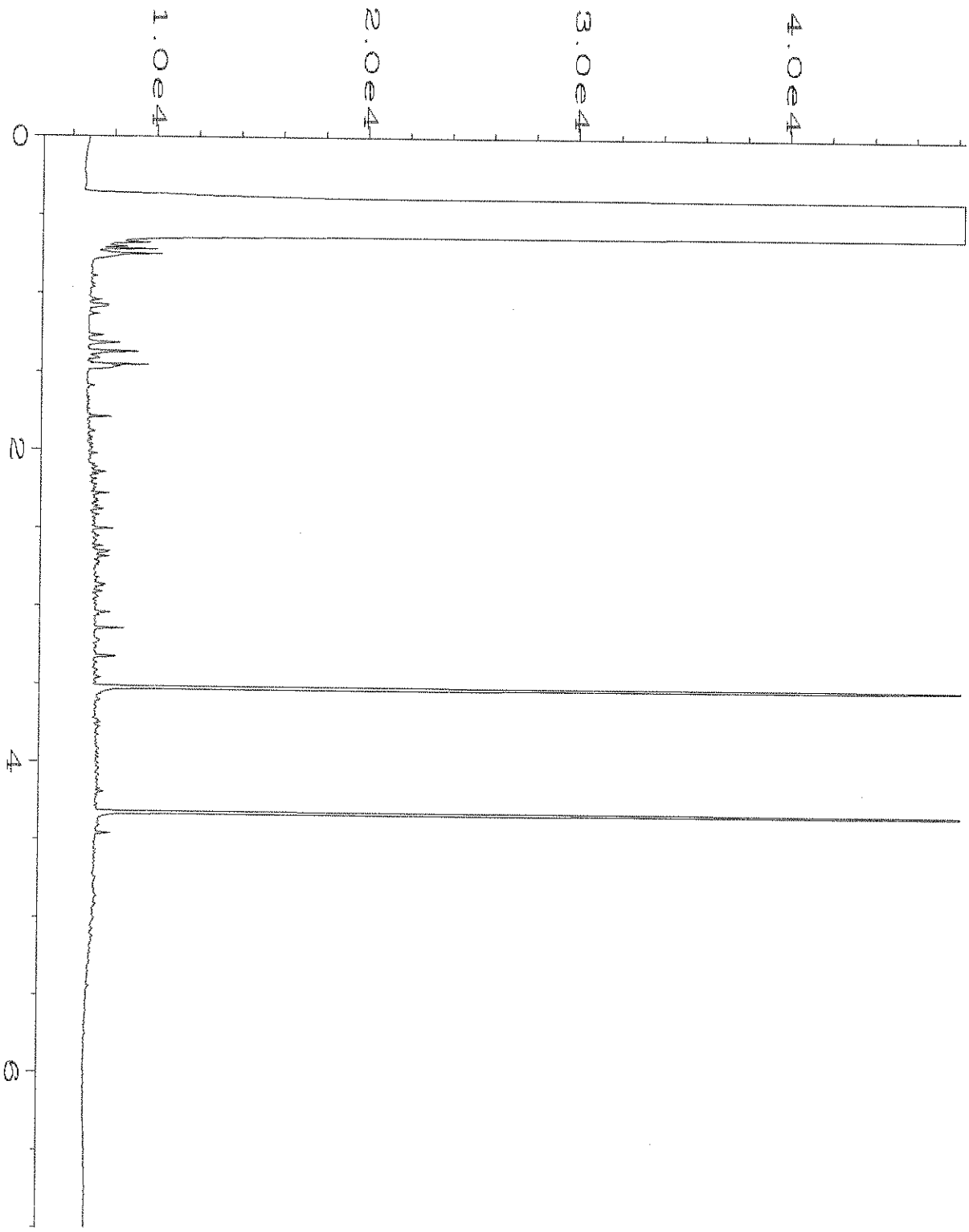
Data File Name : C:\HPCHEM\6\DATA\06-28-18\042F0801.D
Operator : TL
Instrument : GC6
Sample Name : 806553-02
Run Time Bar Code:
Acquired on : 28 Jun 18 05:45 PM
Report Created on: 29 Jun 18 08:26 AM

Page Number : 1
Vial Number : 42
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH



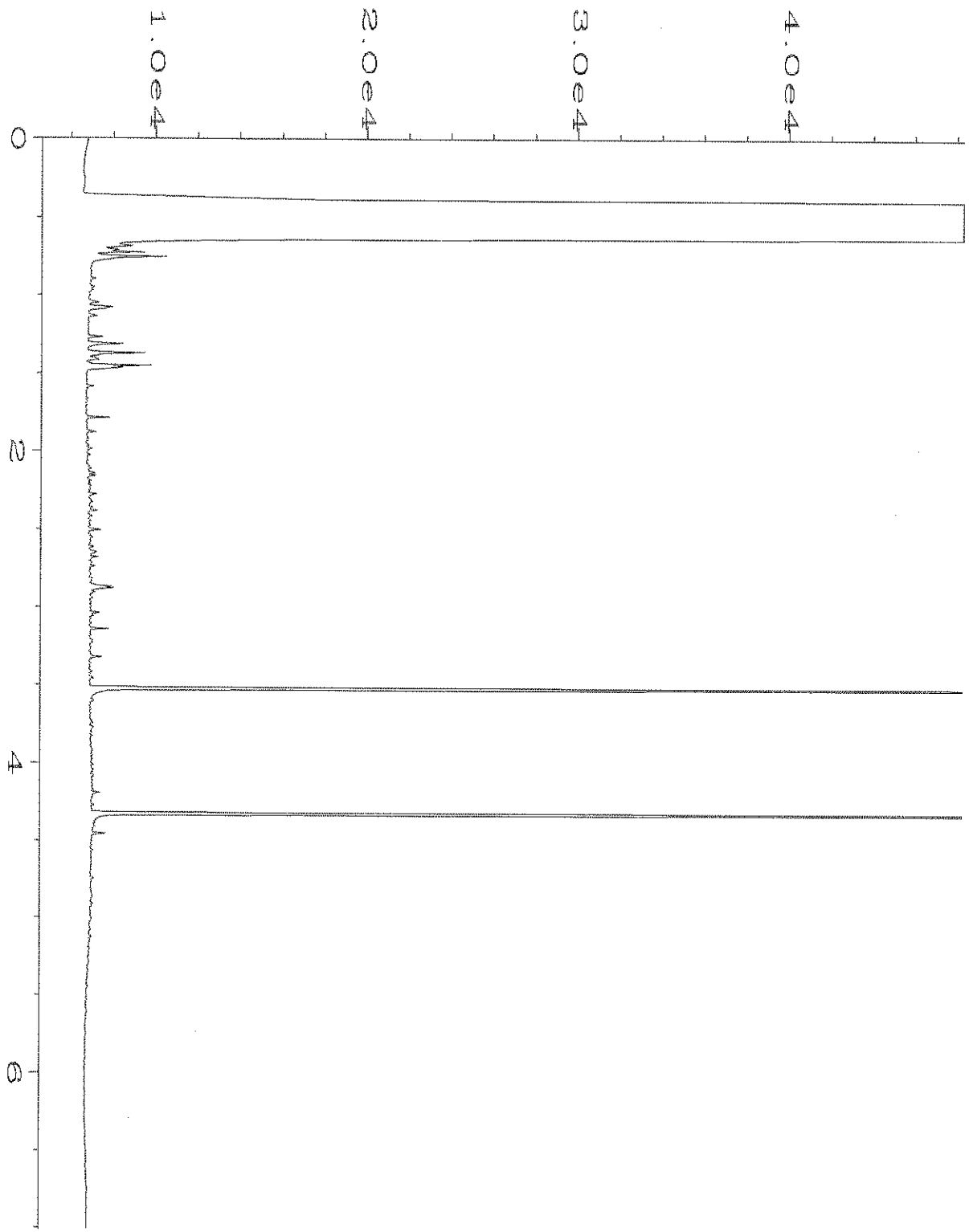
Data File Name : C:\HPCHEM\6\DATA\06-28-18\043F0801.D
Operator : TL
Instrument : GC6
Sample Name : 806553-03
Run Time Bar Code:
Acquired on : 28 Jun 18 05:56 PM
Report Created on: 29 Jun 18 08:26 AM

Page Number : 1
Vial Number : 43
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH



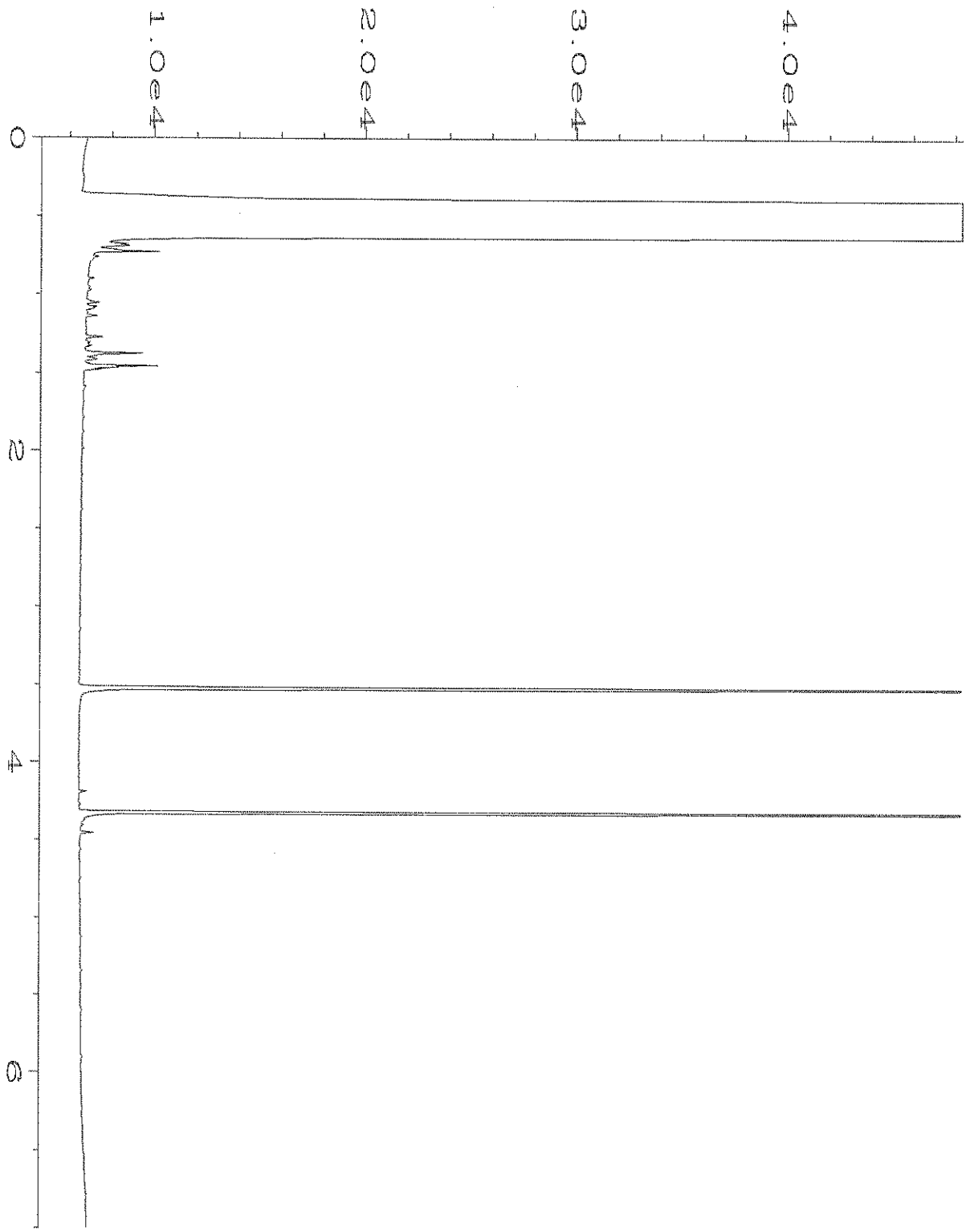
Data File Name : C:\HPCHEM\6\DATA\06-28-18\044F0801.D
Operator : TL
Instrument : GC6
Sample Name : 806553-04
Run Time Bar Code:
Acquired on : 28 Jun 18 06:07 PM
Report Created on: 29 Jun 18 08:26 AM

Page Number : 1
Vial Number : 44
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH

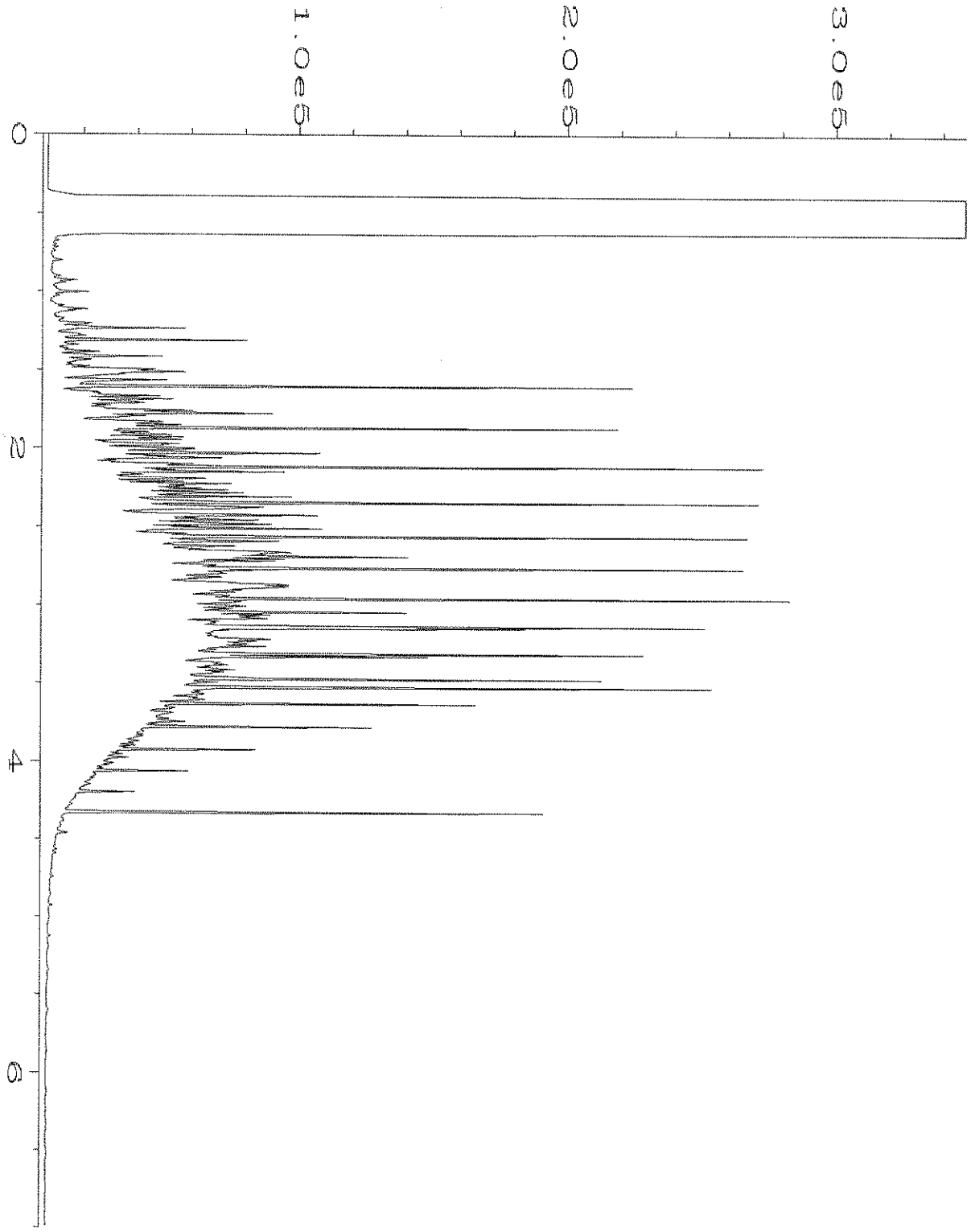


Data File Name : C:\HPCHEM\6\DATA\06-28-18\045F0801.D
Operator : TL
Instrument : GC6
Sample Name : 806553-05
Run Time Bar Code:
Acquired on : 28 Jun 18 06:18 PM
Report Created on: 29 Jun 18 08:27 AM

Page Number : 1
Vial Number : 45
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\6\DATA\06-28-18\018F0501.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 18
Sample Name	: 08-1433 mb	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 5
Acquired on	: 28 Jun 18 01:43 PM	Instrument Method	: DX.MTH
Report Created on	: 29 Jun 18 08:26 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\6\DATA\06-28-18\005F0901.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 5
Sample Name	: 1000 Dx 52-185B	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 9
Acquired on	: 28 Jun 18 06:40 PM	Instrument Method	: DX.MTH
Report Created on	: 29 Jun 18 08:25 AM	Analysis Method	: DX.MTH

SAMPLE CHAIN OF CUSTODY

806553

ME 6-28-18 A02 1 of 1

Send Report ~~to Chris Carter~~; Chris Cass

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

PO #: 1249-001-05

REMARKS (project quote)
24 Hour TAT

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24 Hour TAT
Rush charges authorized by:

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

Sample ID	Sample Location	Sample ~~Depth~~ Elev	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
UST01-WSW01-15	UST01-WSW	15	01	06-28-18	1130	Soil	1					X	
UST01-SSW01-15	UST01-SSW	15	02	"	1140	"	"					X	
UST01-ESW01-15	UST01-ESW	15	03	"	1145	"	"					X	
UST01-B01-13	UST01-B	13	04	"	1200	"	"					X	
UST01-NSW01-15	UST01-NSW	15	05	"	1205	"	"					X	
UST01-WSW02-15	UST01-WSW02	15	06	"	1125	"	"						HOLD
UST01-SSW02-15	UST01-SSW02	15	07	"	1230	"	"						"
UST01-ESW02-15	UST01-ESW02	15	08	"	1235	"	"						"
					APH 06-28-18								

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Ada Hamilton	SoundEarth	06-29-18	1525
Received by:	Nhan Phan	FEBI	6/28/18	1528
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 6, 2018

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

Dear Mr Carter:

Included are the additional results from the testing of material submitted on June 28, 2018 from the SOU_ 1249-001-05_ 20180628, F&BI 806553 project. There are 4 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 Cass
SOU0706R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 28, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180628, F&BI 806553 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806553 -01	UST01-WSW01-15
806553 -02	UST01-SSW01-15
806553 -03	UST01-ESW01-15
806553 -04	UST01-B01-13
806553 -05	UST01-NSW01-15
806553 -06	UST01-WSW02-15
806553 -07	UST01-SSW02-15
806553 -08	UST01-ESW02-15

All quality control requirements were acceptable.

Date of Report: 07/06/18
Date Received: 06/28/18
Project: SOU_ 1249-001-05_ 20180628, F&BI 806553
Date Extracted: 07/03/18
Date Analyzed: 07/03/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 56-165)
UST01-WSW02-15 806553-06	<50	<250	99
Method Blank 07-1447 MB2	<50	<250	94

Date of Report: 07/06/18
Date Received: 06/28/18
Project: SOU_ 1249-001-05_ 20180628, F&BI 806553

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 807001-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	88	86	64-133	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	86	58-147

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

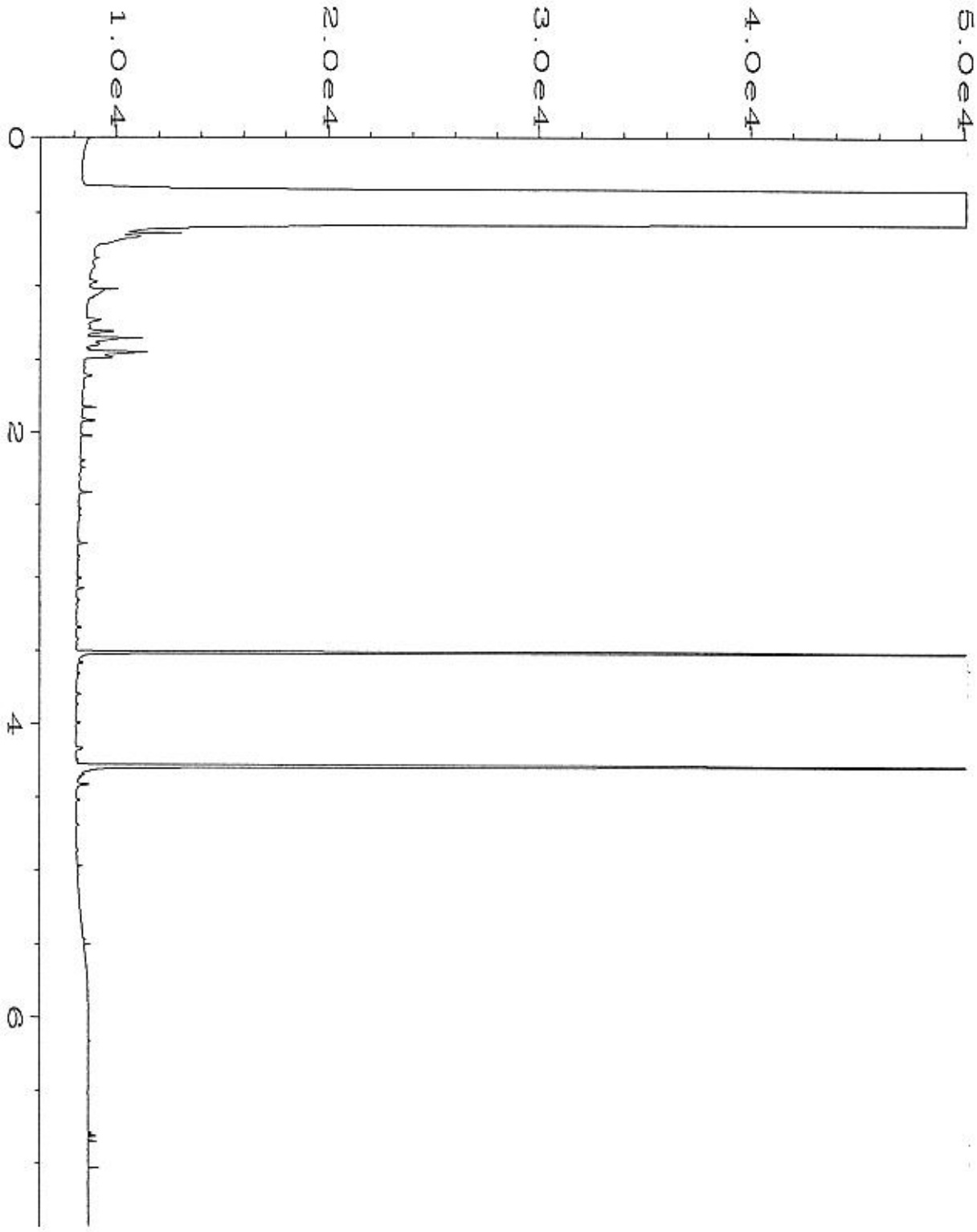
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

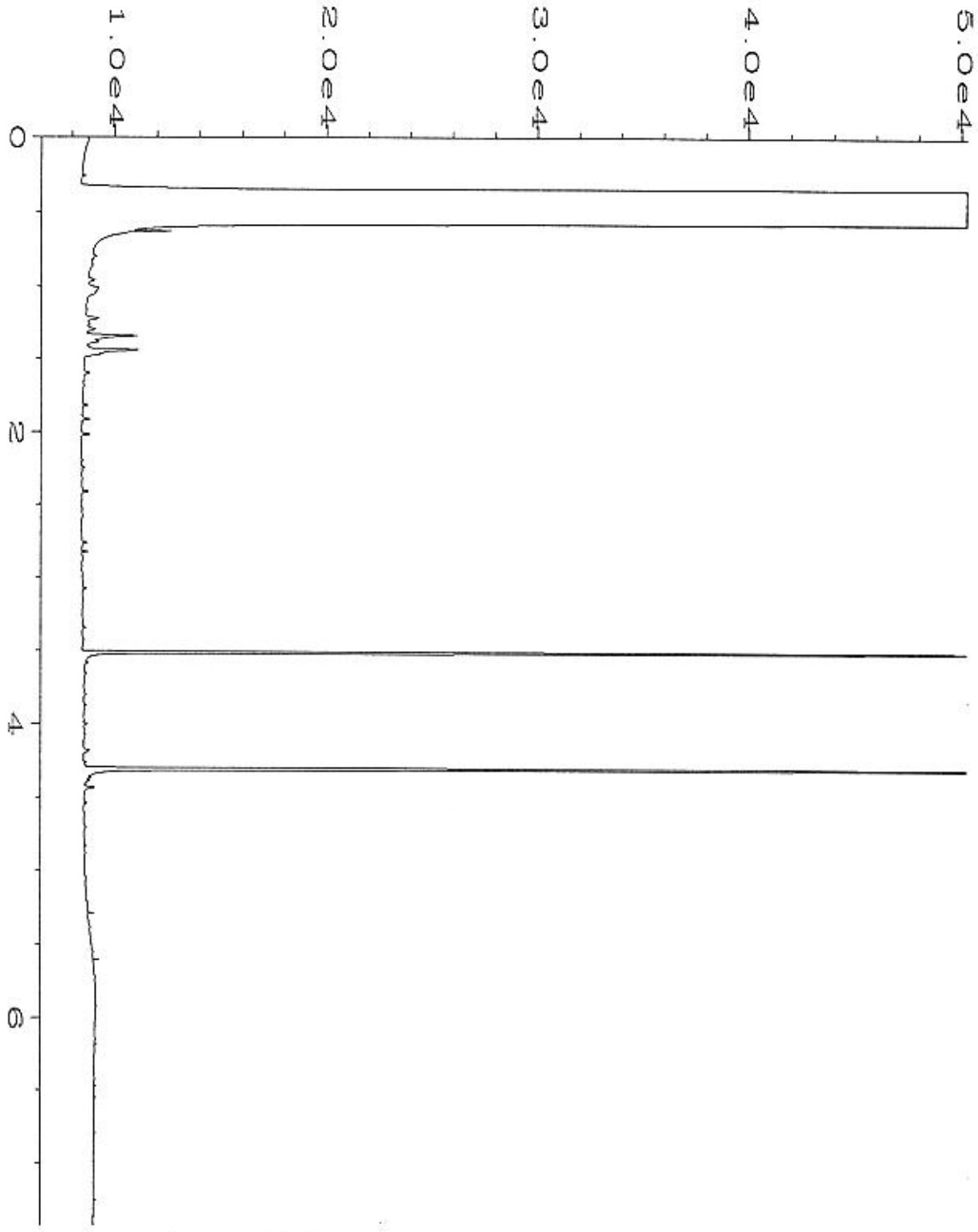
vo - The value reported fell outside the control limits established for this analyte.

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

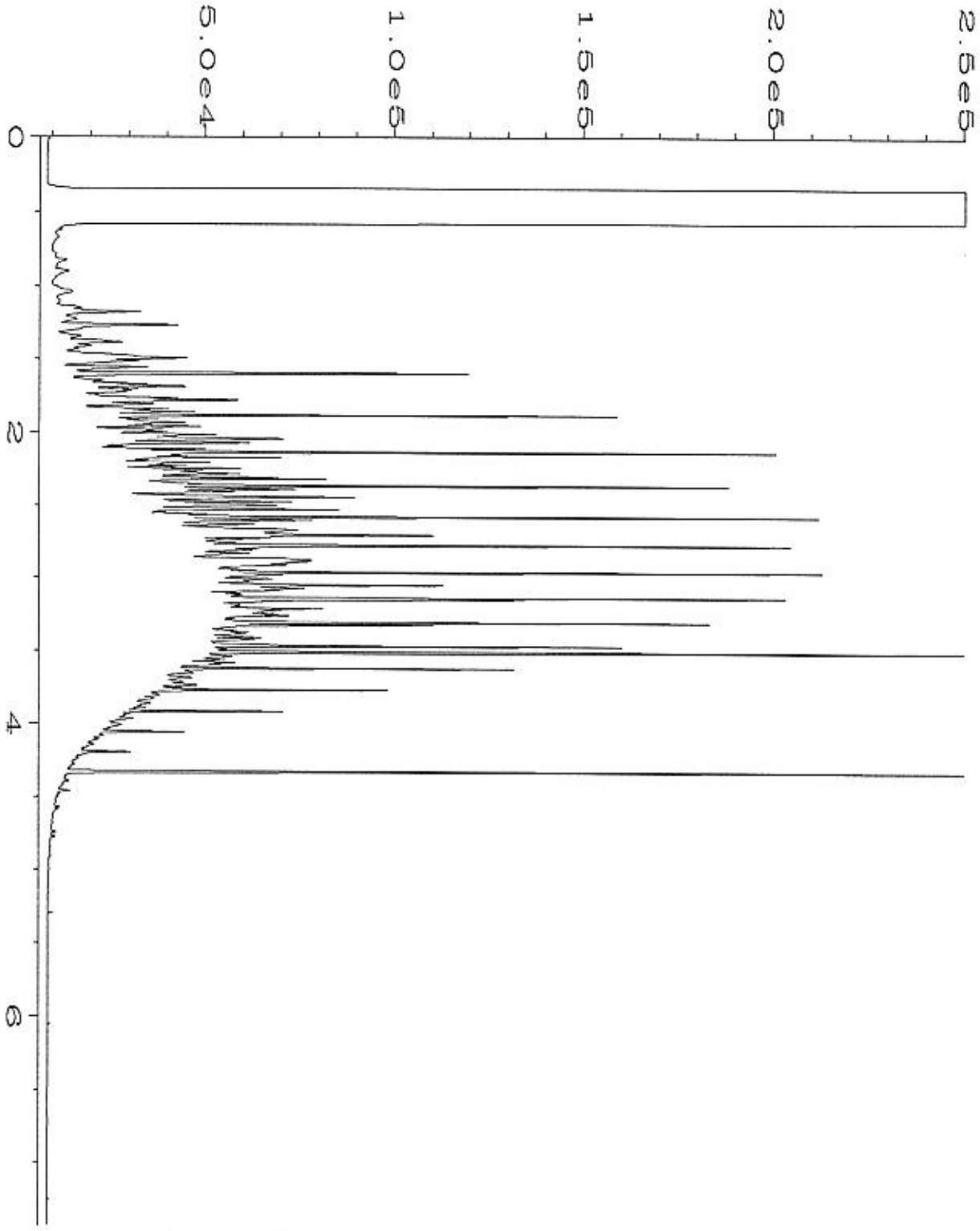


Data File Name : C:\HPCHEM\1\DATA\07-03-18\013F0301.D
Operator : TL
Instrument : GC1
Sample Name : 806553-06
Run Time Bar Code:
Acquired on : 03 Jul 18 10:09 AM
Report Created on: 03 Jul 18 01:07 PM

Page Number : 1
Vial Number : 13
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\07-03-18\006F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 6
Sample Name	: 07-1447 mb2	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 03 Jul 18 08:52 AM	Instrument Method	: DX.MTH
Report Created on	: 03 Jul 18 01:08 PM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\1\DATA\07-03-18\003F0201.D
Operator : TL
Instrument : GC1
Sample Name : 500 Dx 52-71D
Run Time Bar Code:
Acquired on : 03 Jul 18 05:51 AM
Report Created on: 03 Jul 18 01:08 PM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 2
Instrument Method: DX.MTH
Analysis Method : DX.MTH

SAMPLE CHAIN OF CUSTODY

806553

ME 6-28-18 A02 1 of 1

Send Report ~~Chris Carter~~; Chris Cass

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

PO #: 1249-001-05

REMARKS (project quote)
24 Hour TAT

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24 Hour TAT
Rush charges authorized by:

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

Sample ID	Sample Location	Sample ~~Depth~~ Elev	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
US701-WSW01-15	US701-WSW	15	01	06-28-18	1130	Soil	1					X	(Y) per CC
US701-SSW01-15	US701-SSW	15	02	"	1140	"	"					X	7/2/18
US701-ESW01-15	US701-ESW	15	03	"	1145	"	"					X	ME
US701-B01-13	US701-B	13	04	"	1200	"	"					X	
US701-NSW01-15	US701-NSW	15	05	"	1205	"	"					X	
US701-WSW02-15	US701-WSW02	15	06	"	1125	"	"					(X)	~~HOLD~~
US701-SSW02-15	US701-SSW02	15	07	"	1230	"	"						
US701-ESW02-15	US701-ESW02	15	08	"	1235	"	"						

XXX 06-28-18

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Ada Hamilton	SoundEarth	06-29-18	1525
Received by:	Nhan Phan	FEBI	6/28/18	1528
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 2, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on June 28, 2018 from the SOU_ 1249-001-05_ 20180628, F&BI 806554 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Glen Mckenney
SOU0702R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 28, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180628, F&BI 806554 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
806554 -01	A-09-15.5-B
806554 -02	Field Blank_20180628
806554 -03	Temp Blank_20180628

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-09-15.5-B	Client:	SoundEarth Strategies
Date Received:	06/28/18	Project:	SOU_ 1249-001-05_ 20180628
Date Extracted:	06/29/18	Lab ID:	806554-01
Date Analyzed:	06/29/18	Data File:	806554-01.031
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.39

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180628
Date Extracted:	06/29/18	Lab ID:	I8-421 mb2
Date Analyzed:	06/29/18	Data File:	I8-421 mb2.030
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-09-15.5-B	Client:	SoundEarth Strategies
Date Received:	06/28/18	Project:	SOU_ 1249-001-05_ 20180628
Date Extracted:	06/29/18	Lab ID:	806554-01 1/5
Date Analyzed:	06/29/18	Data File:	062910.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	94	31	163
Benzo(a)anthracene-d12	111	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180628
Date Extracted:	06/29/18	Lab ID:	08-1435 mb 1/5
Date Analyzed:	06/29/18	Data File:	062907.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	96	31	163
Benzo(a)anthracene-d12	113	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/02/18
Date Received: 06/28/18
Project: SOU_ 1249-001-05_ 20180628, F&BI 806554

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

Laboratory Code: 806532-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<1	103	102	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	101	85-115

Date of Report: 07/02/18
Date Received: 06/28/18
Project: SOU_ 1249-001-05_ 20180628, F&BI 806554

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806549-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	81	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	83	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	86	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	84	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	91	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	86	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	85	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	82	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	79	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	83	85	58-121	2
2-Methylnaphthalene	mg/kg (ppm)	0.17	86	88	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	86	88	60-124	2
Benz(a)anthracene	mg/kg (ppm)	0.17	84	88	51-115	5
Chrysene	mg/kg (ppm)	0.17	86	90	55-129	5
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	86	90	56-123	5
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	86	89	54-131	3
Benzo(a)pyrene	mg/kg (ppm)	0.17	82	86	51-118	5
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	82	84	49-148	2
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	81	84	50-141	4

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

SAMPLE CHAIN OF CUSTODY

ME 06-28-18 VW1/Add BT1

806554

Send Report to Chris Carter; Chris Cass

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

PO #: 1249-001-05

REMARKS (project quote)
24 hour TAT

Page # 1 of 1

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24 hour TAT
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: Naphthalene thru Chrysene by 8270D (NAPHs)	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
A-09-15.5-B	A-09	15.5	01	06-28-18	1305	Soil	1	X	X				
Field Blank_20180628	—	—	02	06-28-18	—	—	—						
Temp Blank_20180628	—	—	03	06-28-18	—	—	—						

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Adia Hamilton	SoundEarth	06-28-18	1525
Received by:	Nhan Phan	FedEx	6/28/18	1525
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 9, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 2, 2018 from the SOU_ 1249-001-05_ 20180702, F&BI 807014 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0709R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 2, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 2018, F&BI 807014 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807014 -01	C-08-15.5
807014 -02	C-09-16

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-08-15.5	Client:	SoundEarth Strategies
Date Received:	07/02/18	Project:	SOU_ 1249-001-05_ 20180702
Date Extracted:	07/03/18	Lab ID:	807014-01 1/5
Date Analyzed:	07/03/18	Data File:	070310.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	108	31	163
Benzo(a)anthracene-d12	122	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.079
Chrysene	0.088
Benzo(a)pyrene	0.091
Benzo(b)fluoranthene	0.10
Benzo(k)fluoranthene	0.030
Indeno(1,2,3-cd)pyrene	0.056
Dibenz(a,h)anthracene	0.012

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-09-16	Client:	SoundEarth Strategies
Date Received:	07/02/18	Project:	SOU_ 1249-001-05_ 20180702
Date Extracted:	07/03/18	Lab ID:	807014-02 1/5
Date Analyzed:	07/03/18	Data File:	070308.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	99	31	163
Benzo(a)anthracene-d12	118	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180702
Date Extracted:	07/03/18	Lab ID:	08-1445 mb2 1/5
Date Analyzed:	07/03/18	Data File:	070307.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	107	31	163
Benzo(a)anthracene-d12	124	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-08-15.5	Client:	SoundEarth Strategies
Date Received:	07/02/18	Project:	SOU_ 1249-001-05_ 20180702
Date Extracted:	07/03/18	Lab ID:	807014-01
Date Analyzed:	07/03/18	Data File:	807014-01.035
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.50

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-09-16	Client:	SoundEarth Strategies
Date Received:	07/02/18	Project:	SOU_ 1249-001-05_ 2018
Date Extracted:	07/03/18	Lab ID:	807014-02
Date Analyzed:	07/03/18	Data File:	807014-02.040
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.11

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180702
Date Extracted:	07/03/18	Lab ID:	I8-430 mb
Date Analyzed:	07/03/18	Data File:	I8-430 mb.033
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Date of Report: 07/09/18
Date Received: 07/02/18
Project: SOU_ 1249-001-05_ 20180702, F&BI 807014

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 806341-10 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	89	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	89	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.068	98 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.12	79 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.23 J	190 b J	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.075 J	135 b J	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.10 J	97 b J	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.028 J	35 J	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01 J	37 J	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	85	86	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	89	91	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	88	90	60-124	2
Benz(a)anthracene	mg/kg (ppm)	0.17	87	92	51-115	6
Chrysene	mg/kg (ppm)	0.17	86	94	55-129	9
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	90	92	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	88	93	54-131	6
Benzo(a)pyrene	mg/kg (ppm)	0.17	87	88	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	98	90	49-148	9
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	99	86	50-141	14

Date of Report: 07/09/18
Date Received: 07/02/18
Project: SOU_ 1249-001-05_ 20180702, F&BI 807014

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

Laboratory Code: 807014-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.03	88	92	70-130	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

807014

SAMPLE CHAIN OF CUSTODY

ME 7/2/18 VW2/B01

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welte

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS (project quote)

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24hr
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: Naphthalene, Methyl Naphthalene, 1-MNAPHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
C-08-15.5	C-08	15.5	01	7/2/18	1500	S	1	X	X				
C-09-16	C-09	16	02	7/2/18	1510	S	1	X	X				
Field Blank-20180702	—	—	03 A-B	7/2/18	—	W	2						
Temp Blank-20180702	—	—	04	7/2/18	—	W	1						

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welte	Sarah Welte	SES	7/2/18	1537
Received by:	HONG NGUYEN	FBT	"	"
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 9, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 3, 2018 from the SOU_ 1249-001-05_ 20180703, F&BI 807047 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0709R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 3, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies 1249-001-05 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807047 -01	A-11-14
807047 -02	A-11-13
807047 -03	Temp Blank-20180703
807047 -04	Field Blank-20180703

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-11-14	Client:	SoundEarth Strategies
Date Received:	07/03/18	Project:	SOU_ 1249-001-05_ 20180703
Date Extracted:	07/05/18	Lab ID:	807047-01
Date Analyzed:	07/05/18	Data File:	807047-01.063
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-11-13	Client:	SoundEarth Strategies
Date Received:	07/03/18	Project:	SOU_ 1249-001-05_ 20180703
Date Extracted:	07/05/18	Lab ID:	807047-02
Date Analyzed:	07/05/18	Data File:	807047-02.068
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180703
Date Extracted:	07/05/18	Lab ID:	I8-432 mb
Date Analyzed:	07/05/18	Data File:	I8-432 mb.061
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-11-14	Client:	SoundEarth Strategies
Date Received:	07/03/18	Project:	SOU_ 1249-001-05_ 20180703
Date Extracted:	07/05/18	Lab ID:	807047-01 1/5
Date Analyzed:	07/05/18	Data File:	070507.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	92	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-11-13	Client:	SoundEarth Strategies
Date Received:	07/03/18	Project:	SOU_ 1249-001-05_ 20180703
Date Extracted:	07/05/18	Lab ID:	807047-02 1/5
Date Analyzed:	07/05/18	Data File:	070509.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	92	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180703
Date Extracted:	07/05/18	Lab ID:	08-1465 mb 1/5
Date Analyzed:	07/05/18	Data File:	070506.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	84	31	163
Benzo(a)anthracene-d12	93	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/09/18
Date Received: 07/03/18
Project: SOU_ 1249-001-05_ 20180703, F&BI 807047

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

Laboratory Code: 807047-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<1	98	100	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	95	85-115

Date of Report: 07/09/18
Date Received: 07/03/18
Project: SOU_ 1249-001-05_ 20180703, F&BI 807047

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807047-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	88	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	87	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	87	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	89	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	87	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	86	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	84	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	93	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	93	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	86	86	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	90	89	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	90	89	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	88	90	51-115	2
Chrysene	mg/kg (ppm)	0.17	88	93	55-129	6
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	89	92	56-123	3
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	87	86	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	86	86	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	102	93	49-148	9
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	103	94	50-141	9

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

807047

SAMPLE CHAIN OF CUSTODY

ME 07/03/18

VW1/AI1

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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	1249-001-05

REMARKS (project quote)

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24hr
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: Naphthalene, 1-2 Methyl Naphthalene, cPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
A-11-14	A-11	14	01	7/3/18	1150	S	1	X	X				
A-11-13	A-11	13	02		1155	S	1	X	X				Hold
Temp Blank-20180703	-	-	03		-	W	1						
Field Blank-20180703	-	-	04 B		-	W	2						
								SM/W					

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Wetter	Sarah Wetter	SES	7/3/18	1430
Received by: Nhan Phan	Nhan Phan	FEBT	7/3/18	1430
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 9, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 5, 2018 from the SOU_ 1249-001-05_ 20180705, F&BI 807074 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0709R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 5, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180705, F&BI 807074 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807074 -01	C-08-15
807074 -02	Temp Blank-20180705
807074 -03	Field Blank-20180705

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-08-15	Client:	SoundEarth Strategies
Date Received:	07/05/18	Project:	SOU_ 1249-001-05_ 20180705
Date Extracted:	07/06/18	Lab ID:	807074-01
Date Analyzed:	07/06/18	Data File:	807074-01.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.33

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180705
Date Extracted:	07/06/18	Lab ID:	I8-432 mb2
Date Analyzed:	07/06/18	Data File:	I8-432 mb2.046
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-08-15	Client:	SoundEarth Strategies
Date Received:	07/05/18	Project:	SOU_ 1249-001-05_ 20180705
Date Extracted:	07/06/18	Lab ID:	807074-01 1/5
Date Analyzed:	07/06/18	Data File:	070607.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	96	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	0.010
Benzo(a)pyrene	0.010
Benzo(b)fluoranthene	0.011
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180705
Date Extracted:	07/06/18	Lab ID:	08-1465 mb2 1/5
Date Analyzed:	07/06/18	Data File:	070606.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	31	163
Benzo(a)anthracene-d12	95	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/09/18
Date Received: 07/05/18
Project: SOU_ 1249-001-05_ 20180705, F&BI 807074

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

Laboratory Code: 807047-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<1	98	100	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	95	85-115

Date of Report: 07/09/18
Date Received: 07/05/18
Project: SOU_ 1249-001-05_ 20180705, F&BI 807074

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807047-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	88	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	87	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	87	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	89	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	87	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	86	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	84	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	93	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	93	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	86	86	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	90	89	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	90	89	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	88	90	51-115	2
Chrysene	mg/kg (ppm)	0.17	88	93	55-129	6
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	89	92	56-123	3
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	87	86	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	86	86	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	102	93	49-148	9
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	103	94	50-141	9

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

807074

SAMPLE CHAIN OF CUSTODY

ME 7/5/18

Page # 1 of 1 B03

Send Report to Chris Carter; Chris Cass

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) Sarah Walter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS (project quote)

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24h.
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: Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, cPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
C-08-15	C-08	15	01	7/5/18	1500	S	1	X	X				
Temp Blank-20180705	—	—	02		—	W	1						
Field Blank-20180705	—	—	03AB		—	W	2						

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Walter	Sarah Walter	SES	7/6/18	1615
Received by:	Tom Glass		7/6/18	1615
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 9, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 5, 2018 from the SOU_ 1249-001-05_ 20180705, F&BI 807075 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0709R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 5, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180705, F&BI 807075 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807075 -01	D-07-15
807075 -02	E-07-15
807075 -03	Temp Blank-20180705
807075 -04	Field Blank-20180705

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-07-15	Client:	SoundEarth Strategies
Date Received:	07/05/18	Project:	SOU_ 1249-001-05_ 20180705
Date Extracted:	07/06/18	Lab ID:	807075-01
Date Analyzed:	07/06/18	Data File:	807075-01.048
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.02

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-07-15	Client:	SoundEarth Strategies
Date Received:	07/05/18	Project:	SOU_ 1249-001-05_ 20180705
Date Extracted:	07/06/18	Lab ID:	807075-02
Date Analyzed:	07/06/18	Data File:	807075-02.054
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.90

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180705
Date Extracted:	07/06/18	Lab ID:	I8-432 mb2
Date Analyzed:	07/06/18	Data File:	I8-432 mb2.046
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-07-15	Client:	SoundEarth Strategies
Date Received:	07/05/18	Project:	SOU_ 1249-001-05_ 20180705
Date Extracted:	07/06/18	Lab ID:	807075-01 1/5
Date Analyzed:	07/06/18	Data File:	070608.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	92	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-07-15	Client:	SoundEarth Strategies
Date Received:	07/05/18	Project:	SOU_ 1249-001-05_ 20180705
Date Extracted:	07/06/18	Lab ID:	807075-02 1/5
Date Analyzed:	07/06/18	Data File:	070609.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	80	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180705
Date Extracted:	07/06/18	Lab ID:	08-1465 mb2 1/5
Date Analyzed:	07/06/18	Data File:	070606.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	31	163
Benzo(a)anthracene-d12	95	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/09/18
Date Received: 07/05/18
Project: SOU_ 1249-001-05_ 20180705, F&BI 807075

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

Laboratory Code: 807047-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<1	98	100	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	95	85-115

Date of Report: 07/09/18
Date Received: 07/05/18
Project: SOU_ 1249-001-05_ 20180705, F&BI 807075

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807047-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	88	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	87	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	87	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	89	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	87	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	86	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	84	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	93	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	93	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	86	86	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	90	89	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	90	89	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	88	90	51-115	2
Chrysene	mg/kg (ppm)	0.17	88	93	55-129	6
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	89	92	56-123	3
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	87	86	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	86	86	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	102	93	49-148	9
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	103	94	50-141	9

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

807075

SAMPLE CHAIN OF CUSTODY

ME 7/5/18

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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

PO #: 1249-001-05

REMARKS (project quote)

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24 hr
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: cPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
D-07-15	D07	15	01	7/5/18	1505	S	1	X	X				
E-07-15	E-07	15	02	"	1511	S	1	X	X				
Temp Blank-20180705	—	—		"	—	W	1						-See 807074-DMC 7/5
Field Blank-20180705	—	—		"	—	W	2						
								SHW					

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Sarah Wyatt	SES	7/5/18	1615
Received by:	Eric Yam	[illegible]	7/5/18	1605
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 10, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 5, 2018 from the SOU_ 1249-001-05_ 20180705, F&BI 807076 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0710R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 5, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180705, F&BI 807076 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807076 -01	A-08-17
807076 -02	B-08-17
807076 -03	D-10-15
807076 -04	Temp Blank-20180705
807076 -05	Field Blank-20180705

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-08-17	Client:	SoundEarth Strategies
Date Received:	07/05/18	Project:	SOU_ 1249-001-05_ 20180705, F&BI 807076
Date Extracted:	07/06/18	Lab ID:	807076-01
Date Analyzed:	07/06/18	Data File:	807076-01.055
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.84

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-08-17	Client:	SoundEarth Strategies
Date Received:	07/05/18	Project:	SOU_ 1249-001-05_ 20180705, F&BI 807076
Date Extracted:	07/06/18	Lab ID:	807076-02
Date Analyzed:	07/06/18	Data File:	807076-02.056
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.87

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-10-15	Client:	SoundEarth Strategies
Date Received:	07/05/18	Project:	SOU_ 1249-001-05_ 20180705, F&BI 807076
Date Extracted:	07/06/18	Lab ID:	807076-03
Date Analyzed:	07/06/18	Data File:	807076-03.057
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.20

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180705, F&BI 807076
Date Extracted:	07/06/18	Lab ID:	I8-432 mb2
Date Analyzed:	07/06/18	Data File:	I8-432 mb2.046
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-08-17	Client:	SoundEarth Strategies
Date Received:	07/05/18	Project:	SOU_ 1249-001-05_ 20180705, F&BI 807076
Date Extracted:	07/06/18	Lab ID:	807076-01 1/5
Date Analyzed:	07/06/18	Data File:	070610.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	90	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-08-17	Client:	SoundEarth Strategies
Date Received:	07/05/18	Project:	SOU_ 1249-001-05_ 20180705, F&BI 807076
Date Extracted:	07/06/18	Lab ID:	807076-02 1/5
Date Analyzed:	07/06/18	Data File:	070611.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	94	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-10-15	Client:	SoundEarth Strategies
Date Received:	07/05/18	Project:	SOU_ 1249-001-05_ 20180705, F&BI 807076
Date Extracted:	07/06/18	Lab ID:	807076-03 1/5
Date Analyzed:	07/06/18	Data File:	070612.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	31	163
Benzo(a)anthracene-d12	85	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.026
2-Methylnaphthalene	0.016
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.017
Chrysene	0.018
Benzo(a)pyrene	0.017
Benzo(b)fluoranthene	0.017
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180705, F&BI 807076
Date Extracted:	07/06/18	Lab ID:	08-1465 mb2 1/5
Date Analyzed:	07/06/18	Data File:	070606.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	31	163
Benzo(a)anthracene-d12	95	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/10/18
Date Received: 07/05/18
Project: SOU_ 1249-001-05_ 20180705, F&BI 807076

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

Laboratory Code: 807047-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<1	98	100	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	95	85-115

Date of Report: 07/10/18
Date Received: 07/05/18
Project: SOU_ 1249-001-05_ 20180705, F&BI 807076

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807047-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	88	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	87	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	87	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	89	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	87	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	86	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	84	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	93	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	93	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	86	86	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	90	89	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	90	89	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	88	90	51-115	2
Chrysene	mg/kg (ppm)	0.17	88	93	55-129	6
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	89	92	56-123	3
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	87	86	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	86	86	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	102	93	49-148	9
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	103	94	50-141	9

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

807076

SAMPLE CHAIN OF CUSTODY

ME 7/5/18

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO. Ballard Blocks II Property

PO # 1249-001-05

REMARKS (project quote)

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24hr
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: Naphthalene / 1-2 Methyl Naphthalene CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
A-08-17	A-08	17	01	7/5/18	1435	S	1	X	X				
B-08-17	B-08	17	02		1450	S	1	X	X				
D-10-15	D-10	15	03		1330	S	1	X	X				
TempBlank-20180705	—	—			—	W	1						
FieldBlank-20180705	—	—			—	W	2						see 807074 mk 7/5

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/5/18	1615
Received by:	Eric Yow	Ftp	7/5/18	1615
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 11, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 6, 2018 from the SOU_ 1249-001-05_ 20180706, F&BI 807115 project. There are 22 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0711R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 6, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180706, F&BI 807115 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807115 -01	D-06-15
807115 -02	E-06-15
807115 -03	B14-15
807115 -04	E-10-15
807115 -05	E-11-15
807115 -06	C-07-15
807115 -07	B-07-17
807115 -08	A-07-17
807115 -09	Temp Blank-20180706
807115 -10	Field Blank-20180706

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-06-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	807115-01
Date Analyzed:	07/09/18	Data File:	807115-01.039
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.78

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-06-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	807115-02
Date Analyzed:	07/09/18	Data File:	807115-02.042
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.15

Analysis For Total Metals By EPA Method 200.8

Client ID:	B14-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	807115-03
Date Analyzed:	07/09/18	Data File:	807115-03.043
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.96

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-10-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	807115-04
Date Analyzed:	07/09/18	Data File:	807115-04.046
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.77

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-11-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	807115-05
Date Analyzed:	07/09/18	Data File:	807115-05.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.56

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-07-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	807115-06
Date Analyzed:	07/09/18	Data File:	807115-06.048
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.36

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-07-17	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	807115-07
Date Analyzed:	07/09/18	Data File:	807115-07.049
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.44

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-07-17	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	807115-08
Date Analyzed:	07/09/18	Data File:	807115-08.050
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	27.5

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	I8-438 mb
Date Analyzed:	07/09/18	Data File:	I8-438 mb.037
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-06-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	807115-01 1/5
Date Analyzed:	07/07/18	Data File:	070640.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	81	31	163
Benzo(a)anthracene-d12	87	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.069
2-Methylnaphthalene	0.041
1-Methylnaphthalene	0.040
Benz(a)anthracene	0.61
Chrysene	0.63
Benzo(a)pyrene	0.68
Benzo(b)fluoranthene	0.63
Benzo(k)fluoranthene	0.25
Indeno(1,2,3-cd)pyrene	0.27
Dibenz(a,h)anthracene	0.058

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-06-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	807115-02 1/5
Date Analyzed:	07/07/18	Data File:	070642.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	31	163
Benzo(a)anthracene-d12	95	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.19
2-Methylnaphthalene	0.095
1-Methylnaphthalene	0.078
Benz(a)anthracene	0.95
Chrysene	0.97
Benzo(a)pyrene	1.1
Benzo(b)fluoranthene	1.1
Benzo(k)fluoranthene	0.42
Indeno(1,2,3-cd)pyrene	0.37
Dibenz(a,h)anthracene	0.082

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B14-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	807115-03 1/5
Date Analyzed:	07/07/18	Data File:	070631.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	92	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.021
2-Methylnaphthalene	0.011
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.099
Chrysene	0.11
Benzo(a)pyrene	0.12
Benzo(b)fluoranthene	0.12
Benzo(k)fluoranthene	0.043
Indeno(1,2,3-cd)pyrene	0.065
Dibenz(a,h)anthracene	0.014

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-10-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	807115-04 1/5
Date Analyzed:	07/07/18	Data File:	070632.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	0.011
Benzo(b)fluoranthene	0.011
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-11-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	807115-05 1/5
Date Analyzed:	07/07/18	Data File:	070633.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.033
2-Methylnaphthalene	0.024
1-Methylnaphthalene	0.015
Benz(a)anthracene	0.049
Chrysene	0.060
Benzo(a)pyrene	0.050
Benzo(b)fluoranthene	0.054
Benzo(k)fluoranthene	0.021
Indeno(1,2,3-cd)pyrene	0.028
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-07-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	807115-06 1/5
Date Analyzed:	07/07/18	Data File:	070644.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	94	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.20
2-Methylnaphthalene	0.13
1-Methylnaphthalene	0.13
Benz(a)anthracene	0.97
Chrysene	1.0
Benzo(a)pyrene	1.3
Benzo(b)fluoranthene	1.4
Benzo(k)fluoranthene	0.54
Indeno(1,2,3-cd)pyrene	0.40
Dibenz(a,h)anthracene	0.093

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-07-17	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	807115-07 1/5
Date Analyzed:	07/07/18	Data File:	070634.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	31	163
Benzo(a)anthracene-d12	86	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-07-17	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	807115-08 1/5
Date Analyzed:	07/07/18	Data File:	070635.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	78	31	163
Benzo(a)anthracene-d12	81	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	0.013
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	08-1481 mb 1/5
Date Analyzed:	07/07/18	Data File:	070630.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/11/18
Date Received: 07/06/18
Project: SOU_ 1249-001-05_ 20180706, F&BI 807115

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

Laboratory Code: 807115-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.76	102	113	70-130	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	105	85-115

Date of Report: 07/11/18
Date Received: 07/06/18
Project: SOU_ 1249-001-05_ 20180706, F&BI 807115

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807115-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.058	124 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.035	127 b	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.033	120	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.51	218 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.53	204 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.53	234 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.21	145 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.57	231 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.23	96 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.049	69 b	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	87	83	58-121	5
2-Methylnaphthalene	mg/kg (ppm)	0.17	89	84	58-123	6
1-Methylnaphthalene	mg/kg (ppm)	0.17	87	83	60-124	5
Benz(a)anthracene	mg/kg (ppm)	0.17	86	85	51-115	1
Chrysene	mg/kg (ppm)	0.17	91	88	55-129	3
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	86	85	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	89	88	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	84	82	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	95	91	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	90	50-141	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

NP 807115 ~~807115~~

SAMPLE CHAIN OF CUSTODY

ME 07/06/18 | VW1 | B02

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
D-06-15	D-06	15	01	7/6/18	1215	S	1	X	X				
E-06-15	E-06	15	02		1231	S	1	X	X				
B14-15	B14	15	03		0925	S	1	X	X				
E-10-15	E-10	15	04		0930	S	1	X	X				
E-11-15	E-11	15	05		0940	S	1	X	X				
C-07-15	C07	15	06		0915	S	1	X	X				
B-07-17	B-07	17	07		1023	S	1	X	X				
A-07-17	A-07	17	08		0957	S	1	X	X				
TripBlank-20180706	-	-	09		-	W	1						
FieldBlank-20180706	-	-	10 FB		-	W	2						Vials labeled Trip Blank

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/6/18	1510
Received by: Nhan Phan	Nhan Phan	FEBI	7/6/18	1510
Relinquished by:				
Received by:		Samples received at 5 °C		

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 11, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 6, 2018 from the SOU_ 1249-001-05_ 20180706, F&BI 807116 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0711R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 6, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180706, F&BI 807116 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807116 -01	B-01-11.5
807116 -02	E-06-11.5

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-01-11.5	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	807116-01
Date Analyzed:	07/09/18	Data File:	807116-01.051
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.23

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-06-11.5	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	807116-02
Date Analyzed:	07/09/18	Data File:	807116-02.054
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.35

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	I8-438 mb
Date Analyzed:	07/09/18	Data File:	I8-438 mb.037
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-01-11.5	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	807116-01 1/5
Date Analyzed:	07/07/18	Data File:	070636.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	76	31	163
Benzo(a)anthracene-d12	83	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-06-11.5	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	807116-02 1/5
Date Analyzed:	07/07/18	Data File:	070637.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	81	31	163
Benzo(a)anthracene-d12	90	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	08-1481 mb 1/5
Date Analyzed:	07/07/18	Data File:	070630.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluor anthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/11/18
Date Received: 07/06/18
Project: SOU_ 1249-001-05_ 20180706, F&BI 807116

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

Laboratory Code: 807115-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.76	102	113	70-130	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	105	85-115

Date of Report: 07/11/18
Date Received: 07/06/18
Project: SOU_ 1249-001-05_ 20180706, F&BI 807116

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807115-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.058	124 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.035	127 b	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.033	120	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.51	218 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.53	204 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.53	234 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.21	145 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.57	231 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.23	96 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.049	69 b	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	87	83	58-121	5
2-Methylnaphthalene	mg/kg (ppm)	0.17	89	84	58-123	6
1-Methylnaphthalene	mg/kg (ppm)	0.17	87	83	60-124	5
Benz(a)anthracene	mg/kg (ppm)	0.17	86	85	51-115	1
Chrysene	mg/kg (ppm)	0.17	91	88	55-129	3
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	86	85	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	89	88	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	84	82	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	95	91	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	90	50-141	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

807116

SAMPLE CHAIN OF CUSTODY

ME 07/06/18

BOZ

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
B01-11.5 B01-115	B01	11.5	01*	7/6/18	1225	S	1	X	X				
E-06-11.5	E-06	11.5	02	7/6/18	1237	S	1	X	X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/6/18	1610
Received by: Nhan Pham	Nhan Pham	FEBI	7/6/18	1510
Relinquished by:				
Received by:		Samples received at 5 °C		

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 11, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 6, 2018 from the SOU_ 1249-001-05_ 20180706, F&BI 807117 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0711R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 6, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180706, F&BI 807117 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807117 -01	D-06-13.5
807117 -02	E-06-13.5

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-06-13.5	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	807117-01
Date Analyzed:	07/09/18	Data File:	807117-01.055
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.86

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-06-13.5	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	807117-02
Date Analyzed:	07/09/18	Data File:	807117-02.056
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	20.1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/09/18	Lab ID:	I8-438 mb
Date Analyzed:	07/09/18	Data File:	I8-438 mb.037
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-06-13.5	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	807117-01 1/5
Date Analyzed:	07/07/18	Data File:	070638.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	78	31	163
Benzo(a)anthracene-d12	84	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-06-13.5	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	807117-02 1/5
Date Analyzed:	07/07/18	Data File:	070639.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	75	31	163
Benzo(a)anthracene-d12	72	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.064
Chrysene	0.066
Benzo(a)pyrene	0.067
Benzo(b)fluoranthene	0.061
Benzo(k)fluoranthene	0.024
Indeno(1,2,3-cd)pyrene	0.033
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/06/18	Lab ID:	08-1481 mb 1/5
Date Analyzed:	07/07/18	Data File:	070630.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/11/18
Date Received: 07/06/18
Project: SOU_ 1249-001-05_ 20180706, F&BI 807117

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

Laboratory Code: 807115-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.76	102	113	70-130	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	105	85-115

Date of Report: 07/11/18
Date Received: 07/06/18
Project: SOU_ 1249-001-05_ 20180706, F&BI 807117

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807115-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.058	124 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.035	127 b	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.033	120	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.51	218 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.53	204 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.53	234 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.21	145 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.57	231 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.23	96 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.049	69 b	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	87	83	58-121	5
2-Methylnaphthalene	mg/kg (ppm)	0.17	89	84	58-123	6
1-Methylnaphthalene	mg/kg (ppm)	0.17	87	83	60-124	5
Benz(a)anthracene	mg/kg (ppm)	0.17	86	85	51-115	1
Chrysene	mg/kg (ppm)	0.17	91	88	55-129	3
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	86	85	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	89	88	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	84	82	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	95	91	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	90	50-141	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

807117

SAMPLE CHAIN OF CUSTODY ~~8271~~ ME 07/06/18 B02

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH @ 24 hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
D-06-13.5	D-06	13.5	01	7/6/18	1217	S	1	X	X				
E-06-13.5	E06	13.5	02	7/6/18	1235	S	1	X	X				
													Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/6/18	1510
Received by: Nhan Phan	Nhan Phan	FEDEX	7/6/18	1510
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 12, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 6, 2018 from the SOU_1249-001-05_ 20180706, F&BI 807118 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0712R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 6, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180706, F&BI 807118 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807118 -01	A-07-15
807118 -02	B-07-15

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-07-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_1249-001-05_ 20180706
Date Extracted:	07/10/18	Lab ID:	807118-01
Date Analyzed:	07/10/18	Data File:	807118-01.072
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.73

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180706
Date Extracted:	07/10/18	Lab ID:	I8-447 mb
Date Analyzed:	07/10/18	Data File:	I8-447 mb.070
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-07-15	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_1249-001-05_ 20180706
Date Extracted:	07/10/18	Lab ID:	807118-01 1/5
Date Analyzed:	07/10/18	Data File:	071009.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	75	31	163
Benzo(a)anthracene-d12	76	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180706
Date Extracted:	07/10/18	Lab ID:	08-1482 mb 1/5
Date Analyzed:	07/10/18	Data File:	071006.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/12/18
Date Received: 07/06/18
Project: SOU_ 1249-001-05_ 20180706, F&BI 807118

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

Laboratory Code: 807120-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	5.17	87	93	70-130	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	100	85-115

Date of Report: 07/12/18
Date Received: 07/06/18
Project: SOU_ 1249-001-05_ 20180706, F&BI 807118

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807140-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.61	0 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.33	0 b	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.21	0 b	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.23	9 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.24	6 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.23	24 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.084	46 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.24	15 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.10	45 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.024	64	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	85	86	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	88	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	91	91	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	83	84	51-115	1
Chrysene	mg/kg (ppm)	0.17	87	89	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	86	88	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	87	86	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	79	80	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	91	90	49-148	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	92	89	50-141	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

807118

SAMPLE CHAIN OF CUSTODY ME 07/06/18

B02

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH ~~24hr~~ Same Day
Rush charges authorized by: [illegible]

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: cPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
A-07-15	A-07	15	01	7/6/18	1000	S	1	X	X				~~HOLD~~ same day per SW 7/10/18
B-07-15	B-07	15	02	7/6/18	1025	S	1	X	X				HOLD

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/6/18	1510
Received by: Nhan Phan	Nhan Phan	FBI	7/6/18	1570
Relinquished by:				
Received by:		Samples received at 5 °C		

SoundEarth Strategies

DRAFT

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-07-14	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/10/18	Lab ID:	807120-01
Date Analyzed:	07/10/18 12:37:49	Data File:	807120-01.073
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm) Dry Weight
Arsenic	6.16

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/10/18	Lab ID:	I8-447 mb
Date Analyzed:	07/10/18 12:23:42	Data File:	I8-447 mb.070
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-07-14	Client:	SoundEarth Strategies
Date Received:	07/06/18	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/10/18	Lab ID:	807120-01 1/5
Date Analyzed:	07/10/18	Data File:	071010.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	89	24	168

Compounds:	Concentration mg/kg (ppm) Dry Weight
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.055
Chrysene	0.059
Benzo(a)pyrene	0.059
Benzo(b)fluoranthene	0.060
Benzo(k)fluoranthene	0.020
Indeno(1,2,3-cd)pyrene	0.031
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180706
Date Extracted:	07/10/18	Lab ID:	08-1482 mb 1/5
Date Analyzed:	07/10/18 11:10	Data File:	071006.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm) Dry Weight
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

807120

SAMPLE CHAIN OF CUSTODY

ME 07/06/18

Page # 1 of 1 B02

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24hr same day
Rush charges authorized by: 7/7/10

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: CPAHs by 8270D SIM/ Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
C-07-14	C-07		01	7/6/18	0917	S	1	x	x				~~HOLD~~ same day per SW 7/10/18 ME
C-07-13	C-07		02	7/6/18	0920	S	1	x	x				HOLD

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/6/18	1510
Received by: Nhan Phan	Nhan Phan	FEDEX	7/6/18	1516
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.
Arina Podnozova, B.S.
Eric Young, B.S.

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

July 12, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 9, 2018 from the SOU_1249-001-05_ 20180709, F&BI 807140 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0712R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 9, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180709, F&BI 807140 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807140 -01	C-06-14
807140 -02	Temp Blank-20180709
807140 -03	Field Blank-20180709

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-06-14	Client:	SoundEarth Strategies
Date Received:	07/09/18	Project:	SOU_1249-001-05_ 20180709
Date Extracted:	07/10/18	Lab ID:	807140-01
Date Analyzed:	07/10/18	Data File:	807140-01.050
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.3

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180709
Date Extracted:	07/10/18	Lab ID:	I8-438 mb2
Date Analyzed:	07/10/18	Data File:	I8-438 mb2.049
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-06-14	Client:	SoundEarth Strategies
Date Received:	07/09/18	Project:	SOU_1249-001-05_ 20180709
Date Extracted:	07/10/18	Lab ID:	807140-01 1/5
Date Analyzed:	07/10/18	Data File:	071011.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	90	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.84
2-Methylnaphthalene	0.45
1-Methylnaphthalene	0.28
Benz(a)anthracene	0.31
Chrysene	0.33
Benzo(a)pyrene	0.33
Benzo(b)fluoranthene	0.31
Benzo(k)fluoranthene	0.12
Indeno(1,2,3-cd)pyrene	0.14
Dibenz(a,h)anthracene	0.033

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180709
Date Extracted:	07/10/18	Lab ID:	08-1482 mb 1/5
Date Analyzed:	07/10/18	Data File:	071006.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/12/18
Date Received: 07/09/18
Project: SOU_1249-001-05_ 20180709, F&BI 807140

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

Laboratory Code: 807115-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.76	102	113	70-130	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	105	85-115

Date of Report: 07/12/18
Date Received: 07/09/18
Project: SOU_1249-001-05_ 20180709, F&BI 807140

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807140-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.61	0 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.33	0 b	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.21	0 b	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.23	9 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.24	6 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.23	24 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.084	46 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.24	15 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.10	45 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.024	64	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	85	86	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	88	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	91	91	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	83	84	51-115	1
Chrysene	mg/kg (ppm)	0.17	87	89	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	86	88	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	87	86	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	79	80	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	91	90	49-148	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	92	89	50-141	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

807140

SAMPLE CHAIN OF CUSTODY ME 7/9/18

BI1/VW1

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24 hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
C-OC-14	C-OC	14	01	7/9/18	1225	S	1	X	X				
TempBlank-20180709	–	–	02	–	–	W	1						
FieldBlank-20180709	–	–	03A-B	–	–	W	2						

Samples received at 6 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/9/18	1500
Received by: Liza Radford	Liza Radford	F&BI	7/9/18	1500
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 13, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 9, 2018 from the SOU_1249-001-05_ 20180709, F&BI 807141 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0713R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 9, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180709, F&BI 807141 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807141 -01	C-06-13

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-06-13	Client:	SoundEarth Strategies
Date Received:	07/09/18	Project:	SOU_1249-001-05_ 20180709
Date Extracted:	07/11/18	Lab ID:	807141-01
Date Analyzed:	07/11/18	Data File:	807141-01.052
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	7.30

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180709
Date Extracted:	07/11/18	Lab ID:	I8-447 mb2
Date Analyzed:	07/11/18	Data File:	I8-447 mb2.050
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-06-13	Client:	SoundEarth Strategies
Date Received:	07/09/18	Project:	SOU_1249-001-05_ 20180709
Date Extracted:	07/11/18	Lab ID:	807141-01 1/5
Date Analyzed:	07/11/18	Data File:	071106.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	77	31	163
Benzo(a)anthracene-d12	81	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180709
Date Extracted:	07/11/18	Lab ID:	08-1482 mb2 1/5
Date Analyzed:	07/11/18	Data File:	071104.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/13/18
Date Received: 07/09/18
Project: SOU_1249-001-05_ 20180709, F&BI 807141

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

Laboratory Code: 807120-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	5.17	87	93	70-130	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	100	85-115

Date of Report: 07/13/18
Date Received: 07/09/18
Project: SOU_1249-001-05_ 20180709, F&BI 807141

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807140-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.61	0 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.33	0 b	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.21	0 b	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.23	9 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.24	6 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.23	24 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.084	46 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.24	15 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.10	45 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.024	64	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	85	86	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	88	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	91	91	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	83	84	51-115	1
Chrysene	mg/kg (ppm)	0.17	87	89	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	86	88	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	87	86	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	79	80	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	91	90	49-148	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	92	89	50-141	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

807141

SAMPLE CHAIN OF CUSTODY ME 7/9/18

B01

Page # 1 of 1

Send Report to Chris Carter: Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
(X) RUSH 24 hour per SW 7/11/18 AG
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
C-06-13	C-06	13	01	7/4/18	1227	S	1	X	X				~~HOLD~~
													Analyze per SW 7/11/18 ME
								SW					

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/4/18	1500
Received by:	Liza Radford	FEDEX	7/4/18	1500
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

January 21, 2019

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

Dear Mr Carter:

Included is the amended report from the testing of material submitted on July 10, 2018 from the SOU_ 1249-001-05_ 20180710, F&BI 807168 project. Sample ID B14:14 was changed to B14-14 per Siera Pleskac's request.

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 Cass
SOU0713R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 13, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 10, 2018 from the SOU_ 1249-001-05_ 20180710, F&BI 807168 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0713R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 10, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180710, F&BI 807168 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807168 -01	B14-14
807168 -02	TempBlank-20180710
807168 -03	FieldBlank-20180710

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	B14-14	Client:	SoundEarth Strategies
Date Received:	07/10/18	Project:	SOU_ 1249-001-05_ 20180710
Date Extracted:	07/11/18	Lab ID:	807168-01
Date Analyzed:	07/11/18	Data File:	807168-01.051
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.05

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180710
Date Extracted:	07/11/18	Lab ID:	I8-447 mb2
Date Analyzed:	07/11/18	Data File:	I8-447 mb2.050
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B14-14	Client:	SoundEarth Strategies
Date Received:	07/10/18	Project:	SOU_ 1249-001-05_ 20180710
Date Extracted:	07/11/18	Lab ID:	807168-01 1/5
Date Analyzed:	07/11/18	Data File:	071105.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.044
Chrysene	0.050
Benzo(a)pyrene	0.050
Benzo(b)fluoranthene	0.053
Benzo(k)fluoranthene	0.017
Indeno(1,2,3-cd)pyrene	0.031
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180710
Date Extracted:	07/11/18	Lab ID:	08-1482 mb2 1/5
Date Analyzed:	07/11/18	Data File:	071104.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/13/18
Date Received: 07/10/18
Project: SOU_ 1249-001-05_ 20180710, F&BI 807168

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

Laboratory Code: 807120-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	5.17	87	93	70-130	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	100	85-115

Date of Report: 07/13/18
Date Received: 07/10/18
Project: SOU_ 1249-001-05_ 20180710, F&BI 807168

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807140-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.61	0 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.33	0 b	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.21	0 b	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.23	9 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.24	6 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.23	24 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.084	46 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.24	15 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.10	45 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.024	64	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	85	86	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	88	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	91	91	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	83	84	51-115	1
Chrysene	mg/kg (ppm)	0.17	87	89	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	86	88	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	87	86	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	79	80	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	91	90	49-148	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	92	89	50-141	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

807168

SAMPLE CHAIN OF CUSTODY ME 7/10/18

B01/VN1

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS (project quote)

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24 hr
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: Light Molecular cPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
B14-14	B14	14	01	7/10/18	1416	S	1	X	Y				
TempBlank-20180710	-	-	02	-	-	W	1						
FieldBlank-20180710	-	-	03A-B	-	-	W	2						

Samples received at 17 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/10/18	1500
Received by: Liza Radford	Liza Radford	FBI	7/10/18	1500
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 23, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 11, 2018 from the SOU_1249-001-05_ 20180711, F&BI 807198 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0723R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 11, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180711, F&BI 807198 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807198 -01	A-06-15
807198 -02	B-06-14
807198 -03	Temp Blank 20180711
807198 -04	Field Blank 20180711

All quality control requirements were acceptable.

Date of Report: 07/23/18
Date Received: 07/11/18
Project: SOU_ 1249-001-05_ 20180711, F&BI 807198
Date Extracted: 07/12/18
Date Analyzed: 07/12/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
A-06-15 807198-01	<50	<250	85
Method Blank 08-1521 MB2	<50	<250	85

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-06-15	Client:	SoundEarth Strategies
Date Received:	07/11/18	Project:	SOU_1249-001-05_ 20180711
Date Extracted:	07/12/18	Lab ID:	807198-01
Date Analyzed:	07/12/18	Data File:	807198-01.062
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.00

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-06-14	Client:	SoundEarth Strategies
Date Received:	07/11/18	Project:	SOU_1249-001-05_ 20180711
Date Extracted:	07/12/18	Lab ID:	807198-02
Date Analyzed:	07/12/18	Data File:	807198-02.063
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.66

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_1249-001-05_ 20180711
Date Extracted:	07/12/18	Lab ID:	I8-452 mb
Date Analyzed:	07/12/18	Data File:	I8-452 mb.085
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-06-15	Client:	SoundEarth Strategies
Date Received:	07/11/18	Project:	SOU_1249-001-05_ 20180711
Date Extracted:	07/12/18	Lab ID:	807198-01 1/5
Date Analyzed:	07/12/18	Data File:	071207.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	74	31	163
Benzo(a)anthracene-d12	73	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-06-14	Client:	SoundEarth Strategies
Date Received:	07/11/18	Project:	SOU_1249-001-05_ 20180711
Date Extracted:	07/12/18	Lab ID:	807198-02 1/5
Date Analyzed:	07/12/18	Data File:	071208.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	101	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	1.3
2-Methylnaphthalene	0.41
1-Methylnaphthalene	0.26
Benz(a)anthracene	0.46
Chrysene	0.51
Benzo(a)pyrene	0.47
Benzo(b)fluoranthene	0.48
Benzo(k)fluoranthene	0.15
Indeno(1,2,3-cd)pyrene	0.26
Dibenz(a,h)anthracene	0.062

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180711
Date Extracted:	07/12/18	Lab ID:	08-1522 mb 1/5
Date Analyzed:	07/12/18	Data File:	071206.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	80	31	163
Benzo(a)anthracene-d12	84	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/23/18
Date Received: 07/11/18
Project: SOU_ 1249-001-05_ 20180711, F&BI 807198

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 807164-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	82	80	73-135	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	90	74-139

Date of Report: 07/23/18
Date Received: 07/11/18
Project: SOU_ 1249-001-05_ 20180711, F&BI 807198

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

Laboratory Code: 807198-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.59	112	109	70-130	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	88	85-115

Date of Report: 07/23/18
Date Received: 07/11/18
Project: SOU_ 1249-001-05_ 20180711, F&BI 807198

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807198-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	<0.01	78	78	44-129	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	83	83	45-135	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	86	86	40-141	0
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	75	75	23-144	0
Chrysene	mg/kg (ppm)	0.17	<0.01	79	79	32-149	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	80	80	23-176	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	76	76	42-139	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	76	76	21-163	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	81	81	23-170	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	82	82	31-146	0

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	84	58-121
2-Methylnaphthalene	mg/kg (ppm)	0.17	88	58-123
1-Methylnaphthalene	mg/kg (ppm)	0.17	91	60-124
Benz(a)anthracene	mg/kg (ppm)	0.17	85	51-115
Chrysene	mg/kg (ppm)	0.17	90	55-129
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	84	56-123
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	84	54-131
Benzo(a)pyrene	mg/kg (ppm)	0.17	79	51-118
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	95	49-148
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	98	50-141

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

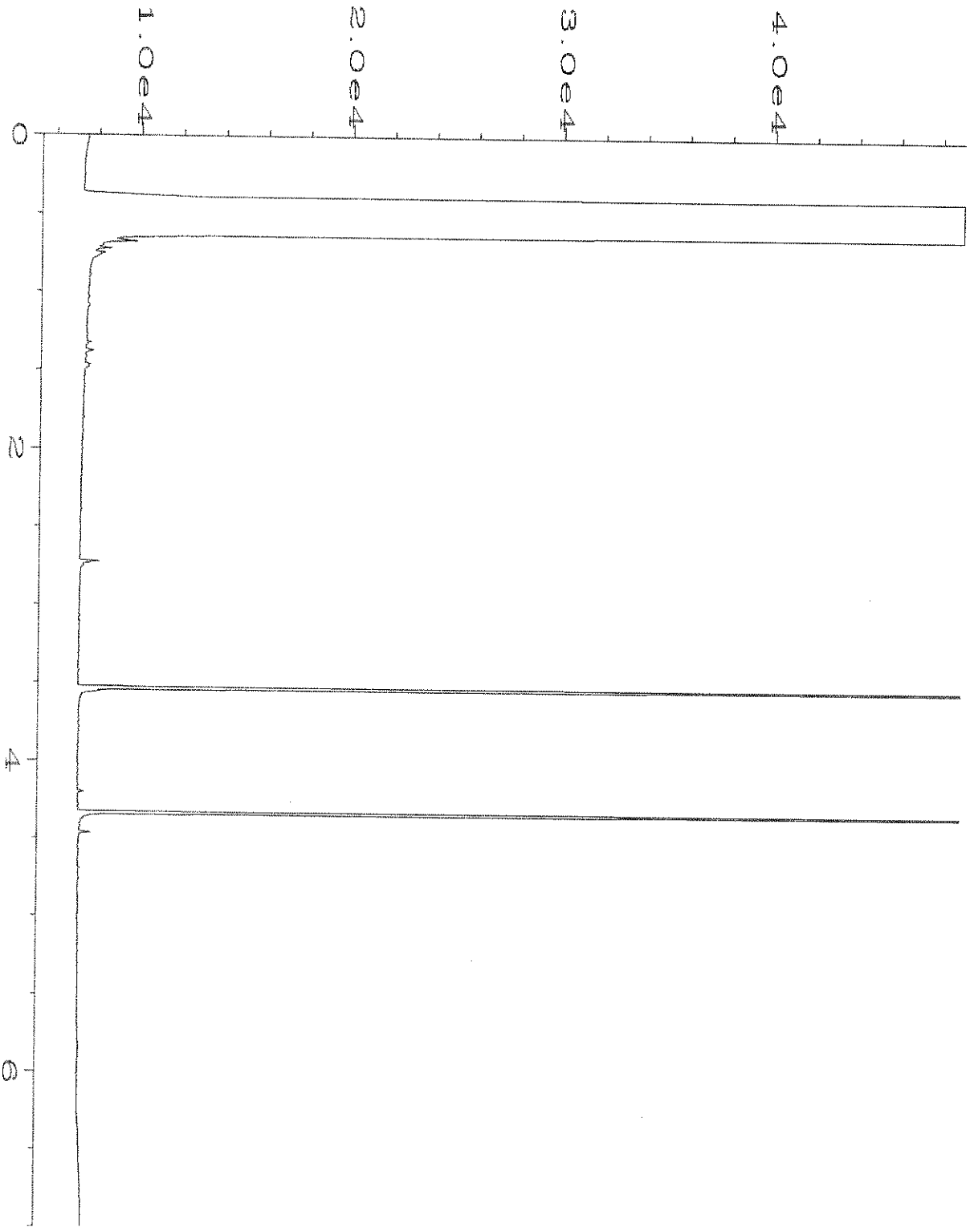
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

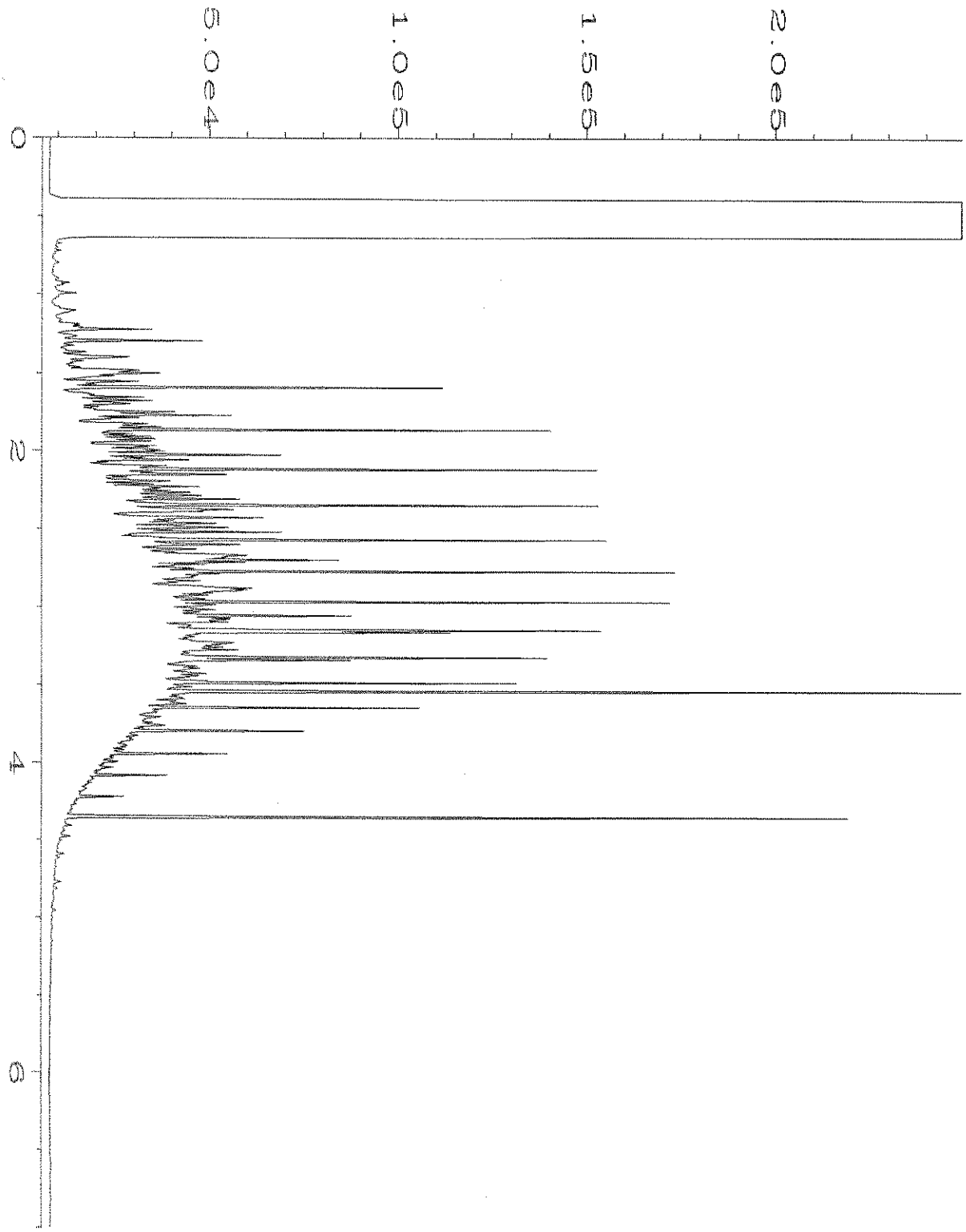
vo - The value reported fell outside the control limits established for this analyte.

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



Data File Name : C:\HPCHEM\6\DATA\07-12-18\023F0401.D
Operator : TL
Instrument : GC6
Sample Name : 807198-01
Run Time Bar Code:
Acquired on : 12 Jul 18 01:09 PM
Report Created on: 12 Jul 18 01:50 PM

Page Number : 1
Vial Number : 23
Injection Number : 1
Sequence Line : 4
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\6\DATA\07-12-18\003F0201.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 3
Sample Name	: 500 Dx 52-71D	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 12 Jul 18 05:46 AM	Instrument Method	: DX.MTH
Report Created on	: 12 Jul 18 01:51 PM	Analysis Method	: DX.MTH

SAMPLE CHAIN OF CUSTODY

~~807/18~~ 807/98 ME 7/11/18 VW 1/802

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO. Ballard Blocks II Property

PO # 1249-001-05

REMARKS (project quote)

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24hr
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: Naphthalene & 1-Methylnaphthalene & 2-Methylnaphthalene CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
A-OG-15	A-OG	15	01	7/11/18	1415	S	1	X	V	-		X	CB-per CC 7/11/18
B-OG-14	B-OG	14	02	7/11/18	1402	S	1	X	V				#E
TempBlank20180711	–	–	03	–	–	W	1						
Field Blank 20180711	–	–	04A-B	–	–	W	2						
											Samples received at 4 °C		

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/11/18	1520
Received by:	Liz Webber	FTB1	7/11/18	1520
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 19, 2018

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

Dear Mr Carter:

Included are the results from the testing of material submitted on July 11, 2018 from the SOU_ 1249-001-05_ 20180711, F&BI 807200 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0719R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 11, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180711, F&BI 807200 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807200 -01	A-06-13
807200 -02	B-06-13

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-06-13	Client:	SoundEarth Strategies
Date Received:	07/11/18	Project:	SOU_ 1249-001-05_ 20180711
Date Extracted:	07/16/18	Lab ID:	807200-01 1/5
Date Analyzed:	07/16/18	Data File:	071608.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	90	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-06-13	Client:	SoundEarth Strategies
Date Received:	07/11/18	Project:	SOU_ 1249-001-05_ 20180711
Date Extracted:	07/16/18	Lab ID:	807200-02 1/5
Date Analyzed:	07/16/18	Data File:	071616.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	31	163
Benzo(a)anthracene-d12	93	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.072
2-Methylnaphthalene	0.028
1-Methylnaphthalene	0.016
Benz(a)anthracene	0.029
Chrysene	0.029
Benzo(a)pyrene	0.027
Benzo(b)fluoranthene	0.027
Benzo(k)fluoranthene	0.011
Indeno(1,2,3-cd)pyrene	0.010
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180711
Date Extracted:	07/16/18	Lab ID:	08-1554 mb 1/5
Date Analyzed:	07/16/18	Data File:	071606.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-06-13	Client:	SoundEarth Strategies
Date Received:	07/11/18	Project:	SOU_ 1249-001-05_ 20180711
Date Extracted:	07/16/18	Lab ID:	807200-01
Date Analyzed:	07/16/18	Data File:	807200-01.068
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.53

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-06-13	Client:	SoundEarth Strategies
Date Received:	07/11/18	Project:	SOU_ 1249-001-05_ 20180711
Date Extracted:	07/17/18	Lab ID:	807200-02
Date Analyzed:	07/17/18	Data File:	807200-02.056
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180711
Date Extracted:	07/16/18	Lab ID:	I8-460 mb
Date Analyzed:	07/16/18	Data File:	I8-460 mb.058
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

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

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180711
Date Extracted:	07/17/18	Lab ID:	I8-460 mb2
Date Analyzed:	07/17/18	Data File:	I8-460 mb2.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Date of Report: 07/19/18
Date Received: 07/11/18
Project: SOU_ 1249-001-05_ 20180711, F&BI 807200

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807200-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	78	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	87	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	76	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	78	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	78	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	79	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	78	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	88	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	87	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	83	84	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	88	90	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	91	92	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	84	83	51-115	1
Chrysene	mg/kg (ppm)	0.17	88	87	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	90	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	84	82	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	83	84	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	94	99	49-148	5
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	97	50-141	4

Date of Report: 07/19/18
Date Received: 07/11/18
Project: SOU_ 1249-001-05_ 20180711, F&BI 807200

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

Laboratory Code: 807252-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	3.52	100	92	70-130	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	102	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

807L00

SAMPLE CHAIN OF CUSTODY ME 7/11/18

B01

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Wells

PROJECT NAME/NO.	PO #
Ballard Blocks II Property	1249-001-05

REMARKS (project quote)

TURNAROUND TIME
Standard (2 Weeks)
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: cPAHs by 8270D (Naphthalene + Methyl + Naphthalene)	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
													24 hr TAT ME
A-C6-13	AC6	13	01	7/11/18	1420	S	1	X	X				HOLD Analyze per CC 7/13/18
B-C6-13	13C6	13	02	7/11/18	1405	S	1	X	X				HOLD analyze per CC 7/16/18
													Samples received at ____ °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Wells	Sarah Wells	SES	7/11/18	1520
Received by: E.D. Webber	Liz Webber	F3B1	7/11/18	1520
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 18, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on July 13, 2018 from the SOU_1249-001-05_ 20180713, F&BI 807252 project. There are 15 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0718R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 13, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180713, F&BI 807252 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807252 -01	A-05-15
807252 -02	B-05-15
807252 -03	D-05-15
807252 -04	E-05-15
807252 -05	E-05-13.5
807252 -06	TempBlank20180713
807252 -07	FieldBlank20180713

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-05-15	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/16/18	Lab ID:	807252-01 1/5
Date Analyzed:	07/16/18	Data File:	071607.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	89	31	163
Benzo(a)anthracene-d12	93	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.012
2-Methylnaphthalene	0.013
1-Methylnaphthalene	0.011
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-05-15	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/16/18	Lab ID:	807252-02 1/5
Date Analyzed:	07/16/18	Data File:	071610.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	88	31	163
Benzo(a)anthracene-d12	99	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.027
2-Methylnaphthalene	0.011
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.034
Chrysene	0.043
Benzo(a)pyrene	0.027
Benzo(b)fluoranthene	0.035
Benzo(k)fluoranthene	0.011
Indeno(1,2,3-cd)pyrene	0.021
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-05-15	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/16/18	Lab ID:	807252-03 1/5
Date Analyzed:	07/16/18	Data File:	071611.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	31	163
Benzo(a)anthracene-d12	99	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.078
2-Methylnaphthalene	0.055
1-Methylnaphthalene	0.044
Benz(a)anthracene	0.84
Chrysene	0.87
Benzo(a)pyrene	1.1
Benzo(b)fluoranthene	1.1
Benzo(k)fluoranthene	0.35
Indeno(1,2,3-cd)pyrene	0.34
Dibenz(a,h)anthracene	0.074

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-05-13.5	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/16/18	Lab ID:	807252-05 1/50
Date Analyzed:	07/16/18	Data File:	071612.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	117 d	31	163
Benzo(a)anthracene-d12	105 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	22 ve
2-Methylnaphthalene	21
1-Methylnaphthalene	15
Benz(a)anthracene	2.5
Chrysene	2.5
Benzo(a)pyrene	1.4
Benzo(b)fluoranthene	1.6
Benzo(k)fluoranthene	0.56
Indeno(1,2,3-cd)pyrene	0.49
Dibenz(a,h)anthracene	0.12

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-05-13.5	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/16/18	Lab ID:	807252-05 1/500
Date Analyzed:	07/16/18	Data File:	071615.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	383 d	31	163
Benzo(a)anthracene-d12	92 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	23

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/16/18	Lab ID:	08-1554 mb 1/5
Date Analyzed:	07/16/18	Data File:	071606.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-05-15	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/16/18	Lab ID:	807252-01
Date Analyzed:	07/16/18	Data File:	807252-01.060
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.25

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-05-15	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/16/18	Lab ID:	807252-02
Date Analyzed:	07/16/18	Data File:	807252-02.063
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	11.6

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-05-15	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/16/18	Lab ID:	807252-03
Date Analyzed:	07/16/18	Data File:	807252-03.066
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.56

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-05-13.5	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/16/18	Lab ID:	807252-05
Date Analyzed:	07/16/18	Data File:	807252-05.067
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.40

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/16/18	Lab ID:	I8-460 mb
Date Analyzed:	07/16/18	Data File:	I8-460 mb.058
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Date of Report: 07/18/18
Date Received: 07/13/18
Project: SOU_1249-001-05_ 20180713, F&BI 807252

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807200-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	78	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	87	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	76	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	78	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	78	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	79	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	78	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	88	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	87	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	83	84	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	88	90	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	91	92	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	84	83	51-115	1
Chrysene	mg/kg (ppm)	0.17	88	87	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	90	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	84	82	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	83	84	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	94	99	49-148	5
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	97	50-141	4

Date of Report: 07/18/18
Date Received: 07/13/18
Project: SOU_1249-001-05_ 20180713, F&BI 807252

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807252-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	3.52	100	92	70-130	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	102	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

807252

SAMPLE CHAIN OF CUSTODY ME 7/13/18

VW1/B04 B05

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
A-05-15	A-05	15	01	7/13/18	1252	S	1	X	X				
B-05-15	B-05	15	02		1308	S	1	X	X				
D-05-15	D-05	15	03		0940	S	1	X	X				
E-05-15	E05	15	04		0935	S	1	X	X				HOLD
E-05-13.5	E-05	13.5	05		0934	S	1	X	X				
Temp Blank 20180713	—	—	06	—	—	W	1						
Field Blank 20180713	—	—	07AB	—	—	W	3						

Samples received at 6 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/13/18	1430
Received by: Liza Radford	Liza Radford	F3B	7/13/18	1430
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 19, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on July 13, 2018 from the SOU_1249-001-05_ 20180713, F&BI 807253 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0719R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 13, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180713, F&BI 807253 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807253 -01	A-05-13
807253 -02	B-05-13
807253 -03	D-05-13.5

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-05-13.5	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/17/18	Lab ID:	807253-03
Date Analyzed:	07/17/18	Data File:	807253-03.048
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	12.3

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/17/18	Lab ID:	I8-460 mb2
Date Analyzed:	07/17/18	Data File:	I8-460 mb2.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-05-13.5	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/17/18	Lab ID:	807253-03 1/5
Date Analyzed:	07/17/18	Data File:	071707.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	73	31	163
Benzo(a)anthracene-d12	73	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.016
Chrysene	0.018
Benzo(a)pyrene	0.015
Benzo(b)fluoranthene	0.016
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/17/18	Lab ID:	08-1554 mb2 1/5
Date Analyzed:	07/17/18	Data File:	071706.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	96	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/19/18
Date Received: 07/13/18
Project: SOU_1249-001-05_ 20180713, F&BI 807253

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807252-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	3.52	100	92	70-130	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	102	85-115

Date of Report: 07/19/18
Date Received: 07/13/18
Project: SOU_1249-001-05_ 20180713, F&BI 807253

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807200-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	78	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	87	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	76	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	78	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	78	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	79	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	78	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	88	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	87	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	83	84	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	88	90	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	91	92	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	84	83	51-115	1
Chrysene	mg/kg (ppm)	0.17	88	87	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	90	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	84	82	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	83	84	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	94	99	49-148	5
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	97	50-141	4

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

807253

SAMPLE CHAIN OF CUSTODY

ME 7/13/18 ~~BOT~~ BOS ke

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welte

PROJECT NAME/NO.	PO #
Ballard Blocks II Property	1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
A-05-13	A-05	13	01	7/13/18	1257	S	1	X	X				HOLD
B-05-13	B-05	13	02	7/13/18	1315	S	1	X	X				HOLD
D-05-13.5	D05	13.5	03	7/13/18	0942	S	1	(X)	(Y)				~~HOLD~~ (X same day per SW 7/17/18 mc

Samples received at 6 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welte	Sarah Welter	SES	7/13/18	1430
Received by: Liza Radford	Liza Radford	FEBI	7/13/18	1430
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 19, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on July 13, 2018 from the SOU_1249-001-05_ 20180713, F&BI 807255 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0719R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 13, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180713, F&BI 807255 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807255 -01	D-05-11.5
807255 -02	E-05-11.5

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-05-11.5	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/17/18	Lab ID:	807255-02
Date Analyzed:	07/17/18	Data File:	807255-02.057
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.95

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/17/18	Lab ID:	I8-460 mb2
Date Analyzed:	07/17/18	Data File:	I8-460 mb2.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-05-11.5	Client:	SoundEarth Strategies
Date Received:	07/13/18	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/17/18	Lab ID:	807255-02 1/5
Date Analyzed:	07/17/18	Data File:	071708.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	77	31	163
Benzo(a)anthracene-d12	83	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.020
2-Methylnaphthalene	0.82
1-Methylnaphthalene	1.2
Benz(a)anthracene	0.42
Chrysene	0.41
Benzo(a)pyrene	0.23
Benzo(b)fluoranthene	0.25
Benzo(k)fluoranthene	0.096
Indeno(1,2,3-cd)pyrene	0.098
Dibenz(a,h)anthracene	0.024

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180713
Date Extracted:	07/17/18	Lab ID:	08-1554 mb2 1/5
Date Analyzed:	07/17/18	Data File:	071706.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	96	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/19/18
Date Received: 07/13/18
Project: SOU_1249-001-05_ 20180713, F&BI 807255

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807252-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	3.52	100	92	70-130	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	102	85-115

Date of Report: 07/19/18
Date Received: 07/13/18
Project: SOU_1249-001-05_ 20180713, F&BI 807255

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807200-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	78	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	87	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	76	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	78	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	78	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	79	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	78	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	88	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	87	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	83	84	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	88	90	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	91	92	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	84	83	51-115	1
Chrysene	mg/kg (ppm)	0.17	88	87	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	90	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	84	82	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	83	84	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	94	99	49-148	5
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	97	50-141	4

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

807255

SAMPLE CHAIN OF CUSTODY ME 7/13/18

~~B04~~ B05

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Inlow

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
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: CPAHs by 8270D SIM, Naphthalene, 1-Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
D-05-11.5	D-05	11.5	01	7/13/18	0945	S	1	X	X				HOLD
E-05-11.5	E05	11.5	02	7/13/18	0938	S	1	X	X				~~HOLD~~ X per SW 7/17/18 same day ME

Samples received at 6 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Inlow	Sarah Inlow	SES	7/13/18	1430
Received by: Liza Radford	Liza Radford	F3BI	7/13/18	1430
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 19, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on July 16, 2018 from the SOU_1249-001-05_ 20180716, F&BI 807283 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0719R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 16, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180716, F&BI 807283 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807283 -01	E-04-13.5
807283 -02	Temp Blank 20180716
807283 -03	Field Blank 20180716

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-04-13.5	Client:	SoundEarth Strategies
Date Received:	07/16/18	Project:	SOU_1249-001-05_ 20180716
Date Extracted:	07/17/18	Lab ID:	807283-01
Date Analyzed:	07/17/18	Data File:	807283-01.058
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.30

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180716
Date Extracted:	07/17/18	Lab ID:	I8-460 mb2
Date Analyzed:	07/17/18	Data File:	I8-460 mb2.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-04-13.5	Client:	SoundEarth Strategies
Date Received:	07/16/18	Project:	SOU_1249-001-05_ 20180716
Date Extracted:	07/16/18	Lab ID:	807283-01 1/5
Date Analyzed:	07/17/18	Data File:	071704.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	93	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.028
2-Methylnaphthalene	0.014
1-Methylnaphthalene	0.012
Benz(a)anthracene	0.011
Chrysene	0.013
Benzo(a)pyrene	0.011
Benzo(b)fluoranthene	0.011
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180716
Date Extracted:	07/16/18	Lab ID:	08-1554 mb 1/5
Date Analyzed:	07/16/18	Data File:	071606.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/19/18
Date Received: 07/16/18
Project: SOU_1249-001-05_ 20180716, F&BI 807283

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807252-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	3.52	100	92	70-130	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	102	85-115

Date of Report: 07/19/18
Date Received: 07/16/18
Project: SOU_1249-001-05_ 20180716, F&BI 807283

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807200-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	78	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	87	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	76	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	78	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	78	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	79	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	78	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	88	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	87	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	83	84	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	88	90	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	91	92	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	84	83	51-115	1
Chrysene	mg/kg (ppm)	0.17	88	87	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	90	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	84	82	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	83	84	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	94	99	49-148	5
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	97	50-141	4

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

807283

SAMPLE CHAIN OF CUSTODY ME 7/16/18

COI/VWI

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Wells

PROJECT NAME/NO.	PO #
Ballard Blocks II Property	1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24hr
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: cPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
E-04-13.5	E-04	13.5	01	7/14/18	1510	S	1	X	Y				
temp blank 20180716	-	-	02	-	-	W	1						
Field Blank 20180716	-	-	03A-B	-	-	W	3						
													Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Wells	Sarah Wells-er	SES	7/14/18	1530
Received by:	Eric Yan	RB	7/14/18	1530
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 24, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on July 19, 2018 from the SOU_1249-001-05_ 20180719, F&BI 807370 project. There are 16 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Sarah Welter
SOU0724R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 19, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180719, F&BI 807370 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807370 -01	EX-MW08-13
807370 -02	EX-B21-15
807370 -03	EX-B62-15
807370 -04	EX-B16-15
807370 -05	TempBlank20180719
807370 -06	FieldBlank20180719

All quality control requirements were acceptable.

Date of Report: 07/24/18
Date Received: 07/19/18
Project: SOU_1249-001-05_ 20180719, F&BI 807370
Date Extracted: 07/20/18
Date Analyzed: 07/20/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 56-165)
EX-B62-15 807370-03	<50	<250	85
Method Blank 08-1574 MB2	<50	<250	77

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-MW08-13	Client:	SoundEarth Strategies
Date Received:	07/19/18	Project:	SOU_1249-001-05_ 20180719, F&BI 807370
Date Extracted:	07/19/18	Lab ID:	807370-01 1/5
Date Analyzed:	07/20/18	Data File:	072005.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	81	31	163
Benzo(a)anthracene-d12	83	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B21-15	Client:	SoundEarth Strategies
Date Received:	07/19/18	Project:	SOU_1249-001-05_ 20180719, F&BI 807370
Date Extracted:	07/19/18	Lab ID:	807370-02 1/5
Date Analyzed:	07/20/18	Data File:	072006.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	94	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.049
2-Methylnaphthalene	0.022
1-Methylnaphthalene	0.013
Benz(a)anthracene	0.031
Chrysene	0.033
Benzo(a)pyrene	0.032
Benzo(b)fluoranthene	0.030
Benzo(k)fluoranthene	0.012
Indeno(1,2,3-cd)pyrene	0.022
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B62-15	Client:	SoundEarth Strategies
Date Received:	07/19/18	Project:	SOU_1249-001-05_ 20180719, F&BI 807370
Date Extracted:	07/19/18	Lab ID:	807370-03 1/5
Date Analyzed:	07/20/18	Data File:	072007.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	95	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.076
2-Methylnaphthalene	0.032
1-Methylnaphthalene	0.018
Benz(a)anthracene	0.045
Chrysene	0.048
Benzo(a)pyrene	0.049
Benzo(b)fluoranthene	0.048
Benzo(k)fluoranthene	0.019
Indeno(1,2,3-cd)pyrene	0.032
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B16-15	Client:	SoundEarth Strategies
Date Received:	07/19/18	Project:	SOU_1249-001-05_ 20180719, F&BI 807370
Date Extracted:	07/19/18	Lab ID:	807370-04 1/5
Date Analyzed:	07/20/18	Data File:	072008.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	92	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.14
2-Methylnaphthalene	0.081
1-Methylnaphthalene	0.067
Benz(a)anthracene	0.052
Chrysene	0.055
Benzo(a)pyrene	0.051
Benzo(b)fluoranthene	0.053
Benzo(k)fluoranthene	0.021
Indeno(1,2,3-cd)pyrene	0.033
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180719, F&BI 807370
Date Extracted:	07/19/18	Lab ID:	08-1570 mb 1/5
Date Analyzed:	07/19/18	Data File:	071906.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-MW08-13	Client:	SoundEarth Strategies
Date Received:	07/19/18	Project:	SOU_1249-001-05_ 20180719, F&BI 807370
Date Extracted:	07/20/18	Lab ID:	807370-01
Date Analyzed:	07/20/18	Data File:	807370-01.036
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	7.62

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B21-15	Client:	SoundEarth Strategies
Date Received:	07/19/18	Project:	SOU_1249-001-05_ 20180719, F&BI 807370
Date Extracted:	07/20/18	Lab ID:	807370-02
Date Analyzed:	07/20/18	Data File:	807370-02.041
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.60

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B62-15	Client:	SoundEarth Strategies
Date Received:	07/19/18	Project:	SOU_1249-001-05_ 20180719, F&BI 807370
Date Extracted:	07/20/18	Lab ID:	807370-03
Date Analyzed:	07/20/18	Data File:	807370-03.042
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.84

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B16-15	Client:	SoundEarth Strategies
Date Received:	07/19/18	Project:	SOU_1249-001-05_ 20180719, F&BI 807370
Date Extracted:	07/20/18	Lab ID:	807370-04
Date Analyzed:	07/20/18	Data File:	807370-04.043
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	10.2

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_1249-001-05_ 20180719, F&BI 807370
Date Extracted:	07/20/18	Lab ID:	I8-472 mb
Date Analyzed:	07/20/18	Data File:	I8-472 mb.034
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Date of Report: 07/24/18
Date Received: 07/19/18
Project: SOU_1249-001-05_ 20180719, F&BI 807370

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 807363-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	80	86	63-146	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	88	79-144

Date of Report: 07/24/18
Date Received: 07/19/18
Project: SOU_1249-001-05_ 20180719, F&BI 807370

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807355-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	79	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	88	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	89	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	83	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	82	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	87	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	83	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	90	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	74	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	70	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	82	83	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	88	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	89	91	60-124	2
Benz(a)anthracene	mg/kg (ppm)	0.17	83	82	51-115	1
Chrysene	mg/kg (ppm)	0.17	88	86	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	85	56-123	3
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	82	86	54-131	5
Benzo(a)pyrene	mg/kg (ppm)	0.17	79	80	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	85	85	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	86	85	50-141	1

Date of Report: 07/24/18
Date Received: 07/19/18
Project: SOU_1249-001-05_ 20180719, F&BI 807370

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807370-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	6.40	82	90	70-130	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

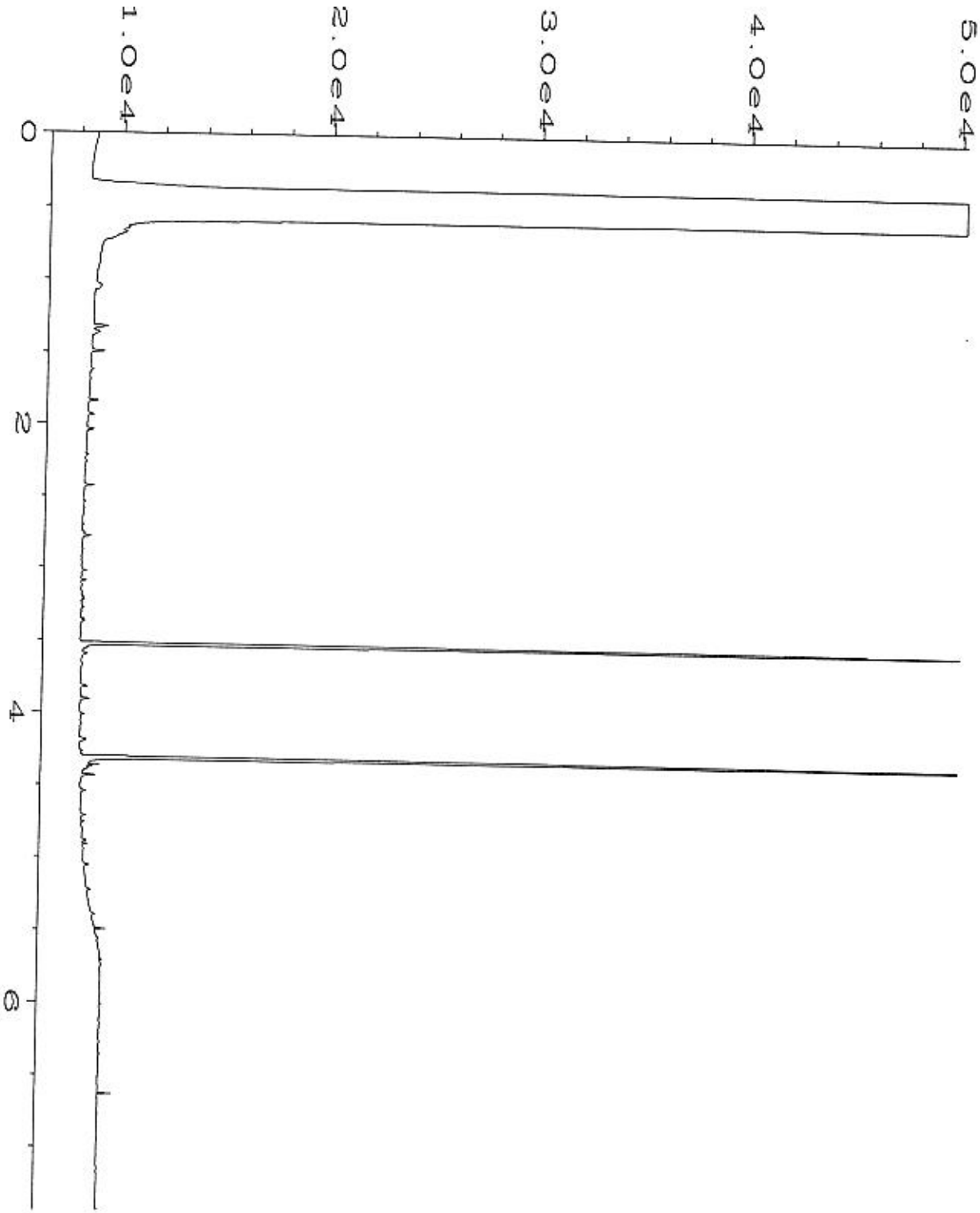
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

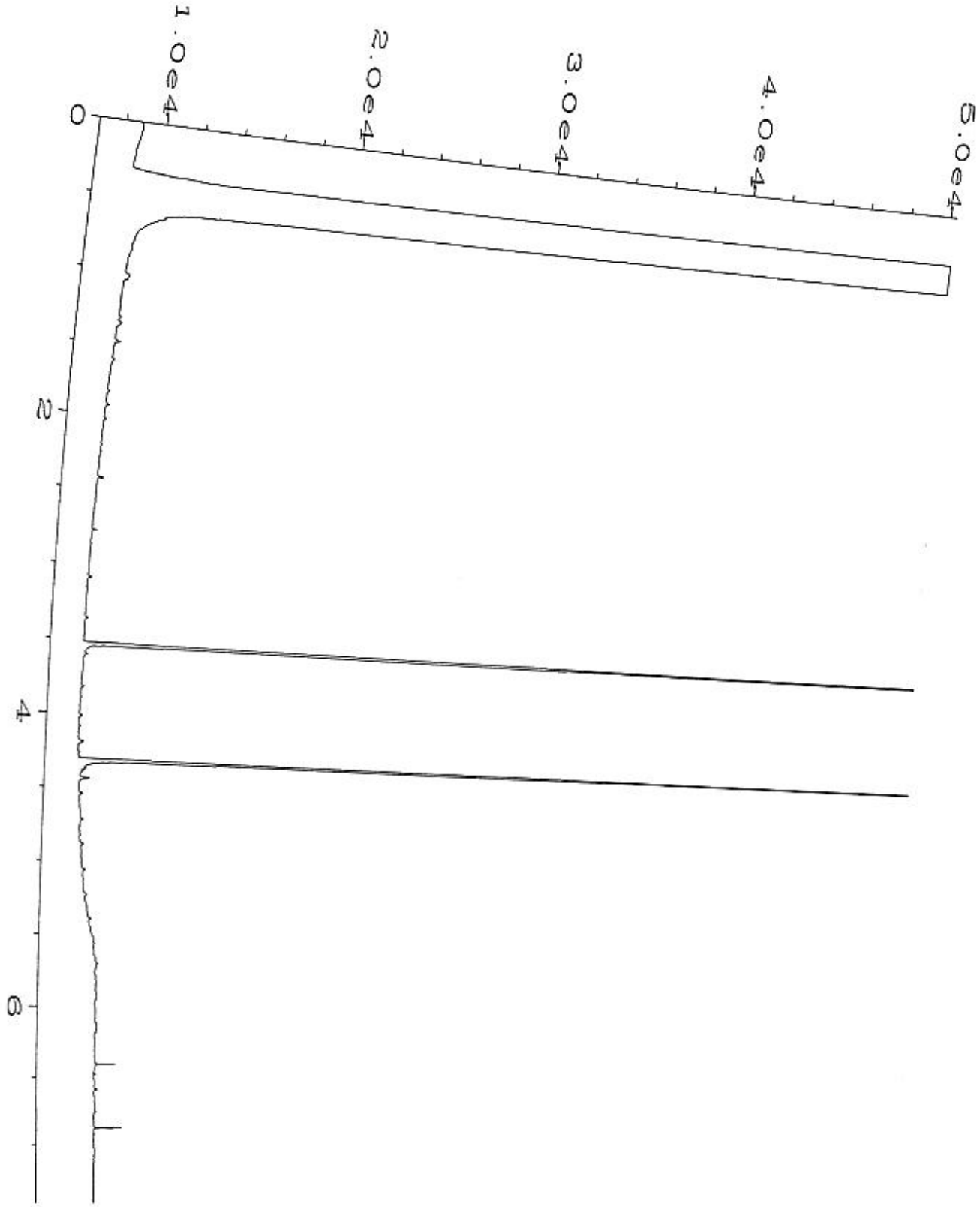
vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



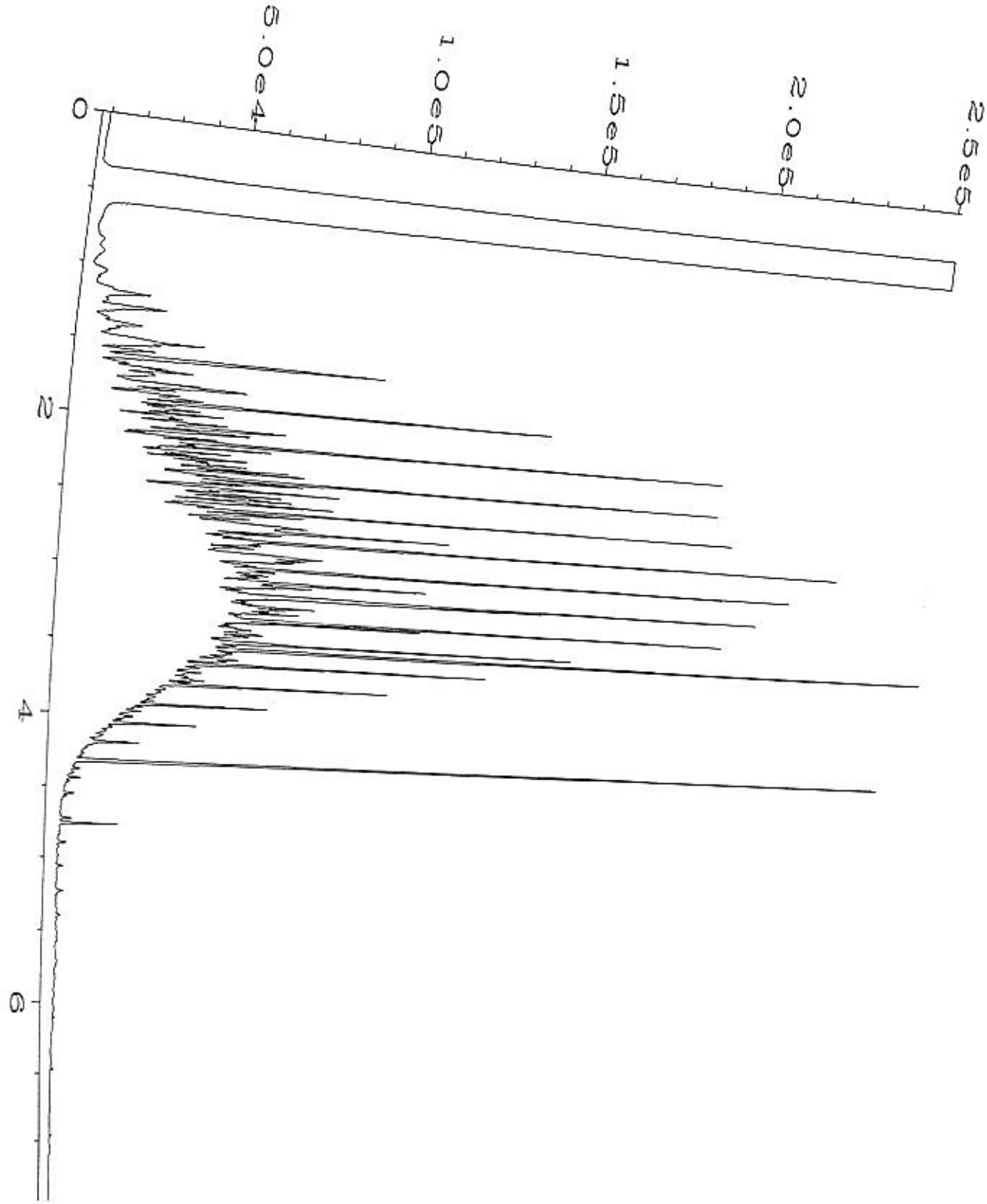
Data File Name : C:\HPCHEM\1\DATA\07-20-18\007F0301.D
Operator : TL
Instrument : GC1
Sample Name : 807370-03
Run Time Bar Code:
Acquired on : 20 Jul 18 08:50 AM
Report Created on: 20 Jul 18 09:15 AM

Page Number : 1
Vial Number : 7
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\1\DATA\07-20-18\006F0401.D
Operator : TL
Instrument : GC1
Sample Name : 08-1574 mb2
Run Time Bar Code:
Acquired on : 20 Jul 18 09:12 AM
Report Created on: 20 Jul 18 09:42 AM

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 4
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\1\DATA\07-20-18\003F0201.D
Operator : TL
Instrument : GC1
Sample Name : 500 Dx 52-71D
Run Time Bar Code:
Acquired on : 20 Jul 18 05:47 AM
Report Created on: 20 Jul 18 09:16 AM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 2
Instrument Method: DX.MTH
Analysis Method : DX.MTH

SAMPLE CHAIN OF CUSTODY ME 7/19/18

807370

VW1 / ALT

Page # 1 of 1

Send Report to Chris Carter; Chris Cass cc Sarah Welter

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) Sarah Welter

PROJECT NAME/NO.	PO #
Ballard Blocks II Property	1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
(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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
EX-MW08-13	MW08	13	01	7/19/18	1400	S	1	X	X				⊗ - per CC 7/19/18 ME
EX-B21-15	B21	15	02	7/19/18	1435	S	1	X	X				
EX-B22-15	B22	15	03	7/19/18	1440	S	1	X	X			(X)	
EX-B16-15	B16	15	04	7/19/18	1445	S	1	X	X				
TempBlank20180719	—	—	05	—	—	W	1						
FieldBlank20180719	—		06A-B	—	—	W	3						

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/19/18	1505
Received by: James Boyd	James Boyd	F&B	7/19	1505
Relinquished by:				
Received by:		Samples received at 7 °C		

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 25, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on July 23, 2018 from the SOU_ 1249-001-05_ 20180723, F&BI 807414 project. There are 18 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0725R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 23, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180723, F&BI 807414 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807414 -01	EX-B20-14.0
807414 -02	A-04-15
807414 -03	B-04-15
807414 -04	C-05-15
807414 -05	D-04-13.5
807414 -06	E-05-10.5
807414 -07	Temp Blank20150723
807414 -08	Field Blank20150723

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B20-14.0	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/23/18	Lab ID:	807414-01 1/5
Date Analyzed:	07/23/18	Data File:	072311.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	77	31	163
Benzo(a)anthracene-d12	83	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-04-15	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/23/18	Lab ID:	807414-02 1/5
Date Analyzed:	07/23/18	Data File:	072312.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	84	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.010
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-04-15	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/23/18	Lab ID:	807414-03 1/5
Date Analyzed:	07/23/18	Data File:	072313.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	97	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.054
2-Methylnaphthalene	0.033
1-Methylnaphthalene	0.031
Benz(a)anthracene	0.018
Chrysene	0.021
Benzo(a)pyrene	0.014
Benzo(b)fluoranthene	0.016
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-05-15	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/23/18	Lab ID:	807414-04 1/5
Date Analyzed:	07/23/18	Data File:	072314.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	31	163
Benzo(a)anthracene-d12	94	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.15
2-Methylnaphthalene	0.057
1-Methylnaphthalene	0.027
Benz(a)anthracene	0.18
Chrysene	0.24
Benzo(a)pyrene	0.23
Benzo(b)fluoranthene	0.23
Benzo(k)fluoranthene	0.081
Indeno(1,2,3-cd)pyrene	0.12
Dibenz(a,h)anthracene	0.030

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-04-13.5	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/23/18	Lab ID:	807414-05 1/5
Date Analyzed:	07/23/18	Data File:	072315.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	85	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-05-10.5	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/23/18	Lab ID:	807414-06 1/5
Date Analyzed:	07/23/18	Data File:	072316.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	92	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.074
2-Methylnaphthalene	0.42
1-Methylnaphthalene	0.31
Benz(a)anthracene	0.16
Chrysene	0.14
Benzo(a)pyrene	0.080
Benzo(b)fluoranthene	0.098
Benzo(k)fluoranthene	0.030
Indeno(1,2,3-cd)pyrene	0.037
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/23/18	Lab ID:	08-1594 mb 1/5
Date Analyzed:	07/23/18	Data File:	072308.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	90	31	163
Benzo(a)anthracene-d12	95	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B20-14.0	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/24/18	Lab ID:	807414-01
Date Analyzed:	07/24/18	Data File:	807414-01.045
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	36.7

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-04-15	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/24/18	Lab ID:	807414-02
Date Analyzed:	07/24/18	Data File:	807414-02.048
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	20.9

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-04-15	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/24/18	Lab ID:	807414-03
Date Analyzed:	07/24/18	Data File:	807414-03.049
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.08

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-05-15	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/24/18	Lab ID:	807414-04
Date Analyzed:	07/24/18	Data File:	807414-04.050
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	15.5

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-04-13.5	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/24/18	Lab ID:	807414-05
Date Analyzed:	07/24/18	Data File:	807414-05.051
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	10.8

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-05-10.5	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/24/18	Lab ID:	807414-06
Date Analyzed:	07/24/18	Data File:	807414-06.052
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/24/18	Lab ID:	I8-479 mb
Date Analyzed:	07/24/18	Data File:	I8-479 mb.043
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Date of Report: 07/25/18
Date Received: 07/23/18
Project: SOU_ 1249-001-05_ 20180723, F&BI 807414

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807414-06 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.060	52 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.34	0 b	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.25	0 b	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.13	18 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.11	28 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.079	45 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.025	68	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.065	48 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.030	64	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	75	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	80	80	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	84	85	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	87	88	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	82	83	51-115	1
Chrysene	mg/kg (ppm)	0.17	86	86	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	82	83	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	82	79	54-131	4
Benzo(a)pyrene	mg/kg (ppm)	0.17	78	79	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	91	95	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	92	93	50-141	1

Date of Report: 07/25/18
Date Received: 07/23/18
Project: SOU_ 1249-001-05_ 20180723, F&BI 807414

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807414-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<1	93	99	70-130	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	103	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

807414

SAMPLE CHAIN OF CUSTODY ME 07/23/18

BIZ ~~AIZ~~/UW1

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
~~RUSH~~ 24 hr
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: cPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
EX-B20-14.0	B20	14	01	7/23/18	0917	S	1	X	X				
A-04-15	A-04	15	02		0840	S	1	X	X				
B-04-15	B-04	15	03		0853	S	1	X	X				
C-05-15	C-05	15	04		0900	S	1	X	V				
D-04-13.5	D-04	13.5	05		0940	S	1	X	X				
E-05-10.5	E-05	10.5	06		0930	S	1	X	V				
Temp Blank-20180723	-	-	07		-	W	1						
Field Blank 20180723	-	-	08 AB		-	W	2 BNP						
													Samples received at 6 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/23/18	1100
Received by:	Matt Langstaff	FIS	7/23/18	1100
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 27, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on July 23, 2018 from the SOU_ 1249-001-05_ 20180723, F&BI 807416 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0727R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 23, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180723, F&BI 807416 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807416 -01	A-04-14
807416 -02	B-04-14
807416 -03	C-05-14

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-04-14	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/25/18	Lab ID:	807416-01
Date Analyzed:	07/25/18	Data File:	807416-01.087
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.13

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-05-14	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/25/18	Lab ID:	807416-03
Date Analyzed:	07/25/18	Data File:	807416-03.053
Matrix:	Soil	Instrument:	ICP MS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.38

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/25/18	Lab ID:	I8-479 mb2
Date Analyzed:	07/25/18	Data File:	I8-479 mb2.052
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/25/18	Lab ID:	I8-482 mb
Date Analyzed:	07/25/18	Data File:	I8-482 mb.085
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-04-14	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/25/18	Lab ID:	807416-01 1/5
Date Analyzed:	07/25/18	Data File:	072507.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	88	31	163
Benzo(a)anthracene-d12	94	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-05-14	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/25/18	Lab ID:	807416-03 1/5
Date Analyzed:	07/25/18	Data File:	072508.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	94	31	163
Benzo(a)anthracene-d12	95	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/25/18	Lab ID:	08-1609 mb 1/5
Date Analyzed:	07/25/18	Data File:	072506.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	31	163
Benzo(a)anthracene-d12	98	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/27/18
Date Received: 07/23/18
Project: SOU_ 1249-001-05_ 20180723, F&BI 807416

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807414-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<1	93	99	70-130	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	103	85-115

Date of Report: 07/27/18
Date Received: 07/23/18
Project: SOU_ 1249-001-05_ 20180723, F&BI 807416

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807416-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.68	95	92	70-130	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	96	85-115

Date of Report: 07/27/18
Date Received: 07/23/18
Project: SOU_ 1249-001-05_ 20180723, F&BI 807416

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807416-03 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	89	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	92	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	82	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	84	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	82	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	83	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	80	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	87	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	88	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	83	83	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	86	89	58-123	3
1-Methylnaphthalene	mg/kg (ppm)	0.17	88	92	60-124	4
Benz(a)anthracene	mg/kg (ppm)	0.17	88	85	51-115	3
Chrysene	mg/kg (ppm)	0.17	90	88	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	91	87	56-123	4
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	86	89	54-131	3
Benzo(a)pyrene	mg/kg (ppm)	0.17	84	83	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	91	94	49-148	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	95	50-141	2

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

807416

SAMPLE CHAIN OF CUSTODY ME 07/23/18

Page # 1 of 1 B12

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24 hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
A-04-14	A-04	14	01	7/23/18	0843	S	1	X	X				HOLD analyze per SW 7/24/18 ME
B-04-14	B-04	14	02	7/23/18	0855	S	1	X	X				HOLD
C-05-14	C-05	14	03	7/23/18	0905	S	1	X	X				HOLD Analyze per SW 7/24/18 ME

Samples received at 9 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/23/18	1100
Received by:	Matt Langston	FBInc	7/23/18	1100
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 27, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on July 23, 2018 from the SOU_ 1249-001-05_ 20180723, F&BI 807417 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0727R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 23, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180723, F&BI 807417 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807417 -01	D-04-11.5
807417 -02	E-05-9.5

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-05-9.5	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/25/18	Lab ID:	807417-02
Date Analyzed:	07/25/18	Data File:	807417-02.054
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.35

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/25/18	Lab ID:	I8-479 mb2
Date Analyzed:	07/25/18	Data File:	I8-479 mb2.052
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-05-9.5	Client:	SoundEarth Strategies
Date Received:	07/23/18	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/25/18	Lab ID:	807417-02 1/5
Date Analyzed:	07/25/18	Data File:	072509.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	84	31	163
Benzo(a)anthracene-d12	83	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.017
2-Methylnaphthalene	0.030
1-Methylnaphthalene	0.033
Benz(a)anthracene	0.014
Chrysene	0.014
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	0.011
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180723
Date Extracted:	07/25/18	Lab ID:	08-1609 mb 1/5
Date Analyzed:	07/25/18	Data File:	072506.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	31	163
Benzo(a)anthracene-d12	98	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/27/18
Date Received: 07/23/18
Project: SOU_ 1249-001-05_ 20180723, F&BI 807417

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807414-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<1	93	99	70-130	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	103	85-115

Date of Report: 07/27/18
Date Received: 07/23/18
Project: SOU_ 1249-001-05_ 20180723, F&BI 807417

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807416-03 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	89	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	92	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	82	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	84	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	82	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	83	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	80	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	87	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	88	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	83	83	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	86	89	58-123	3
1-Methylnaphthalene	mg/kg (ppm)	0.17	88	92	60-124	4
Benz(a)anthracene	mg/kg (ppm)	0.17	88	85	51-115	3
Chrysene	mg/kg (ppm)	0.17	90	88	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	91	87	56-123	4
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	86	89	54-131	3
Benzo(a)pyrene	mg/kg (ppm)	0.17	84	83	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	91	94	49-148	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	95	50-141	2

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

807417

SAMPLE CHAIN OF CUSTODY ME 07/23/18

Page # 1 of 1 DT2

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO. Ballard Blocks II Property

PO # 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
D-04-11.5	D-04	11.5	01	7/23/18	0942	S	1	X	X				HOLD
E-05-9.5	E-05	9.5	02	7/23/18	0935	S	1	X	X				~~HOLD~~ analyze per SW 7/24/18 NG

HOLD

Samples received at 6 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/23/18	1100
Received by:	Matt Langstaff	FBInc	7/23/18	1100
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 30, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on July 25, 2018 from the SOU_ 1249-001-05_ 20180725, F&BI 807492 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU0730R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 25, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180725, F&BI 807492 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807492 -01	EX-B20-13
807492 -02	TempBlank20180725
807492 -03	FieldBlank20180725

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B20-13	Client:	SoundEarth Strategies
Date Received:	07/25/18	Project:	SOU_ 1249-001-05_ 20180725
Date Extracted:	07/26/18	Lab ID:	807492-01
Date Analyzed:	07/26/18	Data File:	807492-01.034
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	19.1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180725
Date Extracted:	07/26/18	Lab ID:	I8-482 mb2
Date Analyzed:	07/26/18	Data File:	I8-482 mb2.033
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B20-13	Client:	SoundEarth Strategies
Date Received:	07/25/18	Project:	SOU_ 1249-001-05_ 20180725
Date Extracted:	07/25/18	Lab ID:	807492-01 1/5
Date Analyzed:	07/26/18	Data File:	072612.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	96	31	163
Benzo(a)anthracene-d12	105	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.032
2-Methylnaphthalene	0.011
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.014
Chrysene	0.013
Benzo(a)pyrene	0.014
Benzo(b)fluoranthene	0.013
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180725
Date Extracted:	07/25/18	Lab ID:	08-1609 mb 1/5
Date Analyzed:	07/25/18	Data File:	072506.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	31	163
Benzo(a)anthracene-d12	98	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 07/30/18
Date Received: 07/25/18
Project: SOU_ 1249-001-05_ 20180725, F&BI 807492

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807416-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.68	95	92	70-130	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	96	85-115

Date of Report: 07/30/18
Date Received: 07/25/18
Project: SOU_ 1249-001-05_ 20180725, F&BI 807492

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807416-03 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	89	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	92	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	82	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	84	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	82	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	83	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	80	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	87	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	88	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	83	83	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	86	89	58-123	3
1-Methylnaphthalene	mg/kg (ppm)	0.17	88	92	60-124	4
Benz(a)anthracene	mg/kg (ppm)	0.17	88	85	51-115	3
Chrysene	mg/kg (ppm)	0.17	90	88	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	91	87	56-123	4
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	86	89	54-131	3
Benzo(a)pyrene	mg/kg (ppm)	0.17	84	83	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	91	94	49-148	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	95	50-141	2

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

807492

ME 07-25-18 | AI/VWI

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS (project quote)

TURNAROUND TIME
~~Standard (2 Weeks)~~
RUSH 24hr
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: Naphthalene 1,6 methylnaphthalene CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
EX-B20-13	B20	13	01	7/25/18	0805	S	1	X	Y				
TempBlank20180725	—	—	02	—	—	W	1						
FieldBlank20180725	—	—	03A-B	—	—	W	3						

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/25/18	1500
Received by:	DO VO	FEDEX	7-25-18	15:00
Relinquished by:		Samples received at 4 °C		
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 6, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on July 31, 2018 from the SOU_1249-001-05_ 20180731, F&BI 807609 project. There are 25 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0806R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 31, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180731, F&BI 807609 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807609 -01	EX-B40-14
807609 -02	EX-MW13-14
807609 -03	EX-B04-14
807609 -04	C-04-15
807609 -05	A-03-15
807609 -06	B-03-15
807609 -07	A-02-14
807609 -08	B-02-14
807609 -09	TempBlank 20180731
807609 -10	FieldBlank 20180731

Dibenz(a,h)anthracene was detected in the 8270D method blank at a level within 10 times the concentration detected in the samples. The data were flagged accordingly.

All other quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B40-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	08/01/18	Lab ID:	807609-01
Date Analyzed:	08/01/18	Data File:	807609-01.053
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	15.4

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-MW13-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	08/01/18	Lab ID:	807609-02
Date Analyzed:	08/01/18	Data File:	807609-02.054
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.57

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B04-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	08/01/18	Lab ID:	807609-03
Date Analyzed:	08/01/18	Data File:	807609-03.057
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.03

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-04-15	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	08/01/18	Lab ID:	807609-04
Date Analyzed:	08/01/18	Data File:	807609-04.058
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.31

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-03-15	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	08/01/18	Lab ID:	807609-05
Date Analyzed:	08/01/18	Data File:	807609-05.059
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	10.6

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-03-15	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	08/01/18	Lab ID:	807609-06
Date Analyzed:	08/01/18	Data File:	807609-06.060
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	18.7

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-02-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	08/01/18	Lab ID:	807609-07
Date Analyzed:	08/01/18	Data File:	807609-07.061
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.83

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-02-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	08/01/18	Lab ID:	807609-08
Date Analyzed:	08/01/18	Data File:	807609-08.062
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	08/01/18	Lab ID:	I8-497 mb
Date Analyzed:	08/01/18	Data File:	I8-497 mb.051
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B40-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	07/31/18	Lab ID:	807609-01 1/5
Date Analyzed:	07/31/18	Data File:	073112.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	31	163
Benzo(a)anthracene-d12	87	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.80
2-Methylnaphthalene	0.41
1-Methylnaphthalene	0.38
Benz(a)anthracene	0.81
Chrysene	0.75
Benzo(a)pyrene	0.76
Benzo(b)fluoranthene	0.67
Benzo(k)fluoranthene	0.20
Indeno(1,2,3-cd)pyrene	0.30
Dibenz(a,h)anthracene	0.076

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-MW13-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	07/31/18	Lab ID:	807609-02 1/50
Date Analyzed:	08/01/18	Data File:	073122.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	126 d	31	163
Benzo(a)anthracene-d12	87 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.1
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	23 ve
Chrysene	21 ve
Benzo(a)pyrene	23 ve
Benzo(b)fluoranthene	21 ve
Benzo(k)fluoranthene	6.7
Indeno(1,2,3-cd)pyrene	7.6
Dibenz(a,h)anthracene	1.8

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-MW13-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	07/31/18	Lab ID:	807609-02 1/250
Date Analyzed:	07/31/18	Data File:	073119.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	132 d	31	163
Benzo(a)anthracene-d12	73 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.5
2-Methylnaphthalene	<0.5
1-Methylnaphthalene	<0.5
Benz(a)anthracene	22
Chrysene	21
Benzo(a)pyrene	22
Benzo(b)fluoranthene	19
Benzo(k)fluoranthene	5.5
Indeno(1,2,3-cd)pyrene	10
Dibenz(a,h)anthracene	2.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B04-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	07/31/18	Lab ID:	807609-03 1/5
Date Analyzed:	07/31/18	Data File:	073113.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	92	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-04-15	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	07/31/18	Lab ID:	807609-04 1/5
Date Analyzed:	07/31/18	Data File:	073114.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	84	31	163
Benzo(a)anthracene-d12	87	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.10
2-Methylnaphthalene	0.028
1-Methylnaphthalene	0.014
Benz(a)anthracene	0.076
Chrysene	0.075
Benzo(a)pyrene	0.10
Benzo(b)fluoranthene	0.10
Benzo(k)fluoranthene	0.032
Indeno(1,2,3-cd)pyrene	0.060
Dibenz(a,h)anthracene	0.012 fb

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-03-15	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	07/31/18	Lab ID:	807609-05 1/5
Date Analyzed:	07/31/18	Data File:	073115.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-03-15	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	07/31/18	Lab ID:	807609-06 1/50
Date Analyzed:	08/01/18	Data File:	073121.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	89 d	31	163
Benzo(a)anthracene-d12	81 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	270 ve
2-Methylnaphthalene	120 ve
1-Methylnaphthalene	55 ve
Benz(a)anthracene	18
Chrysene	15
Benzo(a)pyrene	16
Benzo(b)fluoranthene	15
Benzo(k)fluoranthene	4.8
Indeno(1,2,3-cd)pyrene	5.4
Dibenz(a,h)anthracene	1.5

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-03-15	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	07/31/18	Lab ID:	807609-06 1/250
Date Analyzed:	07/31/18	Data File:	073118.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	139 d	31	163
Benzo(a)anthracene-d12	69 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	250 ve
2-Methylnaphthalene	110 ve
1-Methylnaphthalene	55
Benz(a)anthracene	18
Chrysene	16
Benzo(a)pyrene	16
Benzo(b)fluoranthene	14
Benzo(k)fluoranthene	4.5
Indeno(1,2,3-cd)pyrene	6.8
Dibenz(a,h)anthracene	1.8

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-03-15	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	07/31/18	Lab ID:	807609-06 1/2500
Date Analyzed:	08/02/18	Data File:	080210.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	660 d	31	163
Benzo(a)anthracene-d12	60 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	260
2-Methylnaphthalene	110
1-Methylnaphthalene	53
Benz(a)anthracene	16
Chrysene	14
Benzo(a)pyrene	13
Benzo(b)fluoranthene	12
Benzo(k)fluoranthene	<5
Indeno(1,2,3-cd)pyrene	<5
Dibenz(a,h)anthracene	<5

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-02-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	07/31/18	Lab ID:	807609-07 1/5
Date Analyzed:	07/31/18	Data File:	073116.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	94	31	163
Benzo(a)anthracene-d12	97	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	1.5
2-Methylnaphthalene	0.76
1-Methylnaphthalene	0.40
Benz(a)anthracene	0.18
Chrysene	0.18
Benzo(a)pyrene	0.18
Benzo(b)fluoranthene	0.16
Benzo(k)fluoranthene	0.051
Indeno(1,2,3-cd)pyrene	0.082
Dibenz(a,h)anthracene	0.019

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-02-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	07/31/18	Lab ID:	807609-08 1/5
Date Analyzed:	07/31/18	Data File:	073117.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	31	163
Benzo(a)anthracene-d12	96	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180731
Date Extracted:	07/31/18	Lab ID:	08-1683 mb 1/5
Date Analyzed:	07/31/18	Data File:	073111.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	95	31	163
Benzo(a)anthracene-d12	101	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 08/06/18
Date Received: 07/31/18
Project: SOU_ 1249-001-05_ 20180731, F&BI 807609

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807609-08 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<1	102	100	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	96	85-115

Date of Report: 08/06/18
Date Received: 07/31/18
Project: SOU_ 1249-001-05_ 20180731, F&BI 807609

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807609-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.54	187 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.28	127 b	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.26	136 b	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.54	594 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.50	497 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.45	533 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.13	232 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.51	615 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.20	215 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.051	88 b	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	93	92	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	97	99	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	93	97	60-124	4
Benz(a)anthracene	mg/kg (ppm)	0.17	92	92	51-115	0
Chrysene	mg/kg (ppm)	0.17	90	91	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	97	99	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	90	89	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	94	94	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	109	108	49-148	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	107	105	50-141	2

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

8076609

SAMPLE CHAIN OF CUSTODY ME 7/31/18

BD3/VW1

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Walter

PROJECT NAME/NO. Ballard Blocks II Property

PO # 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24 hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
EX-B40-14	B40	14	01	7/31/18	0945	S	1	X	X				
EX-MW13-14	MW13	14	02		1007	S	1	X	X				
EX-B04-14	B04	14	03		1005	S	1	X	Y				
C-04-15	C-04	15	04		1010	S	1	X	Y				
A-03-15	A-03	15	05		0938	S	1	X	Y				
B-03-15	B-03	15	06		0947	S	1	X*	Y				
A-02-14	A-02	14	07		0955	S	1	X	X				
B-02-14	B-02	14	08		1000	S	1	X	Y				Samples received at 4 °C
Temp Blank 20180731	—	-	09		—	W	1						RUSH
Field Blank 20180731	—	-	10A-B		-	W	1						

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Walter	Sarah Walter	SES	7/31/18	1248
Received by:	Eric Lane	F+B	7/3/18	1248
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 7, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on July 31, 2018 from the SOU_1249-001-05_ 20180731, F&BI 807623 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0807R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 31, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180731, F&BI 807623 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807623 -01	A-03-13
807623 -02	B-03-13
807623 -03	C-04-13
807623 -04	A-02-13
807623 -05	B-02-13

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-03-13	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731, F&BI 807623
Date Extracted:	08/02/18	Lab ID:	807623-02 1/500
Date Analyzed:	08/02/18	Data File:	080211.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	193 d	31	163
Benzo(a)anthracene-d12	56 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	370 ve
2-Methylnaphthalene	180
1-Methylnaphthalene	76
Benz(a)anthracene	27
Chrysene	25
Benzo(a)pyrene	24
Benzo(b)fluoranthene	22
Benzo(k)fluoranthene	6.9
Indeno(1,2,3-cd)pyrene	8.7
Dibenz(a,h)anthracene	2.3

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-03-13	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731, F&BI 807623
Date Extracted:	08/02/18	Lab ID:	807623-02 1/2500
Date Analyzed:	08/03/18	Data File:	080311.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	590 d	31	163
Benzo(a)anthracene-d12	50 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	430

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-02-13	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731, F&BI 807623
Date Extracted:	08/02/18	Lab ID:	807623-04 1/5
Date Analyzed:	08/02/18	Data File:	080207.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	94	31	163
Benzo(a)anthracene-d12	96	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.027
2-Methylnaphthalene	0.035
1-Methylnaphthalene	0.020
Benz(a)anthracene	0.018
Chrysene	0.015
Benzo(a)pyrene	0.014
Benzo(b)fluoranthene	0.013
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180731, F&BI 807623
Date Extracted:	08/02/18	Lab ID:	08-1694 mb 1/5
Date Analyzed:	08/02/18	Data File:	080206.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	99	31	163
Benzo(a)anthracene-d12	101	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-03-13	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731, F&BI 807623
Date Extracted:	08/02/18	Lab ID:	807623-02
Date Analyzed:	08/02/18	Data File:	807623-02.082
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	27.2

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-02-13	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731, F&BI 807623
Date Extracted:	08/02/18	Lab ID:	807623-04
Date Analyzed:	08/02/18	Data File:	807623-04.085
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180731, F&BI 807623
Date Extracted:	08/02/18	Lab ID:	I8-499 mb
Date Analyzed:	08/02/18	Data File:	I8-499 mb.080
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Date of Report: 08/07/18
Date Received: 07/31/18
Project: SOU_ 1249-001-05_ 20180731, F&BI 807623

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807623-04 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.024	79	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.031	79	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.017	82	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.016	78	23-144
Chrysene	mg/kg (ppm)	0.17	0.014	78	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.011	89	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	83	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.012	84	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	88	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	86	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	93	95	58-121	2
2-Methylnaphthalene	mg/kg (ppm)	0.17	100	101	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	98	97	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	96	97	51-115	1
Chrysene	mg/kg (ppm)	0.17	96	96	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	107	104	56-123	3
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	97	98	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	94	98	51-118	4
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	98	101	49-148	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	95	98	50-141	3

Date of Report: 08/07/18
Date Received: 07/31/18
Project: SOU_ 1249-001-05_ 20180731, F&BI 807623

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807623-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	20.1	71	70	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	102	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

807623

SAMPLE CHAIN OF CUSTODY

ME 07-31-18

Page # 1 of 1 COC

Send report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.	PO #
Ballard Blocks II Property	1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
A-03-13	A-03	13	01	7/31/18	0942	S	1						~~HOLD~~
B-03-13	B-03	13	02		0952	S	1	X	X				X - per SW 8/2/18
C-04-13	C-04	13	03		1015	S	1						ME
A-02-13	A-02	13	04		0957	S	1	X	X				24 hour TAT
B-02-13	B-02	13	05		1002	S	1						
								SW					Samples ~~received~~ at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/31/18	15:45
Received by: Erika Vossbeck	ERIKA VOSSBECK	SES	7/31/18	15:45
Relinquished by: Erika Vossbeck	ERIKA VOSSBECK	SES	7/31/18	16:48
Received by:	Eric Young	FCR	7-1/18	16:48

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 7, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on July 31, 2018 from the SOU_1249-001-05_ 20180731, F&BI 807625 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0807R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 31, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180731, F&BI 807625 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
807625 -01	A-03-14
807625 -02	B-03-14
807625 -03	C-04-14

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-03-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731, F&BI 807625
Date Extracted:	08/02/18	Lab ID:	807625-02 1/500
Date Analyzed:	08/02/18	Data File:	080212.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	200 d	31	163
Benzo(a)anthracene-d12	61 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	370 ve
2-Methylnaphthalene	170
1-Methylnaphthalene	80
Benz(a)anthracene	26
Chrysene	24
Benzo(a)pyrene	23
Benzo(b)fluoranthene	20
Benzo(k)fluoranthene	8.4
Indeno(1,2,3-cd)pyrene	8.7
Dibenz(a,h)anthracene	2.3

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-03-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731, F&BI 807625
Date Extracted:	08/02/18	Lab ID:	807625-02 1/2500
Date Analyzed:	08/03/18	Data File:	080312.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	590 d	31	163
Benzo(a)anthracene-d12	40 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	530
2-Methylnaphthalene	240
1-Methylnaphthalene	110
Benz(a)anthracene	34
Chrysene	32
Benzo(a)pyrene	29
Benzo(b)fluoranthene	24
Benzo(k)fluoranthene	10
Indeno(1,2,3-cd)pyrene	13
Dibenz(a,h)anthracene	<5

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-04-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731, F&BI 807625
Date Extracted:	08/02/18	Lab ID:	807625-03 1/5
Date Analyzed:	08/02/18	Data File:	080209.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	95	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180731, F&BI 807625
Date Extracted:	08/02/18	Lab ID:	08-1694 mb 1/5
Date Analyzed:	08/02/18	Data File:	080206.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	99	31	163
Benzo(a)anthracene-d12	101	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-03-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731, F&BI 807625
Date Extracted:	08/02/18	Lab ID:	807625-02
Date Analyzed:	08/02/18	Data File:	807625-02.086
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	29.2

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-04-14	Client:	SoundEarth Strategies
Date Received:	07/31/18	Project:	SOU_1249-001-05_ 20180731, F&BI 807625
Date Extracted:	08/02/18	Lab ID:	807625-03
Date Analyzed:	08/02/18	Data File:	807625-03.087
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	7.69

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180731, F&BI 807625
Date Extracted:	08/02/18	Lab ID:	I8-499 mb
Date Analyzed:	08/02/18	Data File:	I8-499 mb.080
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Date of Report: 08/07/18
Date Received: 07/31/18
Project: SOU_1249-001-05_ 20180731, F&BI 807625

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807623-04 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.024	79	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.031	79	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.017	82	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.016	78	23-144
Chrysene	mg/kg (ppm)	0.17	0.014	78	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.011	89	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	83	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.012	84	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	88	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	86	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	93	95	58-121	2
2-Methylnaphthalene	mg/kg (ppm)	0.17	100	101	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	98	97	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	96	97	51-115	1
Chrysene	mg/kg (ppm)	0.17	96	96	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	107	104	56-123	3
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	97	98	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	94	98	51-118	4
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	98	101	49-148	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	95	98	50-141	3

Date of Report: 08/07/18
Date Received: 07/31/18
Project: SOU_1249-001-05_ 20180731, F&BI 807625

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807623-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	20.1	71	70	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	102	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

807625

SAMPLE CHAIN OF CUSTODY

ME 07-31-18 Page # 1 of 1 COC

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
A-03-14	A-03	14	01	7/31/18	0940	S	1						~~HOLD~~
B-03-14	B-03	14	02	7/31/18	0950	S	1	X	X				X-ppe SW 8/2/18
C-04-14	C-04	14	03	7/31/18	1012	S	1	X	X				ME
													24 hour TAT
													Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	7/31/18	15:46
Received by: Erika Vossbeck	ERIKA VOSSBECK	SES	7/31/18	15:46
Relinquished by: Erika Vossbeck	ERIKA VOSSBECK	SES	7/31/18	16:48
Received by:	Eric Hanson	FedEx	8/1/18	1600

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 7, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on August 2, 2018 from the SOU_1249-001-05_ 20180802, F&BI 808068 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0807R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 2, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180802, F&BI 808068 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
808068 -01	C-02-14
808068 -02	C-03-14
808068 -03	Temp Blank-20180802
808068 -04	Field Blank-20180802

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-02-14	Client:	SoundEarth Strategies
Date Received:	08/02/18	Project:	SOU_1249-001-05_ 20180802
Date Extracted:	08/03/18	Lab ID:	808068-01
Date Analyzed:	08/03/18	Data File:	808068-01.044
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	27.4

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-03-14	Client:	SoundEarth Strategies
Date Received:	08/02/18	Project:	SOU_1249-001-05_ 20180802
Date Extracted:	08/03/18	Lab ID:	808068-02
Date Analyzed:	08/03/18	Data File:	808068-02.045
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	91.7

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180802
Date Extracted:	08/03/18	Lab ID:	I8-499 mb2
Date Analyzed:	08/03/18	Data File:	I8-499 mb2.043
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-02-14	Client:	SoundEarth Strategies
Date Received:	08/02/18	Project:	SOU_1249-001-05_ 20180802
Date Extracted:	08/03/18	Lab ID:	808068-01 1/5
Date Analyzed:	08/03/18	Data File:	080305.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	88	31	163
Benzo(a)anthracene-d12	94	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-03-14	Client:	SoundEarth Strategies
Date Received:	08/02/18	Project:	SOU_1249-001-05_ 20180802
Date Extracted:	08/03/18	Lab ID:	808068-02 1/5
Date Analyzed:	08/03/18	Data File:	080306.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	31	163
Benzo(a)anthracene-d12	94	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180802
Date Extracted:	08/03/18	Lab ID:	08-1694 mb2 1/5
Date Analyzed:	08/03/18	Data File:	080304.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	96	31	163
Benzo(a)anthracene-d12	99	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 08/07/18
Date Received: 08/02/18
Project: SOU_ 1249-001-05_ 20180802, F&BI 808068

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807623-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	20.1	71	70	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	102	85-115

Date of Report: 08/07/18
Date Received: 08/02/18
Project: SOU_ 1249-001-05_ 20180802, F&BI 808068

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 807623-04 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.024	79	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.031	79	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.017	82	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.016	78	23-144
Chrysene	mg/kg (ppm)	0.17	0.014	78	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.011	89	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	83	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.012	84	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	88	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	86	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	93	95	58-121	2
2-Methylnaphthalene	mg/kg (ppm)	0.17	100	101	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	98	97	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	96	97	51-115	1
Chrysene	mg/kg (ppm)	0.17	96	96	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	107	104	56-123	3
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	97	98	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	94	98	51-118	4
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	98	101	49-148	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	95	98	50-141	3

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

808068

SAMPLE CHAIN OF CUSTODY

IYE 08-02-18

AI3

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO. Ballard Blocks II Property

PO # 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24 hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
C-02-14	C-02	14	01	8/2/14	1010	S	1	X	X				
C-03-14	C-03	14	02		1015	S	1	X	X				
Temp Blank-20160802	-	-	03		-	W	1						
Field Blank-20160802	-	-	04		-	W	2						

SHLW

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	8/2/14	1538
Received by:	DOD	FedEx	8-2-18	15:38
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 10, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on August 2, 2018 from the SOU_ 1249-001-05_ 20180802, F&BI 808069 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0810R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 2, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180802, F&BI 808069 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
808069 -01	C-02-13
808069 -02	C-03-13

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-02-13	Client:	SoundEarth Strategies
Date Received:	08/02/18	Project:	SOU_ 1249-001-05_ 20180802
Date Extracted:	08/06/18	Lab ID:	808069-01
Date Analyzed:	08/06/18	Data File:	808069-01.091
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	32.6

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-03-13	Client:	SoundEarth Strategies
Date Received:	08/02/18	Project:	SOU_ 1249-001-05_ 20180802
Date Extracted:	08/06/18	Lab ID:	808069-02
Date Analyzed:	08/06/18	Data File:	808069-02.092
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	34.0

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180802
Date Extracted:	08/06/18	Lab ID:	I8-504 mb
Date Analyzed:	08/06/18	Data File:	I8-504 mb.098
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-02-13	Client:	SoundEarth Strategies
Date Received:	08/02/18	Project:	SOU_ 1249-001-05_ 20180802
Date Extracted:	08/06/18	Lab ID:	808069-01 1/5
Date Analyzed:	08/06/18	Data File:	080607.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	101	31	163
Benzo(a)anthracene-d12	103	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-03-13	Client:	SoundEarth Strategies
Date Received:	08/02/18	Project:	SOU_ 1249-001-05_ 20180802
Date Extracted:	08/06/18	Lab ID:	808069-02 1/5
Date Analyzed:	08/06/18	Data File:	080608.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	99	31	163
Benzo(a)anthracene-d12	107	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180802
Date Extracted:	08/06/18	Lab ID:	08-1720 mb 1/5
Date Analyzed:	08/06/18	Data File:	080606.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	102	31	163
Benzo(a)anthracene-d12	102	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 08/10/18
Date Received: 08/02/18
Project: SOU_ 1249-001-05_ 20180802, F&BI 808069

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 808069-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	25.5	0 b	119 b	70-130	200 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	90	85-115

Date of Report: 08/10/18
Date Received: 08/02/18
Project: SOU_ 1249-001-05_ 20180802, F&BI 808069

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 808069-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	92	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	96	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	92	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	91	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	89	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	96	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	88	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	94	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	93	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	91	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	93	97	58-121	4
2-Methylnaphthalene	mg/kg (ppm)	0.17	98	103	58-123	5
1-Methylnaphthalene	mg/kg (ppm)	0.17	95	100	60-124	5
Benz(a)anthracene	mg/kg (ppm)	0.17	95	99	51-115	4
Chrysene	mg/kg (ppm)	0.17	95	98	55-129	3
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	100	105	56-123	5
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	95	95	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	96	99	51-118	3
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	100	104	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	95	101	50-141	6

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

808069

SAMPLE CHAIN OF CUSTODY

ME 08-02-18

Page # 1 of 1 001

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
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: CPAHs by 8270D Naphthalene/1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
C-02-13	C-02	13	01	8/2/18	1012	S	1	X	X				~~HOLD~~
C-03-13	C-03	13	02	8/2/18	1017	S	1	X	X				1

X - 24 h TAT per SW 8/3/18 ME

SRW

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	8/2/18	1539
Received by:	DOD	FEDEX	8-2-18	15.39
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 10, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on August 7, 2018 from the SOU_1249-001-05_ 20180807, F&BI 808170 project. There are 16 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0810R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 7, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180807, F&BI 808170 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
808170 -01	EX-B40-13
808170 -02	B-03-12
808170 -03	EX-MW13-13
808170 -04	C-03-12
808170 -05	C-02-12
808170 -06	Temp Blank-20180807
808170 -07	Field Blank-20180807

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B40-13	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	808170-01
Date Analyzed:	08/08/18	Data File:	808170-01.066
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.85

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-03-12	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	808170-02
Date Analyzed:	08/08/18	Data File:	808170-02.067
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	6.59

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-MW13-13	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	808170-03
Date Analyzed:	08/08/18	Data File:	808170-03.073
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-03-12	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	808170-04
Date Analyzed:	08/08/18	Data File:	808170-04.074
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	11.7

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-02-12	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	808170-05
Date Analyzed:	08/08/18	Data File:	808170-05.075
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.05

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	I8-507 mb
Date Analyzed:	08/08/18	Data File:	I8-507 mb.071
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B40-13	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	808170-01 1/5
Date Analyzed:	08/08/18	Data File:	080807.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	98	31	163
Benzo(a)anthracene-d12	109	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.064
2-Methylnaphthalene	0.012
1-Methylnaphthalene	0.21
Benz(a)anthracene	0.53
Chrysene	0.47
Benzo(a)pyrene	0.49
Benzo(b)fluoranthene	0.44
Benzo(k)fluoranthene	0.13
Indeno(1,2,3-cd)pyrene	0.20
Dibenz(a,h)anthracene	0.056

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-03-12	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	808170-02 1/250
Date Analyzed:	08/08/18	Data File:	080811.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	132 d	31	163
Benzo(a)anthracene-d12	118 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	13
2-Methylnaphthalene	4.8
1-Methylnaphthalene	5.9
Benz(a)anthracene	5.1
Chrysene	4.5
Benzo(a)pyrene	4.6
Benzo(b)fluoranthene	4.4
Benzo(k)fluoranthene	1.4
Indeno(1,2,3-cd)pyrene	1.8
Dibenz(a,h)anthracene	0.56

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-MW13-13	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	808170-03 1/5
Date Analyzed:	08/08/18	Data File:	080808.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	31	163
Benzo(a)anthracene-d12	92	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-03-12	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	808170-04 1/5
Date Analyzed:	08/08/18	Data File:	080809.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	94	31	163
Benzo(a)anthracene-d12	94	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	0.022
1-Methylnaphthalene	0.014
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-02-12	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	808170-05 1/5
Date Analyzed:	08/08/18	Data File:	080810.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	96	31	163
Benzo(a)anthracene-d12	98	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.062
2-Methylnaphthalene	0.034
1-Methylnaphthalene	0.018
Benz(a)anthracene	0.049
Chrysene	0.047
Benzo(a)pyrene	0.051
Benzo(b)fluoranthene	0.057
Benzo(k)fluoranthene	0.016
Indeno(1,2,3-cd)pyrene	0.029
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	08-1730 mb 1/5
Date Analyzed:	08/08/18	Data File:	080806.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	102	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 08/10/18
Date Received: 08/07/18
Project: SOU_ 1249-001-05_ 20180807, F&BI 808170

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 808170-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	6.76	88	86	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	90	85-115

Date of Report: 08/10/18
Date Received: 08/07/18
Project: SOU_ 1249-001-05_ 20180807, F&BI 808170

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 808170-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.052	67 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.0093	88	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.17	12 b	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.43	0 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.38	0 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.35	0 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.10	47 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.40	0 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.16	13 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.046	59 b	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	92	91	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	96	94	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	94	90	60-124	4
Benz(a)anthracene	mg/kg (ppm)	0.17	90	89	51-115	1
Chrysene	mg/kg (ppm)	0.17	89	91	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	101	100	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	98	94	54-131	4
Benzo(a)pyrene	mg/kg (ppm)	0.17	91	91	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	86	87	49-148	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	87	87	50-141	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

808170

SAMPLE CHAIN OF CUSTODY ME 8/7/18 VW1/BI2

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24 hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
EV-B40-13	B40	13	01	8/7/18	1155	S	1	X	X				
B-03-12	B-03	12	02		1210	S	1	X	X				
EX-MW13-13	MW13	13	03		1218	S	1	X	X				
C-03-12	C-03	12	04		1228	S	1	X	X				
C-02-12	C-02	12	05		1142	S	1	X	X				
Temp Blank-20180807	—	—	06		—	W	1						
Field Blank-20180807	—	—	07AB		—	W	2						

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	8/7/18	1456
Received by: Liza Radford	Liza Radford	FBI	8/7/18	1456
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 13, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on August 7, 2018 from the SOU_ 1249-001-05_ 20180807, F&BI 808171 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0813R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 7, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180807, F&BI 808171 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
808171 -01	EX-B40-11
808171 -02	B-03-11
808171 -03	EX-MW13-11
808171 -04	C-03-11
808171 -05	C-02-11

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-03-11	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_ 1249-001-05_ 20180807
Date Extracted:	08/09/18	Lab ID:	808171-02
Date Analyzed:	08/09/18	Data File:	808171-02.050
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.07

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180807
Date Extracted:	08/09/18	Lab ID:	I8-507 mb2
Date Analyzed:	08/09/18	Data File:	I8-507 mb2.049
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-03-11	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_ 1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	808171-02 1/5
Date Analyzed:	08/08/18	Data File:	080816.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	89	31	163
Benzo(a)anthracene-d12	84	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	08-1730 mb 1/5
Date Analyzed:	08/08/18	Data File:	080806.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	102	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 08/13/18
Date Received: 08/07/18
Project: SOU_ 1249-001-05_ 20180807, F&BI 808171

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 808170-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	6.76	88	86	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	90	85-115

Date of Report: 08/13/18
Date Received: 08/07/18
Project: SOU_ 1249-001-05_ 20180807, F&BI 808171

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 808170-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.052	67 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.0093	88	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.17	12 b	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.43	0 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.38	0 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.35	0 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.10	47 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.40	0 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.16	13 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.046	59 b	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	92	91	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	96	94	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	94	90	60-124	4
Benz(a)anthracene	mg/kg (ppm)	0.17	90	89	51-115	1
Chrysene	mg/kg (ppm)	0.17	89	91	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	101	100	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	98	94	54-131	4
Benzo(a)pyrene	mg/kg (ppm)	0.17	91	91	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	86	87	49-148	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	87	87	50-141	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

808171

SAMPLE CHAIN OF CUSTODY

ME 08/07/18

Page # 1 of 1 D02

Send Report to Chris Carter; Chris Cass

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) Sarah Walter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
(X) RUSH 24 hour TAT
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
EV-B40-11	B40	11	01	8/7/18	1159	S	1						~~HOLD~~
B-03-11	B-03	11	02	"	1212	S	1	X	X				"
EV-MW3-11	MW3	11	03	"	1222	S	1						"
C-03-11	C-03	11	04	"	1230	S	1						"
C-02-11	C-02	11	05	"	1145	S	1						"

X-pe SW 8/8/18 ME

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Walter	Sarah Walter	SES	8/7/18	1456
Received by: Liza Radford	Liza Radford	FBI	8/7/18	1456
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.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 13, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on August 7, 2018 from the SOU_ 1249-001-05_ 20180807, F&BI 808172 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0813R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 7, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180807, F&BI 808172 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
808172 -01	EX-B40-12
808172 -02	EX-MW13-12

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B40-12	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_ 1249-001-05_ 20180807
Date Extracted:	08/09/18	Lab ID:	808172-01
Date Analyzed:	08/09/18	Data File:	808172-01.053
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.11

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180807
Date Extracted:	08/09/18	Lab ID:	I8-507 mb2
Date Analyzed:	08/09/18	Data File:	I8-507 mb2.049
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B40-12	Client:	SoundEarth Strategies
Date Received:	08/07/18	Project:	SOU_ 1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	808172-01 1/5
Date Analyzed:	08/08/18	Data File:	080815.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	92	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180807
Date Extracted:	08/08/18	Lab ID:	08-1730 mb 1/5
Date Analyzed:	08/08/18	Data File:	080806.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	102	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 08/13/18
Date Received: 08/07/18
Project: SOU_ 1249-001-05_ 20180807, F&BI 808172

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 808170-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	6.76	88	86	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	90	85-115

Date of Report: 08/13/18
Date Received: 08/07/18
Project: SOU_ 1249-001-05_ 20180807, F&BI 808172

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 808170-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.052	67 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.0093	88	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.17	12 b	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.43	0 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.38	0 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.35	0 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.10	47 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.40	0 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.16	13 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.046	59 b	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	92	91	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	96	94	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	94	90	60-124	4
Benz(a)anthracene	mg/kg (ppm)	0.17	90	89	51-115	1
Chrysene	mg/kg (ppm)	0.17	89	91	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	101	100	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	98	94	54-131	4
Benzo(a)pyrene	mg/kg (ppm)	0.17	91	91	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	86	87	49-148	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	87	87	50-141	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

808172

SAMPLE CHAIN OF CUSTODY

ME 08/07/18

Page # 1 of 1 BI

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
(X) RUSH 24 hour TAT
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: cPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
EX-B40-12	B40	12	01	8/7/18	1157	S	1	X	X				~~HOLD~~
EX-MW13-12	MW13	12	02	8/7/18	1220	S	1						HOLD

Notes: ~~X per SW 8/8/18~~ ME

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	8/7/18	1456
Received by: Lisa Radford	Lisa Radford	FBI	8/7/18	1466
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 15, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on August 9, 2018 from the SOU_ 1249-001-05_ 20180809, F&BI 808237 project. There are 19 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0815R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 9, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001-05_ 20180809, F&BI 808237 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
808237 -01	A-01-15
808237 -02	B-01-15
808237 -03	EX-B28-15
808237 -04	A-00-15
808237 -05	B-00-15
808237 -06	TempBlank-20180809
808237 -07	FieldBlank-20180809

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-01-15	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_ 1249-001-05_ 20180809, F&BI 808237
Date Extracted:	08/10/18	Lab ID:	808237-01
Date Analyzed:	08/10/18	Data File:	808237-01.074
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.55

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-01-15	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_ 1249-001-05_ 20180809, F&BI 808237
Date Extracted:	08/10/18	Lab ID:	808237-02
Date Analyzed:	08/10/18	Data File:	808237-02.079
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	21.0

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B28-15	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_ 1249-001-05_ 20180809, F&BI 808237
Date Extracted:	08/10/18	Lab ID:	808237-03
Date Analyzed:	08/10/18	Data File:	808237-03.080
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	134

Analysis For Total Metals By EPA Method 200.8

Client ID:	A-00-15	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_ 1249-001-05_ 20180809, F&BI 808237
Date Extracted:	08/10/18	Lab ID:	808237-04
Date Analyzed:	08/10/18	Data File:	808237-04.081
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.18

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-00-15	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_ 1249-001-05_ 20180809, F&BI 808237
Date Extracted:	08/10/18	Lab ID:	808237-05
Date Analyzed:	08/10/18	Data File:	808237-05.082
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	49.4

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180809, F&BI 808237
Date Extracted:	08/10/18	Lab ID:	I8-517 mb
Date Analyzed:	08/10/18	Data File:	I8-517 mb.077
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis for TCLP Metals By EPA Method 200.8 and 1311

Client ID:	EX-B28-15	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_ 1249-001-05_ 20180809
Date Extracted:	08/13/18	Lab ID:	808237-03
Date Analyzed:	08/14/18 11:06:59	Data File:	808237-03.030
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/L (ppm)	Operator:	AP

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0

Analysis for TCLP Metals By EPA Method 200.8 and 1311

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180809
Date Extracted:	08/13/18	Lab ID:	I8-520 mb
Date Analyzed:	08/14/18 10:57:37	Data File:	I8-520 mb.028
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/L (ppm)	Operator:	AP

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Arsenic	<1	5.0

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-01-15	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_ 1249-001-05_ 20180809, F&BI 808237
Date Extracted:	08/09/18	Lab ID:	808237-01 1/5
Date Analyzed:	08/09/18	Data File:	080914.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	103	31	163
Benzo(a)anthracene-d12	107	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-01-15	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_ 1249-001-05_ 20180809, F&BI 808237
Date Extracted:	08/09/18	Lab ID:	808237-02 1/5
Date Analyzed:	08/09/18	Data File:	080916.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	101	31	163
Benzo(a)anthracene-d12	105	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B28-15	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_ 1249-001-05_ 20180809, F&BI 808237
Date Extracted:	08/09/18	Lab ID:	808237-03 1/5
Date Analyzed:	08/09/18	Data File:	080917.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	31	163
Benzo(a)anthracene-d12	96	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A-00-15	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_ 1249-001-05_ 20180809, F&BI 808237
Date Extracted:	08/09/18	Lab ID:	808237-04 1/5
Date Analyzed:	08/09/18	Data File:	080918.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	98	31	163
Benzo(a)anthracene-d12	100	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-00-15	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_ 1249-001-05_ 20180809, F&BI 808237
Date Extracted:	08/09/18	Lab ID:	808237-05 1/5
Date Analyzed:	08/09/18	Data File:	080919.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	96	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180809, F&BI 808237
Date Extracted:	08/09/18	Lab ID:	08-1811 mb 1/5
Date Analyzed:	08/09/18	Data File:	080913.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	102	31	163
Benzo(a)anthracene-d12	110	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 08/15/18
Date Received: 08/09/18
Project: SOU_ 1249-001-05_ 20180809, F&BI 808237

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 808237-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	33.1	0 b	0 b	70-130	0 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	99	85-115

Date of Report: 08/15/18
Date Received: 08/09/18
Project: SOU_ 1249-001-05_ 20180809, F&BI 808237

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TCLP METALS USING EPA METHODS 200.8 AND 1311

Laboratory Code: 808237-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/L (ppm)	1.0	<1	105	104	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/L (ppm)	1.0	102	85-115

Date of Report: 08/15/18
Date Received: 08/09/18
Project: SOU_ 1249-001-05_ 20180809, F&BI 808237

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 808237-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	92	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	97	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	96	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	93	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	94	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	99	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	92	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	93	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	104	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	103	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	90	90	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	94	96	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	91	92	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	94	93	51-115	1
Chrysene	mg/kg (ppm)	0.17	92	93	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	102	102	56-123	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	91	91	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	96	94	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	110	106	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	107	105	50-141	2

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

808237

SAMPLE CHAIN OF CUSTODY

ME 08-09-18

Page # 1 of 1

BTZ UWL

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	TCLP As ~~BTEX~~	NWTPH-Dx	Notes
A-01-15	A-01	15	01	8/9/18	0900	S	1	X	X				
B-01-15	B-01	15	02		0930	S	1	X	X				(X) per cc 8/10/18
DV-B28-15	B28	15	03		0923	S	1	X	X				48 hour TAT
A-00-15	A-00	15	04		0910	S	1	X	X		(X)		ML
B-00-15	B-00	15	05		0945	S	1	X	X				
TempBlank-20180809	—	—	06		—	W	1						
FieldBlank-20180809	—	—	07A-B		—	W	2						

SMW

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	8/9/18	1115
Received by:	Liz Webber-Bj	FedEx	8/9/18	1145
Relinquished by:				
Received by:		Samples received at 5 °C		

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 15, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on August 9, 2018 from the SOU_1249-001-05_ 20180809, F&BI 808238 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0815R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 9, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180809, F&BI 808238 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
808238 -01	A-01-14
808238 -02	A-00-14
808238 -03	EX-B28-14
808238 -04	B-01-14
808238 -05	B-00-14

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B28-14	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_1249-001-05_ 20180809
Date Extracted:	08/13/18	Lab ID:	808238-03 1/5
Date Analyzed:	08/13/18	Data File:	081306.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-01-14	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_1249-001-05_ 20180809
Date Extracted:	08/13/18	Lab ID:	808238-04 1/5
Date Analyzed:	08/13/18	Data File:	081307.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	88	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-00-14	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_1249-001-05_ 20180809
Date Extracted:	08/13/18	Lab ID:	808238-05 1/5
Date Analyzed:	08/13/18	Data File:	081308.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	31	163
Benzo(a)anthracene-d12	87	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180809
Date Extracted:	08/13/18	Lab ID:	08-1821 mb 1/5
Date Analyzed:	08/13/18	Data File:	081305.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	85	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B28-14	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_1249-001-05_ 20180809
Date Extracted:	08/13/18	Lab ID:	808238-03
Date Analyzed:	08/13/18	Data File:	808238-03.039
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	10.1

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-01-14	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_1249-001-05_ 20180809
Date Extracted:	08/13/18	Lab ID:	808238-04
Date Analyzed:	08/13/18	Data File:	808238-04.042
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	17.2

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-00-14	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_1249-001-05_ 20180809
Date Extracted:	08/13/18	Lab ID:	808238-05
Date Analyzed:	08/13/18	Data File:	808238-05.043
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	41.2

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180809
Date Extracted:	08/13/18	Lab ID:	I8-519 mb
Date Analyzed:	08/13/18	Data File:	I8-519 mb.037
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Date of Report: 08/15/18
Date Received: 08/09/18
Project: SOU_1249-001-05_ 20180809, F&BI 808238

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 808238-05 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	89	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	86	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	82	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	82	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	85	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	83	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	84	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	93	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	87	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	86	88	58-121	2
2-Methylnaphthalene	mg/kg (ppm)	0.17	91	94	58-123	3
1-Methylnaphthalene	mg/kg (ppm)	0.17	89	92	60-124	3
Benz(a)anthracene	mg/kg (ppm)	0.17	85	86	51-115	1
Chrysene	mg/kg (ppm)	0.17	84	85	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	89	90	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	86	86	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	85	85	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	96	97	49-148	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	95	50-141	2

Date of Report: 08/15/18
Date Received: 08/09/18
Project: SOU_1249-001-05_ 20180809, F&BI 808238

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 808238-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	8.08	71	78	70-130	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

808238

SAMPLE CHAIN OF CUSTODY

ME 08/09/18 | Page # 1 of 1 | BT

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
(X) RUSH 24 hour TAT
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes: X-per CC 8/10/18 ME 24 hr TAT
A-01-14	A-01	14	01	8/9/18	0901								HOLD
A-00-14	A-00	14	02		0912								
EX-B28-14	B28	14	03		0925			X	X				
B-01-14	B01	14	04		0932			X	X				
B-00-14	B00	14	05		0948			X	X				
									CHW				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	8/9/18	1115
Received by: Liz Webber-Braa	Liz Webber-Braa	FedEx	8/9/18	115
Relinquished by:				
Received by:		Samples received at 5 °C		

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 17, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on August 9, 2018 from the SOU_1249-001-05_ 20180809, F&BI 808239 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0817R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 9, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180809, F&BI 808239 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
808239 -01	A-01-13
808239 -02	A-00-13
808239 -03	B-01-13
808239 -04	B-00-13

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-00-13	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_1249-001-05_ 20180809
Date Extracted:	08/15/18	Lab ID:	808239-04
Date Analyzed:	08/15/18	Data File:	808239-04.030
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
Arsenic	30.4

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180809
Date Extracted:	08/15/18	Lab ID:	I8-526 mb
Date Analyzed:	08/15/18	Data File:	I8-526 mb.028
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-00-13	Client:	SoundEarth Strategies
Date Received:	08/09/18	Project:	SOU_1249-001-05_ 20180809
Date Extracted:	08/14/18	Lab ID:	808239-04 1/5
Date Analyzed:	08/14/18	Data File:	081413.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	68	31	163
Benzo(a)anthracene-d12	63	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180809
Date Extracted:	08/14/18	Lab ID:	08-1821 mb2 1/5
Date Analyzed:	08/14/18	Data File:	081412.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	89	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 08/17/18
Date Received: 08/09/18
Project: SOU_ 1249-001-05_ 20180809, F&BI 808239

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 808239-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	21.9	0 b	265 b	70-130	200 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	98	85-115

Date of Report: 08/17/18
Date Received: 08/09/18
Project: SOU_ 1249-001-05_ 20180809, F&BI 808239

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 808238-05 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	89	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	86	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	82	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	82	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	85	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	83	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	84	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	93	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	87	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	86	88	58-121	2
2-Methylnaphthalene	mg/kg (ppm)	0.17	91	94	58-123	3
1-Methylnaphthalene	mg/kg (ppm)	0.17	89	92	60-124	3
Benz(a)anthracene	mg/kg (ppm)	0.17	85	86	51-115	1
Chrysene	mg/kg (ppm)	0.17	84	85	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	89	90	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	86	86	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	85	85	51-118	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	96	97	49-148	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	95	50-141	2

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

808239

SAMPLE CHAIN OF CUSTODY

ME 08/09/18

Page # 1 of 1 BT

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
(X) RUSH 24 hr TAT per SW
Rush charges authorized by: 8/14/16

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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
A-01-13	A-01	13	01	8/9/18	0902	S	1						HOLD
A-00-13	A-00	13	02	"	0913	S	1						X-per SW 8/14/16 ME
B-01-13	B-01	13	03	"	0935	S	1						"
B-00-13	B-00	13	04	"	0950	S	1	X	X				"

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	8/9/18	1115
Received by:	Liz Webber-Bruya	FedEx	8/9/18	1115
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 23, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on August 20, 2018 from the SOU_1249-001-05_ 20180820, F&BI 808457 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0823R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 20, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180820, F&BI 808457 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
808457 -01	B-00-12
808457 -02	B-00-11
808457 -03	TempBlank-20180820
808457 -04	FieldBlank-20180820

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-00-12	Client:	SoundEarth Strategies
Date Received:	08/20/18	Project:	SOU_1249-001-05_ 20180820
Date Extracted:	08/21/18	Lab ID:	808457-01
Date Analyzed:	08/21/18	Data File:	808457-01.113
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.29

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180820
Date Extracted:	08/21/18	Lab ID:	I8-538 mb
Date Analyzed:	08/21/18	Data File:	I8-538 mb.111
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-00-12	Client:	SoundEarth Strategies
Date Received:	08/20/18	Project:	SOU_1249-001-05_ 20180820
Date Extracted:	08/21/18	Lab ID:	808457-01 1/5
Date Analyzed:	08/21/18	Data File:	082105.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	88	31	163
Benzo(a)anthracene-d12	96	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.011
Chrysene	0.013
Benzo(a)pyrene	0.011
Benzo(b)fluoranthene	0.011
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180820
Date Extracted:	08/21/18	Lab ID:	08-1863 mb2 1/5
Date Analyzed:	08/21/18	Data File:	082104.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	93	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 08/23/18
Date Received: 08/20/18
Project: SOU_ 1249-001-05_ 20180820, F&BI 808457

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 808457-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	7.99	51 b	56 b	70-130	9 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	113	85-115

Date of Report: 08/23/18
Date Received: 08/20/18
Project: SOU_ 1249-001-05_ 20180820, F&BI 808457

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 808436-14 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	85	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.015	85	23-144
Chrysene	mg/kg (ppm)	0.17	0.016	82	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.017	90	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	85	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.015	80	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.0099	82	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	81	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	93	93	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	93	93	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	94	93	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	93	92	51-115	1
Chrysene	mg/kg (ppm)	0.17	97	95	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	96	98	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	94	92	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	86	87	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	103	98	49-148	5
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	103	99	50-141	4

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

808457

SAMPLE CHAIN OF CUSTODY

ME 8/20/18

VWI/AI1

Page # 1 of 1

~~Send Report~~ to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO. Ballard Blocks II Property

PO # 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
B-00-12	B-00	12	01	8/20/18		S	1	X	X				
B-00-11	B-00	11	02	"		S	1						HOLD
TempBlank-20180820	—	—	03	"		W	1						"
FieldBlank-20180820	—	—	04 A-B	"		W	2						"

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	8/20/18	1530
Received by:	TOM LADD	FBI	08.20.18	1530
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 6, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on August 30, 2018 from the SOU_1249-001-05_ 20180830, F&BI 808681 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0906R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 30, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180830, F&BI 808681 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
808681 -01	D-03-13.5
808681 -02	E-03-13.5

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-03-13.5	Client:	SoundEarth Strategies
Date Received:	08/30/18	Project:	SOU_1249-001-05_ 20180830
Date Extracted:	08/30/18	Lab ID:	808681-01 1/5
Date Analyzed:	08/31/18	Data File:	083110.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	31	163
Benzo(a)anthracene-d12	74	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.025
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-03-13.5	Client:	SoundEarth Strategies
Date Received:	08/30/18	Project:	SOU_1249-001-05_ 20180830
Date Extracted:	08/30/18	Lab ID:	808681-02 1/5
Date Analyzed:	08/31/18	Data File:	083117.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	94	31	163
Benzo(a)anthracene-d12	94	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.15
2-Methylnaphthalene	0.052
1-Methylnaphthalene	0.039
Benz(a)anthracene	0.11
Chrysene	0.097
Benzo(a)pyrene	0.090
Benzo(b)fluoranthene	0.091
Benzo(k)fluoranthene	0.033
Indeno(1,2,3-cd)pyrene	0.043
Dibenz(a,h)anthracene	0.011

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180830
Date Extracted:	08/30/18	Lab ID:	08-1936 mb 1/5
Date Analyzed:	08/30/18	Data File:	083006.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	89	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-03-13.5	Client:	SoundEarth Strategies
Date Received:	08/30/18	Project:	SOU_1249-001-05_ 20180830
Date Extracted:	08/31/18	Lab ID:	808681-01
Date Analyzed:	08/31/18	Data File:	808681-01.049
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
Arsenic	16.1

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-03-13.5	Client:	SoundEarth Strategies
Date Received:	08/30/18	Project:	SOU_1249-001-05_ 20180830
Date Extracted:	08/31/18	Lab ID:	808681-02
Date Analyzed:	08/31/18	Data File:	808681-02.052
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.96

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180830
Date Extracted:	08/31/18	Lab ID:	I8-569 mb
Date Analyzed:	08/31/18	Data File:	I8-569 mb.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Date of Report: 09/06/18
Date Received: 08/30/18
Project: SOU_1249-001-05_ 20180830, F&BI 808681

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 808679-06 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	112	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.78	304 b	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.71	283 b	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	88	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	87	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	120	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	109	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	88	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	94	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	97	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	91	92	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	83	85	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	89	90	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	87	88	51-115	1
Chrysene	mg/kg (ppm)	0.17	97	96	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	90	92	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	103	102	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	78	79	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	82	79	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	90	87	50-141	3

Date of Report: 09/06/18
Date Received: 08/30/18
Project: SOU_1249-001-05_ 20180830, F&BI 808681

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 808681-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	2.78	92	98	70-130	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

808681

SAMPLE CHAIN OF CUSTODY ME 08-30-18

1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO. Ballard Blocks II Property

PO # 1249-001-05

REMARKS

Page # 1 of 1

TURNAROUND TIME
Standard (2 Weeks)
~~RUSH~~ 24hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
D-03-13.5	D03	13.5	01	8/30/14	1000	S	1	X	X				
E-03-13.5	E03	13.5	02	8/30/14	1015	S	1	X	X				

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	8/30/14	1533
Received by:	DOD	FedEx	8-30-18	15:35
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 6, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on August 31, 2018 from the SOU_1249-001-05_ 20180831, F&BI 808709 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0906R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 31, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180831, F&BI 808709 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
808709 -01	EX-BO8-12.25

Benzo(b)fluoranthene in the 8270D SIM laboratory control sample exceeded the acceptance criteria. The analyte was not detected in the sample, therefore the data were acceptable.

All other quality control requirements were acceptable.

Date of Report: 09/06/18
Date Received: 08/31/18
Project: SOU_1249-001-05_ 20180831, F&BI 808709
Date Extracted: 09/04/18
Date Analyzed: 09/04/18

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 48-168)
EX-BO8-12.25 808709-01	<50	<250	82
Method Blank 08-1978 MB	<50	<250	91

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-BO8-12.25	Client:	SoundEarth Strategies
Date Received:	08/31/18	Project:	SOU_1249-001-05_ 20180831
Date Extracted:	08/31/18	Lab ID:	808709-01
Date Analyzed:	09/04/18	Data File:	808709-01.025
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.86

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_1249-001-05_ 20180831
Date Extracted:	08/31/18	Lab ID:	I8-569 mb
Date Analyzed:	08/31/18	Data File:	I8-569 mb.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-BO8-12.25	Client:	SoundEarth Strategies
Date Received:	08/31/18	Project:	SOU_1249-001-05_ 20180831
Date Extracted:	09/04/18	Lab ID:	808709-01 1/5
Date Analyzed:	09/04/18	Data File:	090406.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	90	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180831
Date Extracted:	09/04/18	Lab ID:	08-1980 mb 1/5
Date Analyzed:	09/04/18	Data File:	090405.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	92	31	163
Benzo(a)anthracene-d12	101	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 09/06/18
Date Received: 08/31/18
Project: SOU_1249-001-05_ 20180831, F&BI 808709

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 808725-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	92	88	73-135	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	90	74-139

Date of Report: 09/06/18
Date Received: 08/31/18
Project: SOU_1249-001-05_ 20180831, F&BI 808709

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 808681-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	2.78	92	98	70-130	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	99	85-115

Date of Report: 09/06/18
Date Received: 08/31/18
Project: SOU_1249-001-05_ 20180831, F&BI 808709

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 808709-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	83	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	82	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	84	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	83	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	87	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	106	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	89	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	76	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	87	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	91	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	91	90	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	90	90	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	90	92	60-124	2
Benz(a)anthracene	mg/kg (ppm)	0.17	92	93	51-115	1
Chrysene	mg/kg (ppm)	0.17	96	97	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	126 vo	122	56-123	3
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	97	101	54-131	4
Benzo(a)pyrene	mg/kg (ppm)	0.17	82	86	51-118	5
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	101	101	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	107	106	50-141	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

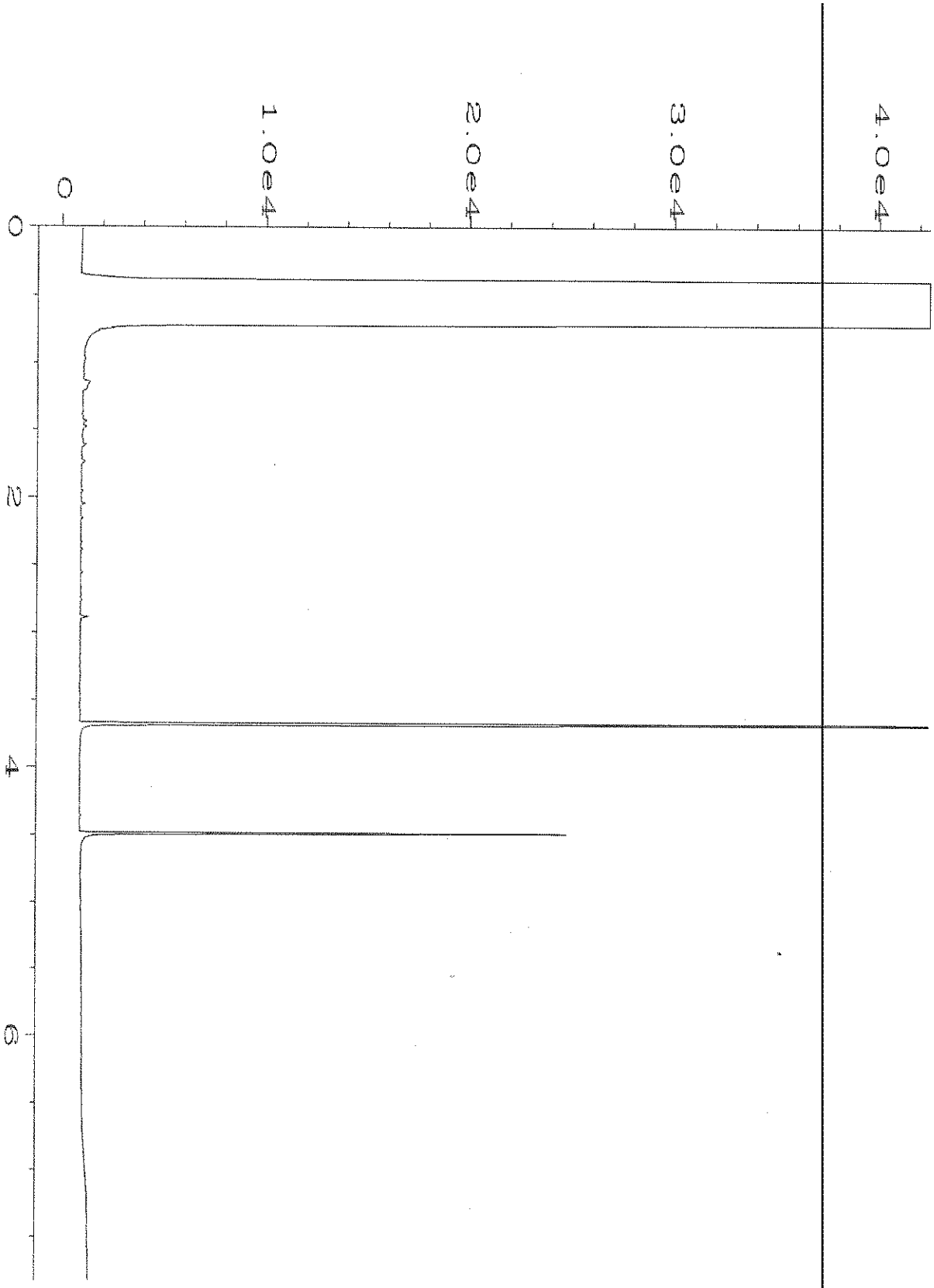
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

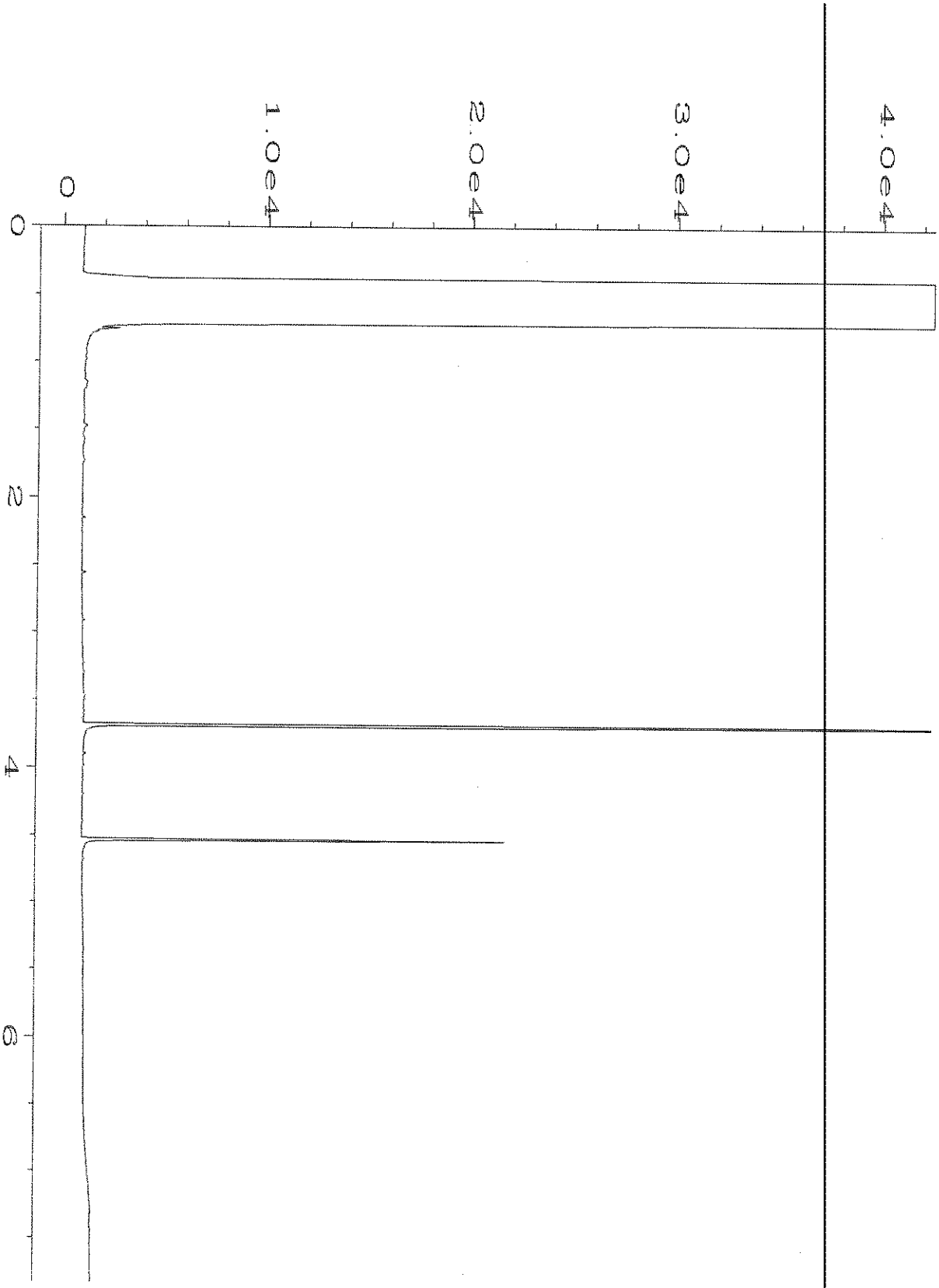
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

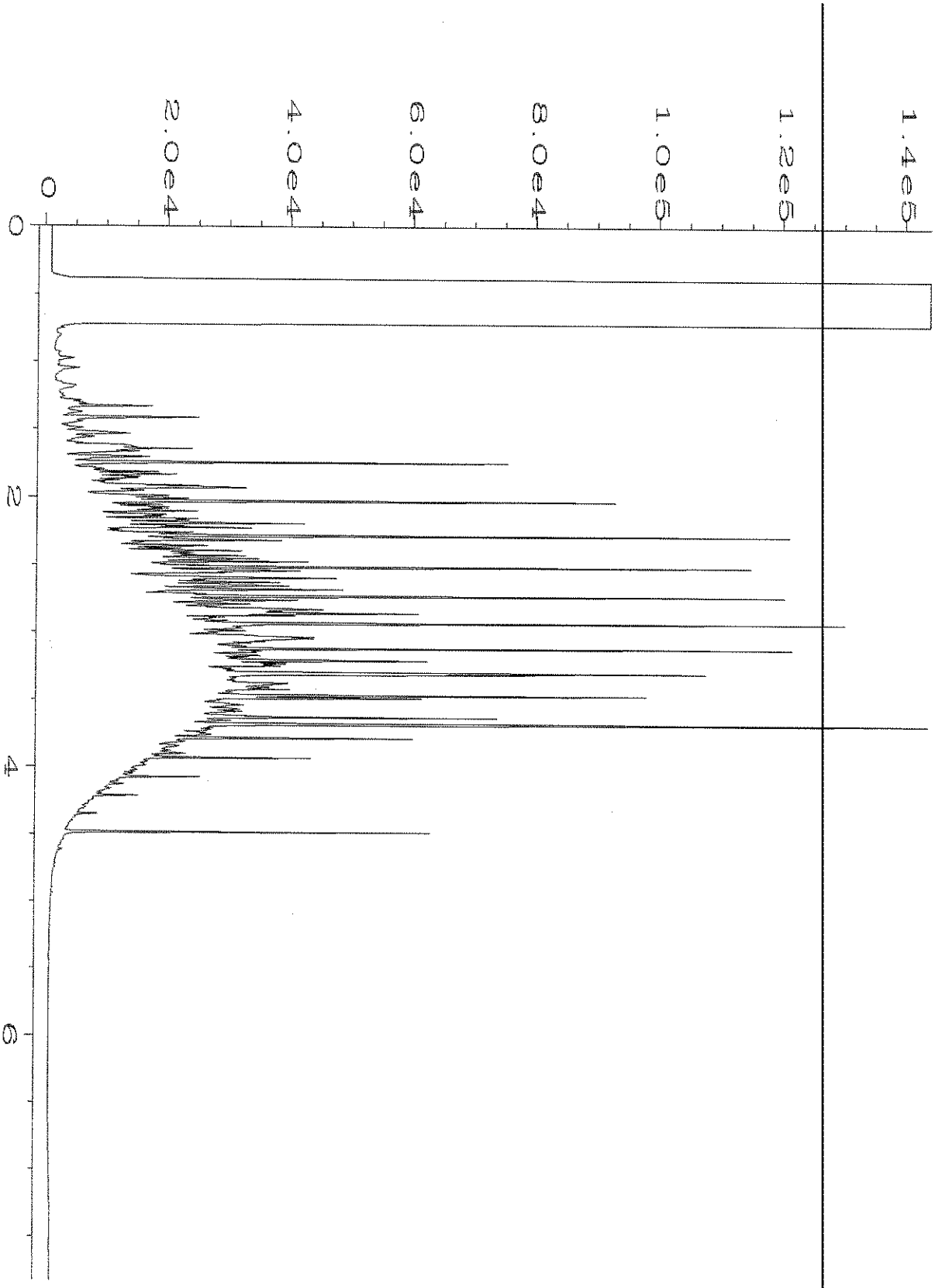
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Data File Name	: C:\HPCHEM\4\DATA\09-04-18\019F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 19
Sample Name	: 808709-01	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 04 Sep 18 12:15 PM	Instrument Method	: DX.MTH
Report Created on:	04 Sep 18 12:36 PM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\4\DATA\09-04-18\006F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 6
Sample Name	: 08-1978 mb	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 04 Sep 18 09:07 AM	Instrument Method	: DX.MTH
Report Created on:	04 Sep 18 12:36 PM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\4\DATA\09-04-18\003F0201.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 3
Sample Name	: 500 Dx 55-27C	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 04 Sep 18 06:51 AM	Instrument Method	: DX.MTH
Report Created on:	04 Sep 18 12:36 PM	Analysis Method	: DX.MTH

808709

SAMPLE CHAIN OF CUSTODY

ME 08/31/18

Page # 1 of 1 BT

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24 hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx DRPH/ORPH	Notes
EX-B08-1225	B08	1225	01	8/31/18	1035	S	1	X	X			X	

SW

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	8/31/18	1100
Received by:	James Broyles	F&B	8/31	1100
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.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 10, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on September 5, 2018 from the SOU_1249-001-05_ 20180905, F&BI 809066 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0910R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 5, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180905, F&BI 809066 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
809066 -01	E-03-13

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-03-13	Client:	SoundEarth Strategies
Date Received:	09/05/18	Project:	SOU_1249-001-05_ 20180905
Date Extracted:	09/06/18	Lab ID:	809066-01 1/50
Date Analyzed:	09/06/18	Data File:	090630.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	163 d	31	163
Benzo(a)anthracene-d12	87 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.95
2-Methylnaphthalene	1.1
1-Methylnaphthalene	1.0
Benz(a)anthracene	3.3
Chrysene	3.5
Benzo(a)pyrene	3.3
Benzo(b)fluoranthene	3.3
Benzo(k)fluoranthene	1.0
Indeno(1,2,3-cd)pyrene	1.5
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180905
Date Extracted:	09/06/18	Lab ID:	08-2018 mb 1/5
Date Analyzed:	09/06/18	Data File:	090625.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	98	31	163
Benzo(a)anthracene-d12	98	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-03-13	Client:	SoundEarth Strategies
Date Received:	09/05/18	Project:	SOU_1249-001-05_ 20180905
Date Extracted:	09/07/18	Lab ID:	809066-01
Date Analyzed:	09/07/18	Data File:	809066-01.061
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	16.7

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180905
Date Extracted:	09/07/18	Lab ID:	I8-580 mb
Date Analyzed:	09/07/18	Data File:	I8-580 mb.045
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Date of Report: 09/10/18
Date Received: 09/05/18
Project: SOU_1249-001-05_ 20180905, F&BI 809066

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 809066-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.76	12 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.94	90 b	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.81	78 b	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	2.5 ve	277 b	23-144
Chrysene	mg/kg (ppm)	0.17	2.6 ve	93 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	3.0 ve	605 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	1.1	303 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	2.7 ve	311 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.62	157 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.16	66 b	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	90	90	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	90	88	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	96	93	60-124	3
Benz(a)anthracene	mg/kg (ppm)	0.17	95	92	51-115	3
Chrysene	mg/kg (ppm)	0.17	96	98	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	99	100	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	97	101	54-131	4
Benzo(a)pyrene	mg/kg (ppm)	0.17	86	85	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	89	83	49-148	7
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	92	85	50-141	8

Date of Report: 09/10/18
Date Received: 09/05/18
Project: SOU_1249-001-05_ 20180905, F&BI 809066

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 809093-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	4.38	94	90	70-130	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	96	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

809066

SAMPLE CHAIN OF CUSTODY

ME 09/05/18

Page # 1 of 1 BT

Send Report to Chris Carter; Chris Cass

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) Sarah Wolter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24 hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
E-03-13	E03	13	01	9/5/18	1535	S	1	X	X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Wolter	Sarah Wolter	SES	9/5/18	1721
Received by:	Jen Shuman	FBI	9/5/18	1721
Relinquished by:				
Received by:		Samples received at 5 °C		

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 10, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on September 6, 2018 from the SOU_1249-001-05_ 20180906, F&BI 809075 project. There are 16 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0910R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 6, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180906, F&BI 809075 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
809075 -01	SE-Ramp01
809075 -02	SE-Ramp02
809075 -03	SE-Ramp03
809075 -04	C-01-15
809075 -05	C-01-14
809075 -06	C-00-15
809075 -07	C-00-14
809075 -08	Temp Blank-20180906
809075 -09	Field Blank-20180906

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	SE-Ramp Composite	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809075
Date Extracted:	09/06/18	Lab ID:	809075-01,,03 1/50
Date Analyzed:	09/06/18	Data File:	090631.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	115 d	31	163
Benzo(a)anthracene-d12	76 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	3.8
2-Methylnaphthalene	3.2
1-Methylnaphthalene	2.0
Benz(a)anthracene	2.7
Chrysene	2.8
Benzo(a)pyrene	2.8
Benzo(b)fluoranthene	3.0
Benzo(k)fluoranthene	0.91
Indeno(1,2,3-cd)pyrene	1.4
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-01-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809075
Date Extracted:	09/06/18	Lab ID:	809075-04 1/5
Date Analyzed:	09/06/18	Data File:	090626.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	90	31	163
Benzo(a)anthracene-d12	100	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.028
2-Methylnaphthalene	0.022
1-Methylnaphthalene	0.015
Benz(a)anthracene	0.11
Chrysene	0.12
Benzo(a)pyrene	0.14
Benzo(b)fluoranthene	0.15
Benzo(k)fluoranthene	0.052
Indeno(1,2,3-cd)pyrene	0.066
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-01-14	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809075
Date Extracted:	09/06/18	Lab ID:	809075-05 1/5
Date Analyzed:	09/06/18	Data File:	090627.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	31	163
Benzo(a)anthracene-d12	97	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-00-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809075
Date Extracted:	09/06/18	Lab ID:	809075-06 1/5
Date Analyzed:	09/06/18	Data File:	090628.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	80	31	163
Benzo(a)anthracene-d12	71	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-00-14	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809075
Date Extracted:	09/06/18	Lab ID:	809075-07 1/5
Date Analyzed:	09/06/18	Data File:	090629.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	31	163
Benzo(a)anthracene-d12	98	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180906, F&BI 809075
Date Extracted:	09/06/18	Lab ID:	08-2018 mb 1/5
Date Analyzed:	09/06/18	Data File:	090625.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	98	31	163
Benzo(a)anthracene-d12	98	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	SE-Ramp Composite	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809075
Date Extracted:	09/07/18	Lab ID:	809075-01,,03
Date Analyzed:	09/07/18	Data File:	809075-01,,03.056
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	11.4

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-01-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809075
Date Extracted:	09/07/18	Lab ID:	809075-04
Date Analyzed:	09/07/18	Data File:	809075-04.057
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.00

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-01-14	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809075
Date Extracted:	09/07/18	Lab ID:	809075-05
Date Analyzed:	09/07/18	Data File:	809075-05.058
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.38

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-00-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809075
Date Extracted:	09/07/18	Lab ID:	809075-06
Date Analyzed:	09/07/18	Data File:	809075-06.059
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	14.5

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-00-14	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809075
Date Extracted:	09/07/18	Lab ID:	809075-07
Date Analyzed:	09/07/18	Data File:	809075-07.060
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	32.0

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180906, F&BI 809075
Date Extracted:	09/07/18	Lab ID:	I8-580 mb
Date Analyzed:	09/07/18	Data File:	I8-580 mb.045
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Date of Report: 09/10/18
Date Received: 09/06/18
Project: SOU_1249-001-05_ 20180906, F&BI 809075

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 809066-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.76	12 b	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.94	90 b	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.81	78 b	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	2.5 ve	277 b	23-144
Chrysene	mg/kg (ppm)	0.17	2.6 ve	93 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	3.0 ve	605 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	1.1	303 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	2.7 ve	311 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.62	157 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.16	66 b	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	90	90	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	90	88	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	96	93	60-124	3
Benz(a)anthracene	mg/kg (ppm)	0.17	95	92	51-115	3
Chrysene	mg/kg (ppm)	0.17	96	98	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	99	100	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	97	101	54-131	4
Benzo(a)pyrene	mg/kg (ppm)	0.17	86	85	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	89	83	49-148	7
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	92	85	50-141	8

Date of Report: 09/10/18
Date Received: 09/06/18
Project: SOU_1249-001-05_ 20180906, F&BI 809075

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 809093-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	4.38	94	90	70-130	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	96	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

809075

SAMPLE CHAIN OF CUSTODY

ME 09-06-18 BI2/VW1

Page # ____ of ____

Send Report to Chris Carter; Chris Cass

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

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 24hr
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: cPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
SE-RampO1	SE-Ramp	—	01	9/6/18	1210	S	1	X	X				lab Composite
SE-RampO2	SE-Ramp	—	02		1212	S	1						SE-RampO1-03-Comp
SE-RampO3	SE-Ramp	—	03		1214	S	1						
C-01-15	C-01	15	04		1230	S	1	X	X				
C-01-14	C-01	14	05		1232	S	1	X	X				
C-00-15	C-00	15	06		1240	S	1	X	X				
C-00-14	C-00	14	07		1242	S	1	X	X				
Temp Blank-20180906	—	—	08		—	W	1						
Field Blank-20180906	—	—	09A/B		—	W	2						

Samples received at 4 °C

SAL

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Sarah Welter	SES	9/6/18	0145
Received by:	Michael Eshleman	Fahn	〃	〃
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 12, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on September 6, 2018 from the SOU_ 1249-001-05_ 20180906, F&BI 809076 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Siera Pleskac
SOU0912R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 6, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180906, F&BI 809076 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
809076 -01	C-01-13
809076 -02	C-00-13

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-00-13	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_ 1249-001-05_ 20180906
Date Extracted:	09/10/18	Lab ID:	809076-02
Date Analyzed:	09/10/18	Data File:	809076-02.131
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	13.6

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180906
Date Extracted:	09/10/18	Lab ID:	I8-590 mb
Date Analyzed:	09/10/18	Data File:	I8-590 mb.126
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	C-00-13	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_ 1249-001-05_ 20180906
Date Extracted:	09/10/18	Lab ID:	809076-02 1/5
Date Analyzed:	09/10/18	Data File:	091022.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	102	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180906
Date Extracted:	09/10/18	Lab ID:	08-2031 mb 1/5
Date Analyzed:	09/10/18	Data File:	091019.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	104	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 09/12/18
Date Received: 09/06/18
Project: SOU_1249-001-05_ 20180906, F&BI 809076

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 809121-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	3.87	74	84	70-130	13

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	77 vo	85-115

Date of Report: 09/12/18
Date Received: 09/06/18
Project: SOU_1249-001-05_ 20180906, F&BI 809076

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 809121-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	87	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	86	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	85	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	86	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	87	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	85	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	87	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	79	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	81	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	84	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	89	90	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	88	89	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	88	88	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	90	92	51-115	2
Chrysene	mg/kg (ppm)	0.17	91	93	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	89	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	91	91	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	83	84	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	90	94	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	92	95	50-141	3

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

809076

SAMPLE CHAIN OF CUSTODY

ME 09-06-18

Page # 1 of 1 BT

Send Report to Chris Carter; Chris Cass

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) Sarah Welter

PROJECT NAME/NO.	PO #
Ballard Blocks II Property	1249-001-05

REMARKS (project quote)

TURNAROUND TIME
Standard (2 Weeks)
(X) RUSH 24 hour
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: Cadmium, Lead, Mercury, cPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
C-01-13	C-01	13	01	9/4/18	1235	S	1	X	X				HOLD
C-00-13	C-00	13	02		1245	S	1	(X)	(X)				HOLD
													(X) per SW 9/7/18 ecpm
													24-hour ME
													Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	9/6/18	0145
Received by:	Michael Eckhl	FedEx	9/6/18	4
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 12, 2018

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on September 6, 2018 from the SOU_1249-001-05_ 20180906, F&BI 809093 project. There are 32 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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, Sarah Welter, Siera Pleskac
SOU0912R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 6, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20180906, F&BI 809093 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
809093 -01	D-02-15
809093 -02	EX-B05-15
809093 -03	E-02-15
809093 -04	D-00-22
809093 -05	D-00-20
809093 -06	D-00-18
809093 -07	E-00-22
809093 -08	E-01-20
809093 -09	E-01-18
809093 -10	E-01-15
809093 -11	D-01-20
809093 -12	D-01-18
809093 -13	D-01-15
809093 -14	TempBlank20180906
809093 -15	FieldBlank20180906

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-02-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-01 1/5
Date Analyzed:	09/07/18	Data File:	090721.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	74	31	163
Benzo(a)anthracene-d12	72	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.13
2-Methylnaphthalene	0.028
1-Methylnaphthalene	0.013
Benz(a)anthracene	0.064
Chrysene	0.066
Benzo(a)pyrene	0.067
Benzo(b)fluoranthene	0.091
Benzo(k)fluoranthene	0.025
Indeno(1,2,3-cd)pyrene	0.044
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B05-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-02 1/5
Date Analyzed:	09/08/18	Data File:	090729.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	88	31	163
Benzo(a)anthracene-d12	99	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.58
2-Methylnaphthalene	0.56
1-Methylnaphthalene	0.37
Benz(a)anthracene	1.2
Chrysene	1.2
Benzo(a)pyrene	1.4
Benzo(b)fluoranthene	1.7
Benzo(k)fluoranthene	0.55
Indeno(1,2,3-cd)pyrene	0.37
Dibenz(a,h)anthracene	0.077

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-02-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-03 1/5
Date Analyzed:	09/07/18	Data File:	090719.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	96	31	163
Benzo(a)anthracene-d12	105	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.020
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.34
Chrysene	0.31
Benzo(a)pyrene	0.36
Benzo(b)fluoranthene	0.33
Benzo(k)fluoranthene	0.12
Indeno(1,2,3-cd)pyrene	0.19
Dibenz(a,h)anthracene	0.037

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-00-22	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-04 1/500
Date Analyzed:	09/08/18	Data File:	090730.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	132 d	31	163
Benzo(a)anthracene-d12	76 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	1.4
2-Methylnaphthalene	1.1
1-Methylnaphthalene	1.4
Benz(a)anthracene	40
Chrysene	38
Benzo(a)pyrene	50
Benzo(b)fluoranthene	55
Benzo(k)fluoranthene	15
Indeno(1,2,3-cd)pyrene	15
Dibenz(a,h)anthracene	3.3

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-00-20	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-05 1/50
Date Analyzed:	09/08/18	Data File:	090731.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	168 d	31	163
Benzo(a)anthracene-d12	92 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.14
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	4.6
Chrysene	4.5
Benzo(a)pyrene	5.8
Benzo(b)fluoranthene	6.5
Benzo(k)fluoranthene	1.9
Indeno(1,2,3-cd)pyrene	1.8
Dibenz(a,h)anthracene	0.41

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-00-18	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-06 1/5
Date Analyzed:	09/07/18	Data File:	090722.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	91	31	163
Benzo(a)anthracene-d12	97	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.12
Chrysene	0.11
Benzo(a)pyrene	0.15
Benzo(b)fluoranthene	0.14
Benzo(k)fluoranthene	0.055
Indeno(1,2,3-cd)pyrene	0.088
Dibenz(a,h)anthracene	0.018

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-00-22	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-07 1/250
Date Analyzed:	09/08/18	Data File:	090732.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83 d	31	163
Benzo(a)anthracene-d12	68 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.61
2-Methylnaphthalene	<0.5
1-Methylnaphthalene	<0.5
Benz(a)anthracene	5.9
Chrysene	6.1
Benzo(a)pyrene	7.7
Benzo(b)fluoranthene	7.9
Benzo(k)fluoranthene	3.1
Indeno(1,2,3-cd)pyrene	2.6
Dibenz(a,h)anthracene	0.60

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-01-20	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-08 1/50
Date Analyzed:	09/08/18	Data File:	090733.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	148 d	31	163
Benzo(a)anthracene-d12	94 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.52
2-Methylnaphthalene	0.33
1-Methylnaphthalene	0.28
Benz(a)anthracene	4.5
Chrysene	4.4
Benzo(a)pyrene	6.0
Benzo(b)fluoranthene	6.6
Benzo(k)fluoranthene	1.8
Indeno(1,2,3-cd)pyrene	2.0
Dibenz(a,h)anthracene	0.42

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-01-18	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-09 1/5
Date Analyzed:	09/08/18	Data File:	090727.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	105	31	163
Benzo(a)anthracene-d12	120	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.056
2-Methylnaphthalene	0.021
1-Methylnaphthalene	0.014
Benz(a)anthracene	0.73
Chrysene	0.74
Benzo(a)pyrene	1.2
Benzo(b)fluoranthene	1.2
Benzo(k)fluoranthene	0.37
Indeno(1,2,3-cd)pyrene	0.43
Dibenz(a,h)anthracene	0.096

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-01-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-10 1/5
Date Analyzed:	09/07/18	Data File:	090723.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	101	31	163
Benzo(a)anthracene-d12	112	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.012
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.039
Chrysene	0.041
Benzo(a)pyrene	0.061
Benzo(b)fluoranthene	0.066
Benzo(k)fluoranthene	0.020
Indeno(1,2,3-cd)pyrene	0.039
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-01-20	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-11 1/5
Date Analyzed:	09/07/18	Data File:	090724.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	98	31	163
Benzo(a)anthracene-d12	117	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.017
2-Methylnaphthalene	0.015
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.016
Chrysene	0.015
Benzo(a)pyrene	0.015
Benzo(b)fluoranthene	0.015
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-01-18	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-12 1/5
Date Analyzed:	09/08/18	Data File:	090728.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	104	31	163
Benzo(a)anthracene-d12	123	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.25
2-Methylnaphthalene	0.25
1-Methylnaphthalene	0.17
Benz(a)anthracene	0.20
Chrysene	0.20
Benzo(a)pyrene	0.25
Benzo(b)fluoranthene	0.29
Benzo(k)fluoranthene	0.085
Indeno(1,2,3-cd)pyrene	0.072
Dibenz(a,h)anthracene	0.015

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-01-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-13 1/5
Date Analyzed:	09/07/18	Data File:	090725.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	103	31	163
Benzo(a)anthracene-d12	118	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.017
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.12
Chrysene	0.12
Benzo(a)pyrene	0.18
Benzo(b)fluoranthene	0.19
Benzo(k)fluoranthene	0.057
Indeno(1,2,3-cd)pyrene	0.10
Dibenz(a,h)anthracene	0.019

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	08-2022 mb 1/5
Date Analyzed:	09/07/18	Data File:	090718.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	106	31	163
Benzo(a)anthracene-d12	108	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-02-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-01
Date Analyzed:	09/07/18	Data File:	809093-01.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	7.54

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B05-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-02
Date Analyzed:	09/09/18	Data File:	809093-02.120
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	7.84

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-02-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-03
Date Analyzed:	09/09/18	Data File:	809093-03.121
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.72

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-00-22	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-04
Date Analyzed:	09/09/18	Data File:	809093-04.122
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.65

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-00-20	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-05
Date Analyzed:	09/09/18	Data File:	809093-05.123
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.93

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-00-18	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-06
Date Analyzed:	09/09/18	Data File:	809093-06.124
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.02

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-00-22	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-07
Date Analyzed:	09/09/18	Data File:	809093-07.125
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.56

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-01-20	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-08
Date Analyzed:	09/09/18	Data File:	809093-08.126
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.09

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-01-18	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-09
Date Analyzed:	09/09/18	Data File:	809093-09.129
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.79

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-01-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-10
Date Analyzed:	09/09/18	Data File:	809093-10.130
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-01-20	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-11
Date Analyzed:	09/09/18	Data File:	809093-11.131
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.76

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-01-18	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-12
Date Analyzed:	09/09/18	Data File:	809093-12.132
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.83

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-01-15	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	809093-13
Date Analyzed:	09/09/18	Data File:	809093-13.133
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.15

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20180906, F&BI 809093
Date Extracted:	09/07/18	Lab ID:	I8-580 mb
Date Analyzed:	09/07/18	Data File:	I8-580 mb.045
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Date of Report: 09/12/18
Date Received: 09/06/18
Project: SOU_1249-001-05_ 20180906, F&BI 809093

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 809093-03 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.017	95	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	103	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	99	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.29	83 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.27	82 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.28	111 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.10	88 b	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.31	101 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.16	59 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.031	76	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	89	92	58-121	3
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	91	58-123	4
1-Methylnaphthalene	mg/kg (ppm)	0.17	87	90	60-124	3
Benz(a)anthracene	mg/kg (ppm)	0.17	89	94	51-115	5
Chrysene	mg/kg (ppm)	0.17	89	93	55-129	4
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	90	90	56-123	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	87	90	54-131	3
Benzo(a)pyrene	mg/kg (ppm)	0.17	84	86	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	102	95	49-148	7
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	106	96	50-141	10

Date of Report: 09/12/18
Date Received: 09/06/18
Project: SOU_1249-001-05_ 20180906, F&BI 809093

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 809093-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	4.38	94	90	70-130	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	96	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

809093

SAMPLE CHAIN OF CUSTODY ME 09/06/18

VW1 / AIG

Page # 1 of 2

Report To Chris Cass, Chris Carter, Sarah Wetter
Company Sound Earth Strategies
Address 2811 Fairview Ave E Suite 2000
City, State, ZIP Seattle, WA 98102
Phone 206-306-1900 Email

SAMPLERS (Signature) Sarah Wetter
PROJECT NAME Ballard Blocks II
PO # 1249-001-05 T: 331
REMARKS
INVOICE TO

TURNAROUND TIME
☐ Standard Turnaround
☐ RUSH 24 hr
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Archive Samples
☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Arsenic	cPAH's Naphthalene			Notes
						ANALYSES REQUESTED											
D-02-15	01	9/6/18	1420	S	1								X	X			
EX-B05-15	02		1600	S	1								X	X			
E-02-15	03		1620	S	1								X	X			
D-00-22	04		1500	S	1								X	X			
D-00-20	05		1505	S	1								X	X			
D-00-18	06		1510	S	1								X	X			
E-00-22	07		1515	S	1								X	X			
E-01-20	08		1530	S	1								X	X			
E-01-18	09		1535	S	1								X	X			
E-01-15	10		1537	S	1								X	X			

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Wetter	Sarah Wetter	SES	9/6/18	1706
Received by:	VING	FBI	9/6/18	17:06
Relinquished by:				
Received by:		Samples received at 4 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

809093

SAMPLE CHAIN OF CUSTODY

ME 09/06/18 2 VWI/2 AT6

Page # 2 of 2

Report To Chris Cass, Chris Carter, Sarah Welter
Company Sound Earth Strategies
Address 2811 Fairview Ave E Suite 2000
City, State, ZIP Seattle, WA 98102
Phone 206-306-1900 Email

SAMPLERS (signature) Sarah Welter
PROJECT NAME Ballard Blocks II
PO # 1249-001-05 T. 331
REMARKS
INVOICE TO

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 24 hr
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Archive Samples
☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Absence cPAH's Naphthalene 1,3 Methyl Naphthalene				Notes
D-01-20	11	9/6/18	1540	S	1								X	X			
D-01-18	12		1542	S	1								X	X			
D-01-15	13		1545	S	1								X	X			
Temp Blank 20180906	14		—	W	1												
Field Blank 20180906	15A 15B		—	W	2												

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Sarah Welter	Sarah Welter	SES	9/6/18	1706
Received by:		VINH	FBI	9/6/18	1706
Relinquished by:					
Received by:			Samples received at 4 °C		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 13, 2018

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on September 6, 2018 from the SOU_1249-001_ 20180906, F&BI 809094 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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, Sarah Welter, Siera Pleskac
SOU0913R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 6, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001_ 20180906, F&BI 809094 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
809094 -01	D-02-14
809094 -02	EX-B05-14
809094 -03	E-02-14

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B05-14	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001_ 20180906
Date Extracted:	09/11/18	Lab ID:	809094-02
Date Analyzed:	09/11/18	Data File:	809094-02.109
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.28

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-02-14	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001_ 20180906
Date Extracted:	09/11/18	Lab ID:	809094-03
Date Analyzed:	09/11/18	Data File:	809094-03.110
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	6.28

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001_ 20180906
Date Extracted:	09/11/18	Lab ID:	I8-590 mb2
Date Analyzed:	09/11/18	Data File:	I8-590 mb2.106
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B05-14	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001_ 20180906
Date Extracted:	09/11/18	Lab ID:	809094-02 1/50
Date Analyzed:	09/11/18	Data File:	091107.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ML

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	77 d	31	163
Benzo(a)anthracene-d12	85 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.17
2-Methylnaphthalene	0.18
1-Methylnaphthalene	0.14
Benz(a)anthracene	0.75
Chrysene	0.78
Benzo(a)pyrene	0.94
Benzo(b)fluoranthene	0.92
Benzo(k)fluoranthene	0.30
Indeno(1,2,3-cd)pyrene	0.57
Dibenz(a,h)anthracene	0.13

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-02-14	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_1249-001_ 20180906
Date Extracted:	09/11/18	Lab ID:	809094-03 1/50
Date Analyzed:	09/11/18	Data File:	091109.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ML

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	106 d	31	163
Benzo(a)anthracene-d12	88 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.87
2-Methylnaphthalene	0.37
1-Methylnaphthalene	0.20
Benz(a)anthracene	0.83
Chrysene	0.93
Benzo(a)pyrene	0.99
Benzo(b)fluoranthene	1.0
Benzo(k)fluoranthene	0.30
Indeno(1,2,3-cd)pyrene	0.50
Dibenz(a,h)anthracene	0.11

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001_ 20180906
Date Extracted:	09/11/18	Lab ID:	08-2052 mb 1/5
Date Analyzed:	09/11/18	Data File:	091106.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ML

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	90	31	163
Benzo(a)anthracene-d12	96	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 09/13/18
Date Received: 09/06/18
Project: SOU_1249-001_ 20180906, F&BI 809094

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 809121-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	3.87	74	84	70-130	13

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	88	85-115

Date of Report: 09/13/18
Date Received: 09/06/18
Project: SOU_1249-001_ 20180906, F&BI 809094

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	91	92	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	90	91	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	90	91	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	94	95	51-115	1
Chrysene	mg/kg (ppm)	0.17	95	95	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	93	95	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	93	97	54-131	4
Benzo(a)pyrene	mg/kg (ppm)	0.17	88	89	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	93	93	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	95	96	50-141	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

809094

SAMPLE CHAIN OF CUSTODY ME 09-06-18

1 of 1

Page # 1 of 1

Report To Chris Cass, Chris Carter, Sarah Welter

Company SoundEarth Strategies

Address 2811 Fairview Ave E Suite 2000

City, State, ZIP Seattle, WA 98102

Phone 206-306-1900 Email —

SAMPLERS (signature) Sarah Welter

PROJECT NAME Ballard Blocks II

PO # 1249-001 T: 331

REMARKS

INVOICE TO

TURNAROUND TIME
- ☐ Standard Turnaround
- ☒ RUSH 24 hour

Rush charges authorized by: per SW 9/10/18 @ 4:26 PM

SAMPLE DISPOSAL ME
- ☐ Dispose after 30 days
- ☐ Archive Samples
- ☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Arsenic	cPAH's, Naphthalene, 1-2 methyl Naphthalene			Notes
D-02-14	01	9/6/18	1422	S	1												~~HCID~~
EX-B05-14	02	9/6/18	1605	S	1								X	X			
E-02-14	03	9/6/18	1625	S	1								X	X			

X - per SW 9/10/18 ME

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	9/6/18	1706
Received by:	JCNH	FBI	9/6/18	1706
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 18, 2018

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on September 6, 2018 from the SOU_ 1249-001-05_ 20180906, F&BI 809095 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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, Sarah Welter
SOU0918R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 6, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies 1249-001-05 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
809095 -01	D-02-13
809095 -02	EX-B05-13
809095 -03	E-02-13

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EX-B05-13	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_ 1249-001-05_ 20180906, F&BI 809095
Date Extracted:	09/13/18	Lab ID:	809095-02 1/5
Date Analyzed:	09/13/18	Data File:	091316.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	99	31	163
Benzo(a)anthracene-d12	92	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.012
Chrysene	0.013
Benzo(a)pyrene	0.017
Benzo(b)fluoranthene	0.016
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-02-13	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_ 1249-001-05_ 20180906, F&BI 809095
Date Extracted:	09/13/18	Lab ID:	809095-03 1/250
Date Analyzed:	09/13/18	Data File:	091313.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	22 d	31	163
Benzo(a)anthracene-d12	70 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.5
2-Methylnaphthalene	<0.5
1-Methylnaphthalene	<0.5
Benz(a)anthracene	1.2
Chrysene	1.2
Benzo(a)pyrene	1.4
Benzo(b)fluoranthene	1.4
Benzo(k)fluoranthene	<0.5
Indeno(1,2,3-cd)pyrene	0.89
Dibenz(a,h)anthracene	<0.5

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180906, F&BI 809095
Date Extracted:	09/13/18	Lab ID:	08-2059 mb 1/5
Date Analyzed:	09/13/18	Data File:	091306.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	95	31	163
Benzo(a)anthracene-d12	88	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 200.8

Client ID:	EX-B05-13	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_ 1249-001-05_ 20180906, F&BI 809095
Date Extracted:	09/13/18	Lab ID:	809095-02
Date Analyzed:	09/13/18	Data File:	809095-02.064
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.69

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-02-13	Client:	SoundEarth Strategies
Date Received:	09/06/18	Project:	SOU_ 1249-001-05_ 20180906, F&BI 809095
Date Extracted:	09/13/18	Lab ID:	809095-03
Date Analyzed:	09/13/18	Data File:	809095-03.067
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.11

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001-05_ 20180906, F&BI 809095
Date Extracted:	09/13/18	Lab ID:	I8-598 mb
Date Analyzed:	09/13/18	Data File:	I8-598 mb.062
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Date of Report: 09/18/18
Date Received: 09/06/18
Project: SOU_ 1249-001-05_ 20180906, F&BI 809095

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 809101-05 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	0.033	95	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	0.028	84	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	0.030	125	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	0.056	93 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.093	76 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.12	83 b	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.030	100	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.061	89 b	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.061	86 b	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	96	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	90	93	58-121	3
2-Methylnaphthalene	mg/kg (ppm)	0.17	87	90	58-123	3
1-Methylnaphthalene	mg/kg (ppm)	0.17	88	91	60-124	3
Benz(a)anthracene	mg/kg (ppm)	0.17	88	91	51-115	3
Chrysene	mg/kg (ppm)	0.17	93	94	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	87	89	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	90	96	54-131	6
Benzo(a)pyrene	mg/kg (ppm)	0.17	81	84	51-118	4
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	97	98	49-148	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	104	102	50-141	2

Date of Report: 09/18/18
Date Received: 09/06/18
Project: SOU_ 1249-001-05_ 20180906, F&BI 809095

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 809095-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.48	94	92	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	96	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. 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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

809095-

SAMPLE CHAIN OF CUSTODY

ME 09-08-18 Bo11 1

Page # 1 of 1

Report To Chris Cuss, Chris Carter, Sarah Welter
Company Sand Earth Strategies
Address 2811 Fairview Ave E Ste 2000
City, State, ZIP Seattle, WA 98102
Phone 206-306-1900 Email

SAMPLERS (signature) Sarah Welter
PROJECT NAME Ballard Blocks II
PO # 1219-001-05 T: 331
REMARKS
INVOICE TO

TURNAROUND TIME
☐ Standard Turnaround
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Archive Samples
☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	+NPAHs 8270D SIM	Arsenic 200.8	Notes
D-02-13	01	9/6/18	1425	S	1									* - 24 hr per CC ML 9/13/18 ~~HOLD~~
EX-B05-13	02	9/6/18	1610	S	1							★	★	
E-02-13	03	9/6/18	1630	S	1							★	★	

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	9/6/18	1706
Received by:	JWH	FBI	9/6/18	1706
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 12, 2018

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on September 7, 2018 from the SOU_ 1249-001_ 20180907, F&BI 809121 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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, Siera Pleskac, Sarah Welter
SOU0912R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 7, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1249-001_ 20180907, F&BI 809121 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
809121 -01	E-03-12

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-03-12	Client:	SoundEarth Strategies
Date Received:	09/07/18	Project:	SOU_ 1249-001_ 20180907, F&BI 809121
Date Extracted:	09/10/18	Lab ID:	809121-01
Date Analyzed:	09/10/18	Data File:	809121-01.128
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.77

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001_ 20180907, F&BI 809121
Date Extracted:	09/10/18	Lab ID:	I8-590 mb
Date Analyzed:	09/10/18	Data File:	I8-590 mb.126
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-03-12	Client:	SoundEarth Strategies
Date Received:	09/07/18	Project:	SOU_ 1249-001_ 20180907, F&BI 809121
Date Extracted:	09/10/18	Lab ID:	809121-01 1/5
Date Analyzed:	09/10/18	Data File:	091020.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	101	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1249-001_ 20180907, F&BI 809121
Date Extracted:	09/10/18	Lab ID:	08-2031 mb 1/5
Date Analyzed:	09/10/18	Data File:	091019.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	104	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 09/12/18
Date Received: 09/07/18
Project: SOU_ 1249-001_ 20180907, F&BI 809121

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 809121-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	3.87	74	84	70-130	13

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	88	85-115

Date of Report: 09/12/18
Date Received: 09/07/18
Project: SOU_ 1249-001_ 20180907, F&BI 809121

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 809121-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	87	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	86	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	85	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	86	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	87	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	85	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	87	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	79	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	81	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	84	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	89	90	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	88	89	58-123	1
1-Methylnaphthalene	mg/kg (ppm)	0.17	88	88	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	90	92	51-115	2
Chrysene	mg/kg (ppm)	0.17	91	93	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	88	89	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	91	91	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	83	84	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	90	94	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	92	95	50-141	3

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

809121

SAMPLE CHAIN OF CUSTODY ME 09/07/18

BTI

Page # 1 of 1

Report To Chris Cass, Chris Carter, Sarah Welter
Company Sound Earth Strategies
Address 2811 Fairview Ave E Suite 2000
City, State, ZIP Seattle, WA 98102
Phone 206-306-1900 Email

SAMPLERS (signature) Sarah Welter
PROJECT NAME Ballard Blocks II
PO # 1249-001 7.331
REMARKS
INVOICE TO

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 24h
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Archive Samples
☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM (PAHs, Naphthalene only)	Arsenic			Notes
E-03-12	01	9/7/18	1505	S	1							X	X			

Samples received at 8 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Welter	Sarah Welter	SES	9/7/18	1600
Received by:	Nhan Phan	FEBI	9/7/18	1600
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

December 20, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on December 17, 2018 from the SOU_1249-001-05_ 20181217, F&BI 812242 project. There are 14 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU1220R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 17, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20181217, F&BI 812242 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
812242 -01	D-00-17
812242 -02	E-00-17
812242 -03	D-01-14
812242 -04	E-02-12

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-00-17	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217, F&BI 812242
Date Extracted:	12/18/18	Lab ID:	812242-01 1/5
Date Analyzed:	12/18/18	Data File:	121813.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	92	31	163
Benzo(a)anthracene-d12	103	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.017
Chrysene	0.019
Benzo(a)pyrene	0.028
Benzo(b)fluoranthene	0.027
Benzo(k)fluoranthene	0.011
Indeno(1,2,3-cd)pyrene	0.022
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-00-17	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217, F&BI 812242
Date Extracted:	12/18/18	Lab ID:	812242-02 1/5
Date Analyzed:	12/18/18	Data File:	121814.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	91	31	163
Benzo(a)anthracene-d12	98	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	0.011
Benzo(a)pyrene	0.011
Benzo(b)fluoranthene	0.012
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-01-14	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217, F&BI 812242
Date Extracted:	12/18/18	Lab ID:	812242-03 1/5
Date Analyzed:	12/18/18	Data File:	121815.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	91	31	163
Benzo(a)anthracene-d12	97	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.018
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	0.24
Chrysene	0.24
Benzo(a)pyrene	0.32
Benzo(b)fluoranthene	0.31
Benzo(k)fluoranthene	0.12
Indeno(1,2,3-cd)pyrene	0.20
Dibenz(a,h)anthracene	0.042

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-02-12	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217, F&BI 812242
Date Extracted:	12/18/18	Lab ID:	812242-04 1/5
Date Analyzed:	12/18/18	Data File:	121816.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	88	31	163
Benzo(a)anthracene-d12	99	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.083
2-Methylnaphthalene	0.021
1-Methylnaphthalene	0.010
Benz(a)anthracene	0.076
Chrysene	0.083
Benzo(a)pyrene	0.11
Benzo(b)fluoranthene	0.12
Benzo(k)fluoranthene	0.043
Indeno(1,2,3-cd)pyrene	0.084
Dibenz(a,h)anthracene	0.016

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20181217, F&BI 812242
Date Extracted:	12/18/18	Lab ID:	08-2838 mb2 1/5
Date Analyzed:	12/18/18	Data File:	121811.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	90	31	163
Benzo(a)anthracene-d12	103	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Total Metals By EPA Method 6020B

Client ID:	D-00-17	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217, F&BI 812242
Date Extracted:	12/18/18	Lab ID:	812242-01
Date Analyzed:	12/18/18	Data File:	812242-01.059
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.05

Analysis For Total Metals By EPA Method 6020B

Client ID:	E-00-17	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217, F&BI 812242
Date Extracted:	12/18/18	Lab ID:	812242-02
Date Analyzed:	12/18/18	Data File:	812242-02.062
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.58

Analysis For Total Metals By EPA Method 6020B

Client ID:	D-01-14	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217, F&BI 812242
Date Extracted:	12/18/18	Lab ID:	812242-03
Date Analyzed:	12/18/18	Data File:	812242-03.063
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	7.87

Analysis For Total Metals By EPA Method 6020B

Client ID:	E-02-12	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217, F&BI 812242
Date Extracted:	12/18/18	Lab ID:	812242-04
Date Analyzed:	12/18/18	Data File:	812242-04.064
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.01

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20181217, F&BI 812242
Date Extracted:	12/18/18	Lab ID:	I8-871 mb
Date Analyzed:	12/18/18	Data File:	I8-871 mb.057
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Date of Report: 12/20/18
Date Received: 12/17/18
Project: SOU_1249-001-05_ 20181217, F&BI 812242

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 812223-06 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	91	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	98	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	95	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	95	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	95	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	102	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	98	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	97	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	95	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	91	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	94	93	58-121	1
2-Methylnaphthalene	mg/kg (ppm)	0.17	101	98	58-123	3
1-Methylnaphthalene	mg/kg (ppm)	0.17	98	97	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	95	94	51-115	1
Chrysene	mg/kg (ppm)	0.17	95	94	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	106	109	56-123	3
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	100	98	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	96	98	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	100	105	49-148	5
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	94	102	50-141	8

Date of Report: 12/20/18
Date Received: 12/17/18
Project: SOU_1249-001-05_ 20181217, F&BI 812242

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 812242-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	2.44	103	123	75-125	18

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	103	80-120

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

812242

SAMPLE CHAIN OF CUSTODY ME 12-17-18

VSI / ~~DOT~~ / BTI

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Wells

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
(RUSH) 24hr
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: CPAHs by 8270D Naphthalene/ 1, 2 Methyl-Naphthalene	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
D-CC-17	D-CC	17	01A-B	12/17/18	0915	S	5	X	X				
E-CC-17	E-CC	17	02	12/17/18	1040	S	5	X	X				
D-01-14	D-01	14	03	12/17/18	1300	S	5	X	X				
E-02-12	E-02	12	04	12/17/18	1430	S	5	X	X				
													Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Wells	Sarah Wells	SES	12/17/18	1540
Received by:	Michael Erdahl	FedEx	↓	↓
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

December 24, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on December 17, 2018 from the SOU_1249-001-05_ 20181217, F&BI 812243 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass
SOU1224R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 17, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20181217, F&BI 812243 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
812243 -01	D-00-14
812243 -02	E-00-14
812243 -03	D-01-13
812243 -04	E-02-11

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-01-13	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217
Date Extracted:	12/20/18	Lab ID:	812243-03
Date Analyzed:	12/20/18	Data File:	812243-03.088
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.92

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-02-11	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217
Date Extracted:	12/20/18	Lab ID:	812243-04
Date Analyzed:	12/20/18	Data File:	812243-04.089
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.06

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20181217
Date Extracted:	12/20/18	Lab ID:	I8-876 mb
Date Analyzed:	12/20/18	Data File:	I8-876 mb.086
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-01-13	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217
Date Extracted:	12/20/18	Lab ID:	812243-03 1/50
Date Analyzed:	12/20/18	Data File:	122008.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	73 d	31	163
Benzo(a)anthracene-d12	87 d	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.1
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	0.18
Chrysene	0.18
Benzo(a)pyrene	0.19
Benzo(b)fluoranthene	0.19
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	0.12
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	E-02-11	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217
Date Extracted:	12/20/18	Lab ID:	812243-04 1/5
Date Analyzed:	12/20/18	Data File:	122007.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	83	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20181217
Date Extracted:	12/20/18	Lab ID:	08-2813 mb 1/5
Date Analyzed:	12/20/18	Data File:	122006.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	89	31	163
Benzo(a)anthracene-d12	93	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 12/24/18
Date Received: 12/17/18
Project: SOU_1249-001-05_ 20181217, F&BI 812243

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 812243-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.85	102	101	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	103	85-115

Date of Report: 12/24/18
Date Received: 12/17/18
Project: SOU_1249-001-05_ 20181217, F&BI 812243

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	93	93	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	98	98	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	93	93	60-124	0
Benz(a)anthracene	mg/kg (ppm)	0.17	93	92	51-115	1
Chrysene	mg/kg (ppm)	0.17	93	94	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	99	99	56-123	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	98	99	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	90	91	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	95	100	49-148	5
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	95	102	50-141	7

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

812243

SAMPLE CHAIN OF CUSTODY

ME 12-17-18

VS1/D01

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sara Welter

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS (project quote)

TURNAROUND TIME
Standard (2 Weeks)
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: 1-Methylnaphthalenes CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
D-00-14	D-00	14	01	12/17/18	0950	S	5						HOLD
E-00-14	E-00	14	02	"	1150	S	5						
D-01-13	D-01	13	03	"	1320	S	5	X	X				
E-02-11	E-02	11	04	"	1435	S	5	X	X				

X - per SW 24hr TAT 12/20/18 ME

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sara Welter	Sara M Welter	SES	SES	1540
Received by:	Michael Enchill	FedEx	↓	↓
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

December 27, 2018

Chris Carter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Carter:

Included are the results from the testing of material submitted on December 17, 2018 from the SOU_1249-001-05_ 20181217, F&BI 812245 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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 Cass, Sarah Welter, Mindy Graddon
SOU1227R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 17, 2018 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20181217, F&BI 812245 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
812245 -01	D-00-13
812245 -02	E-00-13
812245 -03	D-01-12
812245 -04	E-02-10

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	D-01-12	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217
Date Extracted:	12/24/18	Lab ID:	812245-03
Date Analyzed:	12/26/18	Data File:	812245-03.037
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	6.84

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20181217
Date Extracted:	12/24/18	Lab ID:	I8-882 mb
Date Analyzed:	12/26/18	Data File:	I8-882 mb.032
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	D-01-12	Client:	SoundEarth Strategies
Date Received:	12/17/18	Project:	SOU_1249-001-05_ 20181217
Date Extracted:	12/24/18	Lab ID:	812245-03 1/5
Date Analyzed:	12/24/18	Data File:	122408.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	31	163
Benzo(a)anthracene-d12	86	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20181217
Date Extracted:	12/24/18	Lab ID:	08-2899 mb 1/5
Date Analyzed:	12/24/18	Data File:	122407.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	31	163
Benzo(a)anthracene-d12	87	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 12/27/18
Date Received: 12/17/18
Project: SOU_ 1249-001-05_ 20181217, F&BI 812245

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 812245-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	5.54	100	99	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	110	85-115

Date of Report: 12/27/18
Date Received: 12/17/18
Project: SOU_ 1249-001-05_ 20181217, F&BI 812245

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 812313-04 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	90	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	98	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	<0.01	94	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	95	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	91	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.011	109	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	94	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	101	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	79	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	80	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	94	94	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	96	100	58-123	4
1-Methylnaphthalene	mg/kg (ppm)	0.17	93	96	60-124	3
Benz(a)anthracene	mg/kg (ppm)	0.17	95	99	51-115	4
Chrysene	mg/kg (ppm)	0.17	95	99	55-129	4
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	100	106	56-123	6
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	95	95	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	89	92	51-118	3
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	107	104	49-148	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	105	101	50-141	4

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

812245

SAMPLE CHAIN OF CUSTODY

ME 12-17-18

Page # 1 of 1

Send Report to Chris Carter; Chris Cass

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) Sarah Wolfe

PROJECT NAME/NO. Ballard Blocks II Property

PO # 1249-001-05

REMARKS (project quote)

TURNAROUND TIME
Standard (2 Weeks)
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: CPAHs by 8270D	Arsenic	NWTPH-Gx	BTEX	NWTPH-Dx	Notes
D-00-13	D-00	13	01 A-E	12/17/18	1055	S	5						HOLD
E-00-13	E-00	13	02	"	1205	S	5						"
D-01-12	D-01	12	03	"	1325	S	5						
E-02-10	E-02	10	04	"	1445	S	5						
													Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Wolfe	Sarah Wolfe	SES	12/17/18	1540
Received by:	Michael E. Hall	FHPM	↓	↓
Relinquished by:				
Received by:				

SoundEarth Strategies

APPENDIX L

MSTAT ANALYSIS TABLE FOR VCL CALCULATION FOR ARSENIC

	A	B	C	D	E	F	G	H
1	DATA	ID	*MTCAStat 97 Site Module*				Paste values	
2	1.03	EX-B04-14						
3	1.05	B14-14	**Number of samples**		**Uncensored values**		Sort data	
4	1.07	B-03-11	Uncensored	77	Mean	4.873	**Calculate UCL**	
5	1.11	C-09-16	Censored	**9**	Lognormal mean	5.194		**Finished**
6	1.18	A-00-15	Detection limit or PQL	**1**	Std. devn.	4.699		
7	1.21	-11-20-WSV	Method detection limit	**0.01**	Median	2.84	**Lognormal**	**Exit MTCA*Stat***
8	1.27	A-10-15.5-B	TOTAL	86	Min.	0.5		
9	1.30	E04-13.5	**ENTER DATA**		Max.	20.3	**Normal**	
10	1.31	TP-B-10-17	*Distribution Decision*				**Neither**	
11	1.33	C-08-15						
12	1.35	D-09-17-B	**Probability plot method**		W test	D'Agostino's test		
13	1.35	E-05-9.5						
14	1.35	E-06-11.5	Lognormal distribution?		Normal distribution?		**Clear messages**	
15	1.39	A-09-15.5-B	r-squared is:	**0.959**	r-squared is:	**0.907**		
16	1.53	A-06-13	*Recommendations:*				**Clear all**	
17	1.69	EX-B05-13	**Use lognormal distribution.**					
18	1.71	TP-C-10-17					**Histogram**	
19	1.73	A-07-15						
20	1.77	E-10-15					5 10 20	
21	1.87	B-08-17	*Upper Confidence Limit (UCL)*					
22	2.00	A-06-15					**Create report**	
23	2.00	B-09-18-SW						
24	2.06	E-02-11	**UCL (based on t-statistic) is 5.20561199543941**				**Sample size**	
25	2.08	B-04-15		**Simple substitution used with censored values.**				
26	2.13	A-04-14						
27	2.16	E-09-17-B						
28	2.23	B01-11.5						
29	2.58	E-00-17						

APPENDIX M

JUNE AND JULY 2019 SUBGRADE DRAINAGE GROUNDWATER MONITORING LABORATORY ANALYTICAL REPORTS

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

June 24, 2019

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on June 17, 2019 from the SOU_1249-001-05_ 20190617, F&BI 906322 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, Erika Vossbeck
SOU0624R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 17, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20190617, F&BI 906322 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
906322 -01	1249_SSGW_20190617
906322 -02	1249_SSGW_D_20190617

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_SSGW_D_20190617 f	Client:	SoundEarth Strategies
Date Received:	06/17/19	Project:	SOU_1249-001-05_ 20190617
Date Extracted:	06/20/19	Lab ID:	906322-02
Date Analyzed:	06/20/19	Data File:	906322-02.142
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	12.6

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank f	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20190617
Date Extracted:	06/20/19	Lab ID:	I9-381 mb
Date Analyzed:	06/20/19	Data File:	I9-381 mb.126
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_SSGW_20190617	Client:	SoundEarth Strategies
Date Received:	06/17/19	Project:	SOU_1249-001-05_ 20190617
Date Extracted:	06/18/19	Lab ID:	906322-01
Date Analyzed:	06/18/19	Data File:	906322-01.178
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	11.8

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20190617
Date Extracted:	06/18/19	Lab ID:	I9-375 mb
Date Analyzed:	06/18/19	Data File:	I9-375 mb.095
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Date of Report: 06/24/19
Date Received: 06/17/19
Project: SOU_1249-001-05_ 20190617, F&BI 906322

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 906104-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<1	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	94	85-115

Date of Report: 06/24/19
Date Received: 06/17/19
Project: SOU_1249-001-05_ 20190617, F&BI 906322

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 906321-01 (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	11.1	101	98	70-130	3

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. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 06/17/19

AT 3

906322

Page # 1 of 1

Send Report to Chris Cass; Chris Carter; Erika Vossbeck

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) Kyle Lowen

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05

REMARKS: 5-day TAT

TURNAROUND TIME
Standard (2 Weeks)
RUSH 5 day TAT
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: CPAHs by 8270D SIM	Total As, ~~Cr, Pb, Se~~ (200.8)	Dissolved As (200.8)			Notes
~~WW02A_EFF~~	~~WW02A~~	~~NA~~											~~48 HR TAT~~
1249_SSGW_20190617	W-PAH/ E-PAH	NA	01	06/17/19	0855	H_2O	1		X				5-day TAT not Field Filtered
1249_SSGW_D_20190617	W-PAH/ E-PAH	NA	02	06/17/19	0855	H_2O	1			X			✓

Samples received at 6 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Kyle Lowen	Kyle Lowen	SES	~~6/17/19~~ 06/17/19	1010
Received by:	Phan Phan	FEBT	6/17/19	1010
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 1, 2019

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on June 24, 2019 from the SOU_1249-001-05_ 20190624, F&BI 906478 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, Erika Vossbeck
SOU0701R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 24, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20190624, F&BI 906478 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
906478 -01	1249_SSGW_20190624
906478 -02	1249_SSGW_D_20190624

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_SSGW_D_20190624	Client:	SoundEarth Strategies
Date Received:	06/24/19	Project:	SOU_1249-001-05_ 20190624
Date Extracted:	06/27/19	Lab ID:	906478-02
Date Analyzed:	06/27/19	Data File:	906478-02.087
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	13.6

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20190624
Date Extracted:	06/27/19	Lab ID:	I9-398 mb
Date Analyzed:	06/27/19	Data File:	I9-398 mb.048
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_SSGW_20190624	Client:	SoundEarth Strategies
Date Received:	06/24/19	Project:	SOU_1249-001-05_ 20190624
Date Extracted:	06/25/19	Lab ID:	906478-01
Date Analyzed:	06/25/19	Data File:	906478-01.125
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	13.0

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20190624
Date Extracted:	06/25/19	Lab ID:	I9-395 mb
Date Analyzed:	06/25/19	Data File:	I9-395 mb.103
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Date of Report: 07/01/19
Date Received: 06/24/19
Project: SOU_1249-001-05_ 20190624, F&BI 906478

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 906478-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	13.6	91	89	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	85	85-115

Date of Report: 07/01/19
Date Received: 06/24/19
Project: SOU_1249-001-05_ 20190624, F&BI 906478

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 906494-07 (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	42.2	102	98	70-130	4

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. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906478

SAMPLE CHAIN OF CUSTODY ME 06/24/19 AI1

Page # 1 of 1

Send Report to Chris Cass; Chris Carter; Erika Vossbeck

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) Kyle Lowery

PROJECT NAME/NO.: Ballard Blocks II Property

PO #: 1249-001-05 Sub 426

REMARKS: 5-day TAT / No field filtering

TURNAROUND TIME
Standard (2 Weeks)
RUSH 5-day TAT
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	cPAHs by 8270D SIM	Total As, ~~Cr, Pb, Se~~ (200.8)	Dissolved As (200.8)			Notes
~~WW02A_EFF~~	WW02A	NA											48 HR TAT
1249_SSGW_20190624	Subclub	–	01	06/24/19	0825	H2O	1		X				
1249_SSGW_D_20190624	Subclub	–	02	06/24/19	0825	H2O	1			X			Not Field Filtered

HR 06/24/19

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Kyle Lowery	Kyle Lowery	SES	06/24/19	0932
Received by:	Khan Phan	FEDEX	6/24/19	0932
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 10, 2019

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on July 1, 2019 from the SOU_1249-001-05/420_ 20190701, F&BI 907005 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, Erika Vossbeck
SOU0710R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 1, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05/420_ 20190701, F&BI 907005 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
907005 -01	1249_SSGW_20190701
907005 -02	1249_SSGW_D_20190701

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_SSGW_D_20190701 f	Client:	SoundEarth Strategies
Date Received:	07/01/19	Project:	SOU_1249-001-05/420_ 20190701
Date Extracted:	07/09/19	Lab ID:	907005-02
Date Analyzed:	07/09/19	Data File:	907005-02.044
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	14.6

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank f	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05/420_ 20190701
Date Extracted:	07/09/19	Lab ID:	I9-412 mb
Date Analyzed:	07/09/19	Data File:	I9-412 mb.042
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_SSGW_20190701	Client:	SoundEarth Strategies
Date Received:	07/01/19	Project:	SOU_1249-001-05/420_ 20190701
Date Extracted:	07/02/19	Lab ID:	907005-01
Date Analyzed:	07/02/19	Data File:	907005-01.039
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	12.0

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05/420_ 20190701
Date Extracted:	07/02/19	Lab ID:	I9-401 mb2
Date Analyzed:	07/02/19	Data File:	I9-401 mb2.033
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Date of Report: 07/10/19
Date Received: 07/01/19
Project: SOU_1249-001-05/420_ 20190701, F&BI 907005

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 907005-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	14.6	94	97	70-130	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	100	85-115

Date of Report: 07/10/19
Date Received: 07/01/19
Project: SOU_1249-001-05/420_ 20190701, F&BI 907005

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 906532-01 (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	1.45	101	102	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	100	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. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907005

SAMPLE CHAIN OF CUSTODY

ME 07-01-19

Page # 1 of 1

AI2

Send Report to Chris Cass; Chris Carter; Erika Vossbeck

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

PO #: 1249-001-05 / 420

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 5 Day TAT
Rush charges authorized by: Chris Cass

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: CPAHs by 8270D SIM	Total As (200.8)	Dissolved As (200.8)			Notes
1249_SSGW_20190701	Sub slab	N/A	01	7/1/19		WATER	1		X				HNO_3 preserved
1249_SSGW_D_20190701	Sub slab	N/A	02	7/1/19		WATER	1			X			Not filtered in field, please filter at lab.

7/1/19

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	7/1/19	1050
Received by:	Nhan Phan	FedEx	7/1/19	1050
Relinquished by:				
Received by:		Samples received at 8 °C		

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 12, 2019

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on July 8, 2019 from the SOU_1249-001-05/420_ 20190708, F&BI 907116 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, Erika Vossbeck
SOU0712R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 8, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05/420_ 20190708, F&BI 907116 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
907116 -01	1249_SSGW_20190708
907116 -02	1249_SSGW_D_20190708

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_SSGW_D_20190708 f	Client:	SoundEarth Strategies
Date Received:	07/08/19	Project:	SOU_1249-001-05/420_ 20190708
Date Extracted:	07/09/19	Lab ID:	907116-02
Date Analyzed:	07/09/19	Data File:	907116-02.047
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	15.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank f	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05/420_ 20190708
Date Extracted:	07/09/19	Lab ID:	I9-412 mb
Date Analyzed:	07/09/19	Data File:	I9-412 mb.042
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_SSGW_20190708	Client:	SoundEarth Strategies
Date Received:	07/08/19	Project:	SOU_1249-001-05/420_ 20190708
Date Extracted:	07/09/19	Lab ID:	907116-01
Date Analyzed:	07/09/19	Data File:	907116-01.107
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	14.8

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05/420_ 20190708
Date Extracted:	07/09/19	Lab ID:	I9-414 mb
Date Analyzed:	07/09/19	Data File:	I9-414 mb.103
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Date of Report: 07/12/19
Date Received: 07/08/19
Project: SOU_1249-001-05/420_ 20190708, F&BI 907116

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 907005-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	14.6	94	97	70-130	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	100	85-115

Date of Report: 07/12/19
Date Received: 07/08/19
Project: SOU_1249-001-05/420_ 20190708, F&BI 907116

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 907116-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	14.8	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	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. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907116

SAMPLE CHAIN OF CUSTODY

ME 07-08-19

AI2

Page# 1 of 1

Send Report to Chris Cass; Chris Carter; Erika Vossbeck

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

PO #: 1249-001-05 / 420

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 5 Day TAT
Rush charges authorized by: Chris Cass

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: CPAHs by 8270D SIM	Total As (200.8)	Dissolved As (200.8)			Notes
1249_SSGW_20190708	Sub slab	N/A	01	7/8/19	0955	WATER	1		X				HNO_3 preserved
1249_SSGW_D_20190708	Sub slab	N/A	02	"	1000	"	1			X			Unpreserved container. Not filtered in field, please filter at lab.
~~1249_North Pipe_20190708~~	~~Sub slab~~	~~N/A~~		"	"	"	1						~~HNO_3 preserved~~
~~1249_Lower East Pipe_20190708~~	~~Sub slab~~	~~N/A~~		"	"	"	1						~~HNO_3 preserved~~
~~1249_Upper East Pipe_20190708~~	~~Sub slab~~	~~N/A~~		"	"	"	1						~~HNO_3 preserved~~

7/8/19

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	7/8/19	1100
Received by:	HONG NGUYEN	FedEx	"	"
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 26, 2019

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on July 8, 2019 from the SOU_1249-001-05_ 20190708, F&BI 907117 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Chris Carter, Erika Vossbeck
SOU0726R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 8, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05_ 20190708, F&BI 907117 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
907117 -01	1249_North Pipe_20190708
907117 -02	1249_Lower East Pipe_20190708
907117 -03	1249_Upper East Pipe_20190708

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_North Pipe_20190708	Client:	SoundEarth Strategies
Date Received:	07/08/19	Project:	SOU_1249-001-05_ 20190708
Date Extracted:	07/23/19	Lab ID:	907117-01
Date Analyzed:	07/23/19	Data File:	907117-01.185
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	7.89

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_Lower East Pipe_20190708		Client: SoundEarth Strategies
Date Received:	07/08/19	Project:	SOU_1249-001-05_ 20190708
Date Extracted:	07/23/19	Lab ID:	907117-02
Date Analyzed:	07/23/19	Data File:	907117-02.186
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	12.6

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_Upper East Pipe_20190708		Client: SoundEarth Strategies
Date Received:	07/08/19	Project:	SOU_1249-001-05_ 20190708
Date Extracted:	07/23/19	Lab ID:	907117-03
Date Analyzed:	07/23/19	Data File:	907117-03.187
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	22.5

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05_ 20190708
Date Extracted:	07/23/19	Lab ID:	I9-443 mb
Date Analyzed:	07/23/19	Data File:	I9-443 mb.129
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Date of Report: 07/26/19
Date Received: 07/08/19
Project: SOU_1249-001-05_ 20190708, F&BI 907117

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 907372-01 (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	8.60	103	107	70-130	4

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. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907117

SAMPLE CHAIN OF CUSTODY

ME 07-08-19 Page # 1 of 1 AI4

Report To CHRIS CASS; CHRIS CARTER; ERIKA VOSSBECK

Company SOUNDEARTH

Address 2811 FAIRVIEW AVENUE E. SUITE 2000

City, State, ZIP SEATTLE, WA, 98102

Phone 206-306-1900 Email #

SAMPLERS (signature)

PROJECT NAME: BALLARD BLOCKS II PROPERTY

PO #: 1249-001-05

REMARKS: ALL SAMPLES ON HOLD
Analyze per Class 7/22/19

INVOICE TO

TURNAROUND TIME
- [x] Standard Turnaround 5 day
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Archive Samples
- [ ] Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Total Arsenic 6020B				Notes
1249_North Pipe_20190708	01	7/8/19	1005	WATER	1							X	X				
1249_Lower East Pipe_20190708	02	7/8/19	1010	WATER	1							X	X				
1249_Upper East Pipe_20190708	03	7/8/19	1015	WATER	1							X	X				

7/8/19

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	7/8/19	1100
Received by:	HONG NGUYEN	FBT	✓	✓
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 24, 2019

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on July 17, 2019 from the SOU_1249-001-05/420_ 20190717, F&BI 907279 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, Erika Vossbeck
SOU0724R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 17, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05/420_ 20190717, F&BI 907279 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
907279 -01	1249_SSGW_190717
907279 -02	1249_SSGW_D_190717

The dissolved metals samples were filtered at Friedman and Bruya on July 18, 2019 at 13:09. The data were flagged accordingly.

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_SSGW_D_190717 f	Client:	SoundEarth Strategies
Date Received:	07/17/19	Project:	SOU_1249-001-05/420_ 20190717
Date Extracted:	07/18/19	Lab ID:	907279-02
Date Analyzed:	07/18/19	Data File:	907279-02.093
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	14.9

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank f	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05/420_ 20190717
Date Extracted:	07/18/19	Lab ID:	I9-434 mb
Date Analyzed:	07/18/19	Data File:	I9-434 mb.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:	1249_SSGW_190717	Client:	SoundEarth Strategies
Date Received:	07/17/19	Project:	SOU_1249-001-05/420_ 20190717
Date Extracted:	07/19/19	Lab ID:	907279-01
Date Analyzed:	07/19/19	Data File:	907279-01.041
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	16.4

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05/420_ 20190717
Date Extracted:	07/19/19	Lab ID:	I9-436 mb
Date Analyzed:	07/19/19	Data File:	I9-436 mb.039
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Date of Report: 07/24/19
Date Received: 07/17/19
Project: SOU_1249-001-05/420_ 20190717, F&BI 907279

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 907214-01 (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	86	88	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	91	85-115

Date of Report: 07/24/19
Date Received: 07/17/19
Project: SOU_1249-001-05/420_ 20190717, F&BI 907279

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 907279-01 (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	16.4	99	98	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	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. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907279

SAMPLE CHAIN OF CUSTODY ME 07-17-19

AI3

Page # 1 of 1

Send Report to Chris Cass; Chris Carter; Erika Vossbeck

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)* Erika Vossbeck

PROJECT NAME/NO.	PO #
Ballard Blocks II Property	1249-001-05 / 420

REMARKS

TURNAROUND TIME
Standard ~~(2 Weeks)~~
RUSH (5 Day TAT)
Rush charges authorized by: Chris Cass

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: CPAHs by 8270D SIM	Total As (200.8)	Dissolved As (200.8)			Notes
1249_SSGW_190717	Sub slab	N/A	01	7/17/19	9:40	SW	1		X				HNO_3 preserved
1249_SSGW_D_190717	Sub slab	N/A	02	7/17/19	9:45	SW	1			X			Unpreserved container. Not filtered in field, please filter at lab.
~~1249_North Pipe~~	~~Sub slab~~	N/A											HNO_3 preserved
~~1249_Lower East Pipe~~	~~Sub slab~~	N/A											HNO_3 preserved
~~1249_Upper East Pipe~~	~~Sub slab~~	N/A											HNO_3 preserved
								CAV					

Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Erika Vossbeck	ERIKA VOSSBECK	SES	7/17/19	10:38
Received by: mlaplaw	Nhan Phan	FEBI	7/17/19	10:38
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 24, 2019

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on July 17, 2019 from the SOU_1249-001-05/420_ 20190717, F&BI 907280 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Chris Carter, Erika Vossbeck
SOU0724R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 17, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05/420_ 20190717, F&BI 907280 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
907280 -01	1249_North Pipe
907280 -02	1249_Lower East Pipe
907280 -03	1249_Upper East Pipe

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_North Pipe	Client:	SoundEarth Strategies
Date Received:	07/17/19	Project:	SOU_1249-001-05/420_ 20190717
Date Extracted:	07/18/19	Lab ID:	907280-01
Date Analyzed:	07/18/19	Data File:	907280-01.114
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.19

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_Lower East Pipe	Client:	SoundEarth Strategies
Date Received:	07/17/19	Project:	SOU_1249-001-05/420_ 20190717
Date Extracted:	07/18/19	Lab ID:	907280-02
Date Analyzed:	07/18/19	Data File:	907280-02.115
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	8.28

Analysis For Total Metals By EPA Method 200.8

Client ID:	1249_Upper East Pipe	Client:	SoundEarth Strategies
Date Received:	07/17/19	Project:	SOU_1249-001-05/420_ 20190717
Date Extracted:	07/18/19	Lab ID:	907280-03
Date Analyzed:	07/18/19	Data File:	907280-03.116
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	18.9

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05/420_ 20190717
Date Extracted:	07/18/19	Lab ID:	I9-435 mb
Date Analyzed:	07/19/19	Data File:	I9-435 mb.050
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Date of Report: 07/24/19
Date Received: 07/17/19
Project: SOU_1249-001-05/420_ 20190717, F&BI 907280

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 907256-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	1.42	84	86	70-130	2

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. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

~~907287~~ 907280

14E 07-17-19 AT3

Page # 1 of 1

Send Report to Chris Cass; ~~Chris Carter~~; Erika Vossbeck

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)* Erika Vossbeck

PROJECT NAME/NO.	PO #
Ballard Blocks II Property	1249-001-05 / 420

REMARKS HOLD

TURNAROUND TIME
Standard (2 Weeks)
RUSH 5 Day TAT
Rush charges authorized by: Chris Cass

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: CPAHs by 8270D SIM	Total As (200.8)	Dissolved As (200.8)			Notes
~~1249_SSGW_~~	~~Sub slab~~	N/A			EHV								HNO_3 preserved
1249_SSGW_D_	~~Sub slab~~	~~N/A~~			EHV								Unpreserved container. Not ~~filtered in field, please filter at lab.~~
1249_North Pipe_	Sub slab	N/A		10:00	7/17/19	SW	1		X				HNO_3 preserved
1249_Lower East Pipe_	Sub slab	N/A		9:55	7/17/19	SW	1		X				HNO_3 preserved
1249_Upper East Pipe_	Sub slab	N/A		10:05	7/17/19	SW	1		X				HNO_3 preserved
						EHV							
													Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Erika Vossbeck	ERIKA VOSSBECK	SES	7/17/19	10:38
Received by: MPhan	NOhan Phan	FEBI	~~7/17/19~~	10:38
Relinquished by:				
Received by:				

SoundEarth Strategies

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 29, 2019

Chris Cass, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cass:

Included are the results from the testing of material submitted on July 24, 2019 from the SOU_1249-001-05 420_ 20190724, F&BI 907425 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 Cass, Erika Vossbeck
SOU0729R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 24, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1249-001-05 420_ 20190724, F&BI 907425 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
907425 -01	1249_SSGW_20190724
907425 -02	1249_SSGW_D_20190724

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	1249_SSGW_D_20190724 f	Client:	SoundEarth Strategies
Date Received:	07/24/19	Project:	SOU_1249-001-05 420_ 20190724
Date Extracted:	07/25/19	Lab ID:	907425-02
Date Analyzed:	07/25/19	Data File:	907425-02.127
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	14.7

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank f	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05 420_ 20190724
Date Extracted:	07/25/19	Lab ID:	I9-452 mb
Date Analyzed:	07/25/19	Data File:	I9-452 mb.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:	1249_SSGW_20190724	Client:	SoundEarth Strategies
Date Received:	07/24/19	Project:	SOU_1249-001-05 420_ 20190724
Date Extracted:	07/24/19	Lab ID:	907425-01
Date Analyzed:	07/24/19	Data File:	907425-01.055
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	16.6

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1249-001-05 420_ 20190724
Date Extracted:	07/24/19	Lab ID:	I9-443 mb2
Date Analyzed:	07/24/19	Data File:	I9-443 mb2.053
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Date of Report: 07/29/19
Date Received: 07/24/19
Project: SOU_ 1249-001-05 420_ 20190724, F&BI 907425

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 907425-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	14.7	110	110	70-130	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	97	85-115

Date of Report: 07/29/19
Date Received: 07/24/19
Project: SOU_ 1249-001-05 420_ 20190724, F&BI 907425

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 907372-01 (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	8.60	103	107	70-130	4

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. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY ME 07-24-19

907425

AT3

Page # 1 of 1

Send Report to Chris Cass; Chris Carter; Erika Vossbeck

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	1249-001-05 / 420

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH 5 Day TAT
Rush charges authorized by: Chris Cass

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: CPAHs by 8270D SIM	Total As (200.8)	Dissolved As (200.8)			Notes
1249_SSGW_20190724	Sub slab	N/A	01	7/24/19	9:28	SW	1		X				HNO_3 preserved
1249_SSGW_D_20190724	Sub slab	N/A	02	7/24/19	9:30	SW	1			X			Unpreserved container. Not filtered in field, please filter at lab.
1249_North Pipe_	Sub slab	N/A											HNO_3 preserved
1249_Lower East Pipe_	Sub slab	N/A											HNO_3 preserved
1249_Upper East Pipe_	Sub slab	N/A											HNO_3 preserved
								EAV					
													Samples received at 2 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	ERIKA VOSSBECK	SES	7/24/19	10:04
Received by:	Nhan Phan	FCBT	7/24/19	10:04
Relinquished by:				
Received by:				

SoundEarth Strategies